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SEAL PROFILE INDEX

INCH SEALS

Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
ROD U-SEALS	**RTUB** Super-Duty Rod U-Seals			Urethane Seal Rubber Energizer Polyacetal Ring	-50° - +230° F	0 - 6,000 PSI	3 FT/SEC	**10 - 12**
	RTUL O-Ring Loaded Rod U-Seals			Urethane Seal Rubber Energizer	-40° - +225° F	0 - 5,000 PSI	3 FT/SEC	**13**
	RTU Asymmetric Twin Lip Rod U-Seals			Urethane	-40° - +225° F	0 - 5,000 PSI	3 FT/SEC	**14 - 16**
	RU Urethane Rod U-Seals			Urethane	-40° - +200° F	0 - 5,000 PSI	3 FT/SEC	**17**
	DRU Heavy Duty Rod U-Seals			Urethane	-65° - +230° F	0 - 6,000 PSI	3 FT/SEC	**18 - 20**
	DRTU Heavy Duty Rod U-Seals			Urethane	-65° - +230° F	0 - 6,000 PSI	3 FT/SEC	**22 - 24**
	DRUB Heavy Duty Rod U-Seals w/Back-Up Rings			Urethane Seal Nylon Back-Up	-40° - +230° F	0 - 6,000 PSI	3 FT/SEC	**25**
	UFN-EI Rod Seals w/Back-Up Rings			Nitrile Seal, Fabric Reinforced Base, Acetal Back-Up	-22° - +212° F	0 - 5,800 PSI	1.5 FT/ SEC	**25**
	UFN-BR Rod Seals w/Headers			Rubber, Fabric, Polyester Elastomer	-22° - +212° F	1.64 FPS / 3600 PSI 0.49 FPS / 5800 PSI	1.5 FT/ SEC	**26**
	UFN-EI-SAG Rod Seals w/Back-up Rings			Rubber, Fabric, Acetal	-22° - +212° F	1.64 FPS / 3600 PSI 0.49 FPS / 5800 PSI	1.5 FT/ SEC	**26**

INCH SEALS

Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
ROD U-SEALS	**UFN-WI** Rod Seal w/Clip on Bearing			Rubber, Fabric, Acetal	-22° - +212° F	1.64 FPS / 3600 PSI 0.49 FPS / 5800 PSI	1.5 FT/ SEC	**27**
	HMU Polyure-thane U-Seals			Urethane	-40° - +200° F	0 - 5,000 PSI	3 FT/SEC	**27**
	HMU Homoge-neous U-Seals			Buna-N Rubber Fluorocarbon	BUNA-N: -40° - +250° F FC: -20° - +400° F	BUNA-N: 0 TO 1,000 PSI FC: 0-2,000 PSI	3 FT/SEC	**28**
	UKR Rod U-Seals			Urethane	-40° - +200° F	0 - 150 PSI	3 FT/SEC	**28**
PISTON U-SEALS	**DPU** Heavy Duty Piston U-Seals			Urethane	-65° - +230° F	0 - 6,000 PSI	3 FT/SEC	**29 - 33**
	PU Piston U-Seals			Urethane	-40° - +225° F	0 - 5,000 PSI	3 FT/SEC	**34**
	UFN-PWO Piston Seals			Rubber / Fabric Seal, Acetal Back-Up Bearing	-22° - +212° F	0 - 5,800 PSI	1.5 FT/ SEC	**35**
	UFN-UEO Piston U-Seals			Rubber / Fabric Seal, Acetal Back-Up Bearing	-22° - +212° F	0 - 5,800 PSI	1.5 FT/ SEC	**35**
	UFN-UWO Piston U-Seals			Rubber / Fabric Seal, Acetal Back-Up Bearing	-22° - +212° F	0 - 5,800 PSI	1.5 FT/ SEC	**35**
	UKP Piston U-Seals			Urethane	-40° - +200° F	0 TO 150 PSI	3 FT/SEC	**36**

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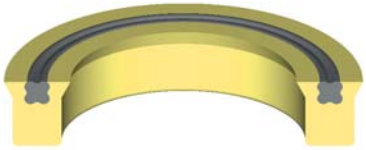
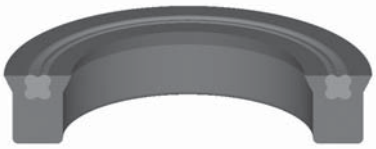
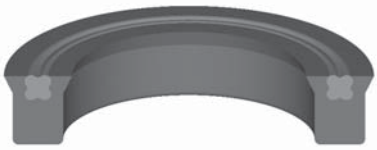
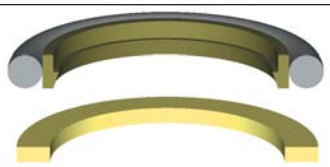
INCH SEALS

Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
U-SEALS	**DSU** Heavy Duty Symmetrical U-Seals			Urethane	-40° - +230° F	0 - 4,000 PSI	3 FT/ SEC	**37 - 44**
	HU Symmetrical Urethane U-Seals			Urethane	-40° - +200° F	0 - 5,000 PSI	3 FT/ SEC	**45 - 49**
	UPU Premium U-Seals			Urethane	-65° - +265° F	0 - 5,000 PSI	3 FT/ SEC	**50 - 51**
	U U-Seals			Urethane Seal Rubber Expander	-40° - +200° F	0 - 5,000 PSI	3 FT/ SEC	**52 - 75**
	U-PM U-Seals			55D Hytrel Seal FKM Energizer	-65° - +275° F	0 - 5,000 PSI	3 FT/ SEC	**76 - 79**
	U High-Temperature U-Seals			Urethane Seal Rubber Expander	-40° - +225° F	0 - 5,000 PSI	3 FT/ SEC	**80 - 81**
	U U-Seals			Fluorocarbon	-20° - +400° F	0 - 2,000 PSI	3 FT/ SEC	**82 - 86**
	U-Z Z-Seals			Urethane Base Rubber Lip	-40° - +200° F	0 - 5,000 PSI	3 FT/ SEC	**87 - 88**
	P U-Seals			Urethane Seal Rubber Expander	-40° - +200° F	0 - 5,000 PSI	3 FT/ SEC	**89 - 101**
	P U-Seals			Fluorocarbon	-20° - +400° F	0 - 2,000 PSI	3 FT/ SEC	**102 - 103**

INCH SEALS

Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
U-SEALS	**855 PRC** Rings			Urethane	-40° - +200° F	0 - 5,000 PSI	3 FT/ SEC	**104 - 106**
	UFN-P Symmetrical Plain Seals			Nitrile Seal Fabric Reinforced Base	-22° - +212° F	0 - 2,900 PSI	1.5 FT/ SEC	**107 - 108**
	870 U-Seals			Buna-N Rubber	-40° - +240° F	0 - 500 PSI	3 FT/ SEC	**109 - 111**
	HRU Homoge-neous U-Seals			Buna-N Rubber Fluorocarbon	BUNA-N: -40° - +250° F FC: -20° - +400° F	BUNA-N: 0 - 1,250 PSI FC: 0-2,000 PSI	3 FT/ SEC	**112 - 115**
	HSU Homoge-neous U-Seals			Buna-N Rubber Fluorocarbon	BUNA-N: -40° TO +250° F FC: -20° TO +400° F	0 - 2,000 PSI	3 FT/ SEC	**116 - 117**
BUFFER SEALS	**DYR** Rod Buffer Seals			Urethane U-Seal Buffer Polyacetal Back-Up	-40° - +230° F	0 - 8,000 PSI	3 FT/ SEC	**118**
	DYM Rod Buffer Seals			Urethane U-Seal Nylon Back-up	-40° - +230° F	0 - 5,000 PSI	3 FT/ SEC	**119**
	KR Rod Buffer Seals			PTFE Buffer Rubber Expander	-40° - +225° F	0 - 5,000 PSI	12 FT/ SEC	**120 - 121**
	RBS Rod Buffer Seals			Urethane	-40° - +200° F	0 - 5,000 PSI	3 FT/ SEC	**122**
	CTC Caterpillar® Specific Buffers			DYR Style, Urethane or Bronze Filled PTFE Buffer Rubber Expander	-22° - +230° F -40° - +200° F -40° - +220° F	0 - 6,000 PSI 0 - 5,000 PSI	3 FT/ SEC 12 FT/ SEC	**122 - 123**

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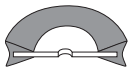
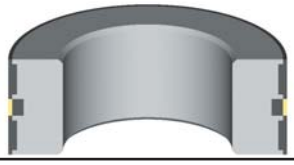
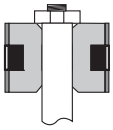
INCH SEALS

Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
VEE PACKING	**HDLV** Hydrolocking Vee Packing Sets			Hytrel & Nylon	-40° - +220° F	0 - 6,000 PSI	1.5 FT/ SEC	**124 - 125**
	VS Vee Packing			Rubber & Urethane Ring Nylon Adap-tor	-35° - +220° F	0 - 10,000 PSI	1.5 FT/ SEC	**126 - 132**
	CAS Cascade® Specific Vee Packing			Rubber & Urethane Ring Nylon Adap-tor	-35° - +220° F	0 - 10,000	1.5 FT/ SEC	**132**
	VR Individual Vee Rings & Adaptors			Fabric Reinforced Rubber, Urethane & Nylon Ring	-35° - +220° F	0 - 5,000 PSI	1.5 FT/ SEC	**133 - 136**
	935 Vee Rings			PTFE	-100° - +400° F	0 - 5,000 PSI	12 FT/ SEC	**137**
	835 Homoge-neous Rubber Vee Rings			70 Durom-eter Buna-N Rubber	-40° - +220° F	0 - 1,250 PSI	3 FT/ SEC	**137**
	WV Styles 850 - 855 WV Packing			Fabric Reinforced Rubber & Buna-N Rubber	-40° - +250° F	SEE CHART	1.5 FT/ SEC	**138 - 140**
PISTON CUPS	**6000** Piston Cups			Buna-N Rubber	-40° - +220° F	0 - 150 PSI	3 FT/ SEC	**141**
	8000 Piston Cups			Urethane	-65° - +220° F	0 - 1,200 PSI	3 FT/ SEC	**142**
	9000 Neo Fab Piston Cups			Fabric Reinforced Rubber	-35° - +220° F	0 - 2,500 PSI	1.5 FT/ SEC	**143 - 144**

INCH SEALS

Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
PISTON CUPS	**DAPC** One Piece Double Acting Piston Cups			Rubber Lip Zinc Coated Steel Plate	-40° - +220° F	0 - 800 PSI	3 FT/ SEC	**145**
T-SEALS	**TR** Rod T-Seals			Hard Plastic Back-Up Buna-N Rubber Seal	-35° - +220° F	0 - 5,000 PSI	3 FT/ SEC	**146**
	TP Piston T-Seals			Hard Plastic Back-Up Buna-N Rubber Seal	-35° - +220° F	0 - 5,000 PSI	3 FT/ SEC	**147 - 148**
	TP-L Locking Piston T-Seals			Hard Plastic Back-Up Buna-N Rubber Seal	-35° - +220° F	0 - 5,000 PSI	3 FT/ SEC	**149**
	CPS Capped Piston T-Seals			PTFE Cap Nylon Back-Up Rubber Expander	-40° - +220° F	0 - 6,000 psi	4.5 FT/ SEC	**150 - 151**
PISTON ASSEMBLIES	**PA** Unitized Pistons			Steel Piston Glass Filled PTFE Seal Rubber Expander	-40° - +230° F	5,000 PSI	3 FT/ SEC	**153**
PISTON SEAL ASSEMBLIES	**PS1400** Piston Seals			Glass Filled PTFE Piston Seal Rubber Expander	-40° - +220° F	O - 5,000 PSI	12 FT/ SEC	**154 - 155**
	PS1500 Piston Seals			Urethane Seal Rubber Expander	-40° - +200° F	0 - 5,000 PSI	3 FT/ SEC	**156**
	PS1600 Two Piece Piston Seals			Glass Filled PTFE Piston Seal Rubber Expander	-40° - +220° F	0 - 5,000 PSI	12 FT/ SEC	**157**
	PS1800 Seals			Glass Filled PTFE Piston Seal Rubber Expander	-40° - +220° F	0 - 5,000 PSI	12 FT/ SEC	**158 - 159**

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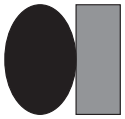
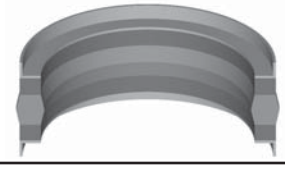
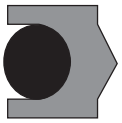
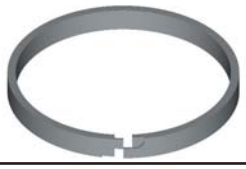
INCH SEALS

Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
PISTON SEAL ASSEMBLIES	**PS1850** Piston Seals			Bronze Filled PTFE Piston Seal Rubber Expander	-40° - +220° F	0 - 5,000 PSI	12 FT/ SEC	**159 - 160**
	PS1900 Piston Seals			Glass Filled PTFE Seal Rubber Energizer	-40° - +220° F	0 - 5,000 PSI	12 FT/ SEC	**160**
	PS2700 Piston Seals			Glass / PTFE Filled Polyester Piston Seal Rubber Expander	-40° - +220° F	0 - 5,000 PSI	3 FT/ SEC	**161**
	PSQ Piston Seals			Bronze Filled PTFE Piston Seal Rubber Expander	-40° - +220° F	0 - 5,000 PSI	6 FT/ SEC	**162**
	PS2470 Piston Seals			Bronze Filled PTFE Piston Seal Rubber Expander	-40° - +220° F	0 - 5,000 PSI	12 FT/ SEC	**163**
	PS914 Step Cut Piston Seals			Glass Filled Nylon Piston Seal Rubber Expander	-40° - +220°	0 - 6,000 PSI	3 FT/ SEC	**164**
	PS2000 Step Cut Piston Seals			Glass Filled Nylon Piston Seal Rubber Expander	-40° - +220° F	0 - 5,000 PSI	3 FT/ SEC	**165**
	CTC Caterpillar® Two Piece Piston Seals			Glass Filled Nylon or Glass Filled PTFE Piston Seal Rubber Expander	-40° - +220° F -40° - +220° F	-	3 FT/ SEC 12 FT/ SEC	**166**
	PSA Piston Seals			Fabric Reinforce Piston Seal Polyacetal Anti-Extru-sion Ring	-22° - +212° F	0 - 6,000 PSI	1.5 FT/ SEC	**167**
	PSA-58 Three Piece Piston Seals			Fabric Reinforce Piston Seal Polyacetal Anti-Extru-sion Ring	-22° - +212° F	0 - 5,000 PSI	1.5 FT/ SEC	**168 - 169**

INCH SEALS

Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
PISTON SEAL ASSEMBLIES	**PSA-59** Three Piece Piston Seals			Fabric Reinforce Piston Seal Polyacetal Anti-Extru-sion Ring	-22° - +212° F	0 - 5,000 PSI	1.5 FT/ SEC	**170**
	PSA-65 Piston Seals			Fabric Reinforce Piston Seal Polyacetal Anti-Extru-sion Ring	-22° - +212° F	0 - 3,000 PSI	1.5 FT/ SEC	**171**
	PSF Piston Seals			Rubber Seal PTFE Back-Up Polyacetal Anti-Extru-sion Ring	-22° - +212° F	0 - 3,000 PSI	3 FT/ SEC	**172**
	PSC Piston Seals			Urethane Seal Rubber Energizer	-40° - +200° F	0 - 5,000 PSI	3 FT/ SEC	**173 - 175**
	PSM Two Piece Piston Seals			Urethane Seal Rubber Energizer	-40° - +200° F	0 - 5,000 PSI	3 FT/ SEC	**176**
	PSU Piston Seals			Urethane	-40° - +200° F	0 - 5,000 PSI	3 FT/ SEC	**177 - 178**
PISTON RINGS	**SPR** Iron Piston Rings			Iron	-	-	-	**179 - 181**
WEAR RINGS	**606-625** Wear Rings			Nylon	-40° - +275° F	-		**183 - 194**
	PB Powerbands			Nylon, Glass Fiber and PTFE Blend	-40° - +275° F	-		**186**
	614 Rod Bearings			Nylon	-40° - +275° F	-		**193 - 194**

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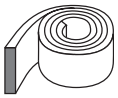
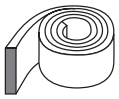
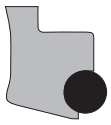
Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
PISTON SEAL ASSEMBLIES	**615** Rod Bearings			Phenolic	-67° - +248° F	-	3 FT/ SEC	**194**
	606T 612T Flexible Guide Bearings			PTFE	-50° - +400° F	-	12 FT/ SEC	**195**
	612F Flexible Guide Bearings			Fabric Reinforced Polyester	-40° - +250° F	-	3 FT/ SEC	**195**
	660 Rod Bearings			Bronze	-	-	-	**196**
	FB Follower Bearings			Polyester	-65° - +220° F	-	3 FT/ SEC	**196**
	MB Modular Back-Up Bearings			70 Shore D Urethane	-40° - +230° F	-	3 FT/ SEC	**197**
WIPER RINGS	**ST** Wiper RIngs			Urethane & Fluorocarbon	URE-THANE: -40° - +200° F FLUORO-CARBON: -20° - +400° F	-	3 FT/ SEC	**198 - 202**
	ST-SH Wiper RIngs w/ Slotted Heel			90A Urethane	-40° - +200° F	-	3 FT/ SEC	**203**
	STXE Wiper Rings			Urethane Rubber Expander	-40° - +200° F	-	3 FT/ SEC	**204**
	ST-XL Wiper Rings			Urethane	-40° - +230° F	-	3 FT/ SEC	**204**

INCH SEALS

Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
WIPER RINGS	**ST-E** Wiper Rings			Urethane	-31° - +212° F	-	3 FT/ SEC	**205**
	SG Seal Guard Metallic Rod Wipers			Bronze Rubber Expander	-40° - +240° F	-	-	**205 - 206**
	AN Wiper Rings			Urethane	-40° - +200° F	-	3 FT/ SEC	**206 - 207**
	AN-M2 Wiper Rings			Brass	-30° - +300° F	-	-	**208**
	HW Wiper Rings			Urethane, Buna-N & Fluorocarbon	-40° - +200° F N: -40° - +225° F V: -20° - +350° F HT: -40° - +225° F	-	3 FT/ SEC	**209 - 210**
	BT Wiper Rings			Urethane	-40° - +200° F	-	3 FT/ SEC	**210**
	KW Wiper Rings			Urethane	-40° - +200° F	-	3 FT/ SEC	**211 - 212**
	SWNC Wiper Rings			Buna-N	-22° - +212° F	-	3 FT/ SEC	**212**
	SWSN Wipers			Buna-N	-22° - +212° F	-	3 FT/ SEC	**213**
	SWNB Wiper Rings			Buna-N	-22° - +212° F	-	3 FT/ SEC	**213 - 214**

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Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
WIPER RINGS	**CSW** Snap-In Wipers			Nylon	-40° - +212° F	-	3 FT/ SEC	**214**
	MCHD Metal Clad Wiper Rings			Urethane Lip Steel Case	-65° - +230° F	-	3 FT/ SEC	**214 - 215**
	MCU-D Heavy Duty Metal Clad Wiper Rings			Urethane Lip Steel Case	-65° - +230° F	-	3 FT/ SEC	**215 - 216**
	MCN Metal Clad Wiper Rings			Nitrile Lip Steel Case	-40° - +240° F	-	3 FT/ SEC	**217**
	CWN Metal Clad Wiper Rings			Nitrile Lip Steel Case	-22° - +212° F	-	3 FT/ SEC	**218**
OIL SEALS	**OS** Oil Seals			Rubber Lip Steel Case	-40° - +240° F	-	3 FT/ SEC	**219 - 223**
O-RINGS	**568** O-Rings			Buna-N Rubber, Fluorocarbon, Silicone, Ethylene Propylene, PTFE, Urethane	-40° - +240° F	VARIES ACCORDING TO DIAMETRAL CLEARANCE	-	**229 - 245**
	580 O-rings			Buna-N Rubber	-40° - +240° F	VARIES ACCORDING TO DIAMETRAL CLEARANCE	3 FT/ SEC	**246 - 247**
	QR Quad Rings			Buna-N Rubber	-40° - +240° F	VARIES ACCORDING TO DIAMETRAL CLEARANCE	3 FT/ SEC	**247 - 249**
	SFS Split Flange Seals			Urethane	-40° - +200° F	0 - 6,000 PSI	3 FT/ SEC	**250**

INCH SEALS

Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
BACK-UP RINGS	**573** Back-Up Rings			Hytrel	-65° - +275° F	VARIES ACCORD-ING TO DIAME-TRAL CLEAR-ANCE	-	**259 - 260**
	574 "Parback®" Back-Up Rings			90A Buna-N Rubber	-40° - +240° F	VARIES ACCORD-ING TO DIAME-TRAL CLEAR-ANCE	-	**261 - 262**
	575 Style 575 Back-Up Rings			Urethane PTFE	-65° - +220° F	VARIES ACCORD-ING TO DIAME-TRAL CLEAR-ANCE	-	**263 - 266**
	576 Split Nylon Back-Up Rings			Nylon	-40° - +250° F	VARIES ACCORD-ING TO DIAME-TRAL CLEAR-ANCE	-	**267**
	590 High Performance Back-Up Rings			High Performance Urethane	-40° - +275° F	VARIES ACCORD-ING TO DIAME-TRAL CLEAR-ANCE	-	**268**
	595 U-Seal Back-Up Rings			PTFE	-40° - +500° F	VARIES ACCORD-ING - DIAME-TRAL CLEAR-ANCE	-	**269**
RETAINER RINGS	**VH, WH, WHM, WHT** Spiral Internal Retainer Rings			Steel	-	-	-	**272 - 274**
	VS, WS, WST, WSM Spiral Internal Retainer Rings			Steel	-	-	-	**275 - 276**
	NAN Ea-n NAN Series Internal Retainer Rings			Steel	-	-	-	**277**
	XAN Ea-n XAN Series External Retainer Rings			Steel	-	-	-	**277**

SEAL PROFILE INDEX

INCH SEALS

Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
RETAINER RINGS	**300 & 310** Internal (300) and External (310) Retainer Rings			Steel	-	-	-	**278 - 279**
	RSR Style RSR Retainer Rings			Steel	-	-	-	**279**
MISCELLANEOUS	**SR** U-Seal Retainer Rings			Acetal	-22° - +212° F	-		**280**
	CAP Cap Plugs			Plastic	-	-	-	**283 - 286**
	DY Face Seals			Steel Washer Rubber Seal	-	-	-	**287**
	SSR Wave Springs			Steel	-	-	-	**288**
	LN Lock Nuts			Steel	-	-	-	**289**
	HH Self Aligning Bearings			Carbon Chromium Steel	-	-	-	**290**
	SS Set Screws		-	-	-	-	-	**291**
	NY-PLUG Nylon Plugs		-	-	-	-	-	**291**

INCH SEALS

Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
MISCELLANEOUS	**FV** Filter Vent Plugs			-			-	291
	GF Grease Fittings			-			-	293
	CP Cotter Pins			-			-	293

SEAL PROFILE INDEX

METRIC SEALS

Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
ROD U-SEALS	**MRTUB** Super-Duty Rod U-Seals			Urethane U-Seal Nitrile Expander Polyacetal Back-Up	-50° - +230° F	0 - 6,000 psi	3 FT/ SEC	**296 - 297**
	MRTU Rod U-Seals			Urethane	-40° - +225° F	0 - 5,000 PSI	3 FT/ SEC	**298 - 302**
	MRU Rod U-Seals			Urethane	-65° - +230° F	0 - 5,000 PSI	3 FT/ SEC	**303 - 309**
	MRUB Rod U-Seals w/Back-Up Rings			Urethane U-Seal Nylon Back-Up	-40° - +230° F	0 - 5,500 PSI	3 FT/ SEC	**310 - 311**
	MRTS Rod U-Seals			Urethane	-22° - +212° F	0 - 5,000 PSI	3 FT/ SEC	**312 - 314**
	MHMU Rod U-Seals			Urethane	-50 - +230° F	0 - 5,000 PSI	3 FT/ SEC	**315**
	MRUN Rod U-Seals			Nitrile	-8° F - +212° F	0 - 2,000 psi W/O BACK-UP 0 - 3,000 psi W/ BACK-UP	3 FT/ SEC	**316 - 317**
	MRUNB Rod U-Seals w/Back-up Rings			Nitrile Seal Bronze-Filled PTFE Back-Up	-8° F - +212° F	0 - 3,000 PSI	3 FT/ SEC	**318**
ROD U-SEALS BACK-UP RINGS	**MBN** Rod U-Seal Back-Up Rings			Nylon	-67° - +212° F	0 - 5,000 PSI	3 FT/ SEC	**319**
	MBT Back-Up Rings			PTFE	-40° - +500° F	0 - 5,000 PSI	3 FT/ SEC	**320 - 321**

METRIC SEALS

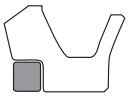
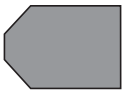
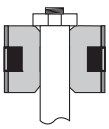
Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
ROD SEALS	**MSMR** Rod Seal w/Back-Up Rings			Rubber Seal Cot-n Impreg. Rubber Header Acetal Anti-Extrusion Ring	-22° - +212° F	0 - 10,000 PSI	3 FT/ SEC	**322**
	MUFN-EI Rod Seal w/Back-Up Rings			Nitrile Seal Fabric Reinforced Base Acetal Back-Up	-22° - +212° F	0 - 6,000 PSI	1.5 FT/ SEC	**323 - 327**
	MUFN-BR Rod Seal w/Headers			Urethane	-22° - +212° F	1.64 FPS / 3600 PSI 0.49 FPS / 5800 PSI	1.5 FT/ SEC	**327**
	MUKRN NEW Pneumatic Rod Seals			80A NBR	-31° - +212° F	0 - 6,500 PSI	1.5 FT/ SEC	**328 - 331**
	PU-TDI NEW Hunger® Hydraulic Rod Seals			Urethane BRZ-PTFE	-31° - +212° F	0 - 6,500 PSI	3 FT/ SEC	**332**
	PU-TDT NEW Hunger® Rod Seals			Urethane	-22° - +212° F	0 - 1,500 PSI	3 FT/ SEC	**333**
PISTON U-SEALS	**MPU** Piston Seals			Urethane	-22° - +212° F	0 - 5,000 PSI	3 FT/ SEC	**334**
	MUFN-PWO Piston Seals			Rubber / Fabric Seal Acetal Back-Up Bearings	-22° - +220° F	0 - 6,000 PSI	1.5 FT/ SEC	**335**
	MUFN-UWO Piston Seals			Rubber / Fabric Seal Acetal Back-Up Bearings	-22° - +220° F	0 - 6,000 PSI	1.5 FT/ SEC	**335**
	MHP26 U-Type Two Piece Piston Seals			Nitrile Seal Nylon Back-Up	-20° - +220° F	0 - 3,000 PSI	3 FT/ SEC	**336**

SEAL PROFILE INDEX

METRIC SEALS

Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
PISTON U-SEALS	**MHP27** U-Type Piston Seals			Rubber Piston Seal Acetal Back-Up	-20° - +220° F	0 - 4,000 PSI	3 FT/ SEC	**337**
	MHP28 U-Type Piston Seals			Rubber Piston Seal Nylon Back-Up	-20° - +220° F	0 - 3,000 PSI	3 FT/ SEC	**337**
	MHP29 U-Type Piston Seals			Urethane Piston Seal Nylon Back-Up	-40° - +200° F	0 - 3,000 PSI	3 FT/ SEC	**337**
	MUKPN Pneumatic Piston Seal			80A NBR	-22° - +212° F	0 - 5,000 PSI	3 FT/ SEC	**338 - 341**
U-SEALS	**MUU** Symmetrical U-Seals			Urethane	-22° - +212° F	0 - 5,000 PSI	3 FT/ SEC	**342 - 358**
	MUUL Loaded Symmetrical U-Seals			Urethane U-Seal Rubber Expander	-40° - +200° F	0 - 5,000 PSI	3 FT/ SEC	**359 - 360**
	MUSN Symmetrical U-Seals			90 Durometer Nitrile	-13° - +212° F	0 - 2,000 PSI	3 FT/ SEC	**361**
	MUFN-U Symmetrical U-Seals			Nitrile U-Seal Fabric Reinforced Base	-22° - +212° F	0 - 2,900 PSI	1.5 FT/ SEC	**362**
	MUFN-P Symmetrical Seals			Nitrile Seal Fabric Reinforced Base	-22° - +212° F	0 - 2,900 PSI	1.5 FT/ SEC	**363**
CUSHION SEALS	**MRT** Cushion Seals			Filled Nylon or Reinforced Phenolic	Nylon -67° - +212° F Phenolic -67° - +248° F	0 - 5,000 PSI	-	**364**

METRIC SEALS

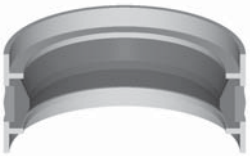
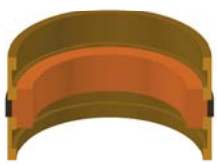
Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
BUFFER SEALS	**MYR** Buffer Seals			Urethane Buffer Nylon Back-Up	-30° - +220° F	0 - 7,000 PSI	3 FT/ SEC	**365 - 366**
	MKR Buffer Seals			Filled PTFE Buffer Rubber Energizer	-40° - +220° F	0 - 5,000 PSI	12 FT/ SEC	**367**
	MNBR Buffer Seals			Nylon / PTFE Buffer Rubber Energizer	-40° TP +220° F	0 - 5,000 PSI	3 FT/ SEC	**368**
	MSBR Buffer Seals			Nylon Buffer Rubber Energizer	-40° - +220° F	0 - 5,000 PSI	3 FT/ SEC	**369**
	MYBR Buffer Seals			Filled PTFE Buffer Rubber Energizer	-40° - +220° F	0 - 5,000 PSI	12 FT/ SEC	**370**
	MIR Buffer Seals			Urethane Buffer	-40° - +200° F	0 - 5,000 PSI	3 FT/ SEC	**371**
SWIVEL SEALS	**MUSW** Swivel Seals			Urethane	-50° - +220° F	0 - 5,000 PSI	3 FT/ SEC	**372**
VEE PACKING	**MVS** Vee Packing			Rubber & Urethane Rings Nylon Adaptors	-35° - +220° F	0 - 5,000 PSI	1.5 FT/ SEC	**373**
PSITON SEAL ASSEMBLIES	**JD / NH** John Deere® / New Holland Unitized Pistons NEW			PTFE	-40° - +275° F	0 - 5,000 PSI	3 FT/ SEC	**374 - 375**
	MPK54 Pneumatic DA Piston Seal			70A NBR	-20° F, +220° F	0 - 175 PSI	3 FT/ SEC	**376**

SEAL PROFILE INDEX

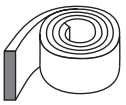
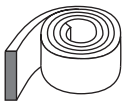
METRIC SEALS

Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
PISTON SEAL ASSEMBLIES	**MPK62** Pneumatic DA Piston Seal			70A NBR	-20° - +220° F	0 - 175 PSI	3 FT/ SEC	**377**
	PU-TDA Hunger® Hydraulic Piston Seal			Urethane BRZ-PTFE	-31° - +212° F	0 - 6,500 PSI	3 FT/ SEC	**378**
	PU-TDMA Hunger® Hydraulic Piston Seal			BRZ-PTFE Urethane	-31° - +212° F	0 - 3,600 PSI	3 FT/ SEC	**379**
	MDPC Pneumatic DA Piston Seal			75A Nitrile	-22° - +220° F	0 - 230 PSI	3 FT/ SEC	**380 - 381**
	MDPCS Hydraulic DA Piston Seal			90A Nitrile	-22° - +220° F	175 - 870 PSI	3 FT/ SEC	**382 - 383**
	MPS Two Piece Piston Seals			PTFE Piston Seal Rubber Energizer	-40° - +230° F	0 - 5,000 PSI	12 FT/ SEC	**384 - 387**
	MPSU Two Piece Piston Seals			Glass / PTFE Filled Polyester Piston Seal Rubber Expander	-40 - +230° F	0 - 5,000 PSI	3 FT/ SEC	**388 - 389**
	MKPD Two Piece Piston Seals			97A Urethane Seal 70A Nitrile Expander	-22° - +210° F	0 - 5,800 PSI	1.5 FT/ SEC	**390 - 391**
	MPS 2000 Step Cut Piston Seals			Nylon Seal with Nitrile Energizer	-22° F - +230° F	0 - 7250 PSI	3 FT/ SEC	**392**
	MBNP Piston Seal Anti-Extrusion Rings			Nylon Back-Up Ring	-65° - +220° F	0 - 5,000 PSI	-	**393**

METRIC SEALS

Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
PISTON SEAL ASSEMBLIES	**MCPS** Four Piece Pis-n Seals			PTFE Cap Nylon Back-Up Rubber Expander	-40° - +220° F	0 - 6,000 psi	4.5 FT/ SEC	**394 - 396**
	CTC Caterpillar® Specific Piston Seals			See Charts On Page 293	See Charts On Page 293	See Charts On Page 293	-	**397**
	MPSA Five Piece Piston Seals			Nitrile Piston Seal Polyacetal Anti-Extrusion Ring	-22° - +212° F	0 - 6,000 PSI	1.5 FT/ SEC	**398 - 399**
	MPSB Three Piece Piston Seals			Fabric Reinforced Piston Seal Polyacetal Anti-Extrusion Ring	-22° - +212° F	0 - 5,000 PSI	1.5 FT/ SEC	**400**
	MPSA-58 Three Piece Piston Seals			Fabric Reinforced Piston Seal Polyacetal Anti-Extrusion Ring	-22° - +212° F	0 - 5,000 PSI	1.5 FT/ SEC	**401**
	MPSA-59 Three Piece Piston Seals			Fabric Reinforced Piston Seal Polyacetal Anti-Extrusion Ring	-22° - +212° F`	0 - 5,000 PSI	1.5 FT/ SEC	**402**
	MPSA-65 Three Piece Piston Seals			Nitrile Piston Seal Acetal Bearings	-22° - +212° F	0 - 3,000 PSI	1.5 FT/ SEC	**403**
	MPSA-PDE Five Piece Piston Seals	NEW		Nitrile Plastic POM	-22° - +230° F	0 - 8,700 PSI	1.5 FT/ SEC	**404**
	MNCF Five Piece Piston Seals			Rubber / Fabric Piston Seal PTFE Back-Up Rings Nylon Bearings	-22° - +190° F	0 - 5,000 PSI	1.5 FT/ SEC	**405**
	PS-GKD Hunger® Five Piece Piston Seals	NEW 		Urethane Plastic POM	-22° - +248° F	0 - 8,700 PSI	3 FT/ SEC	**406**

SEAL PROFILE INDEX

Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
PISSTON SEAL ASSEMBLIES	**PS-GD1000K** NEW Hunger® Multi-Piece Piston Seals			BRZ-PTFE Urethane Filled POM	-22° - +248° F	-	3 FT/ SEC	**407**
PISTON RINGS	**MSPR** Piston Rings			Cast Iron	-	-	-	**408**
	MBR Piston Rings			Bronze	-	-	3 FT/ SEC	**408**
WEAR RINGS	**MWR** Wear Rings			Nylon	-40° - +275° F	-	3 FT/ SEC	**409 - 410**
	MWRB Wear Rings			Phenolic	-40° - +250° F	-	3 FT/ SEC	**411 - 414**
	MWRT Wear Rings			Filled PTFE	-100° - +550° F	-	12 FT/ SEC	**415**
	MWRA NEW Wear Rings			Acetal	-40° - +230° F	-	3 FT/ SEC	**416**
	MGF Flexible Guide Bearings			Fabric Reinforced Polyester	-30° - +265° F	-	3 FT/ SEC	**417**
	MGB Flexible Guide Bearings			Bronze Filled PTFE	-50° - +390° F	-	12 FT/ SEC	**418**
	MDU Rod Bushings			Bronze Lining PTFE Lead Overlay Steel Backing	-325° - +536° F	-	12 FT/ SEC	**418**

Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
WEAR RINGS	**MRB** Rod Bushings			Nylon	-40° - +250° F	-	3 FT/ SEC	**419**
	MWRA-L L-Shaped Rod Wear Rings			Acetal	-40° - +230° F	-	3 FT/ SEC	**419**
	MBB Piston Bushings			Bronze	-	-	3 FT/ SEC	**420**
	WRFAI Hunger® Wear Rings	NEW		POM-PTFE/ Bronze	-62° - +248° F	-	-	**421**
	WRFA Hunger® Wear Rings	NEW		POM-PTFE/ Bronze	-62° - +248° F	-	12 FT/ SEC	**422**
	WRFI Hunger® Wear Rings	NEW		POM-PTFE/ Bronze	-62° - +248° F	-	12 FT/ SEC	**423**
WIPER RINGS	**MSWP** Snap-In Wipers			Urethane	-30° - +220° F	-	3 FT/ SEC	**424**
	MK51 Rod Wiper / Seal			NBR and Hytrel	-22° F, +200° F	230 PSI	3 FT/ SEC	**425**
	MSWE Snap-In Wipers			Urethane	-30° - +200° F	-	3 FT/ SEC	**426**
	MSWH Snap-In Wipers			Urethane	-30° - +200° F	-	3 FT/ SEC	**427**

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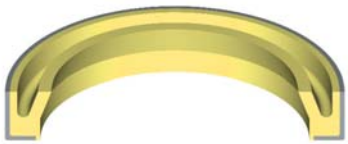
METRIC SEALS

Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
WIPER RINGS	**MSW** Snap-In Wipers			Urethane	-30° - +200° F	-	3 FT/ SEC	**427**
	MSWS Snap-In Wipers			Urethane	-30° - +200° F	-	3 FT/ SEC	**428**
	MSWN Snap-In Wipers			Nitrile	-22° - +212° F	-	3 FT/ SEC	**428**
	CSWM Snap-In Wipers			Nylon	-40° - +212° F	-	3 FT/ SEC	**429**
	MDK Snap-In Wipers			Nitrile	-22° - +212° F	-	3 FT/ SEC	**429**
	MWSCK Snap-In Wipers			Nitrile	-49° - +212° F	-	3 FT/ SEC	**430**
	MCKBI Metal Clad Wipers			Urethane Lip Steel Case	-30° - +200° F	-	3 FT/ SEC	**431 - 432**
	MCW Metal Clad Wipers			Urethane Lip Steel Case	-30° TO +200° F	-	3 FT/ SEC	**433**
	MCWE Snap-In Wipers			Urethane	-40° TO +200° F	-	3 FT/ SEC	**433**
	MCWI Metal Clad Wipers			Urethane Lip Steel Case	-30° TO +200° F	-	3 FT/ SEC	**434**

METRIC SEALS

Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
WIPER RINGS	**MCWS** Metal Clad Wipers			Urethane Lip Steel Case SS Spring	-40° - +200° F	-	3 FT/ SEC	**435**
	MCKB Metal Clad Wipers			Nitrile LIp Steel Case	-20° - +250° F	-	3 FT/ SEC	**435**
	MCWN Metal Clad Wipers			Nitrile Lip Steel Case	-30° - +220° F	-	3 FT/ SEC	**436**
PIN SEALS	**MDS** Link Pin Dust Seals			Nitrile Lip Steel Case	-40° - +220° F	-	3 FT/ SEC	**437**
	MCWA Metal Clad Dust Seals			Urethane Lip Steel Case	-30° - +200° F	-	3 FT/ SEC	**437**
OIL SEALS	**MOS** Oil Seals			Rubber Lip Steel Case	-40° - +225° F	10 PSI @ 1000 FPM	3 FT/ SEC	**438 - 439**
O-RINGS	**MOR** O-Rings			70A or 90A Durometer Nitrile or 75A Durometer Fluorocarbon	-40° - +220° F	-	3 FT/ SEC	**442 - 457**
	OBVD Static Seals	NEW		Nitrile O-Ring Urethane Back-Up	-22° - +212° F	0 - 7250 PSI	3 FT/ SEC	**458**
BACK-UP RINGS	**MBT** Back-Up Rings			PTFE	-100° - +500° F	-	-	**462 - 463**
	MBU Back-Up Rings			Urethane	-40° - +200° F	-	-	**464**

SEAL PROFILE INDEX

METRIC SEALS

Type	Prefix	Product Image	Profile	Material	Temp	Pressure	Speed	Page #
RETAINER RINGS	**MSL** Spiral Internal Retainer Rings			Steel	-	-	-	**465**
	M300 Internal Retainer RIngs (Tru-Arc Type)			Steel	-	-	-	**465**
	M310 External Retainer Rings (Tru-Arc Type)			Steel	-	-	-	**465**
	MSR U-Seal Retainer Rings			Acetal	-22° TO +212° F	-	-	**466**
MISC.	**MHH** Self Aligning Bearings			Carbon Chromium Steel	-	-	-	**467**
	MCPL Couplings			Plastic w/ Aluminum	-	-	-	**468**

Inch Seals

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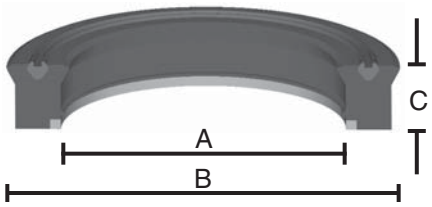
STYLE RTUB SUPER-DUTY ROD U-SEALS

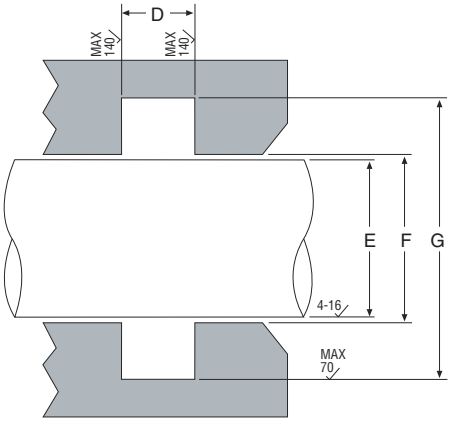
Featuring high pressure and high shock load capability, this seal utilizes the same twin lip design found in RTU style. With the main body of the seal molded from high performance polyurethane, this seal incorporates a dynamically designed nitrile energizer and a tough polyacetal anti-extrusion ring. RTUB is capable of pressures up to 10,000 psi in approved applictions. Please consult our Engineering department for pressures above 6,000 psi.



PART NUMBERS

RTUB 18 - 1.50 - 25

Type of Seal | Cross Section | Inside Diameter | Height



SEAL INFORMATION					
MATERIAL	94A URETHANE SEAL RUBBER ENERGIZER POLYACETAL ANTI-EXTRUSION RING				
MAXIMUM OPERATING CONDITIONS					
MAXIMUM SPEED	PRESSURE RANGE		TEMPERATURE RANGE		
3 FT/SEC	0 - 6,000 PSI		-50° to +230° F		
MAXIMUM EXTRUSION GAP					
PRESSURE	2,400 PSI	3,750 PSI	6,000 PSI	7,500 PSI	10,000 PSI
MAX. DIAM. GAP	.040”	.032”	.024”	.016”	.010”

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER
3/16" C/S							
RTUB18-1.50-25	1-1/2	1-7/8	1/4	0.275 +.010 -.000	1.500 -0.0010 -0.0034	1.501 +0.003 -0.000	1.875 ±0.003
RTUB18-1.50-31	1-1/2	1-7/8	5/16	0.344 +.010 -.000	1.500 -0.0010 -0.0034	1.501 +0.003 -0.000	1.875 ±0.003
RTUB18-1.75-25	1-3/4	2-1/8	1/4	0.275 +.010 -.000	1.750 -0.0010 -0.0034	1.751 +0.003 -0.000	2.125 ±0.004
RTUB18-1.75-37	1-3/4	2-1/8	3/8	0.413 +.010 -.000	1.750 -0.0010 -0.0034	1.751 +0.003 -0.000	2.125 ±0.004
RTUB18-2.00-37	2	2-3/8	3/8	0.413 +.010 -.000	2.000 -0.0012 -0.0041	2.001 +0.004 -0.000	2.375 ±0.004
RTUB18-3.75-37	3-3/4	4-1/8	3/8	0.413 +.010 -.000	3.750 -0.0014 -0.0048	3.751 +0.004 -0.000	4.125 ±0.004

STYLE RTUB SUPER-DUTY ROD U-SEALS

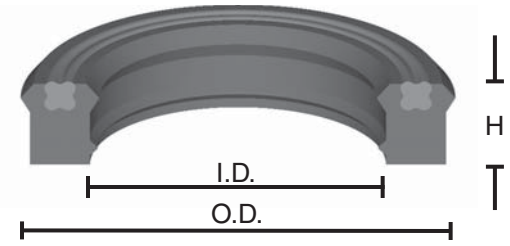
Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER
1/4" C/S							
RTUB25-1.37-37	1-3/8	1-7/8	3/8	0.413 +.010 -.000	1.375 -0.0010 -0.0034	1.376 +0.003 -0.000	1.875 ±0.003
RTUB25-1.50-37	1-1/2	2	3/8	0.413 +.010 -.000	1.500 -0.0010 -0.0034	1.501 +0.003 -0.000	2.000 ±0.004
RTUB25-1.75-37	1-3/4	2-1/4	3/8	0.413 +.010 -.000	1.750 -0.0010 -0.0034	1.751 +0.003 -0.000	2.250 ±0.004
RTUB25-2.00-37	2	2-1/2	3/8	0.413 +.010 -.000	2.000 -0.0012 -0.0041	2.001 +0.004 -0.000	2.500 ±0.004
RTUB25-2.12-37	2-1/8	2-5/8	3/8	0.413 +.010 -.000	2.125 -0.0012 -0.0041	2.126 +0.004 -0.000	2.625 ±0.004
RTUB25-2.25-37	2-1/4	2-3/4	3/8	0.413 +.010 -.000	2.250 -0.0012 -0.0041	2.251 +0.004 -0.000	2.750 ±0.004
RTUB25-2.37-37	2-3/8	2-7/8	3/8	0.413 +.010 -.000	2.375 -0.0012 -0.0041	2.376 +0.004 -0.000	2.875 ±0.004
RTUB25-2.50-37	2-1/2	3	3/8	0.413 +.010 -.000	2.500 -0.0012 -0.0041	2.501 +0.004 -0.000	3.000 ±0.004
RTUB25-2.75-37	2-3/4	3-1/4	3/8	0.413 +.010 -.000	2.750 -0.0012 -0.0041	2.751 +0.004 -0.000	3.250 ±0.004
RTUB25-3.00-37	3	3-1/2	3/8	0.413 +.010 -.000	3.000 -0.0012 -0.0041	3.001 +0.004 -0.000	3.500 ±0.004
RTUB25-3.25-37	3-1/4	3-3/4	3/8	0.413 +.010 -.000	3.250 -0.0014 -0.0048	3.251 +0.004 -0.000	3.750 ±0.004
RTUB25-3.50-37	3-1/2	4	3/8	0.413 +.010 -.000	3.500 -0.0014 -0.0048	3.501 +0.004 -0.000	4.000 ±0.004
RTUB25-4.00-37	4	4-1/2	3/8	0.413 +.010 -.000	4.000 -0.0014 -0.0048	4.001 +0.004 -0.000	4.500 ±0.004
RTUB25-4.00-56	4	4-1/2	9/16	0.618 +.010 -.000	4.000 -0.0014 -0.0048	4.001 +0.004 -0.000	4.500 ±0.004
RTUB25-4.50-37	4-1/2	5	3/8	0.413 +.010 -.000	4.500 -0.0014 -0.0048	4.501 +0.004 -0.000	5.000 ±0.005
RTUB25-4.50-56	4-1/2	5	9/16	0.618 +.010 -.000	4.500 -0.0014 -0.0048	4.501 +0.004 -0.000	5.000 ±0.005
RTUB25-5.00-56	5	5-1/2	9/16	0.618 +.010 -.000	5.000 -0.0017 -0.0056	5.001 +0.004 -0.000	5.500 ±0.005
RTUB25-5.50-56	5-1/2	6	9/16	0.618 +.010 -.000	5.500 -0.0017 -0.0056	5.501 +0.004 -0.000	6.000 ±0.005
RTUB25-6.00-56	6	6-1/2	9/16	0.618 +.010 -.000	6.000 -0.0017 -0.0056	6.001 +0.004 -0.000	6.500 ±0.005
5/16" C/S							
RTUB31-3.00-50	3	3-5/8	1/2	0.550 +.010 -.000	3.000 -0.0012 -0.0041	3.001 +0.004 -0.000	3.625 ±0.004
RTUB31-3.50-50	3-1/2	4-1/8	1/2	0.550 +.010 -.000	3.500 -0.0014 -0.0048	3.501 +0.004 -0.000	4.125 ±0.004
RTUB31-4.00-56	4	4-5/8	9/16	0.619 +.010 -.000	4.000 -0.0014 -0.0048	4.001 +0.004 -0.000	4.625 ±0.004
RTUB31-4.50-62	4-1/2	5-1/8	5/8	0.688 +.010 -.000	4.500 -0.0014 -0.0048	4.501 +0.004 -0.000	5.125 ±0.005
RTUB31-5.00-62	5	5-5/8	5/8	0.688 +.010 -.000	5.000 -0.0017 -0.0056	5.001 +0.004 -0.000	5.625 ±0.005
3/8" C/S							
RTUB37-3.00-62	3	3-3/4	5/8	0.688 +.010 -.000	3.000 -0.0012 -0.0041	3.001 +0.004 -0.000	3.750 ±0.004
RTUB37-3.50-62	3-1/2	4-1/4	5/8	0.688 +.010 -.000	3.500 -0.0014 -0.0048	3.501 +0.004 -0.000	4.250 ±0.005
RTUB37-4.00-62	4	4-3/4	5/8	0.688 +.010 -.000	4.000 -0.0014 -0.0048	4.001 +0.004 -0.000	4.750 ±0.005

STYLE RTUB SUPER-DUTY ROD U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER
3/8" C/S							
RTUB37-4.50-62	4-1/2	5-1/4	5/8	0.688 +.010 -.000	4.500 -0.0014 -0.0048	4.501 +0.004 -0.000	5.250 ±0.005
RTUB37-5.00-62	5	5-3/4	5/8	0.688 +.010 -.000	5.000 -0.0017 -0.0056	5.001 +0.004 -0.000	5.750 ±0.005
RTUB37-6.00-62	6	6-3/4	5/8	0.688 +.010 -.000	6.000 -0.0017 -0.0056	6.001 +0.004 -0.000	6.750 ±0.005

STYLE RTUL LOADED ROD U-SEAL

Molded from high performance polyurethane, style RTUL rod U-seals feature an expander for good low pressure sealing. The twin lip feature reduces friction and promotes stability.



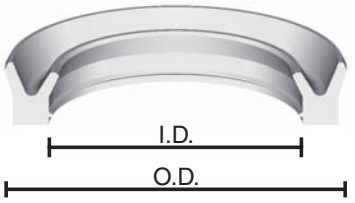
SEAL INFORMATION	
MATERIAL	95A URETHANE
TEMPERATURE RANGE	-40° TO +225°F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)

Part Number	I.D.	O.D.	H.
7/32" C/S			
RTUL21-1.25-31BHT	1-1/4	1-11/16	5/16
RTUL21-1.25-39BHT	1-1/4	1-11/16	0.390
RTUL21-1.37-31BHT	1-3/8	1-13/16	5/16
RTUL21-1.37-39BHT	1-3/8	1-13/16	0.390
RTUL21-1.37-39BHT	1-3/8	1-13/16	0.390
RTUL21-1.50-37BHT	1-1/2	1-15/16	3/8
RTUL21-1.62-37BHT	1-5/8	2-1/16	3/8

Part Number	I.D.	O.D.	H.
7/32" C/S			
RTUL21-1.62-39BHT	1-5/8	2-1/16	0.390
RTUL21-1.75-37BHT	1-3/4	2-3/16	3/8
RTUL21-1.75-39BHT	1-3/4	2-3/16	0.390
1/4" C/S			
RTUL25-1.75-37BHT	1-3/4	2-1/4	3/8
RTUL25-2.00-37BHT	2	2-1/2	3/8
RTUL25-2.25-37BHT	2-1/4	2-3/4	3/8

STYLE RTU ASYMMETRIC TWIN LIP ROD U-SEALS

The twin lip design helps solve difficult rod sealing problems by providing lower friction, increased stability, and high dynamic lip force, while preventing air penetration from outside the cylinder.



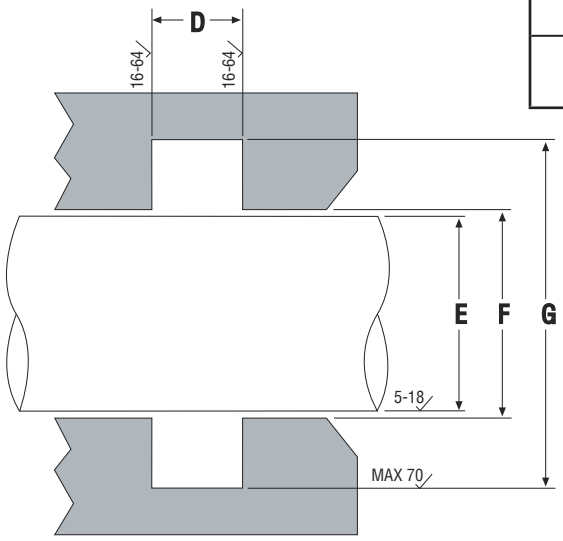
HT= HIGH TEMP MATERIAL UP TO +250°F

PART NUMBERS

RTU 12 - 0.62 - 25

Type of Seal | Cross Section | Inside Diameter | Height

SEAL INFORMATION	
MATERIAL	94A URETHANE
TEMPERATURE RANGE	-40° TO +225°F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)



Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER
1/8" C/S							
RTU12+0.62+25	5/8	7/8	1/4	0.275 +0.01/0	0.620 -0.0008/-0.0028	0.621 +0.003/0	0.870 ±0.003
RTU12-0.75-25	3/4	1	1/4	0.275 +0.01/0	0.750 -0.0008/-0.0028	0.751 +0.003/0	1.000 ±0.003
RTU12-0.87-25	7/8	1-1/8	1/4	0.275 +0.01/0	0.875 -0.0008/-0.0028	0.876 +0.003/0	1.125 ±0.003
RTU12-1.00-18	1	1-1/4	3/16	0.207 +0.01/0	1.000 -0.0008/-0.0028	1.001 +0.003/0	1.250 ±0.003
RTU12-1.00-25	1	1-1/4	1/4	0.275 +0.01/0	1.000 -0.0008/-0.0028	1.001 +0.003/0	1.250 ±0.003
RTU12-1.12-18	1-1/8	1-3/8	3/16	0.218 +0.01/0	1.125 -0.001/-0.0034	1.126 +0.003/0	1.375 ±0.003
RTU12-1.12-19	1-1/8	1-3/8	.19	0.218 +0.01/0	1.125 -0.001/-0.0034	1.126 +0.003/0	1.375 ±0.003
RTU12-1.25-19	1-1/4	1-1/2	.19	0.218 +0.01/0	1.250 -0.001/-0.0034	1.251 +0.003/0	1.500 ±0.003
RTU12-1.25-25	1-1/4	1-1/2	1/4	0.275 +0.01/0	1.250 -0.001/-0.0034	1.251 +0.003/0	1.500 ±0.003
RTU12-1.37-19	1-3/8	1-5/8	.19	0.218 +0.01/0	1.000 -0.0008/-0.0028	1.001 +0.003/0	1.625 ±0.003
RTU12-1.50-25	1-1/2	1-3/4	1/4	0.275 +0.01/0	1.500 -0.001/-0.0034	1.501 +0.003/0	1.750 ±0.003
RTU12-2.00-25	2	2-1/4	1/4	0.275 +0.01/0	2.000 -0.001/-0.0034	2.001 +0.004/0	2.250 ±0.003

STYLE RTU ASYMMETRIC TWIN LIP ROD U-SEALS

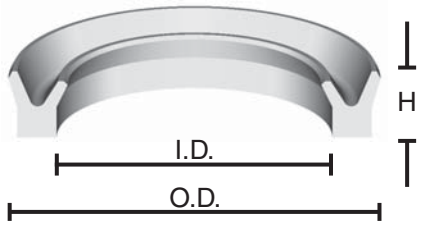
Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER
1/5" C/S							
RTU15-1.37-21	1-3/8	1-11/16	.21	0.231 +0.01/0	1.375 -0.001/-0.0028	1.376 +0.003/0	1.675 ±0.003
3/16" C/S							
RTU18-1.00-25	1	1-3/8	1/4	0.275 +0.01/0	1.000 -0.0008/-0.0028	1.001 +0.003/0	1.375 ±0.003
RTU18-1.00-31	1	1-3/8	5/16	0.344 +0.01/0	1.000 -0.0008/-0.0028	1.001 +0.003/0	1.375 ±0.003
RTU18-1.12-31	1-1/8	1-1/2	5/16	0.344 +0.01/0	1.125 -0.0008/-0.0028	1.126 +0.003/0	1.500 ±0.003
RTU18-1.25-23	1-1/4	1-5/8	15/64	0.257 +0.01/0	1.250 -0.001/-0.0034	1.251 +0.003/0	1.625 ±0.003
RTU18-1.25-31	1-1/4	1-5/8	5/16	0.344 +0.01/0	1.250 -0.001/-0.0034	1.251 +0.003/0	1.625 ±0.003
RTU18-1.25-37HT	1-1/4	1-5/8	3/8	0.413 +0.01/0	1.250 -0.001/-0.0034	1.251 +0.003/0	1.625 ±0.003
RTU18-1.37-31	1-3/8	1-3/4	5/16	0.344 +0.01/0	1.375 -0.001/-0.0034	1.376 +0.003/0	1.750 ±0.003
RTU18-1.50-25	1-1/2	1-7/8	1/4	0.275 +0.01/0	1.500 -0.001/-0.0034	1.501 +0.003/0	1.875 ±0.003
RTU18-1.50-31	1-1/2	1-7/8	5/16	0.344 +0.01/0	1.500 -0.001/-0.0034	1.501 +0.003/0	1.875 ±0.003
RTU18-1.50-37	1-1/2	1-7/8	3/8	0.413 +0.01/0	1.500 -0.001/-0.0034	1.501 +0.003/0	1.875 ±0.003
RTU18-1.62-31	1-5/8	2	5/16	0.344 +0.01/0	1.625 -0.001/-0.0034	1.626 +0.003/0	2.000 ±0.003
RTU18-1.75-25	1-3/4	2-1/8	1/4	0.275 +0.01/0	1.750 -0.001/-0.0034	1.751 +0.003/0	2.125 ±0.004
RTU18-1.75-31	1-3/4	2-1/8	5/16	0.344 +0.01/0	1.750 -0.001/-0.0034	1.751 +0.003/0	2.125 ±0.004
RTU18-1.75-37	1-3/4	2-1/8	3/8	0.413 +0.01/0	1.750 -0.0012/-0.0041	1.751 +0.003/0	2.125 ±0.004
RTU18-2.00-31	2	2-3/8	5/16	0.344 +0.01/0	2.000 -0.0012/-0.0041	2.001 +0.003/0	2.375 ±0.004
RTU18-2.00-37	2	2-3/8	3/8	0.413 +0.01/0	2.000 -0.0012/-0.0041	2.001 +0.004/0	2.375 ±0.004
RTU18-2.50-31	2-1/2	2-7/8	5/16	0.344 +0.01/0	2.500 -0.0012/-0.0041	2.501 +0.004/0	2.875 ±0.004
RTU18-3.00-37	3	3-3/8	3/8	0.413 +0.01/0	3.000 -0.0012/-0.0041	3.001 +0.004/0	3.375 ±0.004
RTU18-3.12-62	3-1/8	3-1/2	5/8	0.688 +0.01/0	3.125 -0.0012/-0.0041	3.126 +0.004/0	3.500 ±0.004
RTU18-3.25-56	3-1/4	3-5/8	9/16	0.616 +0.01/0	3.250 -0.0012/-0.0041	3.251 +0.004/0	3.625 ±0.004
RTU18-3.50-37	3-1/2	3-7/8	3/8	0.413 +0.01/0	3.500 -0.0014/-0.0048	3.501 +0.004/0	3.875 ±0.004
RTU18-4.00-37	4	4-3/8	3/8	0.413 +0.01/0	4.000 -0.0014/-0.0048	4.001 +0.004/0	4.375 ±0.004
1/4" C/S							
RTU25-1.00-25	1	1-1/2	1/4	0.275 +0.01/0	1.000 -0.0008/-0.0028	1.001 +0.003/0	1.500 ±0.003
RTU25-1.00-37	1	1-1/2	3/8	0.413 +0.01/0	1.000 -0.0008/-0.0028	1.001 +0.003/0	1.500 ±0.003
RTU25-1.25-25	1-1/4	1-3/4	1/4	0.275 +0.01/0	1.250 -0.001/-0.0034	1.251 +0.003/0	1.750 ±0.003
RTU25-1.25-37	1-1/4	1-3/4	3/8	0.413 +0.01/0	1.250 -0.001/-0.0034	1.251 +0.003/0	1.750 ±0.003
RTU25-1.37-37HT	1-3/8	1-7/8	3/8	0.413 +0.01/0	1.375 -0.001/-0.0034	1.376 +0.003/0	1.875 ±0.003
RTU25-1.50-37	1-1/2	2	3/8	0.413 +0.01/0	1.500 -0.001/-0.0034	1.501 +0.003/0	2.000 ±0.004

STYLE RTU ASYMMETRIC TWIN LIP ROD U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER
1/4" C/S							
RTU25-1.75-37	1-3/4	2-1/4	3/8	0.413 +0.01/0	1.750 -0.001/-0.0034	1.751 +0.003/0	2.250 ±0.004
RTU25-2.00-31	2	2-1/2	5/16	0.344 +0.01/0	2.000 -0.0012/-0.0041	2.001 +0.004/0	2.500 ±0.004
RTU25-2.00-37	2	2-1/2	3/8	0.413 +0.01/0	2.000 -0.0012/-0.0041	2.001 +0.004/0	2.500 ±0.004
RTU25-2.25-37	2-1/4	2-3/4	3/8	0.413 +0.01/0	2.250 -0.0012/-0.0041	2.251 +0.004/0	2.750 ±0.004
RTU25-2.50-28	2-1/2	3	9/32	0.309 +0.01/0	2.500 -0.0012/-0.0041	2.501 +0.004/0	3.000 ±0.004
RTU25-2.50-37	2-1/2	3	3/8	0.413 +0.01/0	2.500 -0.0012/-0.0041	2.501 +0.004/0	3.000 ±0.004
RTU25-2.75-31	2-3/4	3-1/4	5/16	0.344 +0.01/0	2.750 -0.0012/-0.0041	2.751 +0.004/0	3.250 ±0.004
RTU25-2.75-37	2-3/4	3-1/4	3/8	0.413 +0.01/0	2.750 -0.0012/-0.0041	2.751 +0.004/0	3.250 ±0.004
RTU25-3.00-37	3	3-1/2	3/8	0.413 +0.01/0	3.000 -0.0012/-0.0041	3.001 +0.004/0	3.500 ±0.004
RTU25-3.00-75	3	3-1/2	3/4	0.825 +0.01/0	3.000 -0.0012/-0.0041	3.001 +0.004/0	3.500 ±0.004
RTU25-3.25-37	3-1/4	3-3/4	3/8	0.413 +0.01/0	3.250 -0.0014/-0.0048	3.251 +0.004/0	3.750 ±0.004
RTU25-3.50-31	3-1/2	4	5/16	0.344 +0.01/0	3.500 -0.0014/-0.0048	3.501 +0.004/0	4.000 ±0.004
RTU25-3.50-37	3-1/2	4	3/8	0.413 +0.01/0	3.500 -0.0014/-0.0048	3.501 +0.004/0	4.000 ±0.004
RTU25-4.00-37	4	4-1/2	3/8	0.413 +0.01/0	4.000 -0.0014/-0.0048	4.001 +0.004/0	4.500 ±0.004
RTU25-4.00-56	4	4-1/2	9/16	0.618 +0.01/0	4.000 -0.0014/-0.0048	4.001 +0.004/0	4.500 ±0.004
RTU25-4.00-75	4	4-1/2	3/4	0.825 +0.01/0	4.000 -0.0014/-0.0048	4.001 +0.004/0	4.500 ±0.004
RTU25-4.50-37	4-1/2	5	3/8	0.413 +0.01/0	4.500 -0.0014/-0.0048	4.501 +0.004/0	5.000 ±0.005
RTU25-5.00-37	5	5-1/2	3/8	0.413 +0.01/0	5.000 -0.0017/-0.0056	5.001 +0.004/0	5.500 ±0.005
RTU25-5.00-75	5	5-1/2	3/4	0.825 +0.01/0	5.000 -0.0017/-0.0056	5.001 +0.004/0	5.500 ±0.005
RTU25-5.50-37	5-1/2	6	3/8	0.413 +0.01/0	5.500 -0.0017/-0.0056	5.501 +0.004/0	6.000 ±0.005
RTU25-6.00-75	6	6-1/2	3/4	0.825 +0.01/0	6.000 -0.0017/-0.0056	6.001 +0.004/0	6.500 ±0.005
RTU25-7.00-75	7	7-1/2	3/4	0.859 +0.01/0	7.000 -0.0017/-0.0056	7.001 +0.004/0	7.500 ±0.006
RTU25-8.12-75	8-1/8	8-5/8	3/4	0.825 +0.01/0	8.125 -0.002/-0.0065	8.126 +0.004/0	8.625 ±0.006
RTU25-9.37-75	9-3/8	9-7/8	3/4	0.825 +0.01/0	9.375 -0.002/-0.0065	9.376 +0.004/0	9.875 ±0.006
5/16" C/S							
RTU31-3.37-59	3-3/8	4	19/32	0.590 +0.01/0	3.375 0.0014/+0.0048	3.756 +0.004/0	4.355 ±0.006
RTU31-4.50-50	4-1/2	5-1/8	1/2	0.550 +0.01/0	4.500 0.0014/+0.0048	4.501 +0.004/0	5.125 ±0.005

STYLE RU URETHANE ROD U-SEALS

Style RU seals are molded from high quality urethane and designed specifically for rod applications.



P= HIGH PERFORMANCE
MATERIAL UP TO +275°F

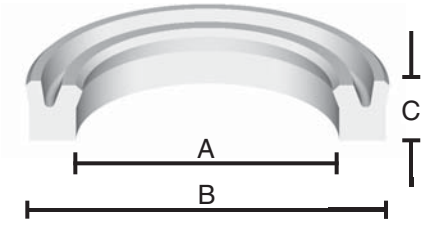
SEAL INFORMATION	
MATERIAL	90A URETHANE
TEMPERATURE RANGE	-40° TO +200°F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)

Part Number	I.D.	O.D.	H.
3/16" C.S			
RU18-2.00-31P	2	2-3/8	5/16
RU18-2.66-30	2.66	3.03	.30
1/4" C/S			
RU25-1.50-37	1-1/2	2	3/8
RU25-1.75-37	1-3/4	2-1/4	3/8
RU25-1.75-50	1-3/4	2-1/4	1/2
RU25-2.00-37	2	2-1/2	3/8
RU25-2.50-37	2-1/2	3	3/8
RU25-3.00-37	3	3-1/2	3/8

Part Number	I.D.	O.D.	H.
5/16" C/S			
RU31-2.62-62	2-5/8	3-1/4	5/8
RU31-3.37-50	3-3/8	4	1/2
RU31-3.75-62	3-3/4	4-3/8	5/8
RU31-4.62-62	4-5/8	5-1/4	5/8
RU31-5.75-62	5-3/4	6-3/8	5/8
RU31-6.75-62	6-3/4	7-3/8	5/8

STYLE DRU HEAVY DUTY ROD U-SEALS

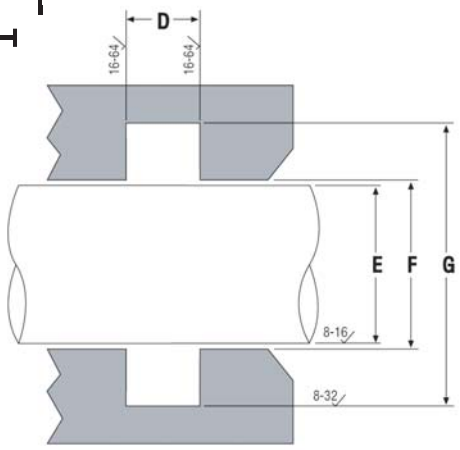
These seals are specifically designed to seal on their inside diameter and engineered to attain maximum life and reliability in dynamic rod sealing.



PART NUMBERS

DRU 12 - 0.62 - 18

Type of Seal | Cross Section | Inside Diameter | Height



SEAL INFORMATION	
MATERIAL	92A URETHANE
TEMPERATURE RANGE	-65° TO +230° F
PRESSURE RANGE	0 TO 6,000 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER
1/8" C/S							
DRU12-0.62-18	5/8	7/8	3/16	0.218 +0.015/0	0.625 +0/-0.003	0.626 +0.003/0	0.875 +0.005/0
DRU12-0.75-12	3/4	1	1/8	0.156 +0.015/0	0.750 +0/-0.003	0.751 +0.003/0	1.000 +0.005/0
DRU12-0.75-25	3/4	1	1/4	0.281 +0.015/0	0.750 +0/-0.003	0.751 +0.003/0	1.000 +0.005/0
DRU12-0.87-12	7/8	1-1/8	1/8	0.156 +0.015/0	0.875 +0/-0.003	0.876 +0.003/0	1.125 +0.005/0
DRU12-1.00-12	1	1-1/4	1/8	0.156 +0.015/0	1.000 +0/-0.003	1.001 +0.003/0	1.250 +0.005/0
DRU12-1.00-18	1	1-1/4	3/16	0.218 +0.015/0	1.000 +0/-0.003	1.001 +0.003/0	1.250 +0.005/0
3/16" C/S							
DRU18-0.87-18	7/8	1-1/4	3/16	0.218 +0.015/0	0.875 +0/-0.003	0.876 +0.003/0	1.250 +0.005/0
DRU18-0.87-25	7/8	1-1/4	1/4	0.218 +0.015/0	0.875 +0/-0.003	0.876 +0.003/0	1.250 +0.005/0
DRU18-1.12-37	1-1/8	1-1/2	3/8	0.406 +0.015/0	1.125 +0/-0.003	1.126 +0.003/0	1.500 +0.007/0
DRU18-1.75-25	1-3/4	2-1/8	1/4	0.281 +0.015/0	1.750 +0/-0.003	1.751 +0.003/0	2.125 +0.008/0
DRU18-1.87-31	1-7/8	2-1/4	5/16	0.343 +0.015/0	1.875 +0/-0.003	1.876 +0.003/0	2.250 +0.008/0
DRU18-2.00-25	2	2-3/8	1/4	0.281 +0.015/0	2.000 +0/-0.003	2.001 +0.004/0	2.375 +0.008/0
DRU18-2.25-31	2-1/4	2-5/8	5/16	0.343 +0.015/0	2.250 +0/-0.003	2.251 +0.004/0	2.625 +0.008/0
DRU18-2.50-31	2-1/2	2-7/8	5/16	0.343 +0.015/0	2.500 +0/-0.003	2.501 +0.004/0	2.875 +0.008/0
1/4" C/S							
DRU25-0.93-37	15/16	1-7/16	3/8	0.406 +0.015/0	0.937 +0/-0.003	0.938 +0.003/0	1.437 +0.005/0
DRU25-1.00-25	1	1-1/2	1/4	0.281 +0.015/0	1.000 +0/-0.003	1.001 +0.003/0	1.500 +0.007/0
DRU25-1.12-25	1-1/8	1-5/8	1/4	0.281 +0.015/0	1.125 +0/-0.003	1.126 +0.003/0	1.625 +0.007/0
DRU25-1.25-25	1-1/4	1-3/4	1/4	0.281 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	1.750 +0.007/0

STYLE DRU HEAVY DUTY ROD U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER
1/4" C/S							
DRU25-1.25-31	1-1/4	1-3/4	5/16	0.343 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	1.750 +0.007/0
DRU25-1.50-31	1-1/2	2	5/16	0.343 +0.015/0	1.500 +0/-0.003	1.501 +0.003/0	2.000 +0.008/0
DRU25-1.62-31	1-5/8	2-1/8	5/16	0.343 +0.015/0	1.625 +0/-0.003	1.626 +0.003/0	2.125 +0.008/0
DRU25-1.87-37	1-7/8	2-3/8	3/8	0.406 +0.015/0	1.875 +0/-0.003	1.876 +0.003/0	2.375 +0.008/0
DRU25-2.00-25	2	2-1/2	1/4	0.281 +0.015/0	2.000 +0/-0.003	2.001 +0.004/0	2.500 +0.008/0
DRU25-2.00-31	2	2-1/2	5/16	0.343 +0.015/0	2.000 +0/-0.003	2.001 +0.004/0	2.500 +0.008/0
DRU25-2.12-37	2-1/8	2-5/8	3/8	0.406 +0.015/0	2.125 +0/-0.003	2.126 +0.004/0	2.625 +0.008/0
DRU25-2.37-37	2-3/8	2-7/8	3/8	0.406 +0.015/0	2.375 +0/-0.003	2.376 +0.004/0	2.875 +0.008/0
DRU25-2.50-25	2-1/2	3	1/4	0.281 +0.015/0	2.500 +0/-0.003	2.501 +0.004/0	3.000 +0.008/0
DRU25-2.50-31	2-1/2	3	5/16	0.343 +0.015/0	2.500 +0/-0.003	2.501 +0.004/0	3.000 +0.008/0
DRU25-2.62-37	2-5/8	3-1/8	3/8	0.406 +0.015/0	2.625 +0/-0.003	2.626 +0.004/0	3.125 +0.008/0
DRU25-3.37-37	3-3/8	3-7/8	3/8	0.406 +0.015/0	3.375 +0/-0.004	3.376 +0.004/0	3.875 +0.009/0
DRU25-3.75-59	3-3/4	4-1/4	19/32	0.625 +0.015/0	3.750 +0/-0.004	3.751 +0.004/0	4.250 +0.009/0
DRU25-4.00-25	4	4-1/2	1/4	0.281 +0.015/0	4.000 +0/-0.004	4.001 +0.004/0	4.500 +0.009/0
DRU25-4.00-56	4	4-1/2	9/16	0.532 +0.015/0	4.000 +0/-0.004	4.001 +0.004/0	4.500 +0.009/0
DRU25-4.50-56	4-1/2	5	9/16	0.593 +0.015/0	4.500 +0/-0.004	4.501 +0.004/0	5.000 +0.01/0
DRU25-5.00-56	5	5-1/2	9/16	0.532 +0.015/0	5.000 +0/-0.004	5.001 +0.004/0	5.500 +0.01/0
DRU25-5.25-59	5-1/4	5-3/4	19/32	0.625 +0.015/0	5.250 +0/-0.004	5.251 +0.004/0	5.750 +0.01/0
DRU25-6.75-59	6-3/4	7-1/4	19/32	0.625 +0.015/0	6.750 +0/-0.004	6.751 +0.004/0	7.250 +0.011/0
5/16" C/S							
DRU31-1.37-37	1-3/8	2	3/8	0.406 +0.015/0	1.375 +0/-0.003	1.376 +0.003/0	2.000 +0.008/0
DRU31-2.00-37	2	2-5/8	3/8	0.406 +0.015/0	2.000 +0/-0.003	2.001 +0.004/0	2.625 +0.008/0
DRU31-2.25-37	2-1/4	2-7/8	3/8	0.406 +0.015/0	2.250 +0/-0.003	2.251 +0.004/0	2.875 +0.008/0
DRU31-2.25-50	2-1/4	2-7/8	1/2	0.531 +0.015/0	2.250 +0/-0.003	2.251 +0.004/0	2.875 +0.008/0
DRU31-2.37-37	2-3/8	3	3/8	0.406 +0.015/0	2.375 +0/-0.003	2.376 +0.004/0	3.000 +0.008/0
DRU31-2.37-50	2-3/8	3	1/2	0.531 +0.015/0	2.375 +0/-0.003	2.376 +0.004/0	3.000 +0.008/0
DRU31-2.75-37	2-3/4	3-3/8	3/8	0.406 +0.015/0	2.750 +0/-0.003	2.751 +0.004/0	3.375 +0.009/0
DRU31-3.00-37	3	3-5/8	3/8	0.406 +0.015/0	3.000 +0/-0.004	3.001 +0.004/0	3.625 +0.009/0
DRU31-3.37-50	3-3/8	4	1/2	0.531 +0.015/0	3.375 +0/-0.004	3.376 +0.004/0	4.000 +0.009/0
DRU31-3.75-50	3-3/4	4-3/8	1/2	0.531 +0.015/0	3.750 +0/-0.004	3.751 +0.004/0	4.375 +0.009/0
DRU31-4.00-50	4	4-5/8	1/2	0.531 +0.015/0	4.000 +0/-0.004	4.001 +0.004/0	4.625 +0.009/0
DRU31-4.50-37	4-1/2	5-1/8	3/8	0.406 +0.015/0	4.500 +0/-0.004	4.501 +0.004/0	5.125 +0.01/0
DRU31-5.50-37	5-1/2	6-1/8	3/8	0.406 +0.015/0	5.500 +0/-0.001	5.501 +0.004/0	6.125 +0.01/0
3/8" C/S							
DRU37-2.00-37	2	2-3/4	3/8	0.406 +0.015/0	2.000 +0/-0.003	2.001 +0.004/0	2.750 +0.008/0
DRU37-2.00-50	2	2-3/4	1/2	0.531 +0.015/0	2.000 +0/-0.003	2.001 +0.004/0	2.750 +0.008/0
DRU37-3.00-37	3	3-3/4	3/8	0.406 +0.015/0	3.000 +0/-0.004	3.001 +0.004/0	3.750 +0.009/0
DRU37-3.00-62	3	3-3/4	5/8	0.656 +0.015/0	3.000 +0/-0.004	3.001 +0.004/0	3.750 +0.009/0
DRU37-3.50-37	3-1/2	4-1/4	3/8	0.406 +0.015/0	3.500 +0/-0.004	3.501 +0.004/0	4.250 +0.009/0
DRU37-3.50-50	3-1/2	4-1/4	1/2	0.531 +0.015/0	3.500 +0/-0.004	3.501 +0.004/0	4.250 +0.009/0

STYLE DRU HEAVY DUTY ROD U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER
3/8" C/S							
DRU37-3.62-37	3-5/8	4-3/8	3/8	0.406 +0.015/0	3.625 +0/-0.004	3.626 +0.004/0	4.375 +0.009/0
DRU37-4.00-37	4	4-3/4	3/8	0.406 +0.015/0	4.000 +0/-0.004	4.001 +0.004/0	4.750 +0.009/0
DRU37-4.00-50	4	4-3/4	1/2	0.531 +0.015/0	4.000 +0/-0.004	4.001 +0.004/0	4.750 +0.009/0
DRU37-4.00-62	4	4-3/4	5/8	0.656 +0.015/0	4.000 +0/-0.004	4.001 +0.004/0	4.750 +0.009/0
DRU37-4.25-50	4-1/4	5	1/2	0.531 +0.015/0	4.250 +0/-0.004	4.251 +0.004/0	5.000 +0.01/0
DRU37-4.25-62	4-1/4	5	5/8	0.656 +0.015/0	4.250 +0/-0.004	4.251 +0.004/0	5.000 +0.01/0
DRU37-4.37-50	4-3/8	5-1/8	1/2	0.531 +0.015/0	4.375 +0/-0.004	4.376 +0.004/0	5.125 +0.01/0
DRU37-4.50-50	4-1/2	5-1/4	1/2	0.531 +0.015/0	4.500 +0/-0.004	4.501 +0.004/0	5.250 +0.01/0
DRU37-4.50-62	4-1/2	5-1/4	5/8	0.656 +0.015/0	4.500 +0/-0.004	4.501 +0.004/0	5.250 +0.01/0
DRU37-4.75-37	4-3/4	5-1/2	3/8	0.406 +0.015/0	4.750 +0/-0.004	4.751 +0.004/0	5.500 +0.01/0
DRU37-4.87-50	4-7/8	5-5/8	1/2	0.531 +0.015/0	4.875 +0/-0.004	4.876 +0.004/0	5.625 +0.01/0
DRU37-5.25-62	5-1/4	6	5/8	0.687 +0.015/0	5.250 +0/-0.004	5.251 +0.004/0	6.000 +0.01/0
DRU37-5.75-62	5-3/4	6-1/2	5/8	0.656 +0.015/0	5.750 +0/-0.004	5.751 +0.004/0	6.500 +0.01/0
DRU37-6.00-62	6	6-3/4	5/8	0.656 +0.015/0	6.000 +0/-0.004	6.001 +0.004/0	6.750 +0.01/0
DRU37-6.50-50	6-1/2	7-1/4	1/2	0.531 +0.015/0	6.500 +0/-0.004	6.501 +0.004/0	7.250 +0.011/0
DRU37-6.50-62	6-1/2	7-1/4	5/8	0.656 +0.015/0	6.500 +0/-0.004	6.501 +0.004/0	7.250 +0.011/0
DRU37-7.00-50	7	7-3/4	1/2	0.531 +0.015/0	7.000 +0/-0.004	7.001 +0.004/0	7.750 +0.011/0
DRU37-7.00-62	7	7-3/4	5/8	0.656 +0.015/0	7.000 +0/-0.004	7.001 +0.004/0	7.750 +0.011/0
7/16" C/S							
DRU43-4.50-48	4-1/2	5-3/8	7/16	0.512 +0.015/0	4.500 +0/-0.004	4.501 +0.004/0	5.375 +0.01/0
1/2" C/S							
DRU50-5.00-75	5	6	3/4	0.781 +0.015/0	5.000 +0/-0.004	5.001 +0.004/0	6.000 +0.01/0
DRU50-7.00-69	7	8	11/16	0.747 +0.015/0	7.000 +0/-0.005	7.001 +0.004/0	8.000 +0.011/0
DRU50-7.00-75	7	8	3/4	0.781 +0.015/0	7.000 +0/-0.005	7.001 +0.004/0	8.000 +0.011/0
DRU50-9.00-62	9	10	5/8	0.656 +0.015/0	9.000 +0/-0.005	9.001 +0.004/0	10.000 +0.012/0
DRU50-9.00-75	9	10	3/4	0.781 +0.015/0	9.000 +0/-0.005	9.001 +0.004/0	10.000 +0.012/0
DRU50-10.00-62	10	11	5/8	0.656 +0.015/0	10.000 +0/-0.006	10.001 +0.004/0	11.000 +0.012/0
DRU50-12.00-75	12	13	3/4	0.781 +0.015/0	12.000 +0/-0.006	12.001 +0.004/0	13.000 +0.012/0
3/4" C/S							
DRU75-8.00-62	8	9-1/2	5/8	0.656 +0.015/0	8.000 +0/-0.005	8.001 +0.004/0	9.500 +0.012/0

DON'T DAMAGE THAT U-SEAL

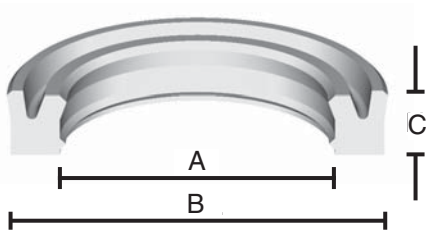
TRY OUR
ROD U-SEAL INSTALLATION TOOLS

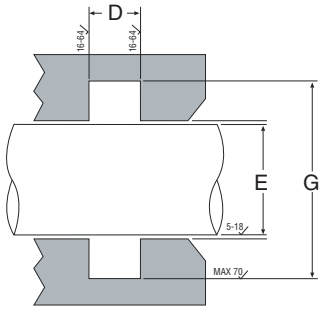
These handy tools aid U-seal installation, eliminating the risk of damaging the seal lip.

Part Number	Seal ID Range
IT 100	3/4” to 1-1/4”
IT 150	1-3/8” to 1-7/8”
IT 200	2” to 3”
IT 100-NN	3/4” to 1-1/4”
IT 150-NN	1-3/8” to 1-7/8”
IT 200-NN	2” to 3”

STYLE DRTU HEAVY DUTY ROD U-SEALS

These seals are specifically designed with a second lip on their inside diameter and engineered to attain maximum life and reliability in dynamic rod sealing. This feature results in reduced leakage, less friction, increased stability, and prevents air and contaminants from entering the cylinder.





SEAL INFORMATION	
MATERIAL	92A URETHANE
MAX SPEED	3 FT/SEC
TEMPERATURE RANGE	-65° TO +230° F
PRESSURE RANGE	0 TO 6,000 PSI

PART NUMBERS

DRTU 12 - 0.75 - 25

Type of Seal | Cross Section | Inside Diameter | Height

MAXIMUM EXTRUSION GAP				
PRESSURE	1000 PSI	3000 PSI	5000 PSI	6000 PSI
MAX DIAM. GAP	0.032"	0.015"	0.012"	0.009"

Part Number	A I.D.	B O.D.	C HT.	G GROOVE O.D.		D GROOVE WIDTH		E ROD DIAMETER	
1/8" C/S									
DRTU12-0.75-25	3/4	1	1/4	1.000	+.005 -.000	0.275	+.015 -.000	0.750	+.000 -.003
DRTU12-1.00-25	1	1-1/4	1/4	1.250	+.005 -.000	0.275	+.015 -.000	1.000	+.000 -.003
3/16" C/S									
DRTU18-0.75-25	3/4	1-1/8	1/4	1.125	+.005 -.000	0.275	+.015 -.000	0.750	+.000 -.003
DRTU18-0.75-31	3/4	1-1/8	5/16	1.125	+.005 -.000	0.344	+.015 -.000	0.750	+.000 -.003
DRTU18-1.00-31	1	1-3/8	5/16	1.375	+.005 -.000	0.344	+.015 -.000	1.000	+.000 -.003
DRTU18-1.12-25	1-1/8	1-1/2	1/4	1.500	+.007 -.000	0.275	+.015 -.000	1.125	+.000 -.003
DRTU18-1.12-31	1-1/8	1-1/2	5/16	1.500	+.007 -.000	0.344	+.015 -.000	1.125	+.000 -.003
DRTU18-1.25-31	1-1/4	1-5/8	5/16	1.625	+.007 -.000	0.344	+.015 -.000	1.250	+.000 -.003
DRTU18-1.25-37	1-1/4	1-5/8	3/8	1.625	+.007 -.000	0.413	+.015 -.000	1.250	+.000 -.003
DRTU18-1.37-31	1-3/8	1-3/4	5/16	1.750	+.007 -.000	0.344	+.015 -.000	1.375	+.000 -.003
DRTU18-1.50-25	1-1/2	1-7/8	1/4	1.875	+.007 -.000	0.275	+.015 -.000	1.500	+.000 -.003
DRTU18-1.50-31	1-1/2	1-7/8	5/16	1.875	+.007 -.000	0.344	+.015 -.000	1.500	+.000 -.003
DRTU18-1.50-37	1-1/2	1-7/8	3/8	1.875	+.007 -.000	0.413	+.015 -.000	1.500	+.000 -.003
DRTU18-1.62-37	1-5/8	2	3/8	2.000	+.008 -.000	0.413	+.015 -.000	1.625	+.000 -.003
DRTU18-1.75-31	1-3/4	2-1/8	5/16	2.125	+.008 -.000	0.344	+.015 -.000	1.750	+.000 -.003
DRTU18-1.75-37	1-3/4	2-1/8	3/8	2.125	+.008 -.000	0.413	+.015 -.000	1.750	+.000 -.003

STYLE DRTU HEAVY DUTY ROD U-SEALS

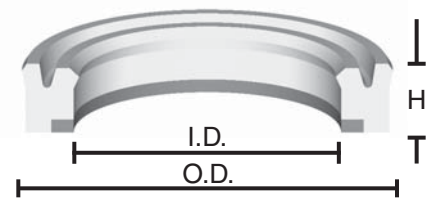
Part Number	A I.D.	B O.D.	C HT.	G GROOVE O.D.		D GROOVE WIDTH		E ROD DIAMETER	
3/16" C/S									
DRTU18-1.87-37	1-7/8	2-1/4	3/8	2.250	+.008 -.000	0.413	+.015 -.000	1.875	+.000 -.003
DRTU18-2.00-31	2	2-3/8	5/16	2.375	+.008 -.000	0.344	+.015 -.000	2.000	+.000 -.003
DRTU18-2.00-37	2	2-3/8	3/8	2.375	+.008 -.000	0.413	+.015 -.000	2.000	+.000 -.003
DRTU18-2.25-37	2-1/4	2-5/8	3/8	2.625	+.008 -.000	0.413	+.015 -.000	2.250	+.000 -.003
DRTU18-2.50-37	2-1/2	2-7/8	3/8	2.875	+.008 -.000	0.413	+.015 -.000	2.500	+.000 -.003
1/4" C/S									
DRTU25-1.00-37	1	1-1/2	3/8	1.500	+.007 -.000	0.413	+.015 -.000	1.000	+.000 -.003
DRTU25-1.25-37	1-1/4	1-3/4	3/8	1.750	+.007 -.000	0.413	+.015 -.000	1.250	+.000 -.003
DRTU25-1.37-37	1-3/8	1-7/8	3/8	1.875	+.007 -.000	0.413	+.015 -.000	1.375	+.000 -.003
DRTU25-1.50-37	1-1/2	2	3/8	2.000	+.008 -.000	0.413	+.015 -.000	1.500	+.000 -.003
DRTU25-1.75-31	1-3/4	2-1/4	5/16	2.250	+.008 -.000	0.344	+.015 -.000	1.750	+.000 -.003
DRTU25-1.75-37	1-3/4	2-1/4	3/8	2.250	+.008 -.000	0.413	+.015 -.000	1.750	+.000 -.003
DRTU25-2.00-37	2	2-1/2	3/8	2.500	+.008 -.000	0.413	+.015 -.000	2.000	+.000 -.003
DRTU25-2.25-37	2-1/4	2-3/4	3/8	2.750	+.008 -.000	0.413	+.015 -.000	2.250	+.000 -.003
DRTU25-2.37-37	2-3/8	2-7/8	3/8	2.875	+.008 -.000	0.413	+.015 -.000	2.375	+.000 -.003
DRTU25-2.50-37	2-1/2	3	3/8	3.000	+.008 -.000	0.413	+.015 -.000	2.500	+.000 -.003
DRTU25-2.75-37	2-3/4	3-1/4	3/8	3.250	+.009 -.000	0.413	+.015 -.000	2.750	+.000 -.003
DRTU25-3.00-37	3	3-1/2	3/8	3.500	+.009 -.000	0.413	+.015 -.000	3.000	+.000 -.004
DRTU25-3.25-31	3-1/4	3-3/4	5/16	3.750	+.009 -.000	0.344	+.015 -.000	3.250	+.000 -.004
DRTU25-3.25-37	3-1/4	3-3/4	3/8	3.7 50	+.009 -.000	0.413	+.015 -.000	3.250	+.000 -.004
DRTU25-3.50-37	3-1/2	4	3/8	4.000	+.009 -.000	0.413	+.015 -.000	3.500	+.000 -.004
DRTU25-3.75-37	3-3/4	4-1/4	3/8	4.250	+.009 -.000	0.413	+.015 -.000	3.750	+.000 -.004
DRTU25-4.00-37	4	4-1/2	3/8	4.500	+.009 -.000	0.413	+.015 -.000	4.000	+.000 -.004
DRTU25-4.50-56	4-1/2	5	9/16	5.000	+.010 -.000	0.618	+.015 -.000	4.500	+.000 -.004
DRTU25-4.75-56	4-3/4	5-1/4	9/16	5.250	+.010 -.000	0.618	+.015 -.000	4.750	+.000 -.004
DRTU25-5.50-56	5-1/2	6	9/16	6.000	+.010 -.000	0.618	+.015 -.000	5.500	+.000 -.004
5/16" C/S									
DRTU31-1.75-37	1-3/4	2-3/8	3/8	2.375	+.008 -.000	0.413	+.015 -.000	1.750	+.000 -.003
DRTU31-1.75-50	1-3/4	2-3/8	1/2	2.375	+.008 -.000	0.550	+.015 -.000	1.750	+.000 -.003
DRTU31-2.00-50	2	2-5/8	1/2	2.625	+.008 -.000	0.550	+.015 -.000	2.000	+.000 -.003
DRTU31-2.50-50	2-1/2	3-1/8	1/2	3.125	+.008 -.000	0.550	+.015 -.000	2.500	+.000 -.003

STYLE DRTU HEAVY DUTY ROD U-SEALS

Part Number	A I.D.	B O.D.	C HT.	G GROOVE O.D.		D GROOVE WIDTH		E ROD DIAMETER	
5/16" C/S									
DRTU31-2.75-50	2-3/4	3-3/8	1/2	3.375	+.009 -.000	0.550	+.015 -.000	2.750	+.000 -.003
DRTU31-3.00-50	3	3-5/8	1/2	3.625	+.009 -.000	0.550	+.015 -.000	3.000	+.000 -.004
DRTU31-4.00-37	4	4-5/8	3/8	4.625	+.009 -.000	0.413	+.015 -.000	4.000	+.000 -.004
3/8" C/S									
DRTU37-2.75-62	2-3/4	3-1/2	5/8	3.500	+.009 -.000	0.687	+.015 -.000	2.750	+.000 -.003
DRTU37-3.00-50	3	3-3/4	1/2	3.750	+.009 -.000	0.550	+.015 -.000	3.000	+.000 -.004
DRTU37-3.50-62	3-1/2	4-1/4	5/8	4.250	+.009 -.000	0.687	+.015 -.000	3.500	+.000 -.004
DRTU37-4.00-62	4	4-3/4	5/8	4.750	+.009 -.000	0.687	+.015 -.000	4.000	+.000 -.004
DRTU37-4.50-62	4-1/2	5-1/4	5/8	5.250	+.010 -.000	0.687	+.015 -.000	4.500	+.000 -.004
DRTU37-4.75-62	4-3/4	5-1/2	5/8	5.500	+.010 -.000	0.687	+.015 -.000	4.750	+.000 -.004
DRTU37-5.00-62	5	5-3/4	5/8	5.750	+.010 -.000	0.687	+.015 -.000	5.000	+.000 -.004

STYLE DRUB HEAVY DUTY ROD U-SEALS

These seals are specifically designed to seal on their inside diameter and engineered to attain maximum life and reliability in dynamic rod sealing. They employ a hard plastic I.D. back-up ring to reduce the possibility of extrusion.

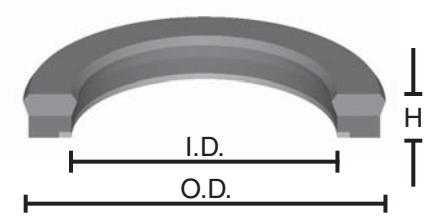


Part Number	I.D.	O.D.	H.
DRUB25-2.37-37	2-3/8	2-7/8	3/8
DRUB25-2.50-37	2-1/2	3	3/8
DRUB37-5.75-62	5-3/4	6-1/2	5/8

SEAL INFORMATION	
MATERIAL	92A URETHANE
TEMPERATURE RANGE	-40° TO +230° F
PRESSURE RANGE	0 TO 6,000 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)

STYLE UFN-EI ROD SEALS W/BACK-UP RINGS

Incorporating a rubber seal lip, a rubberized fabric heel, and an acetal back-up ring, this seal provides excellent sealability and high extrusion resistance.



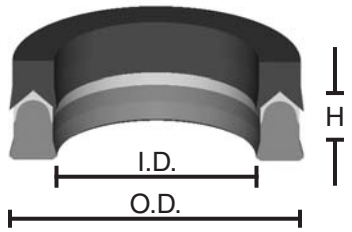
SEAL INFORMATION	
MATERIAL	RUBBER, FABRIC, ACETAL
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 5,800 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)

Part Number	I.D.	O.D.	H.
1/8" C/S			
UFN12-1.00-18EI	1	1-1/4	3/16
UFN12-1.12-18EI	1-1/8	1-3/8	3/16
5/32" C/S			
UFN15-2.00-25EI	2	2-5/16	1/4
0.17" C/S			
UFN17-0.75-28EI	3/4	1.09	9/32
3/16" C/S			
UFN18-0.62-28EI	5/8	1	9/32
UFN18-0.75-31EI	3/4	1-1/8	5/16
UFN18-1.00-25EI	1	1-3/8	1/4
UFN18-1.25-25EI	1-1/4	1-5/8	1/4
UFN18-1.25-28EI	1-1/4	1-5/8	9/32
UFN18-1.37-28EI	1-3/8	1-3/4	9/32
UFN18-1.50-25EI	1-1/2	1-7/8	1/4
UFN18-1.50-28EI	1-1/2	1-7/8	9/32
UFN18-1.75-28EI	1-3/4	2-1/8	9/32
UFN18-1.75-30EI	1-3/4	2-1/8	0.300
UFN18-2.12-31EI	2-1/8	2-1/2	5/16
7/32" C/S			
UFN22-1.12-34EI	1-1/8	1-9/16	0.340
1/4" C/S			
UFN25-0.87-25EI	7/8	1-3/8	1/4
UFN25-1.00-25EI	1	1-1/2	1/4

Part Number	I.D.	O.D.	H.
1/4" C/S			
UFN25-1.00-37EI	1	1-1/2	3/8
UFN25-1.12-37EI	1-1/8	1-5/8	3/8
UFN25-1.25-37EI	1-1/4	1-3/4	3/8
UFN25-1.50-37EI	1-1/2	2	3/8
UFN25-1.50-46EI	1-1/2	2	0.460
UFN25-1.75-37EI	1-3/4	2-1/4	3/8
UFN25-2.00-37EI	2	2-1/2	3/8
UFN25-2.25-37EI	2-1/4	2-3/4	3/8
UFN25-2.50-31EI	2-1/2	3	5/16
UFN25-3.50-37EI	3-1/2	4	3/8
5/16" C/S			
UFN31-1.25-43EI	1-1/4	1-7/8	7/16
UFN31-1.50-43EI	1-1/2	2-1/8	7/16
UFN31-1.75-43EI	1-3/4	2-3/8	7/16
UFN31-2.00-43EI	2	2-5/8	7/16
11/32" C/S			
UFN34-1.50-43EI	1-1/2	1.032	7/16
3/8" C/S			
UFN37-2.50-56EI	2-1/2	3-1/4	9/16
UFN37-2.75-56EI	2-3/4	3-1/2	9/16
UFN37-3.00-56EI	3	3-3/4	9/16
UFN37-3.50-56EI	3-1/2	4-1/4	9/16

STYLE UFN-BR ROD U-SEALS W/HEADERS

This is a single acting rod seal designed for low and high pressure sealing and is commonly found in telescopic cylinders. The seal consists of a molded rubber sealing lip, rubberized fabric heel, and a polyester header for improved extrustion resistance.



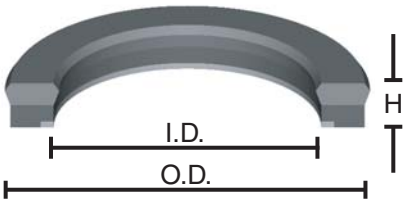
SEAL INFORMATION	
MATERIAL	RUBBER, FABRIC, POLYESTER ELASTOMER
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	1.64 FPS @ 3600 PSI 0.49 FPS @ 5800 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)

Part Number	I.D.	O.D.	H.
UFN22-2.75-75BR-L-F	2-3/4	3.200	3/4
UFN25-3.50-75BR-L-F	3-1/2	4.013	3/4
UFN25-4.37-75BR-L-F	4-3/8	4-7/8	3/4
UFN28-6.31-75BR-L-F	6-5/16	6-7/8	3/4

Part Number	I.D.	O.D.	H.
UFN31-8.37-75BR-L-F	8-3/8	9	3/4
UFN32-7.31-75BR-L-F	7-5/16	7.954	3/4
UFN39-9.43-100BR-L-F	9-7/16	10.216	1

STYLE UFN-EI-SAG ROD SEALS W/BACK-UP RINGS

This is a single acting rod seal designed for low and high pressure sealing and is commonly found in telescopic cylinders. The seal consists of a molded rubber sealing lip, rubberized fabic heel, and an acetal back-up ring for improved extrusion resistance.



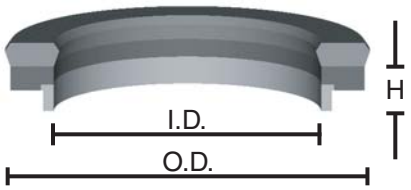
SEAL INFORMATION	
MATERIAL	RUBBER, FABRIC, ACETAL
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	1.64 FPS @ 3600 PSI 0.49 FPS @ 5800 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)

Part Number	I.D.	O.D.	H.
UFN21-2.00-41EI-SAG-F	2	2-7/16	0.406
UFN21-2.75-41EI-SAG-F	2-3/4	3-3/16	0.406
UFN25-3.50-46EI-SAG-F	3-1/2	4	0.468

Part Number	I.D.	O.D.	H.
UFN25-4.37-46EI-SAG-F	4-3/8	4-7/8	0.468
UFN31-5.25-46EI-SAG-F	5-1/4	5-7/8	0.468

STYLE UFN-WI ROD SEAL W/CLIP ON BEARING

This is a single acting rod seal designed for low and high pressure sealing and is commonly found in telescopic cylinders. The seal consists of a molded rubber sealing lip and rubberized fabric heel. It also incorporates an acetal wear ring for improved extrusion resistance and to allow larger clearances between the rod and gland.



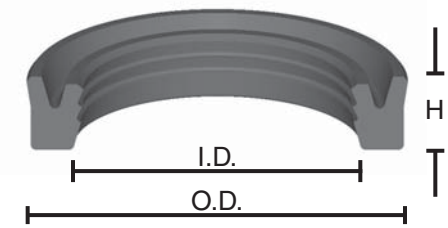
SEAL INFORMATION	
MATERIAL	RUBBER, FABRIC, ACETAL
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	1.64 FPS @ 3600PSI 0.49 FPS @ 5800PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)

Part Number	I.D.	O.D.	H.
UFN37-3.00-56WI-S-F	3	3-3/4	9/16
UFN37-3.62-56WI-S-F	3-5/8	4-3/8	9/16
UFN37-4.37-56WI-S-F	4-3/8	5-1/8	9/16
UFN37-5.25-56WI-S-F	5-1/4	6	9/16

Part Number	I.D.	O.D.	H.
UFN37-6.31-56WI-S-F	6-5/16	7-1/16	9/16
UFN37-7.31-56WI-S-F	7-5/16	8-5/16	9/16
UFN50-8.37-68WI-S-F	8-3/8	9-3/8	11/16

STYLE HMU POLYURETHANE U-SEALS

The HMU style multi-lip rod u-seal combines the pressure-compensating, uni-directional characteristics of a u-seal with the multi-lip sealing effectiveness of compression-type stacked-packings. Made from premium materials, the HMU utilizes several sealing lip edges for dry rod performance while minimizing friction. The multi-lip design maintains a critical sealing edge even though increasing pressure moves the line of contact down toward the heel.

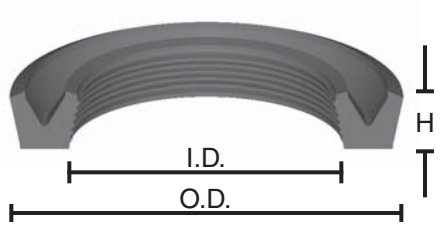


SEAL INFORMATION	
MATERIAL	92A URETHANE
TEMPERATURE RANGE	-40° TO +200° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)

Part Number	I.D.	O.D.	H.
1/8" C/S			
HMU12-0.62-17U	5/8	7/8	.17
HMU12-0.50-21U	1/2	3/4	7/32
HMU12-0.62-21U	5/8	7/8	7/32
HMU12-1.00-25U	1	1-1/4	1/4
5/32" C/S			
HMU15-1.00-21U	1	1-5/16	7/32
HMU15-1.37-24U	1-3/8	1-11/16	0.24
3/16" C/S			
HMU18-1.37-31U	1-3/8	1-3/4	5/16
HMU18-1.75-27U	1-3/4	2-1/8	0.27
HMU18-1.75-38U	1-3/4	2-1/8	3/8
HMU18-2.00-27U	2	2-3/8	0.27
HMU18-2.00-38U	2	2-3/8	3/8
HMU18-2.50-38U	2-1/2	2-7/8	3/8

Part Number	I.D.	O.D.	H.
3/16" C/S			
HMU18-3.00-38U	3	3-3/8	3/8
HMU18-3.50-38U	3-1/2	3-7/8	3/8
7/32" C/S			
HMU21-2.50-30U	2-1/2	2.93	0.30
HMU21-3.00-30U	3	3-7/16	0.30
1/4" C/S			
HMU25-3.50-33U	3-1/2	4	0.33
HMU25-4.00-33U	4	4-1/2	0.33
HMU25-4.50-33U	4-1/2	5	0.33
9/32" C/S			
HMU28-5.00-35U	5	5-9/16	0.355
5/16" C/S			
HMU31-5.50-38U	5-1/2	6.12	0.38

STYLE HMU HOMOGENOUS U-SEALS



N=BUNA-N
V=FLUOROCARBON

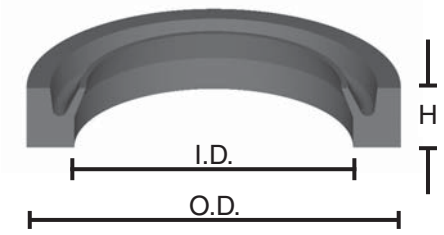
SEAL INFORMATION	
MATERIAL	80A BUNA-N RUBBER 90A FLUOROCARBON
TEMPERATURE RANGE	BUNA-N: -40° TO +250° F FC: -20° TO +400° F
PRESSURE RANGE	BUNA-N: 0 TO 1,000 PSI FC: 0-2,000 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)

Part Number	I.D.	O.D.	H.
1/8" C/S			
HMU12-0.62-15N	5/8	7/8	5/32
HMU12-0.62-15V	5/8	7/8	5/32
5/32" C/S			
HMU15-1.00-18N	1	1-5/16	3/16
HMU15-1.00-18V	1	1-5/16	3/16
HMU15-1.37-18N	1-3/8	1-11/16	3/16
HMU15-1.37-18V	1-3/8	1-11/16	3/16

Part Number	I.D.	O.D.	H.
3/16" C/S			
HMU18-1.75-21N	1-3/4	2-1/8	7/32
HMU18-1.75-21V	1-3/4	2-1/8	7/32
HMU18-2.00-21N	2	2-3/8	7/32
HMU18-2.00-21V	2	2-3/8	7/32
7/32" C/S			
HMU21-2.50-24N	2-1/2	2.93	.24
HMU21-2.50-24V	2-1/2	2.93	.24
HMU21-3.00-24N	3	3-7/16	.24
HMU21-3.00-24V	3	3-7/16	.24

STYLE UKR ROD U-SEALS

UKR u-seals are designed to act as a positive sealing, low friction replacement for conventional rubber u-seals. Molded from polyurethane, UKR u-seals provide long life and high resistance against extrusion. Low friction allows these seals to run smoothly in a lubricated or non-lucricated cylinder. Available for rod sealing, the flexible dynamic lip provides very low breakaway friction and steady motion.



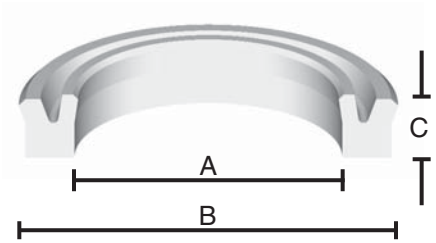
SEAL INFORMATION	
MATERIAL	90A URETHANE
TEMPERATURE RANGE	-40° TO +200° F
PRESSURE RANGE	0 TO 150 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia)

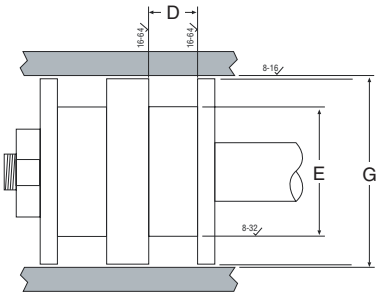
Part Number	I.D.	O.D.	H.
3/32" C/S			
UKR09-0.25	1/4	7/16	3/32
UKR09-0.31	5/16	1/2	3/32
UKR09-0.50	1/2	11/16	3/32
1/8" C/S			
UKR12-0.37	3/8	5/8	1/8
UKR12-0.50	1/2	3/4	1/8
UKR12-0.62	5/8	7/8	1/8
UKR12-0.75	3/4	1	1/8
UKR12-0.87	7/8	1-1/8	1/8

Part Number	I.D.	O.D.	H.
UKR12-1.00	1	1-1/4	1/8
UKR12-1.12	1-1/8	1-3/8	1/8
5/32" C/S			
UKR15-1.00	1	1-5/16	5/32
UKR15-1.25	1-1/4	1-9/16	5/32
UKR15-1.37	1-3/8	1-11/16	5/32
3/16" C/S			
UKR18-1.50	1-1/2	1-7/8	3/16
UKR18-1.75	1-3/4	2-1/8	3/16
UKR18-2.00	2	2-3/8	3/16
UKR18-2.25	2-1/4	2-5/8	3/16

STYLE DPU HEAVY DUTY PISTON U-SEALS

Specifically designed as piston seals, these u-seals are engineered to seal on their outside diameter. They offer extended service life and maximum reliability in piston sealing.





SEAL INFORMATION	
MATERIAL	92A URETHANE
MAX SPEED	3 FT/SEC
TEMPERATURE RANGE	-65° TO +230° F
PRESSURE RANGE	0 TO 6,000 PSI

PART NUMBERS

DPU 12 - 0.75 - 25

Type of Seal | Cross Section | Inside Diameter | Height

MAXIMUM EXTRUSION GAP				
PRESSURE	1000 psi	3000 psi	5000 psi	6000 psi
MAX DIAM. GAP	0.032"	0.015"	0.012"	0.009"

Part Number	A NOM. I.D.	B NOM. O.D.	C HT.	D GROOVE WIDTH	E GROOVE DIAMETER	G BORE DIAMETER
1/8" C/S						
DPU12-0.75-12	3/4	1	0.125	0.156 +0.015 -0.000	0.750 +0.000 -0.005	1.000 +0.003 -0.000
DPU12-1.00-25	1	1-1/4	0.250	0.281 +0.015 -0.000	1.000 +0.000 -0.005	1.250 +0.003 -0.000
3/16" C/S						
DPU18-1.25-31	1-1/4	1-5/8	0.313	0.343 +0.015 -0.000	1.250 +0.000 -0.007	1.625 +0.003 -0.000
DPU18-1.37-31	1-3/8	1-3/4	0.313	0.343 +0.015 -0.000	1.375 +0.000 -0.007	1.750 +0.003 -0.000
DPU18-1.75-31	1-3/4	2-1/8	0.313	0.343 +0.015 -0.000	1.750 +0.000 -0.007	2.125 +0.003 -0.000
DPU18-1.75-37	1-3/4	2-1/8	0.375	0.406 +0.015 -0.000	1.750 +0.000 -0.007	2.125 +0.003 -0.000
DPU18-2.00-37	2	2-3/8	0.375	0.406 +0.015 -0.000	2.000 +0.000 -0.008	2.375 +0.003 -0.000
DPU18-2.12-18	2-1/8	2-1/2	0.188	0.219 +0.015 -0.000	2.125 +0.000 -0.008	2.500 +0.003 -0.000
DPU18-2.12-31	2-1/8	2-1/2	0.313	0.343 +0.015 -0.000	2.125 +0.000 -0.008	2.500 +0.003 -0.000
DPU18-2.12-37	2-1/8	2-1/2	0.375	0.406 +0.015 -0.000	2.125 +0.000 -0.008	2.500 +0.003 -0.000
DPU18-3.12-37	3-1/8	3-1/2	0.375	0.406 +0.015 -0.000	3.125 +0.000 -0.009	3.500 +0.003 -0.000
7/32" C/S						
DPU21-0.25-37	1/4	11/16	0.375	0.406 +0.015 -0.000	0.250 +0.000 -0.004	0.688 +0.003 -0.000
1/4" C/S						
DPU25-1.00-35	1	1-1/2	0.357	0.388 +0.015 -0.000	1.000 +0.000 -0.005	1.500 +0.003 -0.000
DPU25-1.00-37	1	1-1/2	0.375	0.406 +0.015 -0.000	1.000 +0.000 -0.005	1.500 +0.003 -0.000

STYLE DPU HEAVY DUTY PISTON U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C HT.	D GROOVE WIDTH	E GROOVE DIAMETER	G BORE DIAMETER
1/4" C/S						
DPU25-1.12-31	1-1/8	1-5/8	0.313	0.343 +0.015 -0.000	1.125 +0.000 -0.005	1.625 +0.003 -0.000
DPU25-1.25-37	1-1/4	1-3/4	0.375	0.406 +0.015 -0.000	1.250 +0.000 -0.007	1.750 +0.003 -0.000
DPU25-1.50-31	1-1/2	2	0.313	0.343 +0.015 -0.000	1.500 +0.000 -0.007	2.000 +0.003 -0.000
DPU25-1.50-37	1-1/2	2	0.375	0.406 +0.015 -0.000	1.500 +0.000 -0.007	2.000 +0.003 -0.000
DPU25-1.75-37	1-3/4	2-1/4	0.375	0.406 +0.015 -0.000	1.750 +0.000 -0.007	2.250 +0.003 -0.000
DPU25-2.00-37	2	2-1/2	0.375	0.406 +0.015 -0.000	2.000 +0.000 -0.008	2.500 +0.003 -0.000
DPU25-2.06-25	2-1/16	2-9/16	0.250	0.281 +0.015 -0.000	2.063 +0.000 -0.008	2.563 +0.003 -0.000
DPU25-2.06-34	2-1/16	2-9/16	0.344	0.375 +0.015 -0.000	2.063 +0.000 -0.008	2.563 +0.003 -0.000
DPU25-2.25-31	2-1/4	2-3/4	0.313	0.343 +0.015 -0.000	2.250 +0.000 -0.008	2.750 +0.003 -0.000
DPU25-2.25-37	2-1/4	2-3/4	0.375	0.406 +0.015 -0.000	2.250 +0.000 -0.008	2.750 +0.003 -0.000
DPU25-2.50-37	2-1/2	3	0.375	0.406 +0.015 -0.000	2.500 +0.000 -0.008	3.000 +0.003 -0.000
DPU25-2.75-37	2-3/4	3-1/4	0.375	0.406 +0.015 -0.000	2.750 +0.000 -0.008	3.250 +0.003 -0.000
DPU25-3.00-37	3	3-1/2	0.375	0.406 +0.015 -0.000	3.000 +0.000 -0.009	3.500 +0.003 -0.000
DPU25-3.12-37	3-1/8	3-5/8	0.375	0.406 +0.015 -0.000	3.125 +0.000 -0.009	3.625 +0.003 -0.000
DPU25-3.25-37	3-1/4	3-3/4	0.375	0.406 +0.015 -0.000	3.250 +0.000 -0.009	3.750 +0.003 -0.000
DPU25-3.50-37	3-1/2	4	0.375	0.406 +0.015 -0.000	3.500 +0.000 -0.009	4.000 +0.004 -0.000
DPU25-3.62-37	3-5/8	4-1/8	0.375	0.406 +0.015 -0.000	3.625 +0.000 -0.009	4.125 +0.004 -0.000
DPU25-3.75-37	3-3/4	4-1/4	0.375	0.406 +0.015 -0.000	3.750 +0.000 -0.009	4.250 +0.004 -0.000
DPU25-4.00-37	4	4-1/2	0.375	0.406 +0.015 -0.000	4.000 +0.000 -0.009	4.500 +0.004 -0.000
DPU25-4.00-56	4	4-1/2	0.563	0.594 +0.015 -0.000	4.000 +0.000 -0.009	4.500 +0.004 -0.000
DPU25-4.50-37	4-1/2	5	0.375	0.406 +0.015 -0.000	4.500 +0.000 -0.009	5.000 +0.004 -0.000
DPU25-4.50-43	4-1/2	5	0.438	0.468 +0.015 -0.000	4.500 +0.000 -0.009	5.000 +0.004 -0.000
DPU25-4.50-56	4-1/2	5	0.563	0.594 +0.015 -0.000	4.500 +0.000 -0.009	5.000 +0.004 -0.000
DPU25-5.00-37	5	5-1/2	0.375	0.406 +0.015 -0.000	5.000 +0.000 -0.010	5.500 +0.004 -0.000
DPU25-5.00-56	5	5-1/2	0.563	0.594 +0.015 -0.000	5.000 +0.000 -0.010	5.500 +0.004 -0.000
DPU25-5.50-25	5-1/2	6	0.250	0.281 +0.015 -0.000	5.500 +0.000 -0.010	6.000 +0.004 -0.000
DPU25-5.50-37	5-1/2	6	0.375	0.406 +0.015 -0.000	5.500 +0.000 -0.010	6.000 +0.004 -0.000
DPU25-5.50-50	5-1/2	6	0.500	0.531 +0.015 -0.000	5.500 +0.000 -0.010	6.000 +0.004 -0.000
DPU25-5.50-56	5-1/2	6	0.563	0.594 +0.015 -0.000	5.500 +0.000 -0.010	6.000 +0.004 -0.000

STYLE DPU HEAVY DUTY PISTON U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C HT.	D GROOVE WIDTH	E GROOVE DIAMETER	G BORE DIAMETER
5/16" C/S						
DPU31-1.12-50	1-1/8	1-3/4	0.500	0.531 +0.015 -0.000	1.125 +0.000 -0.005	1.750 +0.003 -0.000
DPU31-1.25-47	1-1/4	1-7/8	0.469	0.500 +0.015 -0.000	1.250 +0.000 -0.007	1.875 +0.003 -0.000
DPU31-1.37-37	1-3/8	2	0.375	0.406 +0.015 -0.000	1.375 +0.000 -0.007	2.000 +0.003 -0.000
DPU31-1.37-43	1-3/8	2	0.438	0.468 +0.015 -0.000	1.375 +0.000 -0.007	2.000 +0.003 -0.000
DPU31-1.37-44	1-3/8	2	0.440	0.471 +0.015 -0.000	1.375 +0.000 -0.007	2.000 +0.003 -0.000
DPU31-1.37-50	1-3/8	2	0.500	0.531 +0.015 -0.000	1.375 +0.000 -0.007	2.000 +0.003 -0.000
DPU31-1.62-50	1-5/8	2-1/4	0.500	0.531 +0.015 -0.000	1.625 +0.000 -0.007	2.250 +0.003 -0.000
DPU31-1.87-37	1-7/8	2-1/2	0.375	0.406 +0.015 -0.000	1.875 +0.000 -0.007	2.500 +0.003 -0.000
DPU31-1.87-50	1-7/8	2-1/2	0.500	0.531 +0.015 -0.000	1.875 +0.000 -0.007	2.500 +0.003 -0.000
DPU31-2.37-37	2-3/8	3	0.375	0.406 +0.015 -0.000	2.375 +0.000 -0.008	3.000 +0.003 -0.000
DPU31-2.37-50	2-3/8	3	0.500	0.531 +0.015 -0.000	2.375 +0.000 -0.008	3.000 +0.003 -0.000
DPU31-2.87-50	2-7/8	3-1/2	0.500	0.531 +0.015 -0.000	2.875 +0.000 -0.008	3.500 +0.003 -0.000
DPU31-3.37-37	3-3/8	4	0.375	0.406 +0.015 -0.000	3.375 +0.000 -0.009	4.000 +0.004 -0.000
DPU31-3.37-50	3-3/8	4	0.500	0.531 +0.015 -0.000	3.375 +0.000 -0.009	4.000 +0.004 -0.000
DPU31-3.62-37	3-5/8	4-1/4	0.375	0.406 +0.015 -0.000	3.625 +0.000 -0.009	4.250 +0.004 -0.000
DPU31-3.62-50	3-5/8	4-1/4	0.500	0.531 +0.015 -0.000	3.625 +0.000 -0.009	4.250 +0.004 -0.000
DPU31-3.87-50	3-7/8	4-1/2	0.500	0.531 +0.015 -0.000	3.875 +0.000 -0.009	4.500 +0.004 -0.000
DPU31-5.37-50	5-3/8	6	0.500	0.531 +0.015 -0.000	5.375 +0.000 -0.010	6.000 +0.004 -0.000
.32" C/S						
DPU32-1.62-39	1-5/8	2.266	0.390	0.421 +0.015 -0.000	1.625 +0.000 -0.007	2.266 +0.003 -0.000
3/8" C/S						
DPU37-1.75-62	1-3/4	2-1/2	0.625	0.656 +0.015 -0.000	1.750 +0.000 -0.007	2.500 +0.003 -0.000
DPU37-2.25-62	2-1/4	3	0.625	0.656 +0.015 -0.000	2.250 +0.000 -0.008	3.000 +0.003 -0.000
DPU37-2.50-62	2-1/2	3-1/4	0.625	0.656 +0.015 -0.000	2.500 +0.000 -0.008	3.250 +0.003 -0.000
DPU37-2.75-37	2-3/4	3-1/2	0.375	0.406 +0.015 -0.000	2.750 +0.000 -0.008	3.500 +0.003 -0.000
DPU37-2.75-62	2-3/4	3-1/2	0.625	0.656 +0.015 -0.000	2.750 +0.000 -0.008	3.500 +0.003 -0.000
DPU37-3.00-37	3	3-3/4	0.375	0.406 +0.015 -0.000	3.000 +0.000 -0.009	3.750 +0.003 -0.000
DPU37-3.00-47-AN	3	3-3/4	0.469	0.500 +0.015 -0.000	3.000 +0.000 -0.009	3.750 +0.003 -0.000
DPU37-3.00-50	3	3-3/4	0.500	0.531 +0.015 -0.000	3.000 +0.000 -0.009	3.750 +0.003 -0.000

STYLE DPU HEAVY DUTY PISTON U-SEALS

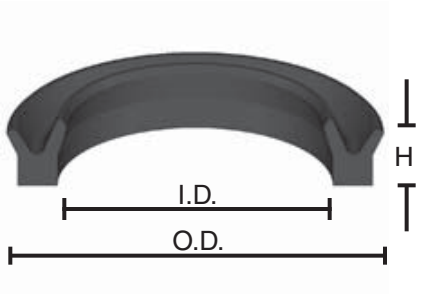
Part Number	A NOM. I.D.	B NOM. O.D.	C HT.	D GROOVE WIDTH	E GROOVE DIAMETER	G BORE DIAMETER
3/8" C/S						
DPU37-3.25-37	3-1/4	4	0.375	0.406 +0.015 -0.000	3.250 +0.000 -0.009	4.000 +0.004 -0.000
DPU37-3.25-50	3-1/4	4	0.500	0.531 +0.015 -0.000	3.250 +0.000 -0.009	4.000 +0.004 -0.000
DPU37-3.25-62	3-1/4	4	0.625	0.656 +0.015 -0.000	3.250 +0.000 -0.009	4.000 +0.004 -0.000
DPU37-3.50-37	3-1/2	4-1/4	0.375	0.406 +0.015 -0.000	3.500 +0.000 -0.009	4.250 +0.004 -0.000
DPU37-3.75-37	3-3/4	4-1/2	0.375	0.406 +0.015 -0.000	3.750 +0.000 -0.009	4.500 +0.004 -0.000
DPU37-3.75-50	3-3/4	4-1/2	0.500	0.531 +0.015 -0.000	3.750 +0.000 -0.009	4.500 +0.004 -0.000
DPU37-3.75-62	3-3/4	4-1/2	0.625	0.656 +0.015 -0.000	3.750 +0.000 -0.009	4.500 +0.004 -0.000
DPU37-4.25-37	4-1/4	5	0.375	0.406 +0.015 -0.000	4.250 +0.000 -0.009	5.000 +0.004 -0.000
DPU37-4.25-50	4-1/4	5	0.500	0.531 +0.015 -0.000	4.250 +0.000 -0.009	5.000 +0.004 -0.000
DPU37-4.25-62	4-1/4	5	0.625	0.656 +0.015 -0.000	4.250 +0.000 -0.009	5.000 +0.004 -0.000
DPU37-4.37-50	4-3/8	5-1/8	0.500	0.531 +0.015 -0.000	4.375 +0.000 -0.009	5.125 +0.004 -0.000
DPU37-4.50-37	4-1/2	5-1/4	0.375	0.406 +0.015 -0.000	4.500 +0.000 -0.009	5.250 +0.004 -0.000
DPU37-4.50-50	4-1/2	5-1/4	0.500	0.531 +0.015 -0.000	4.500 +0.000 -0.009	5.250 +0.004 -0.000
DPU37-4.50-62	4-1/2	5-1/4	0.625	0.656 +0.015 -0.000	4.500 +0.000 -0.009	5.250 +0.004 -0.000
DPU37-4.75-50	4-3/4	5-1/2	0.500	0.531 +0.015 -0.000	4.750 +0.000 -0.009	5.500 +0.004 -0.000
DPU37-4.75-62	4-3/4	5-1/2	0.625	0.656 +0.015 -0.000	4.750 +0.000 -0.009	5.500 +0.004 -0.000
DPU37-5.00-50	5	5-3/4	0.500	0.531 +0.015 -0.000	5.000 +0.000 -0.010	5.750 +0.004 -0.000
DPU37-5.25-37	5-1/4	6	0.375	0.406 +0.015 -0.000	5.250 +0.000 -0.010	6.000 +0.004 -0.000
DPU37-5.25-50	5-1/4	6	0.500	0.531 +0.015 -0.000	5.250 +0.000 -0.010	6.000 +0.004 -0.000
DPU37-5.25-62	5-1/4	6	0.625	0.656 +0.015 -0.000	5.250 +0.000 -0.010	6.000 +0.004 -0.000
DPU37-5.50-37	5-1/2	6-1/4	0.375	0.406 +0.015 -0.000	5.500 +0.000 -0.010	6.250 +0.004 -0.000
DPU37-5.75-37	5-3/4	6-1/2	0.375	0.406 +0.015 -0.000	5.750 +0.000 -0.010	6.500 +0.004 -0.000
DPU37-5.75-62	5-3/4	6-1/2	0.625	0.656 +0.015 -0.000	5.750 +0.000 -0.010	6.500 +0.004 -0.000
DPU37-6.00-50	6	6-3/4	0.500	0.531 +0.015 -0.000	6.000 +0.000 -0.010	6.750 +0.005 -0.000
DPU37-6.25-37	6-1/4	7	0.375	0.406 +0.015 -0.000	6.250 +0.000 -0.010	7.000 +0.005 -0.000
DPU37-6.25-50	6-1/4	7	0.500	0.531 +0.015 -0.000	6.250 +0.000 -0.010	7.000 +0.005 -0.000
DPU37-6.25-62	6-1/4	7	0.625	0.656 +0.015 -0.000	6.250 +0.000 -0.010	7.000 +0.005 -0.000
DPU37-6.50-62	6-1/2	7-1/4	0.625	0.656 +0.015 -0.000	6.500 +0.000 -0.010	7.250 +0.005 -0.000
DPU37-6.75-50	6-3/4	7-1/2	0.500	0.531 +0.015 -0.000	6.750 +0.000 -0.010	7.500 +0.005 -0.000

STYLE DPU HEAVY DUTY PISTON U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C HT.	D GROOVE WIDTH	E GROOVE DIAMETER	G BORE DIAMETER
3/8" C/S						
DPU37-7.25-37	7-1/4	8	0.375	0.406 +0.015 -0.000	7.250 +0.000 -0.011	8.000 +0.005 -0.000
DPU37-7.25-50	7-1/4	8	0.500	0.531 +0.015 -0.000	7.250 +0.000 -0.011	8.000 +0.005 -0.000
DPU37-7.25-62	7-1/4	8	0.625	0.656 +0.015 -0.000	7.250 +0.000 -0.011	8.000 +0.005 -0.000
.383" C/S						
DPU38-2.50-48	2-1/2	3.266	0.486	0.517 +0.015 -0.000	2.500 +0.000 -0.008	3.266 +0.003 -0.000
DPU38-2.00-48	2	2.766	0.486	0.517 +0.015 -0.000	2.000 +0.000 -0.008	2.766 +0.003 -0.000
1/2" C/S						
DPU50-4.12-59	4-1/8	5-1/8	0.590	0.649 +0.015 -0.000	4.125 +0.000 -0.009	5.125 +0.004 -0.000
DPU50-5.00-50	5	6	0.500	0.531 +0.015 -0.000	5.000 +0.000 -0.010	6.000 +0.004 -0.000
DPU50-5.25-62	5-1/4	6-1/4	0.625	0.656 +0.015 -0.000	5.250 +0.000 -0.010	6.250 +0.004 -0.000
DPU50-5.50-62	5-1/2	6-1/2	0.625	0.656 +0.015 -0.000	5.500 +0.000 -0.010	6.500 +0.004 -0.000
DPU50-6.00-75	6	7	0.750	0.781 +0.015 -0.000	6.000 +0.000 -0.010	7.000 +0.005 -0.000
DPU50-6.50-62	6-1/2	7-1/2	0.625	0.656 +0.015 -0.000	6.500 +0.000 -0.010	7.500 +0.005 -0.000
DPU50-6.50-75	6-1/2	7-1/2	0.750	0.781 +0.015 -0.000	6.500 +0.000 -0.010	7.500 +0.005 -0.000
DPU50-7.00-50	7	8	0.500	0.531 +0.015 -0.000	7.000 +0.000 -0.011	8.000 +0.005 -0.000
DPU50-7.00-75	7	8	0.750	0.781 +0.015 -0.000	7.000 +0.000 -0.011	8.000 +0.005 -0.000
DPU50-7.50-62	7-1/2	8-1/2	0.625	0.656 +0.015 -0.000	7.500 +0.000 -0.011	8.500 +0.005 -0.000
DPU50-7.50-75	7-1/2	8-1/2	0.750	0.781 +0.015 -0.000	7.500 +0.000 -0.011	8.500 +0.005 -0.000
DPU50-8.00-75	8	9	0.750	0.781 +0.015 -0.000	8.000 +0.000 -0.011	9.000 +0.005 -0.000
DPU50-9.00-62	9	10	0.625	0.656 +0.015 -0.000	9.000 +0.000 -0.011	10.000 +0.005 -0.000
DPU50-9.00-75	9	10	0.750	0.781 +0.015 -0.000	9.000 +0.000 -0.011	10.000 +0.005 -0.000
DPU50-10.00-62	10	11	0.625	0.656 +0.015 -0.000	10.000 +0.000 -0.011	11.000 +0.005 -0.000
DPU50-10.00-75	10	11	0.750	0.781 +0.015 -0.000	10.000 +0.000 -0.011	11.000 +0.005 -0.000
DPU50-11.00-62	11	12	0.625	0.656 +0.015 -0.000	11.000 +0.000 -0.012	12.000 +0.006 -0.000
DPU50-11.00-75	11	12	0.750	0.781 +0.015 -0.000	11.000 +0.000 -0.012	12.000 +0.006 -0.000
5/8" C/S						
DPU62-3.50-56	3-1/2	4-3/4	0.563	0.594 +0.015 -0.000	3.500 +0.000 -0.009	4.750 +0.004 -0.000
DPU62-9.25-75	9-1/4	10-1/2	0.750	0.781 +0.015 -0.000	9.250 +0.000 -0.011	10.500 +0.005 -0.000

STYLE PU URETHANE PISTON U-SEALS

Style PU seals are molded from high quality urethane and designed specifically for piston applications.



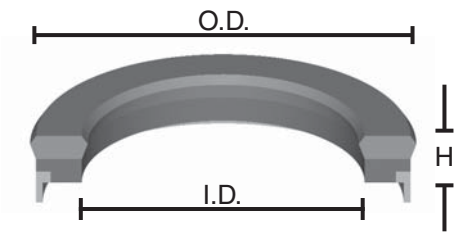
SEAL INFORMATION	
MATERIAL	90A URETHANE
TEMPERATURE RANGE	-40° TO +225° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)

Part Number	I.D.	O.D.	H.
1/8" C/S			
PU12-1.25-25	1-1/4	1-1/2	1/4
3/16" C/S			
PU18-0.75-31	3/4	1-1/8	5/16
PU18-1.62-31	1-5/8	2	5/16
PU18-2.12-25	2-1/8	2-1/2	1/4
PU18-2.12-37	2-1/8	2-1/2	3/8
PU18-2.62-37	2-5/8	3	3/8
1/4" C/S			
PU25-2.00-25	2	2-1/2	1/4
PU25-3.00-37	3	3-1/2	3/8
PU25-3.50-37	3-1/2	4	3/8
PU25-4.50-37	4-1/2	5	3/8

Part Number	I.D.	O.D.	H.
.29" C/S			
PU29-1.61-38	1.61	2.19	0.380
3/8" C/S			
PU37-5.25-50	5-1/4	6	1/2
1/2" C/S			
PU50-2.00-50	2	3	1/2
PU50-2.25-50	2-1/4	3-1/4	1/2
PU50-3.00-50	3	4	1/2

STYLE UFN PISTON SEALS

Constructed of a rubber seal lip with a rubberized fabric heel, these seals feature a polyacetal bearing ring or a poly-acetal anti-extrusion ring. These seals offer excellent sealing ability and high pressure capability. The are commonly used with the SR retention rings.



UFN-PWO

UFN-UEO

UFN-UWO

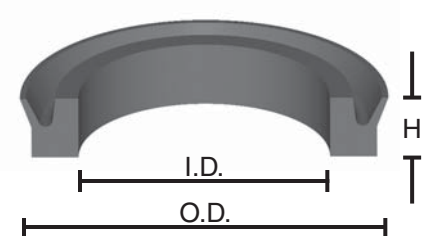
SEAL INFORMATION	
MATERIAL	RUBBER, FABRIC, ACETAL
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 5,800 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)

Part Number	I.D.	O.D.	H.
UFN-PWO			
UFN25-2.00-31PWO	2	2-1/2	5/16
UFN31-1.12-43PWO	1-1/8	1-3/4	7/16
UFN31-1.37-37PWO	1-3/8	2	3/8
UFN31-1.37-43PWO	1-3/8	2	7/16
UFN31-1.87-43PWO	1-7/8	2-1/2	7/16
UFN-UEO			
UFN31-1.75-43UEO	1-3/4	2-3/8	7/16
UFN37-2.25-50UEO	2-1/4	3	1/2
UFN37-3.50-56UEO	3-1/2	4-1/4	9/16
UFN50-4.00-75UEO	4	5	3/4
UFN-UWO			
UFN25-1.00-37UWO	1	1-1/2	3/8

Part Number	I.D.	O.D.	H.
UFN-UWO			
UFN27-0.87-46UWO	7/8	1.41	0.460
UFN31-1.16-46UWO	1.16	1.78	0.460
UFN31-1.37-37UWO	1-3/8	2	3/8
UFN31-1.62-43UWO	1-5/8	2-1/4	7/16
UFN31-1.75-43UWO	1-3/4	2-3/8	7/16
UFN31-1.87-37UWO	1-7/8	2-1/2	3/8
UFN31-2.00-43UWO	2	2-5/8	7/16
UFN31-2.12-46UWO	2-1/8	2-3/4	0.460
UFN37-2.00-56UWO	2	2-3/4	9/16
UFN37-2.25-50UWO	2-1/4	3	1/2
UFN37-2.75-56UWO	2-3/4	3-1/2	9/16
UFN37-3.25-56UWO	3-1/4	4	9/16
UFN37-3.75-56UWO	3-3/4	4-1/2	9/16

STYLE UKP PISTON U-SEALS

UKP u-seals are designed to act as a positive sealing, low friction replacement for conventional rubber u-seals. Molded from polyurethane, UKP u-seals provide long life and high resistance against extrusion. Low friction allows these seals to run smoothly in a lubricated or non-lucricated cylinder. Available for bore sealing, the flexible dynamic lip provides very low breakaway friction and steady motion.



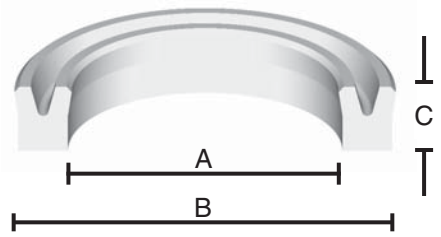
SEAL INFORMATION	
MATERIAL	90A URETHANE
TEMPERATURE RANGE	-40° TO +200° F
PRESSURE RANGE	0 TO 150 PSI
PART NUMBER	(Prefix)(CS) - (Outside diameter)

Part Number	I.D.	O.D.	H.
3/32" C/S			
UKP09-0.37	3/16	3/8	3/32
UKP09-0.68	1/2	11/16	3/32
1/8" C/S			
UKP12-0.56	5/16	9/16	1/8
UKP12-0.62	3/8	5/8	1/8
UKP12-0.75	1/2	3/4	1/8
UKP12-0.87	5/8	7/8	1/8
UKP12-1.00	3/4	1	1/8
UKP12-1.06	13/16	1-1/16	1/8
UKP12-1.12	7/8	1-1/8	1/8
UKP12-1.25	1	1-1/4	1/8
UKP12-1.50	1-1/4	1-1/2	1/8
UKP12-1.87	1-5/8	1-7/8	1/8
UKP12-2.00	1-3/4	2	1/8
UKP12-2.75	2-1/2	2-3/4	1/8
5/32" C/S			
UKP15-1.50	1-3/16	1-1/2	5/32
UKP15-1.56	1-1/4	1-9/16	5/32
3/16" C/S			
UKP18-1.75	1-3/8	1-3/4	3/16
UKP18-2.00	1-5/8	2	3/16
UKP18-2.25	1-7/8	2-1/4	3/16

Part Number	I.D.	O.D.	H.
3/16" C/S			
UKP18-2.50	2-1/8	2-1/2	3/16
UKP18-2.62	2-1/4	2-5/8	3/16
UKP18-4.00	3-5/8	4	3/16
7/32" C/S			
UKP21-3.00	2-9/16	3	7/32
UKP21-3.25	2-13/16	3-1/4	7/32
1/4" C/S			
UKP25-3.00	2-1/2	3	1/4
UKP25-3.25	2-3/4	3-1/4	1/4
UKP25-3.50	3	3-1/2	1/4
UKP25-4.00	3-1/2	4	1/4
UKP25-5.00	4-1/2	5	1/4
UKP25-6.00	5-1/2	6	1/4
UKP25-7.00	6-1/2	7	1/4
UKP25-8.00	7-1/2	8	1/4
UKP25-10.00	9-1/2	10	1/4
5/16" C/S			
UKP31-6.00	5-3/8	6	5/16
UKP31-8.00	7-3/8	8	5/16
3/8" C/S			
UKP37-10.00	9-1/4	10	3/8

STYLE DSU HEAVY DUTY SYMMETRICAL U-SEALS

Used interchangeably for piston or rod sealing, these u-seals employ the same tough urethane material found in our Heavy Duty Rod and Piston U-Seals.

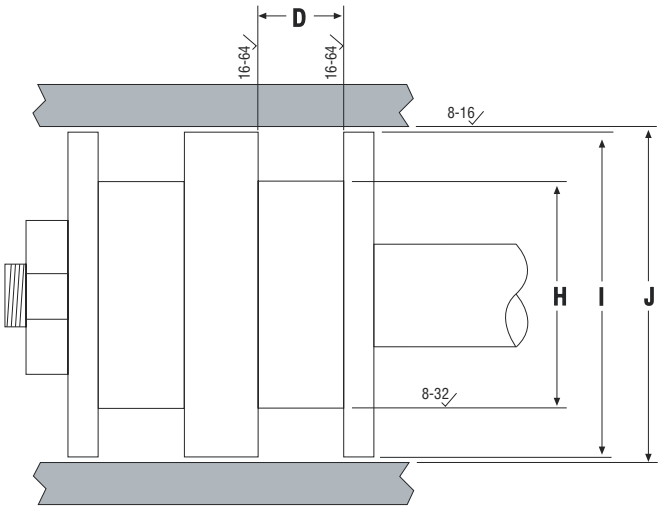


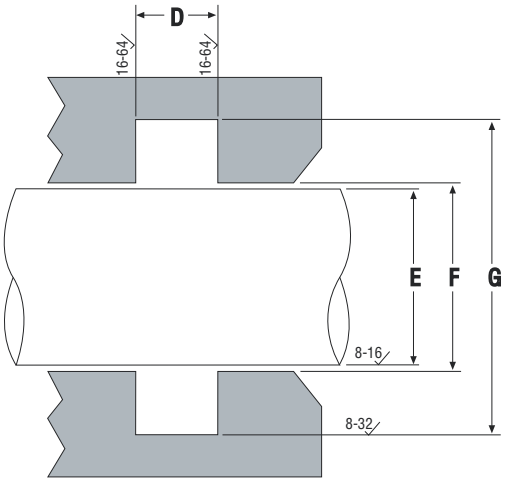
PART NUMBERS

DSU 12 - 0.18 - 12

Type of Seal | Cross Section | Inside Diameter | Height

SEAL INFORMATION	
MATERIAL	92A URETHANE
TEMPERATURE RANGE	-40° TO +230° F
PRESSURE RANGE	0 TO 4,000 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)





Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/8" C/S										
DSU12-0.18-12	3/16	7/16	1/8	0.156 +0.015/0	0.188 +0/-0.002	0.189 +0.003/0	0.438 +0.004/0	0.188 +0/-0.004	0.437 +0/-0.003	0.438 +0.003/0
DSU12-0.18-25	3/16	7/16	1/4	0.281 +0.015/0	0.188 +0/-0.002	0.189 +0.003/0	0.438 +0.004/0	0.188 +0/-0.004	0.437 +0/-0.003	0.438 +0.003/0
DSU12-0.25-18	1/4	1/2	3/16	0.218 +0.015/0	0.250 +0/-0.002	0.251 +0.003/0	0.500 +0.004/0	0.250 +0/-0.004	0.499 +0/-0.003	0.500 +0.003/0
DSU12-0.31-25	5/16	9/16	1/4	0.281 +0.015/0	0.312 +0/-0.002	0.313 +0.003/0	0.562 +0.004/0	0.281 +0/-0.004	0.561 +0/-0.003	0.562 +0.003/0
DSU12-0.37-12	3/8	5/8	1/8	0.156 +0.015/0	0.375 +0/-0.002	0.376 +0.003/0	0.625 +0.004/0	0.375 +0/-0.004	0.624 +0/-0.003	0.625 +0.003/0
DSU12-0.37-25	3/8	5/8	1/4	0.281 +0.015/0	0.375 +0/-0.002	0.376 +0.003/0	0.625 +0.004/0	0.375 +0/-0.004	0.624 +0/-0.003	0.625 +0.003/0
DSU12-0.50-12	1/2	3/4	1/8	0.156 +0.015/0	0.500 +0/-0.002	0.501 +0.003/0	0.750 +0.004/0	0.500 +0/-0.004	0.749 +0/-0.003	0.750 +0.003/0
DSU12-0.56-12	9/16	13/16	1/8	0.156 +0.015/0	0.563 +0/-0.002	0.564 +0.003/0	0.813 +0.005/0	0.563 +0/-0.004	0.812 +0/-0.003	0.813 +0.003/0
DSU12-0.62-12	5/8	7/8	1/8	0.156 +0.015/0	0.625 +0/-0.002	0.626 +0.003/0	0.875 +0.005/0	0.625 +0/-0.004	0.874 +0/-0.003	0.875 +0.003/0
DSU12-0.62-25	5/8	7/8	1/4	0.281 +0.015/0	0.625 +0/-0.002	0.626 +0.003/0	0.875 +0.005/0	0.625 +0/-0.004	0.874 +0/-0.003	0.875 +0.003/0
DSU12-0.75-12	3/4	1	1/8	0.156 +0.015/0	0.750 +0/-0.003	0.751 +0.003/0	1.000 +0.005/0	0.750 +0/-0.005	0.999 +0/-0.003	1.000 +0.003/0
DSU12-0.75-18	3/4	1	3/16	0.218 +0.015/0	0.750 +0/-0.003	0.751 +0.003/0	1.000 +0.005/0	0.750 +0/-0.005	0.999 +0/-0.003	1.000 +0.003/0
DSU12-0.75-25	3/4	1	1/4	0.281 +0.015/0	0.750 +0/-0.003	0.751 +0.003/0	1.000 +0.005/0	0.750 +0/-0.005	0.999 +0/-0.003	1.000 +0.003/0
DSU12-0.87-12	7/8	1-1/8	1/8	0.156 +0.015/0	0.875 +0/-0.003	0.876 +0.003/0	1.125 +0.005/0	0.875 +0/-0.005	1.124 +0/-0.003	1.125 +0.003/0
DSU12-0.87-17	7/8	1-1/8	11/64	0.203 +0.015/0	0.875 +0/-0.003	0.876 +0.003/0	1.125 +0.005/0	0.875 +0/-0.005	1.124 +0/-0.003	1.125 +0.003/0
DSU12-0.87-25	7/8	1-1/8	1/4	0.281 +0.015/0	0.875 +0/-0.003	0.876 +0.003/0	1.125 +0.005/0	0.875 +0/-0.005	1.124 +0/-0.003	1.125 +0.003/0

STYLE DSU HEAVY DUTY SYMMETRICAL U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/8" C/S										
DSU12-1.00-12	1	1-1/4	1/8	0.156 +0.015/0	1.000 +0/-0.003	1.001 +0.003/0	1.250 +0.005/0	1.000 +0/-0.005	1.249 +0/-0.003	1.250 +0.003/0
DSU12-1.00-15	1	1-1/4	5/32	0.187 +0.015/0	1.000 +0/-0.003	1.001 +0.003/0	1.250 +0.005/0	1.000 +0/-0.005	1.249 +0/-0.003	1.250 +0.003/0
DSU12-1.00-18	1	1-1/4	3/16	0.218 +0.015/0	1.000 +0/-0.003	1.001 +0.003/0	1.250 +0.005/0	1.000 +0/-0.005	1.249 +0/-0.003	1.250 +0.003/0
DSU12-1.00-25	1	1-1/4	1/4	0.281 +0.015/0	1.000 +0/-0.003	1.001 +0.003/0	1.250 +0.005/0	1.000 +0/-0.005	1.249 +0/-0.003	1.250 +0.003/0
DSU12-1.12-12	1-1/8	1-3/8	1/8	0.156 +0.015/0	1.125 +0/-0.003	1.126 +0.003/0	1.375 +0.005/0	1.125 +0/-0.005	1.374 +0/-0.003	1.375 +0.003/0
DSU12-1.12-25	1-1/8	1-3/8	1/4	0.281 +0.015/0	1.125 +0/-0.003	1.126 +0.003/0	1.375 +0.005/0	1.125 +0/-0.005	1.374 +0/-0.003	1.375 +0.003/0
DSU12-1.25-12	1-1/4	1-1/2	1/8	0.156 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	1.500 +0.007/0	1.250 +0/-0.007	1.499 +0/-0.003	1.500 +0.003/0
DSU12-1.25-15	1-1/4	1-1/2	5/32	0.187 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	1.500 +0.007/0	1.250 +0/-0.007	1.499 +0/-0.003	1.500 +0.003/0
DSU12-1.25-18	1-1/4	1-1/2	3/16	0.218 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	1.500 +0.007/0	1.250 +0/-0.007	1.499 +0/-0.003	1.500 +0.003/0
DSU12-1.25-25	1-1/4	1-1/2	1/4	0.281 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	1.500 +0.007/0	1.250 +0/-0.007	1.499 +0/-0.003	1.500 +0.003/0
DSU12-1.31-25	1-5/16	1-9/16	1/4	0.281 +0.015/0	1.312 +0/-0.003	1.313 +0.003/0	1.963 +0.007/0	1.312 +0/-0.007	1.962 +0/-0.003	1.963 +0.003/0
DSU12-1.37-25	1-3/8	1-5/8	1/4	0.281 +0.015/0	1.375 +0/-0.003	1.376 +0.003/0	1.625 +0.007/0	1.375 +0/-0.007	1.624 +0/-0.003	1.625 +0.003/0
DSU12-1.50-25	1-1/2	1-3/4	1/4	0.281 +0.015/0	1.500 +0/-0.003	1.501 +0.003/0	1.750 +0.007/0	1.500 +0/-0.007	1.749 +0/-0.003	1.750 +0.003/0
3/16" C/S										
DSU18-0.25-25	1/4	5/8	1/4	0.281 +0.015/0	0.250 +0/-0.002	0.251 +0.003/0	0.625 +0.004/0	0.250 +0/-0.004	0.624 +0/-0.003	0.625 +0.003/0
DSU18-0.25-31	1/4	5/8	5/16	0.343 +0.015/0	0.250 +0/-0.002	0.251 +0.003/0	0.625 +0.004/0	0.250 +0/-0.004	0.624 +0/-0.003	0.625 +0.003/0
DSU18-0.37-31	3/8	3/4	5/16	0.343 +0.015/0	0.375 +0/-0.002	0.376 +0.003/0	0.750 +0.004/0	0.375 +0/-0.004	0.749 +0/-0.003	0.750 +0.003/0
DSU18-0.50-18	1/2	7/8	3/16	0.218 +0.015/0	0.500 +0/-0.002	0.501 +0.003/0	0.875 +0.005/0	0.500 +0/-0.004	0.874 +0/-0.003	0.875 +0.003/0
DSU18-0.50-31	1/2	7/8	5/16	0.343 +0.015/0	0.500 +0/-0.002	0.501 +0.003/0	0.875 +0.005/0	0.500 +0/-0.004	0.874 +0/-0.003	0.875 +0.003/0
DSU18-0.56-18	9/16	15/16	3/16	0.218 +0.015/0	0.563 +0/-0.002	0.564 +0.003/0	0.938 +0.005/0	0.563 +0/-0.004	0.937 +0/-0.003	0.938 +0.003/0
DSU18-0.62-18	5/8	1	3/16	0.218 +0.015/0	0.625 +0/-0.002	0.626 +0.003/0	1.000 +0.005/0	0.625 +0/-0.004	0.999 +0/-0.003	1.000 +0.003/0
DSU18-0.62-25	5/8	1	1/4	0.281 +0.015/0	0.625 +0/-0.002	0.626 +0.003/0	1.000 +0.005/0	0.625 +0/-0.004	0.999 +0/-0.003	1.000 +0.003/0
DSU18-0.62-31	5/8	1	5/16	0.343 +0.015/0	0.625 +0/-0.002	0.626 +0.003/0	1.000 +0.005/0	0.625 +0/-0.004	0.999 +0/-0.003	1.000 +0.003/0
DSU18-0.75-18	3/4	1-1/8	3/16	0.218 +0.015/0	0.750 +0/-0.003	0.751 +0.003/0	1.125 +0.005/0	0.750 +0/-0.005	1.124 +0/-0.003	1.125 +0.003/0
DSU18-0.75-25	3/4	1-1/8	1/4	0.281 +0.015/0	0.750 +0/-0.003	0.751 +0.003/0	1.125 +0.005/0	0.750 +0/-0.005	1.124 +0/-0.003	1.125 +0.003/0
DSU18-0.87-25	7/8	1-1/4	1/4	0.281 +0.015/0	0.875 +0/-0.003	0.876 +0.003/0	1.250 +0.005/0	0.875 +0/-0.005	1.249 +0/-0.003	1.250 +0.003/0
DSU18-1.00-18	1	1-3/8	3/16	0.218 +0.015/0	1.000 +0/-0.003	1.001 +0.003/0	1.375 +0.005/0	1.000 +0/-0.005	1.374 +0/-0.003	1.375 +0.003/0
DSU18-1.00-25	1	1-3/8	1/4	0.281 +0.015/0	1.000 +0/-0.003	1.001 +0.003/0	1.375 +0.005/0	1.000 +0/-0.005	1.374 +0/-0.003	1.375 +0.003/0
DSU18-1.00-31	1	1-3/8	5/16	0.343 +0.015/0	1.000 +0/-0.003	1.001 +0.003/0	1.375 +0.005/0	1.000 +0/-0.005	1.374 +0/-0.003	1.375 +0.003/0
DSU18-1.12-18	1-1/8	1-1/2	3/16	0.218 +0.015/0	1.125 +0/-0.003	1.126 +0.003/0	1.500 +0.007/0	1.125 +0/-0.005	1.499 +0/-0.003	1.500 +0.003/0
DSU18-1.12-25	1-1/8	1-1/2	1/4	0.281 +0.015/0	1.125 +0/-0.003	1.126 +0.003/0	1.500 +0.007/0	1.125 +0/-0.005	1.499 +0/-0.003	1.500 +0.003/0
DSU18-1.12-31	1-1/8	1-1/2	5/16	0.343 +0.015/0	1.125 +0/-0.003	1.126 +0.003/0	1.500 +0.007/0	1.125 +0/-0.005	1.499 +0/-0.003	1.500 +0.003/0
DSU18-1.25-25	1-1/4	1-5/8	1/4	0.281 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	1.625 +0.007/0	1.250 +0/-0.007	1.624 +0/-0.003	1.625 +0.003/0
DSU18-1.25-31	1-1/4	1-5/8	5/16	0.343 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	1.625 +0.007/0	1.250 +0/-0.007	1.624 +0/-0.003	1.625 +0.003/0
DSU18-1.37-25	1-3/8	1-3/4	1/4	0.281 +0.015/0	1.375 +0/-0.003	1.376 +0.003/0	1.750 +0.007/0	1.375 +0/-0.007	1.749 +0/-0.003	1.750 +0.003/0
DSU18-1.37-31	1-3/8	1-3/4	5/16	0.343 +0.015/0	1.375 +0/-0.003	1.376 +0.003/0	1.750 +0.007/0	1.375 +0/-0.007	1.749 +0/-0.003	1.750 +0.003/0
DSU18-1.43-25	1-7/16	1-13/16	1/4	0.281 +0.015/0	1.438 +0/-0.003	1.439 +0.003/0	1.813 +0.007/0	1.438 +0/-0.007	1.812 +0/-0.003	1.813 +0.003/0
DSU18-1.50-18	1-1/2	1-7/8	3/16	0.218 +0.015/0	1.500 +0/-0.003	1.501 +0.003/0	1.875 +0.007/0	1.500 +0/-0.007	1.874 +0/-0.003	1.875 +0.003/0
DSU18-1.50-25	1-1/2	1-7/8	1/4	0.281 +0.015/0	1.500 +0/-0.003	1.501 +0.003/0	1.875 +0.007/0	1.500 +0/-0.007	1.874 +0/-0.003	1.875 +0.003/0
DSU18-1.50-31	1-1/2	1-7/8	5/16	0.343 +0.015/0	1.500 +0/-0.003	1.501 +0.003/0	1.875 +0.007/0	1.500 +0/-0.007	1.874 +0/-0.003	1.875 +0.003/0
DSU18-1.50-37	1-1/2	1-7/8	3/8	0.406 +0.015/0	1.500 +0/-0.003	1.501 +0.003/0	1.875 +0.007/0	1.500 +0/-0.007	1.874 +0/-0.003	1.875 +0.003/0
DSU18-1.62-25	1-5/8	2	1/4	0.281 +0.015/0	1.625 +0/-0.003	1.626 +0.003/0	2.000 +0.008/0	1.625 +0/-0.007	1.999 +0/-0.004	2.000 +0.003/0

STYLE DSU HEAVY DUTY SYMMETRICAL U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
3/16" C/S										
DSU18-1.62-31	1-5/8	2	5/16	0.343 +0.015/0	1.625 +0/-0.003	1.626 +0.003/0	2.000 +0.008/0	1.625 +0/-0.007	1.999 +0/-0.004	2.000 +0.003/0
DSU18-1.62-37	1-5/8	2	3/8	0.406 +0.015/0	1.625 +0/-0.003	1.626 +0.003/0	2.000 +0.008/0	1.625 +0/-0.007	1.999 +0/-0.004	2.000 +0.003/0
DSU18-1.75-25	1-3/4	2-1/8	1/4	0.281 +0.015/0	1.750 +0/-0.003	1.751 +0.003/0	2.125 +0.008/0	1.750 +0/-0.007	2.124 +0/-0.004	2.125 +0.003/0
DSU18-1.75-37	1-3/4	2-1/8	3/8	0.406 +0.015/0	1.750 +0/-0.003	1.751 +0.003/0	2.125 +0.008/0	1.750 +0/-0.007	2.124 +0/-0.004	2.125 +0.003/0
DSU18-1.87-37	1-7/8	2-1/4	3/8	0.406 +0.015/0	1.875 +0/-0.003	1.876 +0.003/0	2.250 +0.008/0	1.875 +0/-0.007	2.249 +0/-0.004	2.250 +0.003/0
DSU18-2.00-25	2	2-3/8	1/4	0.281 +0.015/0	2.000 +0/-0.003	2.001 +0.004/0	2.375 +0.008/0	2.000 +0/-0.008	2.374 +0/-0.004	2.375 +0.003/0
DSU18-2.00-31	2	2-3/8	5/16	0.343 +0.015/0	2.000 +0/-0.003	2.001 +0.004/0	2.375 +0.008/0	2.000 +0/-0.008	2.374 +0/-0.004	2.375 +0.003/0
DSU18-2.00-37	2	2-3/8	3/8	0.406 +0.015/0	2.000 +0/-0.003	2.001 +0.004/0	2.375 +0.008/0	2.000 +0/-0.008	2.374 +0/-0.004	2.375 +0.003/0
DSU18-2.12-25	2-1/8	2-1/2	1/4	0.281 +0.015/0	2.000 +0/-0.003	2.001 +0.004/0	2.750 +0.008/0	2.000 +0/-0.008	2.749 +0/-0.004	2.750 +0.003/0
DSU18-2.12-31	2-1/8	2-1/2	5/16	0.343 +0.015/0	2.125 +0/-0.003	2.126 +0.004/0	2.500 +0.008/0	2.125 +0/-0.008	2.499 +0/-0.004	2.500 +0.003/0
DSU18-2.12-37	2-1/8	2-1/2	3/8	0.406 +0.015/0	2.125 +0/-0.003	2.126 +0.004/0	2.500 +0.008/0	2.125 +0/-0.008	2.499 +0/-0.004	2.500 +0.003/0
DSU18-2.25-31	2-1/4	2-5/8	5/16	0.343 +0.015/0	2.250 +0/-0.003	2.251 +0.004/0	2.625 +0.008/0	2.250 +0/-0.008	2.624 +0/-0.004	2.625 +0.003/0
DSU18-2.25-37	2-1/4	2-5/8	3/8	0.406 +0.015/0	2.250 +0/-0.003	2.251 +0.004/0	2.625 +0.008/0	2.250 +0/-0.008	2.624 +0/-0.004	2.625 +0.003/0
DSU18-2.37-37	2-3/8	2-3/4	3/8	0.406 +0.015/0	2.375 +0/-0.003	2.376 +0.004/0	2.750 +0.008/0	2.375 +0/-0.008	2.749 +0/-0.004	2.750 +0.003/0
DSU18-2.50-25	2-1/2	2-7/8	1/4	0.281 +0.015/0	2.500 +0/-0.003	2.501 +0.004/0	2.875 +0.008/0	2.500 +0/-0.008	2.874 +0/-0.004	2.875 +0.003/0
DSU18-2.50-37	2-1/2	2-7/8	3/8	0.406 +0.015/0	2.500 +0/-0.003	2.501 +0.004/0	2.875 +0.008/0	2.500 +0/-0.008	2.874 +0/-0.004	2.875 +0.003/0
DSU18-2.62-25	2-5/8	3	1/4	0.281 +0.015/0	2.625 +0/-0.003	2.626 +0.004/0	3.000 +0.008/0	2.625 +0/-0.008	2.999 +0/-0.004	3.000 +0.004/0
DSU18-2.62-37	2-5/8	3	3/8	0.406 +0.015/0	2.625 +0/-0.003	2.626 +0.004/0	3.000 +0.008/0	2.625 +0/-0.008	2.999 +0/-0.004	3.000 +0.004/0
DSU18-2.87-25	2-7/8	3-1/4	1/4	0.281 +0.015/0	2.875 +0/-0.003	2.876 +0.004/0	3.250 +0.009/0	2.875 +0/-0.008	3.249 +0/-0.004	3.250 +0.004/0
DSU18-2.87-37	2-7/8	3-1/4	3/8	0.406 +0.015/0	2.875 +0/-0.003	2.876 +0.004/0	3.250 +0.009/0	2.875 +0/-0.008	3.249 +0/-0.004	3.250 +0.004/0
DSU18-3.00-37	3	3-3/8	3/8	0.406 +0.015/0	3.000 +0/-0.004	3.001 +0.004/0	3.375 +0.009/0	3.000 +0/-0.009	3.374 +0/-0.004	3.375 +0.004/0
DSU18-3.12-37	3-1/8	3-1/2	3/8	0.406 +0.015/0	3.125 +0/-0.004	3.126 +0.004/0	3.500 +0.009/0	3.125 +0/-0.009	3.499 +0/-0.004	3.500 +0.004/0
DSU18-3.25-37	3-1/4	3-5/8	3/8	0.406 +0.015/0	3.250 +0/-0.004	3.251 +0.004/0	3.625 +0.009/0	3.250 +0/-0.009	3.624 +0/-0.004	3.625 +0.004/0
DSU18-3.37-37	3-3/8	3-3/4	3/8	0.406 +0.015/0	3.375 +0/-0.004	3.376 +0.004/0	3.750 +0.009/0	3.375 +0/-0.009	3.749 +0/-0.004	3.750 +0.004/0
DSU18-3.50-37	3-1/2	3-7/8	3/8	0.406 +0.015/0	3.500 +0/-0.004	3.501 +0.004/0	3.875 +0.009/0	3.500 +0/-0.009	3.874 +0/-0.004	3.875 +0.004/0
DSU18-3.62-25	3-5/8	4	1/4	0.281 +0.015/0	3.625 +0/-0.004	3.626 +0.004/0	4.000 +0.009/0	3.625 +0/-0.009	3.999 +0/-0.004	4.000 +0.004/0
DSU18-3.62-37	3-5/8	4	3/8	0.406 +0.015/0	3.625 +0/-0.004	3.626 +0.004/0	4.000 +0.009/0	3.625 +0/-0.009	3.999 +0/-0.004	4.000 +0.004/0
DSU18-3.75-37	3-3/4	4-1/8	3/8	0.406 +0.015/0	3.750 +0/-0.004	3.751 +0.004/0	4.125 +0.009/0	3.750 +0/-0.009	4.124 +0/-0.004	4.125 +0.004/0
DSU18-4.00-37	4	4-3/8	3/8	0.406 +0.015/0	4.000 +0/-0.004	4.001 +0.004/0	4.375 +0.009/0	4.000 +0/-0.009	4.374 +0/-0.004	4.375 +0.004/0
DSU18-4.37-37	4-3/8	4-3/4	3/8	0.406 +0.015/0	4.375 +0/-0.004	4.376 +0.004/0	4.750 +0.009/0	4.375 +0/-0.009	4.749 +0/-0.004	4.750 +0.004/0
1/4" C/S										
DSU25-0.50-25	1/2	1	1/4	0.281 +0.015/0	0.500 +0/-0.002	0.501 +0.003/0	1.000 +0.005/0	0.500 +0/-0.004	0.999 +0/-0.003	1.000 +0.003/0
DSU25-0.50-37	1/2	1	3/8	0.406 +0.015/0	0.500 +0/-0.002	0.501 +0.003/0	1.000 +0.005/0	0.500 +0/-0.004	0.999 +0/-0.003	1.000 +0.003/0
DSU25-0.62-25	5/8	1-1/8	1/4	0.281 +0.015/0	0.625 +0/-0.002	0.626 +0.003/0	1.125 +0.005/0	0.625 +0/-0.004	1.124 +0/-0.003	1.125 +0.003/0
DSU25-0.62-37	5/8	1-1/8	3/8	0.406 +0.015/0	0.625 +0/-0.002	0.626 +0.003/0	1.125 +0.005/0	0.625 +0/-0.004	1.124 +0/-0.003	1.125 +0.003/0
DSU25-0.68-37	11/16	1-3/16	3/8	0.406 +0.015/0	0.688 +0/-0.002	0.689 +0.003/0	1.108 +0.005/0	0.688 +0/-0.004	1.187 +0/-0.003	1.188 +0.003/0
DSU25-0.75-25	3/4	1-1/4	1/4	0.281 +0.015/0	0.750 +0/-0.003	0.751 +0.003/0	1.250 +0.005/0	0.750 +0/-0.005	1.249 +0/-0.003	1.250 +0.003/0
DSU25-0.75-37	3/4	1-1/4	3/8	0.406 +0.015/0	0.750 +0/-0.003	0.751 +0.003/0	1.250 +0.005/0	0.750 +0/-0.005	1.249 +0/-0.003	1.250 +0.003/0
DSU25-0.87-25	7/8	1-3/8	1/4	0.281 +0.015/0	0.875 +0/-0.003	0.876 +0.003/0	1.375 +0.005/0	0.875 +0/-0.005	1.374 +0/-0.003	1.375 +0.003/0
DSU25-0.87-37	7/8	1-3/8	3/8	0.406 +0.015/0	0.875 +0/-0.003	0.876 +0.003/0	1.375 +0.005/0	0.875 +0/-0.005	1.374 +0/-0.003	1.375 +0.003/0
DSU25-0.93-25	15/16	1-7/16	1/4	0.281 +0.015/0	0.938 +0/-0.003	0.939 +0.003/0	1.438 +0.005/0	0.938 +0/-0.005	1.437 +0/-0.003	1.438 +0.003/0
DSU25-1.00-25	1	1-1/2	1/4	0.281 +0.015/0	1.000 +0/-0.003	1.001 +0.003/0	1.500 +0.007/0	1.000 +0/-0.005	1.499 +0/-0.003	1.500 +0.003/0

STYLE DSU HEAVY DUTY SYMMETRICAL U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/4" C/S										
DSU25-1.00-31	1	1-1/2	5/16	0.343 +0.015/0	1.000 +0/-0.003	1.001 +0.003/0	1.500 +0.007/0	1.000 +0/-0.005	1.499 +0/-0.003	1.500 +0.003/0
DSU25-1.00-37	1	1-1/2	3/8	0.406 +0.015/0	1.000 +0/-0.003	1.001 +0.003/0	1.500 +0.007/0	1.000 +0/-0.005	1.499 +0/-0.003	1.500 +0.003/0
DSU25-1.12-31	1-1/8	1-5/8	5/16	0.343 +0.015/0	1.125 +0/-0.003	1.126 +0.003/0	1.625 +0.007/0	1.125 +0/-0.005	1.624 +0/-0.003	1.625 +0.003/0
DSU25-1.12-37	1-1/8	1-5/8	3/8	0.406 +0.015/0	1.125 +0/-0.003	1.126 +0.003/0	1.625 +0.007/0	1.125 +0/-0.005	1.624 +0/-0.003	1.625 +0.003/0
DSU25-1.18-25	1-3/16	1-11/16	1/4	0.281 +0.015/0	1.188 +0/-0.003	1.189 +0.003/0	1.688 +0.007/0	1.188 +0/-0.005	1.687 +0/-0.003	1.688 +0.003/0
DSU25-1.25-25	1-1/4	1-3/4	1/4	0.281 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	1.750 +0.007/0	1.250 +0/-0.007	1.749 +0/-0.003	1.750 +0.003/0
DSU25-1.25-31	1-1/4	1-3/4	5/16	0.343 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	1.750 +0.007/0	1.250 +0/-0.007	1.749 +0/-0.003	1.750 +0.003/0
DSU25-1.25-37	1-1/4	1-3/4	3/8	0.406 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	1.750 +0.007/0	1.250 +0/-0.007	1.749 +0/-0.003	1.750 +0.003/0
DSU25-1.37-25	1-3/8	1-7/8	1/4	0.281 +0.015/0	1.375 +0/-0.003	1.376 +0.003/0	1.875 +0.007/0	1.375 +0/-0.007	1.874 +0/-0.003	1.875 +0.003/0
DSU25-1.37-37	1-3/8	1-7/8	3/8	0.406 +0.015/0	1.375 +0/-0.003	1.376 +0.003/0	1.875 +0.007/0	1.375 +0/-0.007	1.874 +0/-0.003	1.875 +0.003/0
DSU25-1.50-25	1-1/2	2	1/4	0.281 +0.015/0	1.500 +0/-0.003	1.501 +0.003/0	2.000 +0.008/0	1.500 +0/-0.007	1.999 +0/-0.004	2.000 +0.003/0
DSU25-1.50-31	1-1/2	2	5/16	0.343 +0.015/0	1.500 +0/-0.003	1.501 +0.003/0	2.000 +0.008/0	1.500 +0/-0.007	1.999 +0/-0.004	2.000 +0.003/0
DSU25-1.50-37	1-1/2	2	3/8	0.406 +0.015/0	1.500 +0/-0.003	1.501 +0.003/0	2.000 +0.008/0	1.500 +0/-0.007	1.999 +0/-0.004	2.000 +0.003/0
DSU25-1.75-25	1-3/4	2-1/4	1/4	0.281 +0.015/0	1.750 +0/-0.003	1.751 +0.003/0	2.250 +0.008/0	1.750 +0/-0.007	2.249 +0/-0.004	2.250 +0.003/0
DSU25-1.75-31	1-3/4	2-1/4	5/16	0.343 +0.015/0	1.750 +0/-0.003	1.751 +0.003/0	2.250 +0.008/0	1.750 +0/-0.007	2.249 +0/-0.004	2.250 +0.003/0
DSU25-1.75-37	1-3/4	2-1/4	3/8	0.406 +0.015/0	1.750 +0/-0.003	1.751 +0.003/0	2.250 +0.008/0	1.750 +0/-0.007	2.249 +0/-0.004	2.250 +0.003/0
DSU25-2.00-25	2	2-1/2	1/4	0.281 +0.015/0	2.000 +0/-0.003	2.001 +0.004/0	2.500 +0.008/0	2.000 +0/-0.008	2.499 +0/-0.004	2.500 +0.003/0
DSU25-2.00-37	2	2-1/2	3/8	0.406 +0.015/0	2.000 +0/-0.003	2.001 +0.004/0	2.500 +0.008/0	2.000 +0/-0.008	2.499 +0/-0.004	2.500 +0.003/0
DSU25-2.12-37	2-1/8	2-5/8	3/8	0.406 +0.015/0	2.125 +0/-0.003	2.126 +0.004/0	2.625 +0.008/0	2.125 +0/-0.008	2.624 +0/-0.004	2.625 +0.003/0
DSU25-2.25-31	2-1/4	2-3/4	5/16	0.343 +0.015/0	2.250 +0/-0.003	2.251 +0.004/0	2.750 +0.008/0	2.250 +0/-0.008	2.749 +0/-0.004	2.750 +0.003/0
DSU25-2.25-37	2-1/4	2-3/4	3/8	0.406 +0.015/0	2.250 +0/-0.003	2.251 +0.004/0	2.750 +0.008/0	2.250 +0/-0.008	2.749 +0/-0.004	2.750 +0.003/0
DSU25-2.37-37	2-3/8	2-7/8	3/8	0.406 +0.015/0	2.375 +0/-0.003	2.376 +0.004/0	2.875 +0.008/0	2.375 +0/-0.008	2.874 +0/-0.004	2.875 +0.003/0
DSU25-2.50-25	2-1/2	3	1/4	0.281 +0.015/0	2.500 +0/-0.003	2.501 +0.004/0	3.000 +0.008/0	2.500 +0/-0.008	2.999 +0/-0.004	3.000 +0.004/0
DSU25-2.50-31	2-1/2	3	5/16	0.343 +0.015/0	2.500 +0/-0.003	2.501 +0.004/0	3.000 +0.008/0	2.500 +0/-0.008	2.999 +0/-0.004	3.000 +0.004/0
DSU25-2.50-37	2-1/2	3	3/8	0.406 +0.015/0	2.500 +0/-0.003	2.501 +0.004/0	3.000 +0.008/0	2.500 +0/-0.008	2.999 +0/-0.004	3.000 +0.004/0
DSU25-2.62-37	2-5/8	3-1/8	3/8	0.406 +0.015/0	2.625 +0/-0.003	2.626 +0.004/0	3.125 +0.008/0	2.625 +0/-0.008	3.124 +0/-0.004	3.125 +0.004/0
DSU25-2.75-37	2-3/4	3-1/4	3/8	0.406 +0.015/0	2.750 +0/-0.003	2.751 +0.004/0	3.250 +0.009/0	2.750 +0/-0.008	3.249 +0/-0.004	3.250 +0.004/0
DSU25-2.87-37	2-7/8	3-3/8	3/8	0.406 +0.015/0	2.875 +0/-0.003	2.876 +0.004/0	3.375 +0.009/0	2.875 +0/-0.008	3.374 +0/-0.004	3.375 +0.004/0
DSU25-3.00-25	3	3-1/2	1/4	0.281 +0.015/0	3.000 +0/-0.004	3.001 +0.004/0	3.500 +0.009/0	3.000 +0/-0.009	3.499 +0/-0.004	3.500 +0.004/0
DSU25-3.00-37	3	3-1/2	3/8	0.406 +0.015/0	3.000 +0/-0.004	3.001 +0.004/0	3.500 +0.009/0	3.000 +0/-0.009	3.499 +0/-0.004	3.500 +0.004/0
DSU25-3.25-37	3-1/4	3-3/4	3/8	0.406 +0.015/0	3.250 +0/-0.004	3.251 +0.004/0	3.750 +0.009/0	3.250 +0/-0.009	3.749 +0/-0.004	3.750 +0.004/0
DSU25-3.37-37	3-3/8	3-7/8	3/8	0.406 +0.015/0	3.375 +0/-0.004	3.376 +0.004/0	3.875 +0.009/0	3.375 +0/-0.009	3.874 +0/-0.004	3.875 +0.004/0
DSU25-3.50-25	3-1/2	4	1/4	0.281 +0.015/0	3.500 +0/-0.004	3.501 +0.004/0	4.000 +0.009/0	3.500 +0/-0.009	3.999 +0/-0.004	4.000 +0.004/0
DSU25-3.50-37	3-1/2	4	3/8	0.406 +0.015/0	3.500 +0/-0.004	3.501 +0.004/0	4.000 +0.009/0	3.500 +0/-0.009	3.999 +0/-0.004	4.000 +0.004/0
DSU25-3.62-37	3-5/8	4-1/8	3/8	0.406 +0.015/0	3.625 +0/-0.004	3.626 +0.004/0	4.125 +0.009/0	3.625 +0/-0.009	4.124 +0/-0.004	4.125 +0.004/0
DSU25-3.75-37	3-3/4	4-1/4	3/8	0.406 +0.015/0	3.750 +0/-0.004	3.751 +0.004/0	4.250 +0.009/0	3.750 +0/-0.009	4.249 +0/-0.004	4.250 +0.004/0
DSU25-4.00-56	4	4-1/2	9/16	0.593 +0.015/0	4.000 +0/-0.004	4.001 +0.004/0	4.500 +0.009/0	4.000 +0/-0.009	4.499 +0/-0.004	4.500 +0.004/0
DSU25-4.12-56	4-1/8	4-5/8	9/16	0.593 +0.015/0	4.125 +0/-0.004	4.126 +0.004/0	4.625 +0.009/0	4.125 +0/-0.009	4.624 +0/-0.004	4.625 +0.004/0
DSU25-4.25-37	4-1/4	4-3/4	3/8	0.406 +0.015/0	4.250 +0/-0.004	4.251 +0.004/0	4.750 +0.009/0	4.250 +0/-0.009	4.749 +0/-0.004	4.750 +0.004/0
DSU25-4.50-37	4-1/2	5	3/8	0.406 +0.015/0	4.500 +0/-0.004	4.501 +0.004/0	5.000 +0.01/0	4.500 +0/-0.009	4.999 +0/-0.004	5.000 +0.004/0
DSU25-4.50-50	4-1/2	5	1/2	0.531 +0.015/0	4.500 +0/-0.004	4.501 +0.004/0	5.000 +0.01/0	4.500 +0/-0.009	4.999 +0/-0.004	5.000 +0.004/0
DSU25-4.50-56	4-1/2	5	9/16	0.593 +0.015/0	4.500 +0/-0.004	4.501 +0.004/0	5.000 +0.01/0	4.500 +0/-0.009	4.999 +0/-0.004	5.000 +0.004/0

STYLE DSU HEAVY DUTY SYMMETRICAL U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/4" C/S										
DSU25-4.75-37	4-3/4	5-1/4	3/8	0.406 +0.015/0	4.750 +0/-0.004	4.751 +0.004/0	5.250 +0.01/0	4.750 +0/-0.009	5.249 +0/-0.004	5.250 +0.004/0
DSU25-4.75-56	4-3/4	5-1/4	9/16	0.593 +0.015/0	4.750 +0/-0.004	4.751 +0.004/0	5.250 +0.01/0	4.750 +0/-0.009	5.249 +0/-0.004	5.250 +0.004/0
DSU25-5.25-56	5-1/4	5-3/4	9/16	0.593 +0.015/0	5.250 +0/-0.004	5.251 +0.004/0	5.750 +0.01/0	5.250 +0/-0.01	5.749 +0/-0.004	5.750 +0.004/0
DSU25-5.37-37	5-3/8	5-7/8	3/8	0.406 +0.015/0	5.375 +0/-0.004	5.376 +0.004/0	5.875 +0.01/0	5.375 +0/-0.01	5.874 +0/-0.004	5.875 +0.004/0
DSU25-5.62-37	5-5/8	6-1/8	3/8	0.406 +0.015/0	5.625 +0/-0.004	5.626 +0.004/0	6.125 +0.01/0	5.625 +0/-0.01	6.124 +0/-0.004	6.125 +0.004/0
DSU25-6.00-37	6	6-1/2	3/8	0.406 +0.015/0	6.000 +0/-0.004	6.001 +0.004/0	6.500 +0.01/0	6.000 +0/-0.01	6.499 +0/-0.004	6.500 +0.004/0
DSU25-6.00-56	6	6-1/2	9/16	0.593 +0.015/0	6.000 +0/-0.004	6.001 +0.004/0	6.500 +0.01/0	6.000 +0/-0.01	6.499 +0/-0.004	6.500 +0.004/0
DSU25-6.25-50	6-1/4	6-3/4	1/2	0.531 +0.015/0	6.250 +0/-0.004	6.251 +0.004/0	6.750 +0.01/0	6.250 +0/-0.01	6.749 +0/-0.004	6.750 +0.005/0
DSU25-6.50-37	6-1/2	7	3/8	0.406 +0.015/0	6.500 +0/-0.004	6.501 +0.004/0	7.000 +0.011/0	6.500 +0/-0.01	6.999 +0/-0.004	7.000 +0.005/0
DSU25-6.50-50	6-1/2	7	1/2	0.531 +0.015/0	6.500 +0/-0.004	6.501 +0.004/0	7.000 +0.011/0	6.500 +0/-0.01	6.999 +0/-0.004	7.000 +0.005/0
DSU25-7.00-56	7	7-1/2	9/16	0.593 +0.015/0	7.000 +0/-0.005	7.001 +0.004/0	7.500 +0.011/0	7.000 +0/-0.011	7.499 +0/-0.004	7.500 +0.005/0
DSU25-8.50-37	8-1/2	9	3/8	0.406 +0.015/0	8.500 +0/-0.005	8.501 +0.004/0	9.000 +0.012/0	8.500 +0/-0.011	8.999 +0/-0.004	9.000 +0.005/0
5/16" C/S										
DSU31-1.25-37	1-1/4	1-7/8	3/8	0.406 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	1.875 +0.007/0	1.250 +0/-0.007	1.874 +0/-0.003	1.875 +0.003/0
DSU31-1.25-50	1-1/4	1-7/8	1/2	0.531 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	1.875 +0.007/0	1.250 +0/-0.007	1.874 +0/-0.003	1.875 +0.003/0
DSU31-1.37-31	1-3/8	2	5/16	0.343 +0.015/0	1.375 +0/-0.003	1.376 +0.003/0	2.000 +0.008/0	1.375 +0/-0.007	1.999 +0/-0.003	2.000 +0.003/0
DSU31-1.37-37	1-3/8	2	3/8	0.406 +0.015/0	1.375 +0/-0.003	1.376 +0.003/0	2.000 +0.008/0	1.375 +0/-0.007	1.999 +0/-0.003	2.000 +0.003/0
DSU31-1.50-37	1-1/2	2-1/8	3/8	0.406 +0.015/0	1.500 +0/-0.003	1.501 +0.003/0	2.125 +0.008/0	1.500 +0/-0.007	2.124 +0/-0.004	2.125 +0.003/0
DSU31-1.62-37	1-5/8	2-1/4	3/8	0.406 +0.015/0	1.625 +0/-0.003	1.626 +0.003/0	2.250 +0.008/0	1.625 +0/-0.007	2.249 +0/-0.004	2.250 +0.003/0
DSU31-1.75-37	1-3/4	2-3/8	3/8	0.406 +0.015/0	1.750 +0/-0.003	1.751 +0.003/0	2.375 +0.008/0	1.750 +0/-0.007	2.374 +0/-0.004	2.375 +0.003/0
DSU31-1.75-50	1-3/4	2-3/8	1/2	0.531 +0.015/0	1.750 +0/-0.003	1.751 +0.003/0	2.375 +0.008/0	1.750 +0/-0.007	2.374 +0/-0.004	2.375 +0.003/0
DSU31-1.87-37	1-7/8	2-1/2	3/8	0.406 +0.015/0	1.875 +0/-0.003	1.876 +0.003/0	2.500 +0.008/0	1.875 +0/-0.007	2.499 +0/-0.004	2.500 +0.003/0
DSU31-1.87-50	1-7/8	2-1/2	1/2	0.531 +0.015/0	1.875 +0/-0.003	1.876 +0.003/0	2.500 +0.008/0	1.875 +0/-0.007	2.499 +0/-0.004	2.500 +0.003/0
DSU31-2.00-25	2	2-5/8	1/4	0.281 +0.015/0	2.000 +0/-0.003	2.001 +0.004/0	2.625 +0.008/0	2.000 +0/-0.008	2.624 +0/-0.004	2.625 +0.003/0
DSU31-2.00-31	2	2-5/8	5/16	0.343 +0.015/0	2.000 +0/-0.003	2.001 +0.004/0	2.625 +0.008/0	2.000 +0/-0.008	2.624 +0/-0.004	2.625 +0.003/0
DSU31-2.00-37	2	2-5/8	3/8	0.406 +0.015/0	2.000 +0/-0.003	2.001 +0.004/0	2.625 +0.008/0	2.000 +0/-0.008	2.624 +0/-0.004	2.625 +0.003/0
DSU31-2.12-37	2-1/8	2-3/4	3/8	0.406 +0.015/0	2.125 +0/-0.003	2.126 +0.004/0	2.750 +0.008/0	2.125 +0/-0.008	2.749 +0/-0.004	2.750 +0.003/0
DSU31-2.25-25	2-1/4	2-7/8	1/4	0.281 +0.015/0	2.250 +0/-0.003	2.251 +0.004/0	2.875 +0.008/0	2.250 +0/-0.008	2.874 +0/-0.004	2.875 +0.003/0
DSU31-2.25-37	2-1/4	2-7/8	3/8	0.406 +0.015/0	2.250 +0/-0.003	2.251 +0.004/0	2.875 +0.008/0	2.250 +0/-0.008	2.874 +0/-0.004	2.875 +0.003/0
DSU31-2.25-50	2-1/4	2-7/8	1/2	0.531 +0.015/0	2.250 +0/-0.003	2.251 +0.004/0	2.875 +0.008/0	2.250 +0/-0.008	2.874 +0/-0.004	2.875 +0.003/0
DSU31-2.37-37	2-3/8	3	3/8	0.406 +0.015/0	2.375 +0/-0.003	2.376 +0.004/0	3.000 +0.008/0	2.375 +0/-0.008	2.999 +0/-0.004	3.000 +0.004/0
DSU31-2.37-50	2-3/8	3	1/2	0.531 +0.015/0	2.375 +0/-0.003	2.376 +0.004/0	3.000 +0.008/0	2.375 +0/-0.008	2.999 +0/-0.004	3.000 +0.004/0
DSU31-2.50-37	2-1/2	3-1/8	3/8	0.406 +0.015/0	2.500 +0/-0.003	2.501 +0.004/0	3.125 +0.008/0	2.500 +0/-0.008	3.124 +0/-0.004	3.125 +0.004/0
DSU31-2.50-50	2-1/2	3-1/8	1/2	0.531 +0.015/0	2.500 +0/-0.003	2.501 +0.004/0	3.125 +0.008/0	2.500 +0/-0.008	3.124 +0/-0.004	3.125 +0.004/0
DSU31-2.62-37	2-5/8	3-1/4	3/8	0.406 +0.015/0	2.625 +0/-0.003	2.626 +0.004/0	3.250 +0.009/0	2.625 +0/-0.008	3.249 +0/-0.004	3.250 +0.004/0
DSU31-2.62-50	2-5/8	3-1/4	1/2	0.531 +0.015/0	2.625 +0/-0.003	2.626 +0.004/0	3.250 +0.009/0	2.625 +0/-0.008	3.249 +0/-0.004	3.250 +0.004/0
DSU31-2.87-37	2-7/8	3-1/2	3/8	0.406 +0.015/0	2.875 +0/-0.003	2.876 +0.004/0	3.500 +0.009/0	2.875 +0/-0.008	3.499 +0/-0.004	3.500 +0.004/0
DSU31-2.87-50	2-7/8	3-1/2	1/2	0.531 +0.015/0	2.875 +0/-0.003	2.876 +0.004/0	3.500 +0.009/0	2.875 +0/-0.008	3.499 +0/-0.004	3.500 +0.004/0
DSU31-3.00-37	3	3-5/8	3/8	0.406 +0.015/0	3.000 +0/-0.004	3.001 +0.004/0	3.625 +0.009/0	3.000 +0/-0.009	3.624 +0/-0.004	3.625 +0.004/0
DSU31-3.00-50	3	3-5/8	1/2	0.531 +0.015/0	3.000 +0/-0.004	3.001 +0.004/0	3.625 +0.009/0	3.000 +0/-0.009	3.624 +0/-0.004	3.625 +0.004/0
DSU31-3.12-37	3-1/8	3-3/4	3/8	0.406 +0.015/0	3.125 +0/-0.004	3.126 +0.004/0	3.750 +0.009/0	3.125 +0/-0.009	3.749 +0/-0.004	3.750 +0.004/0
DSU31-3.12-50	3-1/8	3-3/4	1/2	0.531 +0.015/0	3.125 +0/-0.004	3.126 +0.004/0	3.750 +0.009/0	3.250 +0/-0.009	3.749 +0/-0.004	3.750 +0.004/0

STYLE DSU HEAVY DUTY SYMMETRICAL U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
5/16" C/S										
DSU31-3.50-37	3-1/2	4-1/8	3/8	0.406 +0.015/0	3.500 +0/-0.004	3.501 +0.004/0	4.125 +0.009/0	3.500 +0/-0.009	4.124 +0/-0.004	4.125 +0.004/0
DSU31-3.50-50	3-1/2	4-1/8	1/2	0.531 +0.015/0	3.500 +0/-0.004	3.501 +0.004/0	4.125 +0.009/0	3.500 +0/-0.009	4.124 +0/-0.004	4.125 +0.004/0
DSU31-3.62-37	3-5/8	4-1/4	3/8	0.406 +0.015/0	3.625 +0/-0.004	3.626 +0.004/0	4.250 +0.009/0	3.625 +0/-0.009	4.249 +0/-0.004	4.250 +0.004/0
DSU31-3.87-37	3-7/8	4-1/2	3/8	0.406 +0.015/0	3.875 +0/-0.004	3.876 +0.004/0	4.500 +0.009/0	3.875 +0/-0.009	4.499 +0/-0.004	4.500 +0.004/0
DSU31-3.87-50	3-7/8	4-1/2	1/2	0.531 +0.015/0	3.875 +0/-0.004	3.876 +0.004/0	4.500 +0.009/0	3.875 +0/-0.009	4.499 +0/-0.004	4.500 +0.004/0
DSU31-4.00-37	4	4-5/8	3/8	0.406 +0.015/0	4.000 +0/-0.004	4.001 +0.004/0	4.625 +0.009/0	4.000 +0/-0.009	4.624 +0/-0.004	4.625 +0.004/0
DSU31-4.12-50	4-1/8	4-3/4	1/2	0.531 +0.015/0	4.125 +0/-0.004	4.126 +0.004/0	4.750 +0.009/0	4.125 +0/-0.009	4.749 +0/-0.004	4.750 +0.004/0
DSU31-4.37-37	4-3/8	5	3/8	0.406 +0.015/0	4.375 +0/-0.004	4.376 +0.004/0	5.000 +0.01/0	4.375 +0/-0.009	4.999 +0/-0.004	5.000 +0.004/0
DSU31-4.37-50	4-3/8	5	1/2	0.531 +0.015/0	4.375 +0/-0.004	4.376 +0.004/0	5.000 +0.01/0	4.375 +0/-0.009	4.999 +0/-0.004	5.000 +0.004/0
DSU31-4.37-56	4-3/8	5	9/16	0.593 +0.015/0	4.375 +0/-0.004	4.376 +0.004/0	5.000 +0.01/0	4.375 +0/-0.009	4.999 +0/-0.004	5.000 +0.004/0
DSU31-4.50-37	4-1/2	5-1/8	3/8	0.406 +0.015/0	4.500 +0/-0.004	4.501 +0.004/0	5.125 +0.01/0	4.500 +0/-0.009	5.124 +0/-0.004	5.125 +0.004/0
DSU31-4.50-62	4-1/2	5-1/8	5/8	0.656 +0.015/0	4.500 +0/-0.004	4.501 +0.004/0	5.125 +0.01/0	4.500 +0/-0.009	5.124 +0/-0.004	5.125 +0.004/0
DSU31-4.75-37	4-3/4	5-3/8	3/8	0.406 +0.015/0	4.750 +0/-0.004	4.751 +0.004/0	5.375 +0.01/0	4.750 +0/-0.009	5.374 +0/-0.004	5.375 +0.004/0
DSU31-4.75-50	4-3/4	5-3/8	1/2	0.531 +0.015/0	4.750 +0/-0.004	4.751 +0.004/0	5.375 +0.01/0	4.750 +0/-0.009	5.374 +0/-0.004	5.375 +0.004/0
DSU31-4.75-62	4-3/4	5-3/8	5/8	0.656 +0.015/0	4.750 +0/-0.004	4.751 +0.004/0	5.375 +0.01/0	4.750 +0/-0.009	5.374 +0/-0.004	5.375 +0.004/0
DSU31-4.87-37	4-7/8	5-1/2	3/8	0.406 +0.015/0	4.875 +0/-0.004	4.876 +0.004/0	5.500 +0.01/0	4.875 +0/-0.009	5.499 +0/-0.004	5.500 +0.004/0
DSU31-4.87-50	4-7/8	5-1/2	1/2	0.531 +0.015/0	4.875 +0/-0.004	4.876 +0.004/0	5.500 +0.01/0	4.875 +0/-0.009	5.499 +0/-0.004	5.500 +0.004/0
DSU31-5.12-37	5-1/8	5-3/4	3/8	0.406 +0.015/0	5.125 +0/-0.004	5.126 +0.004/0	5.750 +0.01/0	5.125 +0/-0.01	5.749 +0/-0.004	5.750 +0.004/0
DSU31-5.12-50	5-1/8	5-3/4	1/2	0.531 +0.015/0	5.125 +0/-0.004	5.126 +0.004/0	5.750 +0.01/0	5.125 +0/-0.01	5.749 +0/-0.004	5.750 +0.004/0
DSU31-5.25-37	5-1/4	5-7/8	3/8	0.406 +0.015/0	5.250 +0/-0.004	5.251 +0.004/0	5.875 +0.01/0	5.250 +0/-0.01	5.874 +0/-0.004	5.875 +0.004/0
DSU31-5.37-37	5-3/8	6	3/8	0.406 +0.015/0	5.375 +0/-0.004	5.376 +0.004/0	6.000 +0.01/0	5.375 +0/-0.01	5.999 +0/-0.004	6.000 +0.004/0
DSU31-5.37-50	5-3/8	6	1/2	0.531 +0.015/0	5.375 +0/-0.004	5.376 +0.004/0	6.000 +0.01/0	5.375 +0/-0.01	5.999 +0/-0.004	6.000 +0.004/0
DSU31-5.37-62	5-3/8	6	5/8	0.656 +0.015/0	5.375 +0/-0.004	5.376 +0.004/0	6.000 +0.01/0	5.375 +0/-0.01	5.999 +0/-0.004	6.000 +0.004/0
DSU31-5.50-37	5-1/2	6-1/8	3/8	0.406 +0.015/0	5.500 +0/-0.004	5.501 +0.004/0	6.125 +0.01/0	5.500 +0/-0.01	6.124 +0/-0.004	6.125 +0.004/0
DSU31-5.62-50	5-5/8	6-1/4	1/2	0.531 +0.015/0	5.625 +0/-0.004	5.626 +0.004/0	6.250 +0.01/0	5.625 +0/-0.01	6.249 +0/-0.004	6.250 +0.004/0
DSU31-5.87-37	5-7/8	6-1/2	3/8	0.406 +0.015/0	5.875 +0/-0.004	5.876 +0.004/0	6.500 +0.01/0	5.875 +0/-0.01	6.499 +0/-0.004	6.500 +0.004/0
3/8" C/S										
DSU37-1.25-37	1-1/4	2	3/8	0.406 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	2.000 +0.008/0	1.250 +0/-0.007	1.999 +0/-0.003	2.000 +0.003/0
DSU37-1.25-43	1-1/4	2	7/16	0.468 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	2.000 +0.008/0	1.250 +0/-0.007	1.999 +0/-0.003	2.000 +0.003/0
DSU37-1.25-50	1-1/4	2	1/2	0.531 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	2.000 +0.008/0	1.250 +0/-0.007	1.999 +0/-0.003	2.000 +0.003/0
DSU37-1.50-37	1-1/2	2-1/4	3/8	0.406 +0.015/0	1.500 +0/-0.003	1.501 +0.003/0	2.250 +0.008/0	1.500 +0/-0.007	2.249 +0/-0.004	2.250 +0.003/0
DSU37-1.50-50	1-1/2	2-1/4	1/2	0.531 +0.015/0	1.500 +0/-0.003	1.501 +0.003/0	2.250 +0.008/0	1.500 +0/-0.007	2.249 +0/-0.004	2.250 +0.003/0
DSU37-1.62-37	1-5/8	2-3/8	3/8	0.406 +0.015/0	1.625 +0/-0.003	1.626 +0.003/0	2.375 +0.008/0	1.625 +0/-0.007	2.374 +0/-0.004	2.375 +0.003/0
DSU37-1.62-50	1-5/8	2-3/8	1/2	0.531 +0.015/0	1.625 +0/-0.003	1.626 +0.003/0	2.375 +0.008/0	1.625 +0/-0.007	2.374 +0/-0.004	2.375 +0.003/0
DSU37-1.75-37	1-3/4	2-1/2	3/8	0.406 +0.015/0	1.750 +0/-0.003	1.751 +0.003/0	2.500 +0.008/0	1.750 +0/-0.007	2.499 +0/-0.004	2.500 +0.003/0
DSU37-1.75-62	1-3/4	2-1/2	5/8	0.656 +0.015/0	1.750 +0/-0.003	1.751 +0.003/0	2.500 +0.008/0	1.750 +0/-0.007	2.499 +0/-0.004	2.500 +0.003/0
DSU37-2.00-37	2	2-3/4	3/8	0.406 +0.015/0	2.000 +0/-0.003	2.001 +0.004/0	2.750 +0.008/0	2.000 +0/-0.008	2.749 +0/-0.004	2.750 +0.003/0
DSU37-2.00-50	2	2-3/4	1/2	0.531 +0.015/0	2.000 +0/-0.003	2.001 +0.004/0	2.750 +0.008/0	2.000 +0/-0.008	2.749 +0/-0.004	2.750 +0.003/0
DSU37-2.25-37	2-1/4	3	3/8	0.406 +0.015/0	2.250 +0/-0.003	2.251 +0.004/0	3.000 +0.008/0	2.250 +0/-0.008	2.999 +0/-0.004	3.000 +0.004/0
DSU37-2.25-50	2-1/4	3	1/2	0.531 +0.015/0	2.250 +0/-0.003	2.251 +0.004/0	3.000 +0.008/0	2.250 +0/-0.008	2.999 +0/-0.004	3.000 +0.004/0
DSU37-2.25-62	2-1/4	3	5/8	0.656 +0.015/0	2.250 +0/-0.003	2.251 +0.004/0	3.000 +0.008/0	2.250 +0/-0.008	2.999 +0/-0.004	3.000 +0.004/0
DSU37-2.50-37	2-1/2	3-1/4	3/8	0.406 +0.015/0	2.500 +0/-0.003	2.501 +0.004/0	3.250 +0.009/0	2.500 +0/-0.008	3.249 +0/-0.004	3.250 +0.004/0

STYLE DSU HEAVY DUTY SYMMETRICAL U-SEALS

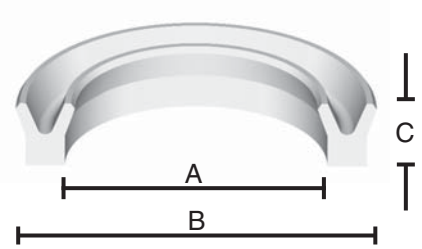
Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
3/8" C/S										
DSU37-2.50-50	2-1/2	3-1/4	1/2	0.531 +0.015/0	2.500 +0/-0.003	2.501 +0.004/0	3.250 +0.009/0	2.500 +0/-0.008	3.249 +0/-0.004	3.250 +0.004/0
DSU37-2.50-62	2-1/2	3-1/4	5/8	0.656 +0.015/0	2.500 +0/-0.003	2.501 +0.004/0	3.250 +0.009/0	2.500 +0/-0.008	3.249 +0/-0.004	3.250 +0.004/0
DSU37-2.62-37	2-5/8	3-3/8	3/8	0.406 +0.015/0	2.625 +0/-0.003	2.626 +0.004/0	3.375 +0.009/0	2.625 +0/-0.008	3.374 +0/-0.004	3.375 +0.004/0
DSU37-2.62-62	2-5/8	3-3/8	5/8	0.656 +0.015/0	2.625 +0/-0.003	2.626 +0.004/0	3.375 +0.009/0	2.625 +0/-0.008	3.374 +0/-0.004	3.375 +0.004/0
DSU37-2.75-37	2-3/4	3-1/2	3/8	0.406 +0.015/0	2.750 +0/-0.003	2.751 +0.004/0	3.500 +0.009/0	2.750 +0/-0.008	3.499 +0/-0.004	3.500 +0.004/0
DSU37-2.75-50	2-3/4	3-1/2	1/2	0.531 +0.015/0	2.750 +0/-0.003	2.751 +0.004/0	3.500 +0.009/0	2.750 +0/-0.008	3.499 +0/-0.004	3.500 +0.004/0
DSU37-2.75-62	2-3/4	3-1/2	5/8	0.656 +0.015/0	2.750 +0/-0.003	2.751 +0.004/0	3.500 +0.009/0	2.750 +0/-0.008	3.499 +0/-0.004	3.500 +0.004/0
DSU37-3.00-37	3	3-3/4	3/8	0.406 +0.015/0	3.000 +0/-0.004	3.001 +0.004/0	3.750 +0.009/0	3.000 +0/-0.009	3.749 +0/-0.004	3.750 +0.004/0
DSU37-3.00-50	3	3-3/4	1/2	0.531 +0.015/0	3.000 +0/-0.004	3.001 +0.004/0	3.750 +0.009/0	3.000 +0/-0.009	3.749 +0/-0.004	3.750 +0.004/0
DSU37-3.00-62	3	3-3/4	5/8	0.656 +0.015/0	3.000 +0/-0.004	3.001 +0.004/0	3.750 +0.009/0	3.000 +0/-0.009	3.749 +0/-0.004	3.750 +0.004/0
DSU37-3.25-37	3-1/4	4	3/8	0.406 +0.015/0	3.250 +0/-0.004	3.251 +0.004/0	4.000 +0.009/0	3.250 +0/-0.009	3.999 +0/-0.004	4.000 +0.004/0
DSU37-3.25-50	3-1/4	4	1/2	0.531 +0.015/0	3.250 +0/-0.004	3.251 +0.004/0	4.000 +0.009/0	3.250 +0/-0.009	3.999 +0/-0.004	4.000 +0.004/0
DSU37-3.25-62	3-1/4	4	5/8	0.656 +0.015/0	3.250 +0/-0.004	3.251 +0.004/0	4.000 +0.009/0	3.250 +0/-0.009	3.999 +0/-0.004	4.000 +0.004/0
DSU37-3.50-37	3-1/2	4-1/4	3/8	0.406 +0.015/0	3.500 +0/-0.004	3.501 +0.004/0	4.250 +0.009/0	3.500 +0/-0.009	4.249 +0/-0.004	4.250 +0.004/0
DSU37-3.50-50	3-1/2	4-1/4	1/2	0.531 +0.015/0	3.500 +0/-0.004	3.501 +0.004/0	4.250 +0.009/0	3.500 +0/-0.009	4.249 +0/-0.004	4.250 +0.004/0
DSU37-3.50-62	3-1/2	4-1/4	5/8	0.656 +0.015/0	3.500 +0/-0.004	3.501 +0.004/0	4.250 +0.009/0	3.500 +0/-0.009	4.249 +0/-0.004	4.250 +0.004/0
DSU37-3.75-37	3-3/4	4-1/2	3/8	0.406 +0.015/0	3.750 +0/-0.004	3.751 +0.004/0	4.500 +0.009/0	3.750 +0/-0.009	4.499 +0/-0.004	4.500 +0.004/0
DSU37-3.75-50	3-3/4	4-1/2	1/2	0.531 +0.015/0	3.750 +0/-0.004	3.751 +0.004/0	4.500 +0.009/0	3.750 +0/-0.009	4.499 +0/-0.004	4.500 +0.004/0
DSU37-3.75-62	3-3/4	4-1/2	5/8	0.656 +0.015/0	3.750 +0/-0.004	3.751 +0.004/0	4.500 +0.009/0	3.750 +0/-0.009	4.499 +0/-0.004	4.500 +0.004/0
DSU37-4.00-37	4	4-3/4	3/8	0.406 +0.015/0	4.000 +0/-0.004	4.001 +0.004/0	4.750 +0.009/0	4.000 +0/-0.009	4.749 +0/-0.004	4.750 +0.004/0
DSU37-4.00-50	4	4-3/4	1/2	0.531 +0.015/0	4.000 +0/-0.004	4.001 +0.004/0	4.750 +0.009/0	4.000 +0/-0.009	4.749 +0/-0.004	4.750 +0.004/0
DSU37-4.00-62	4	4-3/4	5/8	0.656 +0.015/0	4.000 +0/-0.004	4.001 +0.004/0	4.750 +0.009/0	4.000 +0/-0.009	4.749 +0/-0.004	4.750 +0.004/0
DSU37-4.12-62	4-1/8	4-7/8	5/8	0.656 +0.015/0	4.125 +0/-0.004	4.126 +0.004/0	4.875 +0.009/0	4.125 +0/-0.009	4.874 +0/-0.004	4.875 +0.004/0
DSU37-4.25-37	4-1/4	5	3/8	0.406 +0.015/0	4.250 +0/-0.004	4.251 +0.004/0	5.000 +0.01/0	4.250 +0/-0.009	4.999 +0/-0.004	5.000 +0.004/0
DSU37-4.25-50	4-1/4	5	1/2	0.531 +0.015/0	4.250 +0/-0.004	4.251 +0.004/0	5.000 +0.01/0	4.250 +0/-0.009	4.999 +0/-0.004	5.000 +0.004/0
DSU37-4.25-62	4-1/4	5	5/8	0.656 +0.015/0	4.250 +0/-0.004	4.251 +0.004/0	5.000 +0.01/0	4.250 +0/-0.009	4.999 +0/-0.004	5.000 +0.004/0
DSU37-4.50-50	4-1/2	5-1/4	1/2	0.531 +0.015/0	4.500 +0/-0.004	4.501 +0.004/0	5.250 +0.01/0	4.500 +0/-0.009	5.249 +0/-0.004	5.250 +0.004/0
DSU37-4.50-62	4-1/2	5-1/4	5/8	0.656 +0.015/0	4.500 +0/-0.004	4.501 +0.004/0	5.250 +0.01/0	4.500 +0/-0.009	5.249 +0/-0.004	5.250 +0.004/0
DSU37-4.62-50	4-5/8	5-3/8	1/2	0.531 +0.015/0	4.625 +0/-0.004	4.626 +0.004/0	5.375 +0.01/0	4.625 +0/-0.009	5.374 +0/-0.004	5.375 +0.004/0
DSU37-4.75-50	4-3/4	5-1/2	1/2	0.531 +0.015/0	4.750 +0/-0.004	4.751 +0.004/0	5.500 +0.01/0	4.750 +0/-0.009	5.499 +0/-0.004	5.500 +0.004/0
DSU37-4.75-62	4-3/4	5-1/2	5/8	0.656 +0.015/0	4.750 +0/-0.004	4.751 +0.004/0	5.500 +0.01/0	4.750 +0/-0.009	5.499 +0/-0.004	5.500 +0.004/0
DSU37-4.87-50	4-7/8	5-5/8	1/2	0.531 +0.015/0	4.875 +0/-0.004	4.876 +0.004/0	5.625 +0.01/0	4.875 +0/-0.009	5.624 +0/-0.004	5.625 +0.004/0
DSU37-5.25-37	5-1/4	6	3/8	0.406 +0.015/0	5.250 +0/-0.004	5.251 +0.004/0	6.000 +0.01/0	5.250 +0/-0.01	5.999 +0/-0.004	6.000 +0.004/0
DSU37-5.25-50	5-1/4	6	1/2	0.531 +0.015/0	5.250 +0/-0.004	5.251 +0.004/0	6.000 +0.01/0	5.250 +0/-0.01	5.999 +0/-0.004	6.000 +0.004/0
DSU37-5.25-62	5-1/4	6	5/8	0.656 +0.015/0	5.250 +0/-0.004	5.251 +0.004/0	6.000 +0.01/0	5.250 +0/-0.01	5.999 +0/-0.004	6.000 +0.004/0
DSU37-5.37-50	5-3/8	6-1/8	1/2	0.531 +0.015/0	5.375 +0/-0.004	5.376 +0.004/0	6.125 +0.01/0	5.375 +0/-0.01	6.124 +0/-0.004	6.125 +0.004/0
DSU37-5.50-37	5-1/2	6-1/4	3/8	0.406 +0.015/0	5.500 +0/-0.004	5.501 +0.004/0	6.250 +0.01/0	5.500 +0/-0.01	6.249 +0/-0.004	6.250 +0.004/0
DSU37-5.50-50	5-1/2	6-1/4	1/2	0.531 +0.015/0	5.500 +0/-0.004	5.501 +0.004/0	6.250 +0.01/0	5.500 +0/-0.01	6.249 +0/-0.004	6.250 +0.004/0
DSU37-5.62-62	5-5/8	6-3/8	5/8	0.656 +0.015/0	5.625 +0/-0.004	5.626 +0.004/0	6.375 +0.01/0	5.625 +0/-0.01	6.374 +0/-0.004	6.375 +0.004/0
DSU37-5.75-50	5-3/4	6-1/2	1/2	0.531 +0.015/0	5.750 +0/-0.004	5.751 +0.004/0	6.500 +0.01/0	5.750 +0/-0.01	6.499 +0/-0.004	6.500 +0.004/0
DSU37-5.75-62	5-3/4	6-1/2	5/8	0.656 +0.015/0	5.750 +0/-0.004	5.751 +0.004/0	6.500 +0.01/0	5.750 +0/-0.01	6.499 +0/-0.004	6.500 +0.004/0
DSU37-6.25-50	6-1/4	7	1/2	0.531 +0.015/0	6.250 +0/-0.004	6.251 +0.004/0	7.000 +0.011/0	6.250 +0/-0.01	6.999 +0/-0.004	7.000 +0.005/0

STYLE DSU HEAVY DUTY SYMMETRICAL U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
3/8" C/S										
DSU37-6.25-62	6-1/4	7	5/8	0.656 +0.015/0	6.250 +0/-0.004	6.251 +0.004/0	7.000 +0.011/0	6.250 +0/-0.01	6.999 +0/-0.004	7.000 +0.005/0
DSU37-6.50-50	6-1/2	7-1/4	1/2	0.531 +0.015/0	6.500 +0/-0.004	6.501 +0.004/0	7.250 +0.011/0	6.500 +0/-0.01	7.249 +0/-0.004	7.250 +0.005/0
DSU37-6.50-62	6-1/2	7-1/4	5/8	0.656 +0.015/0	6.500 +0/-0.004	6.501 +0.004/0	7.250 +0.011/0	6.500 +0/-0.01	7.249 +0/-0.004	7.250 +0.005/0
DSU37-6.75-50	6-3/4	7-1/2	1/2	0.531 +0.015/0	6.750 +0/-0.004	6.751 +0.004/0	7.500 +0.011/0	6.750 +0/-0.01	7.499 +0/-0.004	7.500 +0.005/0
DSU37-7.00-50	7	7-3/4	1/2	0.531 +0.015/0	7.000 +0/-0.005	7.001 +0.004/0	7.750 +0.011/0	7.000 +0/-0.011	7.749 +0/-0.004	7.750 +0.005/0
DSU37-7.00-62	7	7-3/4	5/8	0.656 +0.015/0	7.000 +0/-0.005	7.001 +0.004/0	7.750 +0.011/0	7.000 +0/-0.011	7.749 +0/-0.004	7.750 +0.005/0
DSU37-7.25-50	7-1/4	8	1/2	0.531 +0.015/0	7.250 +0/-0.005	7.251 +0.004/0	8.000 +0.011/0	7.250 +0/-0.011	7.999 +0/-0.004	8.000 +0.005/0
DSU37-7.75-50	7-3/4	8-1/2	1/2	0.531 +0.015/0	7.750 +0/-0.005	7.751 +0.004/0	8.500 +0.011/0	7.750 +0/-0.011	8.499 +0/-0.004	8.500 +0.005/0
DSU37-8.25-50	8-1/4	9	1/2	0.531 +0.015/0	8.250 +0/-0.005	8.251 +0.004/0	9.000 +0.012/0	8.250 +0/-0.011	8.999 +0/-0.004	9.000 +0.005/0
DSU37-8.50-62	8-1/2	9-1/4	5/8	0.656 +0.015/0	8.500 +0/-0.005	8.501 +0.004/0	9.250 +0.012/0	8.500 +0/-0.011	9.249 +0/-0.004	9.250 +0.005/0
1/2" C/S										
DSU50-1.87-62	1-7/8	2-7/8	5/8	0.656 +0.015/0	1.875 +0/-0.003	1.876 +0.003/0	2.875 +0.008/0	1.875 +0/-0.007	2.874 +0/-0.004	2.875 +0.003/0
DSU50-2.50-68	2-1/2	3-1/2	11/16	0.719 +0.015/0	2.500 +0/-0.003	2.501 +0.004/0	3.500 +0.009/0	2.500 +0/-0.008	3.499 +0/-0.004	3.500 +0.004/0
DSU50-3.00-62	3	4	5/8	0.656 +0.015/0	3.000 +0/-0.004	3.001 +0.004/0	4.000 +0.009/0	3.000 +0/-0.009	3.999 +0/-0.004	4.000 +0.004/0
DSU50-3.50-50	3-1/2	4-1/2	1/2	0.531 +0.015/0	3.500 +0/-0.004	3.501 +0.004/0	4.500 +0.009/0	3.500 +0/-0.009	4.499 +0/-0.004	4.500 +0.004/0
DSU50-3.50-62	3-1/2	4-1/2	5/8	0.656 +0.015/0	3.500 +0/-0.004	3.501 +0.004/0	4.500 +0.009/0	3.500 +0/-0.009	4.499 +0/-0.004	4.500 +0.004/0
DSU50-6.00-62	6	7	5/8	0.656 +0.015/0	6.000 +0/-0.004	3.876 +0.004/0	7.000 +0.011/0	6.000 +0/-0.01	6.999 +0/-0.004	7.000 +0.005/0
DSU50-6.00-75	6	7	3/4	0.781 +0.015/0	6.000 +0/-0.004	3.876 +0.004/0	7.000 +0.011/0	6.000 +0/-0.01	6.999 +0/-0.004	7.000 +0.005/0
DSU50-6.50-75	6-1/2	7-1/2	3/4	0.781 +0.015/0	6.500 +0/-0.004	6.501 +0.004/0	7.500 +0.011/0	6.500 +0/-0.01	7.499 +0/-0.004	7.500 +0.005/0
DSU50-7.00-62	7	8	5/8	0.656 +0.015/0	7.000 +0/-0.005	7.001 +0.004/0	8.000 +0.011/0	7.000 +0/-0.011	7.999 +0/-0.004	8.000 +0.005/0
DSU50-7.00-75	7	8	3/4	0.781 +0.015/0	7.000 +0/-0.005	7.001 +0.004/0	8.000 +0.011/0	7.000 +0/-0.011	7.999 +0/-0.004	8.000 +0.005/0
DSU50-7.50-75	7-1/2	8-1/2	3/4	0.781 +0.015/0	7.500 +0/-0.005	7.501 +0.004/0	8.500 +0.011/0	7.500 +0/-0.011	8.499 +0/-0.004	8.500 +0.005/0
DSU50-7.75-75	7-3/4	8-3/4	3/4	0.781 +0.015/0	7.750 +0/-0.005	7.751 +0.004/0	8.750 +0.011/0	7.750 +0/-0.011	8.749 +0/-0.004	8.750 +0.005/0
DSU50-8.00-62	8	9	5/8	0.656 +0.015/0	8.000 +0/-0.005	8.001 +0.004/0	9.000 +0.012/0	8.000 +0/-0.011	8.999 +0/-0.004	9.000 +0.005/0
DSU50-8.00-75	8	9	3/4	0.781 +0.015/0	8.000 +0/-0.005	8.001 +0.004/0	9.000 +0.012/0	8.000 +0/-0.011	8.999 +0/-0.004	9.000 +0.005/0
DSU50-9.00-62	9	10	5/8	0.656 +0.015/0	9.000 +0/-0.005	9.001 +0.004/0	10.000 +0.012/0	9.000 +0/-0.011	9.999 +0/-0.004	10.000 +0.005/0
DSU50-9.00-75	9	10	3/4	0.781 +0.015/0	9.000 +0/-0.005	9.001 +0.004/0	10.000 +0.012/0	9.000 +0/-0.011	9.999 +0/-0.004	10.000 +0.005/0
DSU50-10.00-75	10	11	3/4	0.781 +0.015/0	10.000 +0/-0.006	10.001 +0.004/0	11.000 +0.012/0	10.000 +0/-0.012	10.999 +0/-0.004	11.000 +0.006/0
DSU50-11.00-75	11	12	3/4	0.781 +0.015/0	11.000 +0/-0.006	11.001 +0.004/0	12.000 +0.012/0	11.000 +0/-0.012	11.999 +0/-0.004	12.000 +0.006/0
DSU50-12.00-75	12	13	3/4	0.781 +0.015/0	12.000 +0/-0.006	12.001 +0.004/0	13.000 +0.012/0	12.000 +0/-0.012	12.999 +0/-0.004	13.000 +0.006/0
DSU50-15.00-75	15	16	3/4	0.781 +0.015/0	15.000 +0/-0.006	15.001 +0.004/0	16.000 +0.012/0	15.000 +0/-0.012	15.999 +0/-0.004	16.000 +0.006/0
DSU50-17.00-75	17	18	3/4	0.781 +0.015/0	17.000 +0/-0.006	17.001 +0.004/0	18.000 +0.012/0	17.000 +0/-0.012	17.999 +0/-0.004	18.000 +0.006/0
5/8" C/S										
DSU62-3.75-62	3-3/4	5	5/8	0.656 +0.015/0	3.750 +0/-0.004	3.751 +0.004/0	5.000 +0.01/0	3.750 +0/-0.009	4.999 +0/-0.004	5.000 +0.004/0
3/4" C/S										
DSU75-12.50-100	12-1/2	14	1	1.031 +0.015/0	12.500 +0/-0.006	12.501 +0.004/0	14.000 +0.012/0	12.500 +0/-0.012	13.999 +0/-0.004	14.000 +0.006/0

STYLE HU SYMMETRICAL URETHANE U-SEALS

Style HU seals feature a reverse bevel lip design and are molded from high quality urethane. The balanced symmetrical design makes them ideal for rod or piston applications.

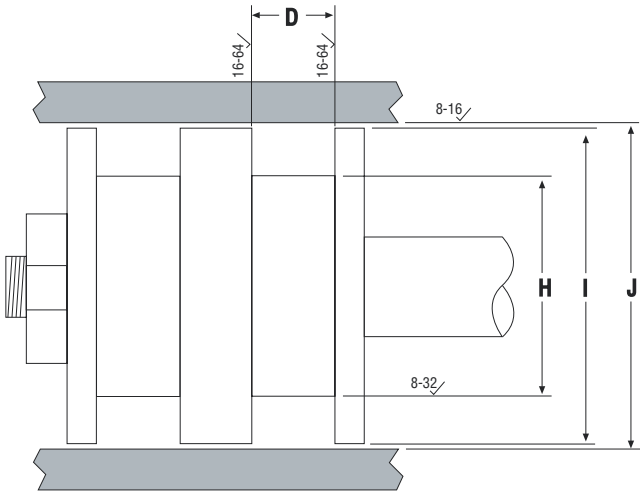


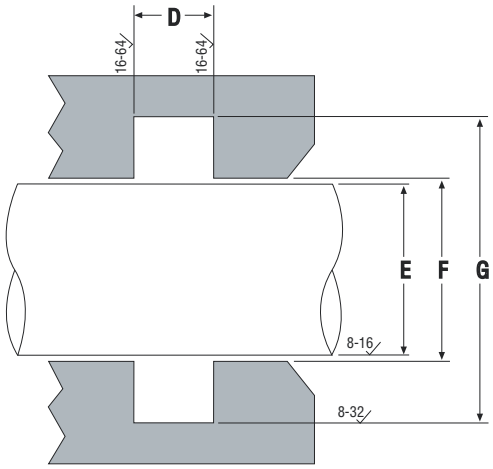
PART NUMBERS

HU 12 - 0.62 - 12

Type of Seal	Cross Section	Inside Diameter	Height

SEAL INFORMATION	
MATERIAL	90A URETHANE
TEMPERATURE RANGE	-50° TO +200° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)





Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/8" C/S										
HU12-0.62-12	5/8	7/8	1/8	0.138 +0.015/0	0.625 +0/-0.003	0.626 +0.003/0	0.875 +0.003/0	0.625 +0/-0.004	0.874 +0/-0.003	0.875 +0.003/0
HU12-0.62-18	5/8	7/8	3/16	0.207 +0.015/0	0.625 +0/-0.003	0.626 +0.003/0	0.875 +0.003/0	0.625 +0/-0.004	0.874 +0/-0.003	0.875 +0.003/0
HU12-0.75-25	3/4	1	1/4	0.275 +0.015/0	0.750 +0/-0.003	0.751 +0.003/0	1.000 +0.003/0	0.750 +0/-0.004	0.999 +0/-0.003	1.000 +0.003/0
HU12-0.87-25	7/8	1-1/8	1/4	0.275 +0.015/0	0.875 +0/-0.003	0.876 +0.003/0	1.125 +0.003/0	0.875 +0/-0.004	1.124 +0/-0.003	1.125 +0.003/0
HU12-1.00-25	1	1-1/4	1/4	0.275 +0.015/0	1.000 +0/-0.003	1.001 +0.003/0	1.250 +0.003/0	1.000 +0/-0.004	1.249 +0/-0.003	1.250 +0.003/0
HU12-1.12-12	1-1/8	1-3/8	1/8	0.138 +0.015/0	1.125 +0/-0.003	1.126 +0.003/0	1.375 +0.003/0	1.125 +0/-0.004	1.374 +0/-0.003	1.375 +0.003/0
HU12-1.25-25	1-1/4	1-1/2	1/4	0.275 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	1.500 +0.003/0	1.250 +0/-0.004	1.499 +0/-0.003	1.500 +0.003/0
HU12-1.50-25	1-1/2	1-3/4	1/4	0.275 +0.015/0	1.500 +0/-0.003	1.501 +0.003/0	1.750 +0.003/0	1.500 +0/-0.004	1.749 +0/-0.003	1.750 +0.003/0
5/32" C/S										
HU15-1.00-21	1	1-5/16	7/32	0.241 +0.015/0	1.000 +0/-0.003	1.001 +0.003/0	1.313 +0.003/0	1.000 +0/-0.004	1.312 +0/-0.003	1.313 +0.003/0
HU15-1.37-21	1-3/8	1-11/16	7/32	0.241 +0.015/0	1.375 +0/-0.003	1.376 +0.003/0	1.688 +0.003/0	1.375 +0/-0.004	1.687 +0/-0.003	1.688 +0.003/0
3/16" C/S										
HU18-0.37-25	3/8	3/4	1/4	0.275 +0.015/0	0.375 +0/-0.003	0.376 +0.003/0	0.750 +0.003/0	0.375 +0/-0.004	0.749 +0/-0.003	0.750 +0.003/0
HU18-0.87-25	7/8	1-1/4	1/4	0.275 +0.015/0	0.875 +0/-0.003	0.876 +0.003/0	1.250 +0.003/0	0.875 +0/-0.004	1.249 +0/-0.003	1.250 +0.003/0
HU18-1.00-25	1	1-3/8	1/4	0.275 +0.015/0	1.000 +0/-0.003	1.001 +0.003/0	1.375 +0.003/0	1.000 +0/-0.004	1.374 +0/-0.003	1.375 +0.003/0

STYLE HU SYMMETRICAL URETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
3/16" C/S										
HU18-1.12-18	1-1/8	1-1/2	3/16	0.207 +0.015/0	1.125 +0/-0.003	1.126 +0.003/0	1.500 +0.003/0	1.125 +0/-0.004	1.499 +0/-0.003	1.500 +0.003/0
HU18-1.12-25	1-1/8	1-1/2	1/4	0.275 +0.015/0	1.125 +0/-0.003	1.126 +0.003/0	1.500 +0.003/0	1.125 +0/-0.004	1.499 +0/-0.003	1.500 +0.003/0
HU18-1.25-18	1-1/4	1-5/8	3/16	0.207 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	1.625 +0.003/0	1.250 +0/-0.004	1.624 +0/-0.003	1.625 +0.003/0
HU18-1.25-25	1-1/4	1-5/8	1/4	0.275 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	1.625 +0.003/0	1.250 +0/-0.004	1.624 +0/-0.003	1.625 +0.003/0
HU18-1.25-31	1-1/4	1-5/8	5/16	0.343 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	1.625 +0.003/0	1.250 +0/-0.004	1.624 +0/-0.003	1.625 +0.003/0
HU18-1.25-37	1-1/4	1-5/8	3/8	0.413 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	1.625 +0.003/0	1.250 +0/-0.004	1.624 +0/-0.003	1.625 +0.003/0
HU18-1.37-18	1-3/8	1-3/4	3/16	0.207 +0.015/0	1.375 +0/-0.003	1.376 +0.003/0	1.750 +0.003/0	1.375 +0/-0.004	1.749 +0/-0.003	1.750 +0.003/0
HU18-1.50-25	1-1/2	1-7/8	1/4	0.275 +0.015/0	1.500 +0/-0.003	1.501 +0.003/0	1.875 +0.003/0	1.500 +0/-0.004	1.874 +0/-0.003	1.875 +0.003/0
HU18-1.50-31	1-1/2	1-7/8	5/16	0.343 +0.015/0	1.500 +0/-0.003	1.501 +0.003/0	1.875 +0.003/0	1.500 +0/-0.004	1.874 +0/-0.003	1.875 +0.003/0
HU18-1.62-18	1-5/8	2	3/16	0.207 +0.015/0	1.625 +0/-0.003	1.626 +0.003/0	2.000 +0.003/0	1.625 +0/-0.004	1.999 +0/-0.003	2.000 +0.003/0
HU18-1.62-31	1-5/8	2	5/16	0.343 +0.015/0	1.625 +0/-0.003	1.626 +0.003/0	2.000 +0.003/0	1.625 +0/-0.004	1.999 +0/-0.003	2.000 +0.003/0
HU18-1.75-18	1-3/4	2-1/8	3/16	0.207 +0.015/0	1.750 +0/-0.003	1.751 +0.003/0	2.125 +0.003/0	1.750 +0/-0.004	2.124 +0/-0.003	2.125 +0.003/0
HU18-1.75-25	1-3/4	2-1/8	1/4	0.275 +0.015/0	1.750 +0/-0.003	1.751 +0.003/0	2.125 +0.003/0	1.750 +0/-0.004	2.124 +0/-0.003	2.125 +0.003/0
HU18-1.75-37	1-3/4	2-1/8	3/8	0.413 +0.015/0	1.750 +0/-0.003	1.751 +0.003/0	2.125 +0.003/0	1.750 +0/-0.004	2.124 +0/-0.003	2.125 +0.003/0
HU18-2.00-18	2	2-3/8	3/16	0.207 +0.015/0	2.000 +0/-0.003	2.001 +0.003/0	2.375 +0.003/0	2.000 +0/-0.004	2.374 +0/-0.003	2.375 +0.003/0
HU18-2.00-25	2	2-3/8	1/4	0.275 +0.015/0	2.000 +0/-0.003	2.001 +0.003/0	2.375 +0.003/0	2.000 +0/-0.004	2.374 +0/-0.003	2.375 +0.003/0
HU18-2.00-31	2	2-3/8	5/16	0.343 +0.015/0	2.000 +0/-0.003	2.001 +0.003/0	2.375 +0.003/0	2.000 +0/-0.004	2.374 +0/-0.003	2.375 +0.003/0
HU18-2.00-37	2	2-3/8	3/8	0.413 +0.015/0	2.000 +0/-0.003	2.001 +0.003/0	2.375 +0.003/0	2.000 +0/-0.004	2.374 +0/-0.003	2.375 +0.003/0
HU18-2.12-18	2-1/8	2-1/2	3/16	0.207 +0.015/0	2.125 +0/-0.003	2.126 +0.003/0	2.500 +0.003/0	2.125 +0/-0.004	2.499 +0/-0.003	2.500 +0.003/0
HU18-2.12-37	2-1/8	2-1/2	3/8	0.413 +0.015/0	2.125 +0/-0.003	2.126 +0.003/0	2.500 +0.003/0	2.125 +0/-0.004	2.499 +0/-0.003	2.500 +0.003/0
HU18-2.50-25	2-1/2	2-7/8	1/4	0.275 +0.015/0	2.500 +0/-0.003	2.501 +0.003/0	2.875 +0.003/0	2.500 +0/-0.004	2.874 +0/-0.003	2.875 +0.003/0
HU18-2.50-37	2-1/2	2-7/8	3/8	0.413 +0.015/0	2.500 +0/-0.003	2.501 +0.003/0	2.875 +0.003/0	2.500 +0/-0.004	2.874 +0/-0.003	2.875 +0.003/0
HU18-2.62-37	2-5/8	3	3/8	0.413 +0.015/0	2.625 +0/-0.003	2.626 +0.003/0	3.000 +0.003/0	2.625 +0/-0.004	2.999 +0/-0.003	3.000 +0.003/0
HU18-3.00-18	3	3-3/8	3/16	0.207 +0.015/0	3.000 +0/-0.003	3.001 +0.003/0	3.375 +0.003/0	3.000 +0/-0.004	3.374 +0/-0.003	3.375 +0.003/0
HU18-3.12-37	3-1/8	3-1/2	3/8	0.413 +0.015/0	3.125 +0/-0.003	3.126 +0.003/0	3.500 +0.003/0	3.125 +0/-0.004	3.499 +0/-0.003	3.500 +0.003/0
HU18-3.62-37	3-5/8	4	3/8	0.413 +0.015/0	3.625 +0/-0.003	3.626 +0.003/0	4.000 +0.003/0	3.625 +0/-0.004	3.999 +0/-0.003	4.000 +0.003/0
HU18-3.87-18	3-7/8	4-1/4	3/16	0.207 +0.015/0	3.875 +0/-0.003	3.876 +0.003/0	4.250 +0.003/0	3.875 +0/-0.004	4.249 +0/-0.003	4.250 +0.003/0
7/32" C/S										
HU21-2.81-28	2-13/16	3-1/4	9/32	0.309 +0.015/0	2.812 +0/-0.003	2.813 +0.003/0	3.250 +0.003/0	2.812 +0/-0.004	3.249 +0/-0.003	3.250 +0.003/0
HU21-2.50-28	2-1/2	2-15/16	9/32	0.309 +0.015/0	2.500 +0/-0.003	2.501 +0.003/0	2.938 +0.003/0	2.500 +0/-0.004	2.937 +0/-0.003	2.938 +0.003/0
HU21-3.00-28	3	3-7/16	9/32	0.309 +0.015/0	3.000 +0/-0.003	3.001 +0.003/0	3.438 +0.003/0	3.000 +0/-0.004	3.437 +0/-0.003	3.438 +0.003/0
1/4" C/S										
HU25-0.93-56	15/16	1-7/16	9/16	0.619 +0.015/0	0.938 +0/-0.003	0.939 +0.003/0	1.438 +0.003/0	0.938 +0/-0.004	1.437 +0/-0.003	1.438 +0.003/0
HU25-1.00-25	1	1-1/2	1/4	0.275 +0.015/0	1.000 +0/-0.003	1.001 +0.003/0	1.500 +0.003/0	1.000 +0/-0.004	1.499 +0/-0.003	1.500 +0.003/0
HU25-1.00-31	1	1-1/2	5/16	0.343 +0.015/0	1.000 +0/-0.003	1.001 +0.003/0	1.500 +0.003/0	1.000 +0/-0.004	1.499 +0/-0.003	1.500 +0.003/0
HU25-1.00-37	1	1-1/2	3/8	0.413 +0.015/0	1.000 +0/-0.003	1.001 +0.003/0	1.500 +0.003/0	1.000 +0/-0.004	1.499 +0/-0.003	1.500 +0.003/0
HU25-1.12-25	1-1/8	1-5/8	1/4	0.275 +0.015/0	1.125 +0/-0.003	1.126 +0.003/0	1.625 +0.003/0	1.125 +0/-0.004	1.624 +0/-0.003	1.625 +0.003/0
HU25-1.25-25	1-1/4	1-3/4	1/4	0.275 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	1.750 +0.003/0	1.250 +0/-0.004	1.749 +0/-0.003	1.750 +0.003/0
HU25-1.25-37	1-1/4	1-3/4	3/8	0.413 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	1.750 +0.003/0	1.250 +0/-0.004	1.749 +0/-0.003	1.750 +0.003/0
HU25-1.37-37	1-3/8	1-7/8	3/8	0.413 +0.015/0	1.375 +0/-0.003	1.376 +0.003/0	1.875 +0.003/0	1.375 +0/-0.004	1.874 +0/-0.003	1.875 +0.003/0

STYLE HU SYMMETRICAL URETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/4" C/S										
HU25-1.50-31	1-1/2	2	5/16	0.343 +0.015/0	1.500 +0/-0.003	1.501 +0.003/0	2.000 +0.003/0	1.500 +0/-0.004	1.999 +0/-0.003	2.000 +0.003/0
HU25-1.50-37	1-1/2	2	3/8	0.413 +0.015/0	1.500 +0/-0.003	1.501 +0.003/0	2.000 +0.003/0	1.500 +0/-0.004	1.999 +0/-0.003	2.000 +0.003/0
HU25-1.75-25	1-3/4	2-1/4	1/4	0.275 +0.015/0	1.750 +0/-0.003	1.751 +0.003/0	2.250 +0.003/0	1.750 +0/-0.004	2.249 +0/-0.003	2.250 +0.003/0
HU25-1.75-37	1-3/4	2-1/4	3/8	0.413 +0.015/0	1.750 +0/-0.003	1.751 +0.003/0	2.250 +0.003/0	1.750 +0/-0.004	2.249 +0/-0.003	2.250 +0.003/0
HU25-2.00-25	2	2-1/2	1/4	0.275 +0.015/0	2.000 +0/-0.003	2.001 +0.003/0	2.500 +0.003/0	2.000 +0/-0.004	2.499 +0/-0.003	2.500 +0.003/0
HU25-2.00-31	2	2-1/2	5/16	0.343 +0.015/0	2.000 +0/-0.003	2.001 +0.003/0	2.500 +0.003/0	2.000 +0/-0.004	2.499 +0/-0.003	2.500 +0.003/0
HU25-2.00-37	2	2-1/2	3/8	0.413 +0.015/0	2.000 +0/-0.003	2.001 +0.003/0	2.500 +0.003/0	2.000 +0/-0.004	2.499 +0/-0.003	2.500 +0.003/0
HU25-2.00-50	2	2-1/2	1/2	0.550 +0.015/0	2.000 +0/-0.003	2.001 +0.003/0	2.500 +0.003/0	2.000 +0/-0.004	2.499 +0/-0.003	2.500 +0.003/0
HU25-2.25-25	2-1/4	2-3/4	1/4	0.275 +0.015/0	2.250 +0/-0.003	2.251 +0.003/0	2.750 +0.003/0	2.250 +0/-0.004	2.749 +0/-0.003	2.750 +0.003/0
HU25-2.25-37	2-1/4	2-3/4	3/8	0.413 +0.015/0	2.250 +0/-0.003	2.251 +0.003/0	2.750 +0.003/0	2.250 +0/-0.004	2.749 +0/-0.003	2.750 +0.003/0
HU25-2.50-25	2-1/2	3	1/4	0.275 +0.015/0	2.500 +0/-0.003	2.501 +0.003/0	3.000 +0.003/0	2.500 +0/-0.004	2.999 +0/-0.003	3.000 +0.003/0
HU25-2.50-37	2-1/2	3	3/8	0.413 +0.015/0	2.500 +0/-0.003	2.501 +0.003/0	3.000 +0.003/0	2.500 +0/-0.004	2.999 +0/-0.003	3.000 +0.003/0
HU25-2.62-37	2-5/8	3-1/8	3/8	0.413 +0.015/0	2.625 +0/-0.003	2.626 +0.003/0	3.125 +0.003/0	2.625 +0/-0.004	3.124 +0/-0.003	3.125 +0.003/0
HU25-2.75-25	2-3/4	3-1/4	1/4	0.275 +0.015/0	2.750 +0/-0.003	2.751 +0.003/0	3.250 +0.003/0	2.750 +0/-0.004	3.249 +0/-0.003	3.250 +0.003/0
HU25-2.75-37	2-3/4	3-1/4	3/8	0.413 +0.015/0	2.750 +0/-0.003	2.751 +0.003/0	3.250 +0.003/0	2.750 +0/-0.004	3.249 +0/-0.003	3.250 +0.003/0
HU25-2.87-37	2-7/8	3-3/8	3/8	0.413 +0.015/0	2.875 +0/-0.003	2.876 +0.003/0	3.375 +0.003/0	2.875 +0/-0.004	3.374 +0/-0.003	3.375 +0.003/0
HU25-3.00-25	3	3-1/2	1/4	0.275 +0.015/0	3.000 +0/-0.003	3.001 +0.003/0	3.500 +0.003/0	3.000 +0/-0.004	3.499 +0/-0.003	3.500 +0.003/0
HU25-3.00-37	3	3-1/2	3/8	0.413 +0.015/0	3.000 +0/-0.003	3.001 +0.003/0	3.500 +0.003/0	3.000 +0/-0.004	3.499 +0/-0.003	3.500 +0.003/0
HU25-3.25-31	3-1/4	3-3/4	5/16	0.343 +0.015/0	3.250 +0/-0.003	3.251 +0.003/0	3.750 +0.003/0	3.250 +0/-0.004	3.749 +0/-0.003	3.750 +0.003/0
HU25-3.25-37	3-1/4	3-3/4	3/8	0.413 +0.015/0	3.250 +0/-0.003	3.251 +0.003/0	3.750 +0.003/0	3.250 +0/-0.004	3.749 +0/-0.003	3.750 +0.003/0
HU25-3.37-37	3-3/8	3-7/8	3/8	0.413 +0.015/0	3.375 +0/-0.003	3.376 +0.003/0	3.875 +0.003/0	3.375 +0/-0.004	3.874 +0/-0.003	3.875 +0.003/0
HU25-3.50-31	3-1/2	4	5/16	0.344 +0.015/0	3.500 +0/-0.003	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.004	3.999 +0/-0.003	4.000 +0.003/0
HU25-3.50-37	3-1/2	4	3/8	0.413 +0.015/0	3.500 +0/-0.003	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.004	3.999 +0/-0.003	4.000 +0.003/0
HU25-3.50-50	3-1/2	4	1/2	0.550 +0.015/0	3.500 +0/-0.003	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.004	3.999 +0/-0.003	4.000 +0.003/0
HU25-3.75-37	3-3/4	4-1/4	3/8	0.413 +0.015/0	3.750 +0/-0.003	3.751 +0.003/0	4.250 +0.003/0	3.750 +0/-0.004	4.249 +0/-0.003	4.250 +0.003/0
HU25-4.00-25	4	4-1/2	1/4	0.275 +0.015/0	4.000 +0/-0.003	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.004	4.499 +0/-0.003	4.500 +0.003/0
HU25-4.00-31	4	4-1/2	5/16	0.344 +0.015/0	4.000 +0/-0.003	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.004	4.499 +0/-0.003	4.500 +0.003/0
HU25-4.00-37	4	4-1/2	3/8	0.413 +0.015/0	4.000 +0/-0.003	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.004	4.499 +0/-0.003	4.500 +0.003/0
HU25-4.00-50	4	4-1/2	1/2	0.550 +0.015/0	4.000 +0/-0.003	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.004	4.499 +0/-0.003	4.500 +0.003/0
HU25-4.00-56	4	4-1/2	9/16	0.619 +0.015/0	4.000 +0/-0.003	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.004	4.499 +0/-0.003	4.500 +0.003/0
HU25-4.25-25	4-1/4	4-3/4	1/4	0.275 +0.015/0	4.250 +0/-0.003	4.251 +0.003/0	4.750 +0.003/0	4.250 +0/-0.004	4.749 +0/-0.003	4.750 +0.003/0
HU25-4.50-25	4-1/2	5	1/4	0.275 +0.015/0	4.500 +0/-0.003	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.004	4.999 +0/-0.003	5.000 +0.003/0
HU25-4.50-31	4-1/2	5	5/16	0.344 +0.015/0	4.500 +0/-0.003	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.004	4.999 +0/-0.003	5.000 +0.003/0
HU25-4.50-37	4-1/2	5	3/8	0.413 +0.015/0	4.500 +0/-0.003	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.004	4.999 +0/-0.003	5.000 +0.003/0
HU25-4.50-50	4-1/2	5	1/2	0.550 +0.015/0	4.500 +0/-0.003	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.004	4.999 +0/-0.003	5.000 +0.003/0
HU25-4.50-56	4-1/2	5	9/16	0.619 +0.015/0	4.500 +0/-0.003	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.004	4.999 +0/-0.003	5.000 +0.003/0
HU25-4.75-25	4-3/4	5-1/4	1/4	0.275 +0.015/0	4.750 +0/-0.003	4.751 +0.003/0	5.250 +0.003/0	4.750 +0/-0.004	5.249 +0/-0.003	5.250 +0.003/0
HU25-5.00-25	5	5-1/2	1/4	0.275 +0.015/0	5.000 +0/-0.003	5.001 +0.003/0	5.500 +0.003/0	5.000 +0/-0.004	5.499 +0/-0.003	5.500 +0.003/0
HU25-5.00-37	5	5-1/2	3/8	0.413 +0.015/0	5.000 +0/-0.003	5.001 +0.003/0	5.500 +0.003/0	5.000 +0/-0.004	5.499 +0/-0.003	5.500 +0.003/0
HU25-5.00-56	5	5-1/2	9/16	0.619 +0.015/0	5.000 +0/-0.003	5.001 +0.003/0	5.500 +0.003/0	5.000 +0/-0.004	5.499 +0/-0.003	5.500 +0.003/0

STYLE HU SYMMETRICAL URETHANE U-SEALS

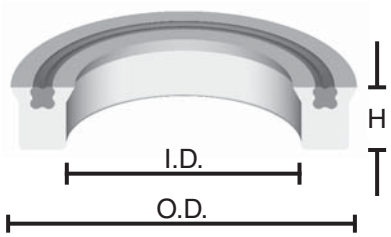
Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/4" C/S										
HU25-5.50-25	5-1/2	6	1/4	0.275 +0.015/0	5.500 +0/-0.003	5.501 +0.003/0	6.000 +0.003/0	5.500 +0/-0.004	5.999 +0/-0.003	6.000 +0.003/0
HU25-5.50-37	5-1/2	6	3/8	0.413 +0.015/0	5.500 +0/-0.003	5.501 +0.003/0	6.000 +0.003/0	5.500 +0/-0.004	5.999 +0/-0.003	6.000 +0.003/0
HU25-5.50-56	5-1/2	6	9/16	0.619 +0.015/0	5.500 +0/-0.003	5.501 +0.003/0	6.000 +0.003/0	5.500 +0/-0.004	5.999 +0/-0.003	6.000 +0.003/0
HU25-5.75-25	5-3/4	6-1/4	1/4	0.275 +0.015/0	5.750 +0/-0.003	5.751 +0.003/0	6.250 +0.003/0	5.750 +0/-0.004	6.249 +0/-0.003	6.250 +0.003/0
HU25-6.00-56	6	6-1/2	9/16	0.619 +0.015/0	6.000 +0/-0.003	6.001 +0.003/0	6.500 +0.003/0	6.000 +0/-0.004	6.499 +0/-0.003	6.500 +0.003/0
HU25-6.50-25	6-1/2	7	1/4	0.275 +0.015/0	6.500 +0/-0.003	6.501 +0.003/0	7.000 +0.003/0	6.500 +0/-0.004	6.999 +0/-0.003	7.000 +0.003/0
9/32" C/S										
HU28-5.00-34	5	5-9/16	11/32	0.309 +0.015/0	5.000 +0/-0.003	5.001 +0.003/0	5.563 +0.003/0	5.000 +0/-0.004	5.562 +0/-0.003	5.563 +0.003/0
5/16" C/S										
HU31-1.25-37	1-1/4	1-7/8	3/8	0.413 +0.015/0	1.250 +0/-0.003	1.251 +0.003/0	1.875 +0.003/0	1.250 +0/-0.004	1.874 +0/-0.003	1.875 +0.003/0
HU31-1.37-31	1-3/8	2	5/16	0.343 +0.015/0	1.375 +0/-0.003	1.376 +0.003/0	2.000 +0.003/0	1.375 +0/-0.004	1.999 +0/-0.003	2.000 +0.003/0
HU31-1.75-31	1-3/4	2-3/8	5/16	0.343 +0.015/0	1.750 +0/-0.003	1.751 +0.003/0	2.375 +0.003/0	1.750 +0/-0.004	2.374 +0/-0.003	2.375 +0.003/0
HU31-2.00-50	2	2-5/8	1/2	0.550 +0.015/0	2.000 +0/-0.003	2.001 +0.003/0	2.625 +0.003/0	2.000 +0/-0.004	2.624 +0/-0.003	2.625 +0.003/0
HU31-2.25-50	2-1/4	2-7/8	1/2	0.550 +0.015/0	2.250 +0/-0.003	2.251 +0.003/0	2.875 +0.003/0	2.250 +0/-0.004	2.874 +0/-0.003	2.875 +0.003/0
HU31-2.37-31	2-3/8	3	5/16	0.440 +0.015/0	2.375 +0/-0.003	2.376 +0.003/0	3.000 +0.003/0	2.375 +0/-0.004	2.999 +0/-0.003	3.000 +0.003/0
HU31-2.50-50	2-1/2	3-1/8	1/2	0.550 +0.015/0	2.500 +0/-0.003	2.501 +0.003/0	3.125 +0.003/0	2.500 +0/-0.004	3.124 +0/-0.003	3.125 +0.003/0
HU31-3.37-37	3-3/8	4	3/8	0.413 +0.015/0	3.375 +0/-0.003	3.376 +0.003/0	4.000 +0.003/0	3.375 +0/-0.004	3.999 +0/-0.003	4.000 +0.003/0
HU31-3.87-50	3-7/8	4-1/2	1/2	0.550 +0.015/0	3.875 +0/-0.003	3.876 +0.003/0	4.500 +0.003/0	3.875 +0/-0.004	4.499 +0/-0.003	4.500 +0.003/0
HU31-5.25-62	5-1/4	5-7/8	5/8	0.688 +0.015/0	5.250 +0/-0.003	5.251 +0.003/0	5.875 +0.003/0	5.250 +0/-0.004	5.874 +0/-0.003	5.875 +0.003/0
HU31-5.37-37	5-3/8	6	3/8	0.413 +0.015/0	5.375 +0/-0.003	5.376 +0.003/0	6.000 +0.003/0	5.375 +0/-0.004	5.999 +0/-0.003	6.000 +0.003/0
HU31-5.37-50	5-3/8	6	1/2	0.550 +0.015/0	5.375 +0/-0.003	5.376 +0.003/0	6.000 +0.003/0	5.375 +0/-0.004	5.999 +0/-0.003	6.000 +0.003/0
HU31-5.37-62	5-3/8	6	5/8	0.688 +0.015/0	5.375 +0/-0.003	5.376 +0.003/0	6.000 +0.003/0	5.375 +0/-0.004	5.999 +0/-0.003	6.000 +0.003/0
HU31-5.50-37	5-1/2	6-1/8	3/8	0.413 +0.015/0	5.500 +0/-0.003	5.501 +0.003/0	6.125 +0.003/0	5.500 +0/-0.004	6.124 +0/-0.003	6.125 +0.003/0
HU31-6.50-62	6-1/2	7-1/8	5/8	0.688 +0.015/0	6.500 +0/-0.003	6.501 +0.003/0	7.125 +0.003/0	6.500 +0/-0.004	7.124 +0/-0.003	7.125 +0.003/0
3/8" C/S										
HU37-2.25-50	2-1/4	3	1/2	0.550 +0.015/0	2.250 +0/-0.003	2.251 +0.003/0	3.000 +0.003/0	2.250 +0/-0.004	2.999 +0/-0.003	3.000 +0.003/0
HU37-2.50-37	2-1/2	3-1/4	3/8	0.413 +0.015/1	2.500 +0/-0.004	2.501 +0.003/1	2.500 +0.003/1	2.500 +0/-0.005	3.249 +0/-0.004	3.250 +0.003/1
HU37-2.62-62	2-5/8	3-3/8	5/8	0.688 +0.015/0	2.625 +0/-0.003	2.626 +0.003/0	3.375 +0.003/0	2.625 +0/-0.004	3.374 +0/-0.003	3.375 +0.003/0
HU37-2.75-50	2-3/4	3-1/2	1/2	0.550 +0.015/0	2.750 +0/-0.003	2.751 +0.003/0	3.500 +0.003/0	2.750 +0/-0.004	3.499 +0/-0.003	3.500 +0.003/0
HU37-2.75-62	2-3/4	3-1/2	5/8	0.688 +0.015/0	2.750 +0/-0.003	2.751 +0.003/0	3.500 +0.003/0	2.750 +0/-0.004	3.499 +0/-0.003	3.500 +0.003/0
HU37-3.00-62	3	3-3/4	5/8	0.688 +0.015/0	3.000 +0/-0.003	3.001 +0.003/0	3.750 +0.003/0	3.000 +0/-0.004	3.749 +0/-0.003	3.750 +0.003/0
HU37-3.12-62	3-1/8	3-7/8	5/8	0.413 +0.015/0	3.125 +0/-0.003	3.126 +0.003/0	3.875 +0.003/0	3.125 +0/-0.004	3.874 +0/-0.003	3.875 +0.003/0
HU37-3.25-37	3-1/4	4	3/8	0.413 +0.015/0	3.250 +0/-0.003	3.251 +0.003/0	4.000 +0.003/0	3.250 +0/-0.004	3.999 +0/-0.003	4.000 +0.003/0
HU37-3.25-50	3-1/4	4	1/2	0.550 +0.015/0	3.250 +0/-0.003	3.251 +0.003/0	4.000 +0.003/0	3.250 +0/-0.004	3.999 +0/-0.003	4.000 +0.003/0
HU37-3.37-87	3-3/8	4-1/8	7/8	0.963 +0.015/0	3.375 +0/-0.003	3.376 +0.003/0	4.125 +0.003/0	3.375 +0/-0.004	4.124 +0/-0.003	4.125 +0.003/0
HU37-3.75-50	3-3/4	4-1/2	1/2	0.550 +0.015/0	3.750 +0/-0.003	3.751 +0.003/0	4.500 +0.003/0	3.750 +0/-0.004	4.499 +0/-0.003	4.500 +0.003/0
HU37-3.75-62	3-3/4	4-1/2	5/8	0.688 +0.015/0	3.750 +0/-0.003	3.751 +0.003/0	4.500 +0.003/0	3.750 +0/-0.004	4.499 +0/-0.003	4.500 +0.003/0
HU37-4.25-37	4-1/4	5	3/8	0.413 +0.015/0	4.250 +0/-0.003	4.251 +0.003/0	5.000 +0.003/0	4.250 +0/-0.004	4.999 +0/-0.003	5.000 +0.003/0
HU37-4.25-50	4-1/4	5	1/2	0.550 +0.015/0	4.250 +0/-0.003	4.251 +0.003/0	5.000 +0.003/0	4.250 +0/-0.004	4.999 +0/-0.003	5.000 +0.003/0
HU37-4.25-62	4-1/4	5	5/8	0.688 +0.015/0	4.250 +0/-0.003	4.251 +0.003/0	5.000 +0.003/0	4.250 +0/-0.004	4.999 +0/-0.003	5.000 +0.003/0

STYLE HU SYMMETRICAL URETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
HU37-4.37-50	4-3/8	5-1/8	1/2	0.550 +0.015/0	4.375 +0/-0.003	4.376 +0.003/0	5.125 +0.003/0	4.375 +0/-0.004	5.124 +0/-0.003	5.125 +0.003/0
3/8" C/S										
HU37-4.50-37	4-1/2	5-1/4	3/8	0.413 +0.015/0	4.500 +0/-0.003	4.501 +0.003/0	5.250 +0.003/0	4.500 +0/-0.004	5.249 +0/-0.003	5.250 +0.003/0
HU37-4.50-50	4-1/2	5-1/4	1/2	0.550 +0.015/0	4.500 +0/-0.003	4.501 +0.003/0	5.250 +0.003/0	4.500 +0/-0.004	5.249 +0/-0.003	5.250 +0.003/0
HU37-4.75-50	4-3/4	5-1/2	1/2	0.550 +0.015/0	4.750 +0/-0.003	4.751 +0.003/0	5.500 +0.003/0	4.750 +0/-0.004	5.499 +0/-0.003	5.500 +0.003/0
HU37-5.00-37	5	5-3/4	3/8	0.413 +0.015/0	5.000 +0/-0.003	5.001 +0.003/0	5.750 +0.003/0	5.000 +0/-0.004	5.749 +0/-0.003	5.750 +0.003/0
HU37-5.00-50	5	5-3/4	1/2	0.550 +0.015/0	5.000 +0/-0.003	5.001 +0.003/0	5.750 +0.003/0	5.000 +0/-0.004	5.749 +0/-0.003	5.750 +0.003/0
HU37-5.25-37	5-1/4	6	3/8	0.413 +0.015/0	5.250 +0/-0.003	5.251 +0.003/0	6.000 +0.003/0	5.250 +0/-0.004	5.999 +0/-0.003	6.000 +0.003/0
HU37-5.25-50	5-1/4	6	1/2	0.550 +0.015/0	5.250 +0/-0.003	5.251 +0.003/0	6.000 +0.003/0	5.250 +0/-0.004	5.999 +0/-0.003	6.000 +0.003/0
HU37-5.25-62	5-1/4	6	5/8	0.688 +0.015/0	5.250 +0/-0.003	5.251 +0.003/0	6.000 +0.003/0	5.250 +0/-0.004	5.999 +0/-0.003	6.000 +0.003/0
HU37-5.50-62	5-1/2	6-1/4	5/8	0.688 +0.015/0	5.500 +0/-0.003	5.501 +0.003/0	6.250 +0.003/0	5.500 +0/-0.004	6.249 +0/-0.003	6.250 +0.003/0
HU37-6.00-50	6	6-3/4	1/2	0.550 +0.015/0	6.000 +0/-0.003	6.001 +0.003/0	6.750 +0.003/0	6.000 +0/-0.004	6.749 +0/-0.003	6.750 +0.003/0
HU37-6.00-62	6	6-3/4	5/8	0.688 +0.015/0	6.000 +0/-0.003	6.001 +0.003/0	6.750 +0.003/0	6.000 +0/-0.004	6.749 +0/-0.003	6.750 +0.003/0
HU37-6.25-37	6-1/4	7	3/8	0.413 +0.015/0	6.250 +0/-0.003	6.251 +0.003/0	7.000 +0.003/0	6.250 +0/-0.004	6.999 +0/-0.003	7.000 +0.003/0
HU37-6.25-50	6-1/4	7	1/2	0.550 +0.015/0	6.250 +0/-0.003	6.251 +0.003/0	7.000 +0.003/0	6.250 +0/-0.004	6.999 +0/-0.003	7.000 +0.003/0
HU37-6.25-62	6-1/4	7	5/8	0.688 +0.015/0	6.250 +0/-0.003	6.251 +0.003/0	7.000 +0.003/0	6.250 +0/-0.004	6.999 +0/-0.003	7.000 +0.003/0
HU37-6.50-37	6-1/2	7-1/4	3/8	0.413 +0.015/0	6.500 +0/-0.003	6.501 +0.003/0	7.250 +0.003/0	6.500 +0/-0.004	7.249 +0/-0.003	7.250 +0.003/0
HU37-6.50-62	6-1/2	7-1/4	5/8	0.688 +0.015/0	6.500 +0/-0.003	6.501 +0.003/0	7.250 +0.003/0	6.500 +0/-0.004	7.249 +0/-0.003	7.250 +0.003/0
HU37-7.25-37	7-1/4	8	3/8	0.413 +0.015/0	7.250 +0/-0.003	7.251 +0.003/0	8.000 +0.003/0	7.250 +0/-0.004	7.999 +0/-0.003	8.000 +0.003/0
HU37-7.25-62	7-1/4	8	5/8	0.688 +0.015/0	7.250 +0/-0.003	7.251 +0.003/0	8.000 +0.003/0	7.250 +0/-0.004	7.999 +0/-0.003	8.000 +0.003/0
1/2" C/S										
HU50-3.00-50	3	4	1/2	0.550 +0.015/0	3.000 +0/-0.003	3.001 +0.003/0	4.000 +0.003/0	3.000 +0/-0.004	3.999 +0/-0.003	4.000 +0.003/0
HU50-4.00-50	4	5	1/2	0.550 +0.015/0	4.000 +0/-0.003	4.001 +0.003/0	5.000 +0.003/0	4.000 +0/-0.004	4.999 +0/-0.003	5.000 +0.003/0
HU50-4.00-62	4	5	5/8	0.688 +0.015/0	4.000 +0/-0.003	4.001 +0.003/0	5.000 +0.003/0	4.000 +0/-0.004	4.999 +0/-0.003	5.000 +0.003/0
HU50-5.00-50	5	6	1/2	0.550 +0.015/0	5.000 +0/-0.003	5.001 +0.003/0	6.000 +0.003/0	5.000 +0/-0.004	5.999 +0/-0.003	6.000 +0.003/0
HU50-5.00-75	5	6	3/4	0.825 +0.015/0	5.000 +0/-0.003	5.001 +0.003/0	6.000 +0.003/0	5.000 +0/-0.004	5.999 +0/-0.003	6.000 +0.003/0
HU50-6.00-50	6	7	1/2	0.550 +0.015/0	6.000 +0/-0.003	6.001 +0.003/0	7.000 +0.003/0	6.000 +0/-0.004	6.999 +0/-0.003	7.000 +0.003/0

STYLE UPU PREMIUM U-SEALS

Style UPU Premium U-Seals are molded from ultra tough urethane for severe service conditions. They feature higher tensile strength and modulus for extrusion resistance. These seals are used in high energy services such as rock drills and shock absorbing devices where high internal heat is generated.



SEAL INFORMATION	
MATERIAL	93A URETHANE
TEMPERATURE RANGE	-65° TO +300° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)

Standard - Height and cross section are equal, thus giving a square seal. Utilizes type "D" lip
Typical Part Number
UPU25-2.50

Deep - Utilizes the same "D" lip, but the seal height is greater than the cross section, thus giving a retangular shape.
Typical Part Number
UPU25-2.50-37D

Type SQB - Same dimensions as the Standard seal. Beveled lip design provides better film breaking. Utilizes type "B" lip.
Typical Part Number
UPU25-2.50-SQB

Type B - Same dimensions as the Deep seal. Beveled lip design provides better film breaking.
Utilizes type "B" lip.
Typical Part Number
UPU25-2.50-37B

Part Number	I.D.	O.D.	H.
1/8" C/S			
UPU12-0.25	1/4	1/2	1/8
UPU12-0.37	3/8	5/8	1/8
UPU12-0.50	1/2	3/4	1/8
UPU12-0.50-25B	1/2	3/4	1/4
UPU12-0.62	5/8	7/8	1/8
UPU12-0.62-25B	5/8	7/8	1/4
UPU12-0.75	3/4	1	1/8
UPU12-0.75-25B	3/4	1	1/4
UPU12-0.87	7/8	1-1/8	1/8
UPU12-1.00-25B	1	1-1/4	1/4
UPU12-1.25	1-1/4	1-1/2	1/8
UPU12-1.37-25D	1-3/8	1-5/8	1/4
UPU12-1.50	1-1/2	1-3/4	1/8
5/32" C/S			
UPU15-1.00	1	1-5/16	5/32
UPU15-1.37	1-3/8	1-11/16	5/32
3/16" C/S			
UPU18-1.00	1	1-3/8	3/16
UPU18-1.00-31B	1	1-3/8	5/16
UPU18-1.12	1-1/8	1-1/2	3/16
UPU18-1.12-31B	1-1/8	1-1/2	5/16
UPU18-1.25	1-1/4	1-5/8	1/8
UPU18-1.25-31B	1-1/4	1-5/8	5/16

Part Number	I.D.	O.D.	H.
3/16" C/S			
UPU18-1.37	1-3/8	1-3/4	3/16
UPU18-1.37-25B	1-3/8	1-3/4	1/4
UPU18-1.37-31B	1-3/8	1-3/4	5/16
UPU18-1.50	1-1/2	1-7/8	3/16
UPU18-1.50-37B	1-1/2	1-7/8	3/8
UPU18-1.62	1-5/8	2	3/16
UPU18-1.62-37B	1-5/8	2	3/8
UPU18-1.75	1-3/4	2-1/8	3/16
UPU18-1.75-37B	1-3/4	2-1/8	3/8
UPU18-2.00	2	2-3/8	3/16
UPU18-2.00-37B	2	2-3/8	3/8
UPU18-2.12	2-1/8	2-1/2	3/16
UPU18-2.12-37B	2-1/8	2-1/2	3/8
UPU18-2.50	2-1/2	2-7/8	3/16
UPU18-2.50-37B	2-1/2	2-7/8	3/8
UPU18-2.87	2-7/8	3-1/4	3/16
UPU18-3.00-37B	3	3-3/8	3/8
UPU18-3.50-37B	3-1/2	3-7/8	3/8
1/4" C/S			
UPU25-0.62	5/8	1-1/8	1/4
UPU25-0.75-37B	3/4	1-1/4	3/8
UPU25-1.00	1	1-1/2	1/4
UPU25-1.25	1-1/4	1-3/4	1/4

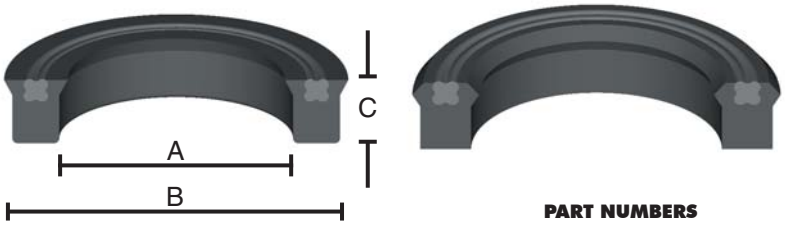
STYLE UPU PREMIUM U-SEALS

Part Number	I.D.	O.D.	H.
1/4" C/S			
UPU25-1.25-37B	1-1/4	1-3/4	3/8
UPU25-1.50	1-1/2	2	1/4
UPU25-1.50-37B	1-1/2	2	3/8
UPU25-1.75	1-3/4	2-1/4	1/4
UPU25-1.75-37B	1-3/4	2-1/4	3/8
UPU25-2.00-37B	2	2-1/2	3/8
UPU25-2.00-37D	2	2-1/2	3/8
UPU25-2.25-37B	2-1/4	2-3/4	3/8
UPU25-2.50	2-1/2	3	1/4
UPU25-2.50-37B	2-1/2	3	3/8
UPU25-2.75	2-3/4	3-1/4	1/4
UPU25-2.75-37B	2-3/4	3-1/4	3/8
UPU25-3.00	3	3-1/2	1/4
UPU25-3.00-37B	3	3-1/2	3/8
UPU25-3.50	3-1/2	4	1/4
UPU25-3.50-37B	3-1/2	4	3/8
UPU25-4.00	4	4-1/2	1/4
UPU25-4.00-56B	4	4-1/2	9/16
UPU25-4.50	4-1/2	5	1/4
UPU25-5.00-37B	5	5-1/2	3/8

Part Number	I.D.	O.D.	H.
5/16" C/S			
UPU31-1.00	1	1-5/8	5/16
UPU31-1.25	1-1/4	1-7/8	5/16
UPU31-1.37	1-3/8	2	5/16
UPU31-1.37-50B	1-3/8	2	1/2
UPU31-1.75-50B	1-3/4	2-3/8	1/2
UPU31-2.00-50B	2	2-5/8	1/2
UPU31-2.25	2-1/4	2-7/8	5/16
UPU31-2.37	2-3/8	3	5/16
UPU31-2.50	2-1/2	3-1/8	5/16
UPU31-3.00	3	3-5/8	5/16
UPU31-4.37	4-3/8	5	5/16
UPU31-5.37	5-3/8	6	5/16
3/8" C/S			
UPU37-3.00-62B	3	3-3/4	5/8
UPU37-3.50-62B	3-1/2	4-1/4	5/8
UPU37-4.50-62B	4-1/2	5-1/4	5/8
UPU37-4.75-62B	4-3/4	5-1/2	5/8
UPU37-5.00-62B	5	5-3/4	5/8
UPU37-5.25	5-1/4	6	3/8
1/2" C/S			
UPU50-5.00	5	6	1/2

STYLE 800 POLYURETHANE U-SEALS

Style 800 U-seals are molded from tough, abrasion-resistant polyurethane. The four lobed expander ring energizes the sealing lips, even at zero pressure, to help prevent "weeping" when the system is idle.

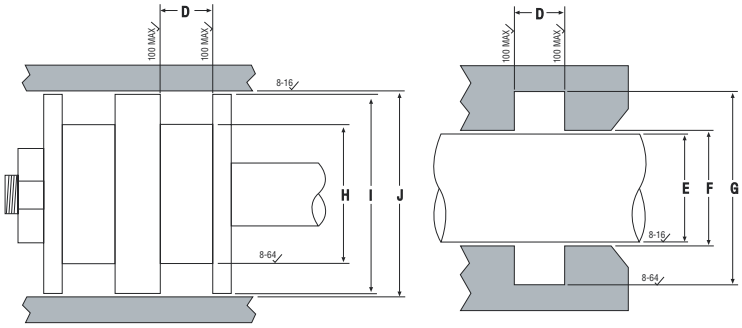


PART NUMBERS

U 12 - 0.18 - 25B

Type of Seal | Cross Section | Inside Diameter | Height

SEAL INFORMATION	
MATERIAL	95A URETHANE
TEMPERATURE RANGE	-65° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)



Standard -
Height and cross section are equal, thus giving a square seal.
Utilizes type "D" lip
Typical Part Number
U25-2.50

Deep -
Utilizes the same "D" lip, but the seal height is greater than the cross section, thus giving a retangular shape.
Typical Part Number
U25-2.50-37D

Type SQB -
Same dimensions as the Standard seal. Beveled lip design provides better film breaking. Utilizes type "B" lip.
Typical Part Number
U25-2.50-SQB

Type B -
Same dimensions as the Deep seal. Beveled lip design provides better film breaking.
Utilizes type "B" lip.
Typical Part Number
U25-2.50-37B

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/8" C/S										
U12-0.12	1/8	3/8	1/8	0.138 +0.01/0	0.125 +0/-0.001	0.126 +0.002/0	0.375 +0.002/0	0.125 +0/-0.001	0.374 +0/-0.001	0.375 +0.002/0
U12-0.14	9/64	25/64	1/8	0.138 +0.01/0	0.141 +0/-0.001	0.142 +0.002/0	0.391 +0.002/0	0.141 +0/-0.001	0.390 +0/-0.001	0.391 +0.002/0
U12-0.18	3/16	7/16	1/8	0.138 +0.01/0	0.188 +0/-0.001	0.189 +0.002/0	0.437 +0.002/0	0.188 +0/-0.001	0.436 +0/-0.001	0.437 +0.002/0
U12-0.18-25B	3/16	7/16	1/4	0.275 +0.01/0	0.188 +0/-0.001	0.189 +0.002/0	0.437 +0.002/0	0.188 +0/-0.001	0.436 +0/-0.001	0.437 +0.002/0
U12-0.18-SQB	3/16	7/16	1/8	0.138 +0.01/0	0.188 +0/-0.001	0.189 +0.002/0	0.437 +0.002/0	0.188 +0/-0.001	0.436 +0/-0.001	0.437 +0.002/0
U12-0.25	1/4	1/2	1/8	0.138 +0.01/0	0.250 +0/-0.001	0.251 +0.002/0	0.500 +0.002/0	0.250 +0/-0.001	0.499 +0/-0.001	0.500 +0.002/0
U12-0.25-25B	1/4	1/2	1/4	0.275 +0.01/0	0.250 +0/-0.001	0.251 +0.002/0	0.500 +0.002/0	0.250 +0/-0.001	0.499 +0/-0.001	0.500 +0.002/0
U12-0.25-SQB	1/4	1/2	1/8	0.138 +0.01/0	0.250 +0/-0.001	0.251 +0.002/0	0.500 +0.002/0	0.250 +0/-0.001	0.499 +0/-0.001	0.500 +0.002/0
U12-0.28-25B	9/32	17/32	1/4	0.275 +0.01/0	0.281 +0/-0.001	0.282 +0.002/0	0.531 +0.002/0	0.281 +0/-0.001	0.530 +0/-0.001	0.531 +0.002/0
U12-0.31	5/16	9/16	1/8	0.138 +0.01/0	0.312 +0/-0.001	0.313 +0.002/0	0.563 +0.002/0	0.312 +0/-0.001	0.562 +0/-0.001	0.563 +0.002/0
U12-0.31-25B	5/16	9/16	1/4	0.275 +0.01/0	0.312 +0/-0.001	0.313 +0.002/0	0.563 +0.002/0	0.312 +0/-0.001	0.562 +0/-0.001	0.563 +0.002/0
U12-0.31-SQB	5/16	9/16	1/8	0.138 +0.01/0	0.312 +0/-0.001	0.313 +0.002/0	0.563 +0.002/0	0.312 +0/-0.001	0.562 +0/-0.001	0.563 +0.002/0
U12-0.37	3/8	5/8	1/8	0.138 +0.01/0	0.375 +0/-0.001	0.376 +0.002/0	0.625 +0.002/0	0.375 +0/-0.001	0.624 +0/-0.001	0.625 +0.002/0
U12-0.37-25B	3/8	5/8	1/4	0.275 +0.01/0	0.375 +0/-0.001	0.376 +0.002/0	0.625 +0.002/0	0.375 +0/-0.001	0.624 +0/-0.001	0.625 +0.002/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/8" C/S										
U12-0.37-SQB	3/8	5/8	1/8	0.138 +0.01/0	0.375 +0/-0.001	0.376 +0.002/0	0.625 +0.002/0	0.375 +0/-0.001	0.624 +0/-0.001	0.625 +0.002/0
U12-0.43	7/16	11/16	1/8	0.138 +0.01/0	0.438 +0/-0.001	0.439 +0.002/0	0.688 +0.002/0	0.438 +0/-0.001	0.687 +0/-0.001	0.688 +0.002/0
U12-0.43-25B	7/16	11/16	1/4	0.275 +0.01/0	0.438 +0/-0.001	0.439 +0.002/0	0.688 +0.002/0	0.438 +0/-0.001	0.687 +0/-0.001	0.688 +0.002/0
U12-0.43-SQB	7/16	11/16	1/8	0.138 +0.01/0	0.438 +0/-0.001	0.439 +0.002/0	0.688 +0.002/0	0.438 +0/-0.001	0.687 +0/-0.001	0.688 +0.002/0
U12-0.50	1/2	3/4	1/8	0.138 +0.01/0	0.500 +0/-0.001	0.501 +0.002/0	0.750 +0.002/0	0.500 +0/-0.001	0.749 +0/-0.001	0.750 +0.002/0
U12-0.50-25B	1/2	3/4	1/4	0.275 +0.01/0	0.500 +0/-0.001	0.501 +0.002/0	0.750 +0.002/0	0.500 +0/-0.001	0.749 +0/-0.001	0.750 +0.002/0
U12-0.50-SQB	1/2	3/4	1/8	0.138 +0.01/0	0.500 +0/-0.001	0.501 +0.002/0	0.750 +0.002/0	0.500 +0/-0.001	0.749 +0/-0.001	0.750 +0.002/0
U12-0.56	9/16	13/16	1/8	0.138 +0.01/0	0.563 +0/-0.001	0.564 +0.002/0	0.813 +0.002/0	0.563 +0/-0.001	0.812 +0/-0.001	0.813 +0.002/0
U12-0.56-25B	9/16	13/16	1/4	0.275 +0.01/0	0.563 +0/-0.001	0.564 +0.002/0	0.813 +0.002/0	0.563 +0/-0.001	0.812 +0/-0.001	0.813 +0.002/0
U12-0.56-SQB	9/16	13/16	1/8	0.138 +0.01/0	0.563 +0/-0.001	0.564 +0.002/0	0.813 +0.002/0	0.563 +0/-0.001	0.812 +0/-0.001	0.813 +0.002/0
U12-0.62	5/8	7/8	1/8	0.138 +0.01/0	0.625 +0/-0.001	0.626 +0.002/0	0.875 +0.002/0	0.625 +0/-0.001	0.874 +0/-0.001	0.875 +0.002/0
U12-0.62-25B	5/8	7/8	1/4	0.275 +0.01/0	0.625 +0/-0.001	0.626 +0.002/0	0.875 +0.002/0	0.625 +0/-0.001	0.874 +0/-0.001	0.875 +0.002/0
U12-0.62-25D	5/8	7/8	1/4	0.275 +0.01/0	0.625 +0/-0.001	0.626 +0.002/0	0.875 +0.002/0	0.625 +0/-0.001	0.874 +0/-0.001	0.875 +0.002/0
U12-0.62-SQB	5/8	7/8	1/8	0.138 +0.01/0	0.625 +0/-0.001	0.626 +0.002/0	0.875 +0.002/0	0.625 +0/-0.001	0.874 +0/-0.001	0.875 +0.002/0
U12-0.68	11/16	15/16	1/8	0.138 +0.01/0	0.688 +0/-0.001	0.689 +0.002/0	0.938 +0.002/0	0.688 +0/-0.001	0.937 +0/-0.001	0.938 +0.002/0
U12-0.68-25B	11/16	15/16	1/4	0.275 +0.01/0	0.688 +0/-0.001	0.689 +0.002/0	0.938 +0.002/0	0.688 +0/-0.001	0.937 +0/-0.001	0.938 +0.002/0
U12-0.68-SQB	11/16	15/16	1/8	0.138 +0.01/0	0.688 +0/-0.001	0.689 +0.002/0	0.938 +0.002/0	0.688 +0/-0.001	0.937 +0/-0.001	0.938 +0.002/0
U12-0.75	3/4	1	1/8	0.138 +0.01/0	0.750 +0/-0.001	0.751 +0.002/0	1.000 +0.002/0	0.750 +0/-0.001	0.999 +0/-0.001	1.000 +0.002/0
U12-0.75-18B	3/4	1	3/16	0.207 +0.01/0	0.750 +0/-0.001	0.751 +0.002/0	1.000 +0.002/0	0.750 +0/-0.001	0.999 +0/-0.001	1.000 +0.002/0
U12-0.75-25B	3/4	1	1/4	0.275 +0.01/0	0.750 +0/-0.001	0.751 +0.002/0	1.000 +0.002/0	0.750 +0/-0.001	0.999 +0/-0.001	1.000 +0.002/0
U12-0.75-25D	3/4	1	1/4	0.275 +0.01/0	0.750 +0/-0.001	0.751 +0.002/0	1.000 +0.002/0	0.750 +0/-0.001	0.999 +0/-0.001	1.000 +0.002/0
U12-0.75-SQB	3/4	1	1/8	0.138 +0.01/0	0.750 +0/-0.001	0.751 +0.002/0	1.000 +0.002/0	0.750 +0/-0.001	0.999 +0/-0.001	1.000 +0.002/0
U12-0.81	13/16	1-1/16	1/8	0.138 +0.01/0	0.813 +0/-0.001	0.814 +0.002/0	1.062 +0.002/0	0.813 +0/-0.001	1.061 +0/-0.001	1.062 +0.002/0
U12-0.81-25B	13/16	1-1/16	1/4	0.275 +0.01/0	0.813 +0/-0.001	0.814 +0.002/0	1.062 +0.002/0	0.813 +0/-0.001	1.061 +0/-0.001	1.062 +0.002/0
U12-0.81-SQB	13/16	1-1/16	1/8	0.138 +0.01/0	0.813 +0/-0.001	0.814 +0.002/0	1.063 +0.002/0	0.813 +0/-0.001	1.062 +0/-0.001	1.063 +0.002/0
U12-0.87	7/8	1-1/8	1/8	0.138 +0.01/0	0.875 +0/-0.001	0.876 +0.002/0	1.125 +0.002/0	0.875 +0/-0.001	1.124 +0/-0.001	1.125 +0.002/0
U12-0.87-25B	7/8	1-1/8	1/4	0.275 +0.01/0	0.875 +0/-0.001	0.876 +0.002/0	1.125 +0.002/0	0.875 +0/-0.001	1.124 +0/-0.001	1.125 +0.002/0
U12-0.87-25D	7/8	1-1/8	1/4	0.275 +0.01/0	0.875 +0/-0.001	0.876 +0.002/0	1.125 +0.002/0	0.875 +0/-0.001	1.124 +0/-0.001	1.125 +0.002/0
U12-0.87-SQB	7/8	1-1/8	1/8	0.138 +0.01/0	0.875 +0/-0.001	0.876 +0.002/0	1.125 +0.002/0	0.875 +0/-0.001	1.124 +0/-0.001	1.125 +0.002/0
U12-0.93	15/16	1-3/16	1/8	0.138 +0.01/0	0.938 +0/-0.001	0.939 +0.002/0	1.188 +0.002/0	0.938 +0/-0.001	1.187 +0/-0.001	1.188 +0.002/0
U12-0.93-25B	15/16	1-3/16	1/4	0.275 +0.01/0	0.938 +0/-0.001	0.939 +0.002/0	1.188 +0.002/0	0.938 +0/-0.001	1.187 +0/-0.001	1.188 +0.002/0
U12-1.00	1	1-1/4	1/8	0.138 +0.01/0	1.000 +0/-0.001	1.001 +0.002/0	1.250 +0.002/0	1.000 +0/-0.001	1.249 +0/-0.001	1.250 +0.002/0
U12-1.00-18B	1	1-1/4	3/16	0.207 +0.01/0	1.000 +0/-0.001	1.001 +0.002/0	1.250 +0.002/0	1.000 +0/-0.001	1.249 +0/-0.001	1.250 +0.002/0
U12-1.00-25B	1	1-1/4	1/4	0.275 +0.01/0	1.000 +0/-0.001	1.001 +0.002/0	1.250 +0.002/0	1.000 +0/-0.001	1.249 +0/-0.001	1.250 +0.002/0
U12-1.00-25D	1	1-1/4	1/4	0.275 +0.01/0	1.000 +0/-0.001	1.001 +0.002/0	1.250 +0.002/0	1.000 +0/-0.001	1.249 +0/-0.001	1.250 +0.002/0
U12-1.00-SQB	1	1-1/4	1/8	0.138 +0.01/0	1.000 +0/-0.001	1.001 +0.002/0	1.250 +0.002/0	1.000 +0/-0.001	1.249 +0/-0.001	1.250 +0.002/0
U12-1.06-25B	1-1/16	1-5/16	1/4	0.275 +0.01/0	1.062 +0/-0.001	1.063 +0.002/0	1.312 +0.002/0	1.062 +0/-0.001	1.311 +0/-0.001	1.312 +0.002/0
U12-1.06-SQB	1-1/16	1-5/16	1/8	0.138 +0.01/0	1.062 +0/-0.001	1.063 +0.002/0	1.312 +0.002/0	1.062 +0/-0.001	1.311 +0/-0.001	1.312 +0.002/0
U12-1.12	1-1/8	1-3/8	1/8	0.138 +0.01/0	1.125 +0/-0.001	1.126 +0.002/0	1.375 +0.002/0	1.125 +0/-0.001	1.374 +0/-0.001	1.375 +0.002/0
U12-1.12-18D	1-1/8	1-3/8	1/8	0.207 +0.01/0	1.125 +0/-0.001	1.126 +0.002/0	1.375 +0.002/0	1.125 +0/-0.001	1.374 +0/-0.001	1.375 +0.002/0
U12-1.12-25B	1-1/8	1-3/8	1/4	0.275 +0.01/0	1.125 +0/-0.001	1.126 +0.002/0	1.375 +0.002/0	1.125 +0/-0.001	1.374 +0/-0.001	1.375 +0.002/0
U12-1.12-25D	1-1/8	1-3/8	1/4	0.275 +0.01/0	1.125 +0/-0.001	1.126 +0.002/0	1.375 +0.002/0	1.125 +0/-0.001	1.374 +0/-0.001	1.375 +0.002/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/8" C/S										
U12-1.12-SQB	1-1/8	1-3/8	1/8	0.138 +0.01/0	1.125 +0/-0.001	1.126 +0.002/0	1.375 +0.002/0	1.125 +0/-0.001	1.374 +0/-0.001	1.375 +0.002/0
U12-1.18	1-3/16	1-7/16	1/8	0.138 +0.01/0	1.188 +0/-0.001	1.189 +0.002/0	1.437 +0.002/0	1.188 +0/-0.001	1.436 +0/-0.001	1.437 +0.002/0
U12-1.18-18B	1-3/16	1-7/16	3/16	0.207 +0.01/0	1.188 +0/-0.001	1.189 +0.002/0	1.437 +0.002/0	1.188 +0/-0.001	1.436 +0/-0.001	1.437 +0.002/0
U12-1.18-25B	1-3/16	1-7/16	1/4	0.275 +0.01/0	1.188 +0/-0.001	1.189 +0.002/0	1.437 +0.002/0	1.188 +0/-0.001	1.436 +0/-0.001	1.437 +0.002/0
U12-1.25	1-1/4	1-1/2	1/8	0.138 +0.01/0	1.250 +0/-0.001	1.251 +0.002/0	1.500 +0.002/0	1.250 +0/-0.001	1.499 +0/-0.001	1.500 +0.002/0
U12-1.25-18B	1-1/4	1-1/2	3/16	0.207 +0.01/0	1.250 +0/-0.001	1.251 +0.002/0	1.500 +0.002/0	1.250 +0/-0.001	1.499 +0/-0.001	1.500 +0.002/0
U12-1.25-25B	1-1/4	1-1/2	1/4	0.275 +0.01/0	1.250 +0/-0.001	1.251 +0.002/0	1.500 +0.002/0	1.250 +0/-0.001	1.499 +0/-0.001	1.500 +0.002/0
U12-1.25-25D	1-1/4	1-1/2	1/4	0.275 +0.01/0	1.250 +0/-0.001	1.251 +0.002/0	1.500 +0.002/0	1.250 +0/-0.001	1.499 +0/-0.001	1.500 +0.002/0
U12-1.25-SQB	1-1/4	1-1/2	1/8	0.138 +0.01/0	1.250 +0/-0.001	1.251 +0.002/0	1.500 +0.002/0	1.250 +0/-0.001	1.499 +0/-0.001	1.500 +0.002/0
U12-1.31	1-5/16	1-9/16	1/8	0.138 +0.01/0	1.312 +0/-0.001	1.313 +0.002/0	1.562 +0.002/0	1.312 +0/-0.001	1.561 +0/-0.001	1.562 +0.002/0
U12-1.31-18B	1-5/16	1-9/16	3/16	0.207 +0.01/0	1.312 +0/-0.001	1.313 +0.002/0	1.562 +0.002/0	1.312 +0/-0.001	1.561 +0/-0.001	1.562 +0.002/0
U12-1.31-SQB	1-5/16	1-9/16	1/8	0.207 +0.01/0	1.312 +0/-0.001	1.313 +0.002/0	1.562 +0.002/0	1.312 +0/-0.001	1.561 +0/-0.001	1.562 +0.002/0
U12-1.37-18D	1-3/8	1-5/8	3/16	0.207 +0.01/0	1.375 +0/-0.001	1.376 +0.002/0	1.625 +0.002/0	1.375 +0/-0.001	1.624 +0/-0.001	1.625 +0.002/0
U12-1.37-25B	1-3/8	1-5/8	1/4	0.275 +0.01/0	1.375 +0/-0.001	1.376 +0.002/0	1.625 +0.002/0	1.375 +0/-0.001	1.624 +0/-0.001	1.625 +0.002/0
U12-1.37-SQB	1-3/8	1-5/8	1/8	0.138 +0.01/0	1.375 +0/-0.001	1.376 +0.002/0	1.625 +0.002/0	1.375 +0/-0.001	1.624 +0/-0.001	1.625 +0.002/0
U12-1.43-25B	1-7/16	1-11/16	1/4	0.275 +0.01/0	1.438 +0/-0.001	1.439 +0.002/0	1.687 +0.002/0	1.438 +0/-0.001	1.686 +0/-0.001	1.687 +0.002/0
U12-1.43-SQB	1-7/16	1-11/16	1/8	0.138 +0.01/0	1.438 +0/-0.001	1.439 +0.002/0	1.687 +0.002/0	1.438 +0/-0.001	1.686 +0/-0.001	1.687 +0.002/0
U12-1.50	1-1/2	1-3/4	1/8	0.138 +0.01/0	1.500 +0/-0.001	1.501 +0.002/0	1.750 +0.002/0	1.500 +0/-0.001	1.749 +0/-0.001	1.750 +0.002/0
U12-1.50-18B	1-1/2	1-3/4	3/16	0.207 +0.01/0	1.500 +0/-0.001	1.501 +0.002/0	1.750 +0.002/0	1.500 +0/-0.001	1.749 +0/-0.001	1.750 +0.002/0
U12-1.50-25B	1-1/2	1-3/4	1/4	0.275 +0.01/0	1.500 +0/-0.001	1.501 +0.002/0	1.750 +0.002/0	1.500 +0/-0.001	1.749 +0/-0.001	1.750 +0.002/0
U12-1.50-SQB	1-1/2	1-3/4	1/8	0.138 +0.01/0	1.500 +0/-0.001	1.501 +0.002/0	1.750 +0.002/0	1.500 +0/-0.001	1.749 +0/-0.001	1.750 +0.002/0
U12-1.56	1-9/16	1-13/16	1/8	0.138 +0.01/0	1.563 +0/-0.001	1.564 +0.002/0	1.812 +0.002/0	1.563 +0/-0.001	1.811 +0/-0.001	1.812 +0.002/0
U12-1.62	1-5/8	1-7/8	1/8	0.138 +0.01/0	1.625 +0/-0.001	1.626 +0.002/0	1.875 +0.002/0	1.625 +0/-0.001	1.874 +0/-0.001	1.875 +0.002/0
U12-1.62-SQB	1-5/8	1-7/8	1/8	0.138 +0.01/0	1.625 +0/-0.001	1.626 +0.002/0	1.875 +0.002/0	1.625 +0/-0.001	1.874 +0/-0.001	1.875 +0.002/0
U12-1.68	1-11/16	1-15/16	1/8	0.138 +0.01/0	1.688 +0/-0.001	1.689 +0.002/0	1.937 +0.002/0	1.688 +0/-0.001	1.936 +0/-0.001	1.937 +0.002/0
U12-1.75	1-3/4	2	1/8	0.138 +0.01/0	1.750 +0/-0.001	1.751 +0.002/0	2.000 +0.002/0	1.750 +0/-0.001	1.999 +0/-0.001	2.000 +0.002/0
U12-1.75-25B	1-3/4	2	1/4	0.275 +0.01/0	1.750 +0/-0.001	1.751 +0.002/0	2.000 +0.002/0	1.750 +0/-0.001	1.999 +0/-0.001	2.000 +0.002/0
U12-1.75-25D	1-3/4	2	1/4	0.275 +0.01/0	1.750 +0/-0.001	1.751 +0.002/0	2.000 +0.002/0	1.750 +0/-0.001	1.999 +0/-0.001	2.000 +0.002/0
U12-1.75-SQB	1-3/4	2	1/8	0.138 +0.01/0	1.750 +0/-0.001	1.751 +0.002/0	2.000 +0.002/0	1.750 +0/-0.001	1.999 +0/-0.001	2.000 +0.002/0
U12-1.87	1-7/8	2-1/8	1/8	0.138 +0.01/0	1.875 +0/-0.001	1.876 +0.002/0	2.125 +0.002/0	1.875 +0/-0.001	2.124 +0/-0.001	2.125 +0.002/0
U12-2.00	2	2-1/4	1/8	0.138 +0.01/0	2.000 +0/-0.001	2.001 +0.002/0	2.250 +0.002/0	2.000 +0/-0.001	2.249 +0/-0.001	2.250 +0.002/0
U12-2.00-25D	2	2-1/4	1/4	0.275 +0.01/0	2.000 +0/-0.001	2.001 +0.002/0	2.250 +0.002/0	2.000 +0/-0.001	2.249 +0/-0.001	2.250 +0.002/0
U12-2.12	2-1/8	2-3/8	1/8	0.138 +0.01/0	2.125 +0/-0.001	2.126 +0.002/0	2.750 +0.002/0	2.125 +0/-0.001	2.749 +0/-0.001	2.750 +0.002/0
U12-2.12-25D	2-1/8	2-3/8	1/4	0.275 +0.01/0	2.125 +0/-0.001	2.126 +0.002/0	2.750 +0.002/0	2.125 +0/-0.001	2.749 +0/-0.001	2.750 +0.002/0
U12-2.25	2-1/4	2-1/2	1/8	0.138 +0.01/0	2.250 +0/-0.001	2.251 +0.002/0	2.500 +0.002/0	2.250 +0/-0.001	2.499 +0/-0.001	2.500 +0.002/0
U12-2.25-37D	2-1/4	2-1/2	3/8	0.413 +0.01/0	2.250 +0/-0.001	2.251 +0.002/0	2.500 +0.002/0	2.250 +0/-0.001	2.499 +0/-0.001	2.500 +0.002/0
U12-2.37	2-3/8	2-5/8	1/8	0.138 +0.01/0	2.375 +0/-0.001	2.376 +0.002/0	2.625 +0.002/0	2.375 +0/-0.001	2.624 +0/-0.001	2.625 +0.002/0
U12-2.37-18B	2-3/8	2-5/8	3/16	0.207 +0.01/0	2.375 +0/-0.001	2.376 +0.002/0	2.625 +0.002/0	2.375 +0/-0.001	2.624 +0/-0.001	2.625 +0.002/0
U12-2.50	2-1/2	2-3/4	1/8	0.138 +0.01/0	2.500 +0/-0.001	2.501 +0.002/0	2.750 +0.002/0	2.500 +0/-0.001	2.749 +0/-0.001	2.750 +0.002/0
U12-2.50-25B	2-1/2	2-3/4	1/4	0.275 +0.01/0	2.500 +0/-0.001	2.501 +0.002/0	2.750 +0.002/0	2.500 +0/-0.001	2.749 +0/-0.001	2.750 +0.002/0
U12-2.50-SQB	2-1/2	2-3/4	1/8	0.138 +0.01/0	2.500 +0/-0.001	2.501 +0.002/0	2.750 +0.002/0	2.500 +0/-0.001	2.749 +0/-0.001	2.750 +0.002/0
U12-2.75	2-3/4	3	1/8	0.138 +0.01/0	2.750 +0/-0.001	2.751 +0.002/0	3.000 +0.002/0	2.750 +0/-0.001	2.999 +0/-0.001	3.000 +0.002/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/8" C/S										
U12-2.75-25B	2-3/4	3	1/4	0.275 +0.01/0	2.750 +0/-0.001	2.751 +0.002/0	3.000 +0.002/0	2.750 +0/-0.001	2.999 +0/-0.001	3.000 +0.002/0
U12-2.75-37B	2-3/4	3	3/8	0.413 +0.01/0	2.750 +0/-0.001	2.751 +0.002/0	3.000 +0.002/0	2.750 +0/-0.001	2.999 +0/-0.001	3.000 +0.002/0
U12-2.87	2-7/8	3-1/8	1/8	0.138 +0.01/0	2.875 +0/-0.001	2.876 +0.002/0	3.125 +0.002/0	2.875 +0/-0.001	3.124 +0/-0.001	3.125 +0.002/0
U12-3.00	3	3-1/4	1/8	0.275 +0.01/0	3.000 +0/-0.001	3.001 +0.002/0	3.250 +0.002/0	3.000 +0/-0.001	3.249 +0/-0.001	3.250 +0.002/0
U12-3.12	3-1/8	3-3/8	1/8	0.138 +0.01/0	3.125 +0/-0.001	3.126 +0.002/0	3.375 +0.002/0	3.125 +0/-0.001	3.374 +0/-0.001	3.375 +0.002/0
U12-3.25	3-1/4	3-1/2	1/8	0.138 +0.01/0	3.250 +0/-0.001	3.251 +0.002/0	3.500 +0.002/0	3.250 +0/-0.001	3.499 +0/-0.001	3.500 +0.002/0
U12-3.50	3-1/2	3-3/4	1/8	0.138 +0.01/0	3.500 +0/-0.001	3.501 +0.002/0	3.750 +0.002/0	3.500 +0/-0.001	3.749 +0/-0.001	3.750 +0.002/0
U12-3.62-18B	3-5/8	3-7/8	3/16	0.207 +0.01/0	3.625 +0/-0.001	3.626 +0.002/0	3.875 +0.002/0	3.625 +0/-0.001	3.874 +0/-0.001	3.875 +0.002/0
U12-3.75	3-3/4	4	1/8	0.138 +0.01/0	3.750 +0/-0.001	3.751 +0.002/0	4.000 +0.002/0	3.750 +0/-0.001	3.999 +0/-0.001	4.000 +0.002/0
U12-4.00	4	4-1/4	1/8	0.138 +0.01/0	4.000 +0/-0.001	4.001 +0.002/0	4.250 +0.002/0	4.000 +0/-0.001	4.249 +0/-0.001	4.250 +0.002/0
U12-4.00-SQB	4	4-1/4	1/8	0.138 +0.01/0	4.000 +0/-0.001	4.001 +0.002/0	4.250 +0.002/0	4.000 +0/-0.001	4.249 +0/-0.001	4.250 +0.002/0
U12-4.25	4-1/4	4-1/2	1/8	0.138 +0.01/0	4.250 +0/-0.001	4.251 +0.002/0	4.500 +0.002/0	4.250 +0/-0.001	4.499 +0/-0.001	4.500 +0.002/0
U12-4.37	4-3/8	4-5/8	1/8	0.138 +0.01/0	4.375 +0/-0.001	4.376 +0.002/0	4.625 +0.002/0	4.375 +0/-0.001	4.624 +0/-0.001	4.625 +0.002/0
U12-4.50	4-1/2	4-3/4	1/8	0.138 +0.01/0	4.500 +0/-0.001	4.501 +0.002/0	4.750 +0.002/0	4.500 +0/-0.001	4.749 +0/-0.001	4.750 +0.002/0
U12-4.75	4-3/4	5	1/8	0.138 +0.01/0	4.750 +0/-0.001	4.751 +0.002/0	5.000 +0.002/0	4.750 +0/-0.001	4.999 +0/-0.001	5.000 +0.002/0
5/32" C/S										
U15-1.00	1	1-5/16	5/32	0.172 +0.01/0	1.000 +0/-0.001	1.001 +0.002/0	1.312 +0.002/0	1.000 +0/-0.001	1.311 +0/-0.001	1.312 +0.002/0
U15-1.00-23B	1	1-5/16	.234	0.257 +0.01/0	1.000 +0/-0.001	1.001 +0.002/0	1.312 +0.002/0	1.000 +0/-0.001	1.311 +0/-0.001	1.312 +0.002/0
U15-1.00-SQB	1	1-5/16	5/32	0.172 +0.01/0	1.000 +0/-0.001	1.001 +0.002/0	1.312 +0.002/0	1.000 +0/-0.001	1.311 +0/-0.001	1.312 +0.002/0
U15-1.12	1-1/8	1-7/16	5/32	0.172 +0.01/0	1.125 +0/-0.001	1.126 +0.002/0	1.437 +0.002/0	1.125 +0/-0.001	1.436 +0/-0.001	1.437 +0.002/0
U15-1.18	1-3/16	1-1/2	5/32	0.172 +0.01/0	1.188 +0/-0.001	1.189 +0.002/0	1.500 +0.002/0	1.188 +0/-0.001	1.499 +0/-0.001	1.500 +0.002/0
U15-1.25	1-1/4	1-9/16	5/32	0.172 +0.01/0	1.250 +0/-0.001	1.251 +0.002/0	1.562 +0.002/0	1.250 +0/-0.001	1.561 +0/-0.001	1.563 +0.002/0
U15-1.37	1-3/8	1-11/16	5/32	0.172 +0.01/0	1.375 +0/-0.001	1.376 +0.002/0	1.687 +0.002/0	1.375 +0/-0.001	1.686 +0/-0.001	1.687 +0.002/0
U15-1.37-SQB	1-3/8	1-11/16	5/32	0.172 +0.01/0	1.375 +0/-0.001	1.376 +0.002/0	1.687 +0.002/0	1.375 +0/-0.001	1.686 +0/-0.001	1.687 +0.002/0
U15-1.50-31B	1-1/2	1-13/16	5/16	0.344 +0.01/0	1.500 +0/-0.001	1.501 +0.002/0	1.812 +0.002/0	1.500 +0/-0.001	1.811 +0/-0.001	1.812 +0.002/0
3/16" C/S										
U18-0.18-SQB	3/16	9/16	3/16	0.207 +0.01/0	0.188 +0/-0.002	0.189 +0.002/0	0.563 +0.002/0	0.188 +0/-0.002	0.562 +0/-0.002	0.563 +0.002/0
U18-0.25-SQB	1/4	5/8	3/16	0.207 +0.01/0	0.250 +0/-0.002	0.251 +0.002/0	0.625 +0.002/0	0.250 +0/-0.002	0.624 +0/-0.002	0.625 +0.002/0
U18-0.31-SQB	5/16	11/16	3/16	0.207 +0.01/0	0.312 +0/-0.002	0.313 +0.002/0	0.688 +0.002/0	0.312 +0/-0.002	0.687 +0/-0.002	0.688 +0.002/0
U18-0.37	3/8	3/4	3/16	0.207 +0.01/0	0.375 +0/-0.002	0.376 +0.002/0	0.750 +0.002/0	0.375 +0/-0.002	0.749 +0/-0.002	0.750 +0.002/0
U18-0.37-SQB	3/8	3/4	3/16	0.207 +0.01/0	0.375 +0/-0.002	0.376 +0.002/0	0.750 +0.002/0	0.375 +0/-0.002	0.749 +0/-0.002	0.750 +0.002/0
U18-0.37-31B	3/8	3/4	5/16	0.344 +0.01/0	0.375 +0/-0.002	0.376 +0.002/0	0.750 +0.002/0	0.375 +0/-0.002	0.749 +0/-0.002	0.750 +0.002/0
U18-0.43	7/16	13/16	3/16	0.207 +0.01/0	0.438 +0/-0.002	0.439 +0.002/0	0.813 +0.002/0	0.438 +0/-0.002	0.812 +0/-0.002	0.813 +0.002/0
U18-0.50	1/2	7/8	3/16	0.207 +0.01/0	0.500 +0/-0.002	0.501 +0.002/0	0.875 +0.002/0	0.500 +0/-0.002	0.874 +0/-0.002	0.875 +0.002/0
U18-0.50-31B	1/2	7/8	5/16	0.344 +0.01/0	0.500 +0/-0.002	0.501 +0.002/0	0.875 +0.002/0	0.500 +0/-0.002	0.874 +0/-0.002	0.875 +0.002/0
U18-0.56	9/16	15/16	3/16	0.207 +0.01/0	0.563 +0/-0.002	0.564 +0.002/0	0.938 +0.002/0	0.563 +0/-0.002	0.937 +0/-0.002	0.938 +0.002/0
U18-0.62	5/8	1	3/16	0.207 +0.01/0	0.625 +0/-0.002	0.626 +0.002/0	1.000 +0.002/0	0.625 +0/-0.002	0.999 +0/-0.002	1.000 +0.002/0
U18-0.62-31B	5/8	1	5/16	0.344 +0.01/0	0.625 +0/-0.002	0.626 +0.002/0	1.000 +0.002/0	0.625 +0/-0.002	0.999 +0/-0.002	1.000 +0.002/0
U18-0.62-31D	5/8	1	5/16	0.344 +0.01/0	0.625 +0/-0.002	0.626 +0.002/0	1.000 +0.002/0	0.625 +0/-0.002	0.999 +0/-0.002	1.000 +0.002/0
U18-0.62-SQB	5/8	1	3/16	0.207 +0.01/0	0.625 +0/-0.002	0.626 +0.002/0	1.000 +0.002/0	0.625 +0/-0.002	0.999 +0/-0.002	1.000 +0.002/0
U18-0.68	11/16	1-1/16	3/16	0.207 +0.01/0	0.688 +0/-0.002	0.689 +0.002/0	1.062 +0.002/0	0.688 +0/-0.002	1.061 +0/-0.002	1.062 +0.002/0
U18-0.75	3/4	1-1/8	3/16	0.207 +0.01/0	0.750 +0/-0.002	0.751 +0.002/0	1.125 +0.002/0	0.750 +0/-0.002	1.124 +0/-0.002	1.125 +0.002/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
3/16" C/S										
U18-0.75-31B	3/4	1-1/8	5/16	0.344 +0.01/0	0.750 +0/-0.002	0.751 +0.002/0	1.125 +0.002/0	0.750 +0/-0.002	1.124 +0/-0.002	1.125 +0.002/0
U18-0.75-31D	3/4	1-1/8	5/16	0.344 +0.01/0	0.750 +0/-0.002	0.751 +0.002/0	1.125 +0.002/0	0.750 +0/-0.002	1.124 +0/-0.002	1.125 +0.002/0
U18-0.75-SQB	3/4	1-1/8	3/16	0.207 +0.01/0	0.750 +0/-0.002	0.751 +0.002/0	1.125 +0.002/0	0.750 +0/-0.002	1.124 +0/-0.002	1.125 +0.002/0
U18-0.81	13/16	1-3/16	3/16	0.207 +0.01/0	0.813 +0/-0.002	0.814 +0.002/0	1.188 +0.002/0	0.813 +0/-0.002	1.187 +0/-0.002	1.188 +0.002/0
U18-0.81-31B	13/16	1-3/16	5/16	0.344 +0.01/0	0.813 +0/-0.002	0.814 +0.002/0	1.188 +0.002/0	0.813 +0/-0.002	1.187 +0/-0.002	1.188 +0.002/0
U18-0.87	7/8	1-1/4	3/16	0.207 +0.01/0	0.875 +0/-0.002	0.876 +0.002/0	1.250 +0.002/0	0.875 +0/-0.002	1.249 +0/-0.002	1.250 +0.002/0
U18-0.87-31B	7/8	1-1/4	5/16	0.344 +0.01/0	0.875 +0/-0.002	0.876 +0.002/0	1.250 +0.002/0	0.875 +0/-0.002	1.249 +0/-0.002	1.250 +0.002/0
U18-0.87-SQB	7/8	1-1/4	3/16	0.207 +0.01/0	0.875 +0/-0.002	0.876 +0.002/0	1.250 +0.002/0	0.875 +0/-0.002	1.249 +0/-0.002	1.250 +0.002/0
U18-0.93	15/16	1-5/16	3/16	0.207 +0.01/0	0.938 +0/-0.002	0.939 +0.002/0	1.312 +0.002/0	0.938 +0/-0.002	1.311 +0/-0.002	1.312 +0.002/0
U18-1.00	1	1-3/8	3/16	0.207 +0.01/0	1.000 +0/-0.002	1.001 +0.002/0	1.375 +0.002/0	1.000 +0/-0.002	1.374 +0/-0.002	1.375 +0.002/0
U18-1.00-25B	1	1-3/8	1/4	0.275 +0.01/0	1.000 +0/-0.002	1.001 +0.002/0	1.375 +0.002/0	1.000 +0/-0.002	1.374 +0/-0.002	1.375 +0.002/0
U18-1.00-31B	1	1-3/8	5/16	0.344 +0.01/0	1.000 +0/-0.002	1.001 +0.002/0	1.375 +0.002/0	1.000 +0/-0.002	1.374 +0/-0.002	1.375 +0.002/0
U18-1.00-31D	1	1-3/8	5/16	0.344 +0.01/0	1.000 +0/-0.002	1.001 +0.002/0	1.375 +0.002/0	1.000 +0/-0.002	1.374 +0/-0.002	1.375 +0.002/0
U18-1.00-37B	1	1-3/8	3/8	0.413 +0.01/0	1.000 +0/-0.002	1.001 +0.002/0	1.375 +0.002/0	1.000 +0/-0.002	1.374 +0/-0.002	1.375 +0.002/0
U18-1.00-SQB	1	1-3/8	3/16	0.207 +0.01/0	1.000 +0/-0.002	1.001 +0.002/0	1.375 +0.002/0	1.000 +0/-0.002	1.374 +0/-0.002	1.375 +0.002/0
U18-1.06	1-1/16	1-7/16	3/16	0.207 +0.01/0	1.438 +0/-0.002	1.439 +0.002/0	1.437 +0.002/0	1.438 +0/-0.002	1.436 +0/-0.002	1.437 +0.002/0
U18-1.06-31B	1-1/16	1-7/16	5/16	0.344 +0.01/0	1.062 +0/-0.002	1.063 +0.002/0	1.437 +0.002/0	1.062 +0/-0.002	1.436 +0/-0.002	1.437 +0.002/0
U18-1.12	1-1/8	1-1/2	3/16	0.207 +0.01/0	1.125 +0/-0.002	1.126 +0.002/0	1.500 +0.002/0	1.125 +0/-0.002	1.499 +0/-0.002	1.500 +0.002/0
U18-1.12-25B	1-1/8	1-1/2	1/4	0.275 +0.01/0	1.125 +0/-0.002	1.126 +0.002/0	1.500 +0.002/0	1.125 +0/-0.002	1.499 +0/-0.002	1.500 +0.002/0
U18-1.12-31B	1-1/8	1-1/2	5/16	0.344 +0.01/0	1.125 +0/-0.002	1.126 +0.002/0	1.500 +0.002/0	1.125 +0/-0.002	1.499 +0/-0.002	1.500 +0.002/0
U18-1.12-31D	1-1/8	1-1/2	5/16	0.344 +0.01/0	1.125 +0/-0.002	1.126 +0.002/0	1.500 +0.002/0	1.125 +0/-0.002	1.499 +0/-0.002	1.500 +0.002/0
U18-1.12-37B	1-1/8	1-1/2	3/8	0.413 +0.01/0	1.125 +0/-0.002	1.126 +0.002/0	1.500 +0.002/0	1.125 +0/-0.002	1.499 +0/-0.002	1.500 +0.002/0
U18-1.12-SQB	1-1/8	1-1/2	3/16	0.207 +0.01/0	1.125 +0/-0.002	1.126 +0.002/0	1.500 +0.002/0	1.125 +0/-0.002	1.499 +0/-0.002	1.500 +0.002/0
U18-1.18	1-3/16	1-9/16	3/16	0.207 +0.01/0	1.188 +0/-0.002	1.189 +0.002/0	1.562 +0.002/0	1.188 +0/-0.002	1.561 +0/-0.002	1.563 +0.002/0
U18-1.18-25B	1-3/16	1-9/16	1/4	0.275 +0.01/0	1.188 +0/-0.002	1.189 +0.002/0	1.562 +0.002/0	1.188 +0/-0.002	1.561 +0/-0.002	1.563 +0.002/0
U18-1.18-31B	1-3/16	1-9/16	5/16	0.344 +0.01/0	1.188 +0/-0.002	1.189 +0.002/0	1.562 +0.002/0	1.188 +0/-0.002	1.561 +0/-0.002	1.563 +0.002/0
U18-1.25	1-1/4	1-5/8	3/16	0.207 +0.01/0	1.250 +0/-0.002	1.251 +0.002/0	1.625 +0.002/0	1.250 +0/-0.002	1.624 +0/-0.002	1.625 +0.002/0
U18-1.25-25B	1-1/4	1-5/8	1/4	0.275 +0.01/0	1.250 +0/-0.002	1.251 +0.002/0	1.625 +0.002/0	1.250 +0/-0.002	1.624 +0/-0.002	1.625 +0.002/0
U18-1.25-26B	1-1/4	1-5/8	.266	0.292 +0.01/0	1.250 +0/-0.002	1.251 +0.002/0	1.625 +0.002/0	1.250 +0/-0.002	1.624 +0/-0.002	1.625 +0.002/0
U18-1.25-31B	1-1/4	1-5/8	5/16	0.344 +0.01/0	1.250 +0/-0.002	1.251 +0.002/0	1.625 +0.002/0	1.250 +0/-0.002	1.624 +0/-0.002	1.625 +0.002/0
U18-1.25-31D	1-1/4	1-5/8	5/16	0.344 +0.01/0	1.250 +0/-0.002	1.251 +0.002/0	1.625 +0.002/0	1.250 +0/-0.002	1.624 +0/-0.002	1.625 +0.002/0
U18-1.25-37B	1-1/4	1-5/8	3/8	0.413 +0.01/0	1.250 +0/-0.002	1.251 +0.002/0	1.625 +0.002/0	1.250 +0/-0.002	1.624 +0/-0.002	1.625 +0.002/0
U18-1.25-SQB	1-1/4	1-5/8	3/16	0.207 +0.01/0	1.250 +0/-0.002	1.251 +0.002/0	1.625 +0.002/0	1.250 +0/-0.002	1.624 +0/-0.002	1.625 +0.002/0
U18-1.31	1-5/16	1-11/16	3/16	0.207 +0.01/0	1.312 +0/-0.002	1.313 +0.002/0	1.687 +0.002/0	1.312 +0/-0.002	1.686 +0/-0.002	1.687 +0.002/0
U18-1.31-31B	1-5/16	1-11/16	5/16	0.344 +0.01/0	1.312 +0/-0.002	1.313 +0.002/0	1.687 +0.002/0	1.312 +0/-0.002	1.686 +0/-0.002	1.687 +0.002/0
U18-1.31-SQB	1-5/16	1-11/16	3/16	0.207 +0.01/0	1.312 +0/-0.002	1.313 +0.002/0	1.687 +0.002/0	1.312 +0/-0.002	1.686 +0/-0.002	1.687 +0.002/0
U18-1.37	1-3/8	1-3/4	3/16	0.207 +0.01/0	1.375 +0/-0.002	1.376 +0.002/0	1.750 +0.002/0	1.375 +0/-0.002	1.749 +0/-0.002	1.750 +0.002/0
U18-1.37-25B	1-3/8	1-3/4	1/4	0.275 +0.01/0	1.375 +0/-0.002	1.376 +0.002/0	1.750 +0.002/0	1.375 +0/-0.002	1.749 +0/-0.002	1.750 +0.002/0
U18-1.37-31B	1-3/8	1-3/4	5/16	0.344 +0.01/0	1.375 +0/-0.002	1.376 +0.002/0	1.750 +0.002/0	1.375 +0/-0.002	1.749 +0/-0.002	1.750 +0.002/0
U18-1.37-31D	1-3/8	1-3/4	5/16	0.344 +0.01/0	1.375 +0/-0.002	1.376 +0.002/0	1.750 +0.002/0	1.375 +0/-0.002	1.749 +0/-0.002	1.750 +0.002/0
U18-1.37-37B	1-3/8	1-3/4	3/8	0.413 +0.01/0	1.375 +0/-0.002	1.376 +0.002/0	1.750 +0.002/0	1.375 +0/-0.002	1.749 +0/-0.002	1.750 +0.002/0
U18-1.37-SQB	1-3/8	1-3/4	3/16	0.207 +0.01/0	1.375 +0/-0.002	1.376 +0.002/0	1.750 +0.002/0	1.375 +0/-0.002	1.749 +0/-0.002	1.750 +0.002/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
3/16" C/S										
U18-1.43	1-7/16	1-13/16	3/16	0.207 +0.01/0	1.438 +0/-0.002	1.439 +0.002/0	1.812 +0.002/0	1.438 +0/-0.002	1.811 +0/-0.002	1.812 +0.002/0
U18-1.50	1-1/2	1-7/8	3/16	0.207 +0.01/0	1.500 +0/-0.002	1.501 +0.002/0	1.875 +0.002/0	1.500 +0/-0.002	1.874 +0/-0.002	1.875 +0.002/0
U18-1.50-25B	1-1/2	1-7/8	1/4	0.275 +0.01/0	1.500 +0/-0.002	1.501 +0.002/0	1.875 +0.002/0	1.500 +0/-0.002	1.874 +0/-0.002	1.875 +0.002/0
U18-1.50-26B	1-1/2	1-7/8	.266	0.292 +0.01/0	1.500 +0/-0.002	1.501 +0.002/0	1.875 +0.002/0	1.500 +0/-0.002	1.874 +0/-0.002	1.875 +0.002/0
U18-1.50-29F	1-1/2	1-7/8	19/64	0.326 +0.01/0	1.500 +0/-0.002	1.501 +0.002/0	1.875 +0.002/0	1.500 +0/-0.002	1.874 +0/-0.002	1.875 +0.002/0
U18-1.50-31B	1-1/2	1-7/8	5/16	0.344 +0.01/0	1.500 +0/-0.002	1.501 +0.002/0	1.875 +0.002/0	1.500 +0/-0.002	1.874 +0/-0.002	1.875 +0.002/0
U18-1.50-37B	1-1/2	1-7/8	3/8	0.413 +0.01/0	1.500 +0/-0.002	1.501 +0.002/0	1.875 +0.002/0	1.500 +0/-0.002	1.874 +0/-0.002	1.875 +0.002/0
U18-1.50-37D	1-1/2	1-7/8	3/8	0.413 +0.01/0	1.500 +0/-0.002	1.501 +0.002/0	1.875 +0.002/0	1.500 +0/-0.002	1.874 +0/-0.002	1.875 +0.002/0
U18-1.50-SQB	1-1/2	1-7/8	3/16	0.207 +0.01/0	1.500 +0/-0.002	1.501 +0.002/0	1.875 +0.002/0	1.500 +0/-0.002	1.874 +0/-0.002	1.875 +0.002/0
U18-1.56-37B	1-9/16	1-15/16	3/8	0.413 +0.01/0	1.563 +0/-0.002	1.564 +0.002/0	1.937 +0.002/0	1.563 +0/-0.002	1.936 +0/-0.002	1.937 +0.002/0
U18-1.62	1-5/8	2	3/16	0.207 +0.01/0	1.625 +0/-0.002	1.626 +0.002/0	2.000 +0.002/0	1.625 +0/-0.002	1.999 +0/-0.002	2.000 +0.002/0
U18-1.62-25B	1-5/8	2	1/4	0.275 +0.01/0	1.625 +0/-0.002	1.626 +0.002/0	2.000 +0.002/0	1.625 +0/-0.002	1.999 +0/-0.002	2.000 +0.002/0
U18-1.62-31B	1-5/8	2	5/16	0.344 +0.01/0	1.625 +0/-0.002	1.626 +0.002/0	2.000 +0.002/0	1.625 +0/-0.002	1.999 +0/-0.002	2.000 +0.002/0
U18-1.62-37B	1-5/8	2	3/8	0.413 +0.01/0	1.625 +0/-0.002	1.626 +0.002/0	2.000 +0.002/0	1.625 +0/-0.002	1.999 +0/-0.002	2.000 +0.002/0
U18-1.62-37D	1-5/8	2	3/8	0.413 +0.01/0	1.625 +0/-0.002	1.626 +0.002/0	2.000 +0.002/0	1.625 +0/-0.002	1.999 +0/-0.002	2.000 +0.002/0
U18-1.62-SQB	1-5/8	2	3/16	0.207 +0.01/0	1.625 +0/-0.002	1.626 +0.002/0	2.000 +0.002/0	1.625 +0/-0.002	1.999 +0/-0.002	2.000 +0.002/0
U18-1.68	1-11/16	2-1/16	3/16	0.207 +0.01/0	1.688 +0/-0.002	1.689 +0.002/0	2.062 +0.002/0	1.688 +0/-0.002	2.061 +0/-0.002	2.062 +0.002/0
U18-1.75	1-3/4	2-1/8	3/16	0.207 +0.01/0	1.750 +0/-0.002	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0
U18-1.75-25B	1-3/4	2-1/8	1/4	0.275 +0.01/0	1.750 +0/-0.002	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0
U18-1.75-26B	1-3/4	2-1/8	.266	0.292 +0.01/0	1.750 +0/-0.002	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0
U18-1.75-31B	1-3/4	2-1/8	5/16	0.344 +0.01/0	1.750 +0/-0.002	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0
U18-1.75-31D	1-3/4	2-1/8	5/16	0.344 +0.01/0	1.750 +0/-0.002	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0
U18-1.75-37B	1-3/4	2-1/8	3/8	0.413 +0.01/0	1.750 +0/-0.002	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0
U18-1.75-37D	1-3/4	2-1/8	3/8	0.413 +0.01/0	1.750 +0/-0.002	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0
U18-1.75-37DF	1-3/4	2-1/8	3/8	0.413 +0.01/0	1.750 +0/-0.002	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0
U18-1.75-SQB	1-3/4	2-1/8	3/16	0.207 +0.01/0	1.750 +0/-0.002	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0
U18-1.87	1-7/8	2-1/4	3/16	0.207 +0.01/0	1.875 +0/-0.002	1.876 +0.002/0	2.250 +0.002/0	1.875 +0/-0.002	2.249 +0/-0.002	2.250 +0.002/0
U18-1.87-25D	1-7/8	2-1/4	1/4	0.275 +0.01/0	1.875 +0/-0.002	1.876 +0.002/0	2.250 +0.002/0	1.875 +0/-0.002	2.249 +0/-0.002	2.250 +0.002/0
U18-1.87-26B	1-7/8	2-1/4	.266	0.292 +0.01/0	1.875 +0/-0.002	1.876 +0.002/0	2.250 +0.002/0	1.875 +0/-0.002	2.249 +0/-0.002	2.250 +0.002/0
U18-1.87-31B	1-7/8	2-1/4	5/16	0.344 +0.01/0	1.875 +0/-0.002	1.876 +0.002/0	2.250 +0.002/0	1.875 +0/-0.002	2.249 +0/-0.002	2.250 +0.002/0
U18-1.87-37B	1-7/8	2-1/4	3/8	0.413 +0.01/0	1.875 +0/-0.002	1.876 +0.002/0	2.250 +0.002/0	1.875 +0/-0.002	2.249 +0/-0.002	2.250 +0.002/0
U18-1.87-37D	1-7/8	2-1/4	3/8	0.413 +0.01/0	1.875 +0/-0.002	1.876 +0.002/0	2.250 +0.002/0	1.875 +0/-0.002	2.249 +0/-0.002	2.250 +0.002/0
U18-1.87-SQB	1-7/8	2-1/4	3/16	0.207 +0.01/0	1.875 +0/-0.002	1.876 +0.002/0	2.250 +0.002/0	1.875 +0/-0.002	2.249 +0/-0.002	2.250 +0.002/0
U18-2.00	2	2-3/8	3/16	0.207 +0.01/0	2.000 +0/-0.002	2.001 +0.002/0	2.375 +0.002/0	2.000 +0/-0.002	2.374 +0/-0.002	2.375 +0.002/0
U18-2.00-25B	2	2-3/8	1/4	0.275 +0.01/0	2.000 +0/-0.002	2.001 +0.002/0	2.375 +0.002/0	2.000 +0/-0.002	2.374 +0/-0.002	2.375 +0.002/0
U18-2.00-27D	2	2-3/8	.270	0.297 +0.01/0	2.000 +0/-0.002	2.001 +0.002/0	2.375 +0.002/0	2.000 +0/-0.002	2.374 +0/-0.002	2.375 +0.002/0
U18-2.00-31B	2	2-3/8	5/16	0.344 +0.01/0	2.000 +0/-0.002	2.001 +0.002/0	2.375 +0.002/0	2.000 +0/-0.002	2.374 +0/-0.002	2.375 +0.002/0
U18-2.00-37B	2	2-3/8	3/8	0.413 +0.01/0	2.000 +0/-0.002	2.001 +0.002/0	2.375 +0.002/0	2.000 +0/-0.002	2.374 +0/-0.002	2.375 +0.002/0
U18-2.00-37D	2	2-3/8	3/8	0.413 +0.01/0	2.000 +0/-0.002	2.001 +0.002/0	2.375 +0.002/0	2.000 +0/-0.002	2.374 +0/-0.002	2.375 +0.002/0
U18-2.00-SQB	2	2-3/8	3/16	0.207 +0.01/0	2.000 +0/-0.002	2.001 +0.002/0	2.375 +0.002/0	2.000 +0/-0.002	2.374 +0/-0.002	2.375 +0.002/0
U18-2.06	2-1/16	2-7/16	3/16	0.207 +0.01/0	2.062 +0/-0.002	2.063 +0.002/0	2.437 +0.002/0	2.062 +0/-0.002	2.436 +0/-0.002	2.437 +0.002/0
U18-2.12	2-1/8	2-1/2	3/16	0.207 +0.01/0	2.125 +0/-0.002	2.126 +0.002/0	2.500 +0.002/0	2.125 +0/-0.002	2.499 +0/-0.002	2.500 +0.002/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
3/16" C/S										
U18-2.12-25B	2-1/8	2-1/2	1/4	0.275 +0.01/0	2.125 +0/-0.002	2.126 +0.002/0	2.500 +0.002/0	2.125 +0/-0.002	2.499 +0/-0.002	2.500 +0.002/0
U18-2.12-26B	2-1/8	2-1/2	.266	0.292 +0.01/0	2.125 +0/-0.002	2.126 +0.002/0	2.500 +0.002/0	2.125 +0/-0.002	2.499 +0/-0.002	2.500 +0.002/0
U18-2.12-31B	2-1/8	2-1/2	5/16	0.292 +0.01/0	2.125 +0/-0.002	2.126 +0.002/0	2.500 +0.002/0	2.125 +0/-0.002	2.499 +0/-0.002	2.500 +0.002/0
U18-2.12-37B	2-1/8	2-1/2	3/8	0.413 +0.01/0	2.125 +0/-0.002	2.126 +0.002/0	2.500 +0.002/0	2.125 +0/-0.002	2.499 +0/-0.002	2.500 +0.002/0
U18-2.12-37D	2-1/8	2-1/2	3/8	0.413 +0.01/0	2.125 +0/-0.002	2.126 +0.002/0	2.500 +0.002/0	2.125 +0/-0.002	2.499 +0/-0.002	2.500 +0.002/0
U18-2.12-SQB	2-1/8	2-1/2	3/16	0.207 +0.01/0	2.125 +0/-0.002	2.126 +0.002/0	2.500 +0.002/0	2.125 +0/-0.002	2.499 +0/-0.002	2.500 +0.002/0
U18-2.18-37B	2-3/16	2-9/16	3/8	0.413 +0.01/0	2.188 +0/-0.002	2.189 +0.002/0	2.562 +0.002/0	2.188 +0/-0.002	2.561 +0/-0.002	2.562 +0.002/0
U18-2.25	2-1/4	2-5/8	3/16	0.207 +0.01/0	2.250 +0/-0.002	2.251 +0.002/0	2.625 +0.002/0	2.250 +0/-0.002	2.624 +0/-0.002	2.625 +0.002/0
U18-2.25-31B	2-1/4	2-5/8	5/16	0.344 +0.01/0	2.250 +0/-0.002	2.251 +0.002/0	2.625 +0.002/0	2.250 +0/-0.002	2.624 +0/-0.002	2.625 +0.002/0
U18-2.25-37B	2-1/4	2-5/8	3/8	0.413 +0.01/0	2.250 +0/-0.002	2.251 +0.002/0	2.625 +0.002/0	2.250 +0/-0.002	2.624 +0/-0.002	2.625 +0.002/0
U18-2.25-SQB	2-1/4	2-5/8	3/16	0.207 +0.01/0	2.250 +0/-0.002	2.251 +0.002/0	2.625 +0.002/0	2.250 +0/-0.002	2.624 +0/-0.002	2.625 +0.002/0
U18-2.37	2-3/8	2-3/4	3/16	0.207 +0.01/0	2.375 +0/-0.002	2.376 +0.002/0	2.750 +0.002/0	2.375 +0/-0.002	2.749 +0/-0.002	2.750 +0.002/0
U18-2.37-25B	2-3/8	2-3/4	1/4	0.275 +0.01/0	2.375 +0/-0.002	2.376 +0.002/0	2.750 +0.002/0	2.375 +0/-0.002	2.749 +0/-0.002	2.750 +0.002/0
U18-2.37-37B	2-3/8	2-3/4	3/8	0.413 +0.01/0	2.375 +0/-0.002	2.376 +0.002/0	2.750 +0.002/0	2.375 +0/-0.002	2.749 +0/-0.002	2.750 +0.002/0
U18-2.37-50B	2-3/8	2-3/4	1/2	0.550 +0.01/0	2.375 +0/-0.002	2.376 +0.002/0	2.750 +0.002/0	2.375 +0/-0.002	2.749 +0/-0.002	2.750 +0.002/0
U18-2.37-SQB	2-3/8	2-3/4	3/16	0.207 +0.01/0	2.375 +0/-0.002	2.376 +0.002/0	2.750 +0.002/0	2.375 +0/-0.002	2.749 +0/-0.002	2.750 +0.002/0
U18-2.50	2-1/2	2-7/8	3/16	0.207 +0.01/0	2.500 +0/-0.002	2.501 +0.002/0	2.875 +0.002/0	2.500 +0/-0.002	2.874 +0/-0.002	2.875 +0.002/0
U18-2.50-25B	2-1/2	2-7/8	1/4	0.275 +0.01/0	2.500 +0/-0.002	2.501 +0.002/0	2.875 +0.002/0	2.500 +0/-0.002	2.874 +0/-0.002	2.875 +0.002/0
U18-2.50-31B	2-1/2	2-7/8	5/16	0.344 +0.01/0	2.500 +0/-0.002	2.501 +0.002/0	2.875 +0.002/0	2.500 +0/-0.002	2.874 +0/-0.002	2.875 +0.002/0
U18-2.50-37B	2-1/2	2-7/8	3/8	0.413 +0.01/0	2.500 +0/-0.002	2.501 +0.002/0	2.875 +0.002/0	2.500 +0/-0.002	2.874 +0/-0.002	2.875 +0.002/0
U18-2.50-37D	2-1/2	2-7/8	3/8	0.207 +0.01/0	2.625 +0/-0.002	2.626 +0.002/0	3.000 +0.002/0	2.625 +0/-0.002	2.999 +0/-0.002	3.000 +0.002/0
U18-2.50-SQB	2-1/2	2-7/8	3/16	0.207 +0.01/0	2.500 +0/-0.002	2.501 +0.002/0	2.875 +0.002/0	2.500 +0/-0.002	2.874 +0/-0.002	2.875 +0.002/0
U18-2.62	2-5/8	3	3/16	0.207 +0.01/0	2.625 +0/-0.002	2.626 +0.002/0	3.000 +0.002/0	2.625 +0/-0.002	2.999 +0/-0.002	3.000 +0.002/0
U18-2.62-25B	2-5/8	3	1/4	0.275 +0.01/0	2.625 +0/-0.002	2.626 +0.002/0	3.000 +0.002/0	2.625 +0/-0.002	2.999 +0/-0.002	3.000 +0.002/0
U18-2.62-37B	2-5/8	3	3/8	0.413 +0.01/0	2.625 +0/-0.002	2.626 +0.002/0	3.000 +0.002/0	2.625 +0/-0.002	2.999 +0/-0.002	3.000 +0.002/0
U18-2.62-37D	2-5/8	3	3/8	0.413 +0.01/0	2.625 +0/-0.002	2.626 +0.002/0	3.000 +0.002/0	2.625 +0/-0.002	2.999 +0/-0.002	3.000 +0.002/0
U18-2.62-SQB	2-5/8	3	3/16	0.207 +0.01/0	2.625 +0/-0.002	2.626 +0.002/0	3.000 +0.002/0	2.625 +0/-0.002	2.999 +0/-0.002	3.000 +0.002/0
U18-2.75	2-3/4	3-1/8	3/16	0.207 +0.01/0	2.750 +0/-0.002	2.751 +0.002/0	3.125 +0.002/0	2.750 +0/-0.002	3.124 +0/-0.002	3.125 +0.002/0
U18-2.75-37B	2-3/4	3-1/8	3/8	0.413 +0.01/0	2.750 +0/-0.002	2.751 +0.002/0	3.125 +0.002/0	2.750 +0/-0.002	3.124 +0/-0.002	3.125 +0.002/0
U18-2.75-SQB	2-3/4	3-1/8	3/16	0.207 +0.01/0	2.750 +0/-0.002	2.751 +0.002/0	3.125 +0.002/0	2.750 +0/-0.002	3.124 +0/-0.002	3.125 +0.002/0
U18-2.87	2-7/8	3-1/4	3/16	0.207 +0.01/0	2.875 +0/-0.002	2.876 +0.002/0	3.250 +0.002/0	2.875 +0/-0.002	3.249 +0/-0.002	3.250 +0.002/0
U18-2.87-25B	2-7/8	3-1/4	1/4	0.275 +0.01/0	2.875 +0/-0.002	2.876 +0.002/0	3.250 +0.002/0	2.875 +0/-0.002	3.249 +0/-0.002	3.250 +0.002/0
U18-2.87-37B	2-7/8	3-1/4	3/8	0.413 +0.01/0	2.875 +0/-0.002	2.876 +0.002/0	3.250 +0.002/0	2.875 +0/-0.002	3.249 +0/-0.002	3.250 +0.002/0
U18-2.87-37D	2-7/8	3-1/4	3/8	0.413 +0.01/0	2.875 +0/-0.002	2.876 +0.002/0	3.250 +0.002/0	2.875 +0/-0.002	3.249 +0/-0.002	3.250 +0.002/0
U18-3.00	3	3-3/8	3/16	0.207 +0.01/0	3.000 +0/-0.002	3.001 +0.002/0	3.375 +0.002/0	3.000 +0/-0.002	3.374 +0/-0.002	3.375 +0.002/0
U18-3.00-31B	3	3-3/8	5/16	0.344 +0.01/0	3.000 +0/-0.002	3.001 +0.002/0	3.375 +0.002/0	3.000 +0/-0.002	3.374 +0/-0.002	3.375 +0.002/0
U18-3.00-37B	3	3-3/8	3/8	0.413 +0.01/0	3.000 +0/-0.002	3.001 +0.002/0	3.375 +0.002/0	3.000 +0/-0.002	3.374 +0/-0.002	3.375 +0.002/0
U18-3.00-SQB	3	3-3/8	3/16	0.207 +0.01/0	3.000 +0/-0.002	3.001 +0.002/0	3.375 +0.002/0	3.000 +0/-0.002	3.374 +0/-0.002	3.375 +0.002/0
U18-3.12	3-1/8	3-1/2	3/16	0.207 +0.01/0	3.125 +0/-0.002	3.126 +0.002/0	3.500 +0.002/0	3.125 +0/-0.002	3.499 +0/-0.002	3.500 +0.002/0
U18-3.12-25B	3-1/8	3-1/2	1/4	0.275 +0.01/0	3.125 +0/-0.002	3.126 +0.002/0	3.500 +0.002/0	3.125 +0/-0.002	3.499 +0/-0.002	3.500 +0.002/0
U18-3.12-37B	3-1/8	3-1/2	3/8	0.413 +0.01/0	3.125 +0/-0.002	3.126 +0.002/0	3.500 +0.002/0	3.125 +0/-0.002	3.499 +0/-0.002	3.500 +0.002/0
U18-3.12-37D	3-1/8	3-1/2	3/8	0.413 +0.01/0	3.125 +0/-0.002	3.126 +0.002/0	3.500 +0.002/0	3.125 +0/-0.002	3.499 +0/-0.002	3.500 +0.002/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
3/16" C/S										
U18-3.12-SQB	3-1/8	3-1/2	3/16	0.207 +0.01/0	3.125 +0/-0.002	3.126 +0.002/0	3.500 +0.002/0	3.125 +0/-0.002	3.499 +0/-0.002	3.500 +0.002/0
U18-3.25	3-1/4	3-5/8	3/16	0.207 +0.01/0	3.250 +0/-0.002	3.251 +0.002/0	3.625 +0.002/0	3.250 +0/-0.002	3.624 +0/-0.002	3.625 +0.002/0
U18-3.25-37B	3-1/4	3-5/8	3/8	0.413 +0.01/0	3.250 +0/-0.002	3.251 +0.002/0	3.625 +0.002/0	3.250 +0/-0.002	3.624 +0/-0.002	3.625 +0.002/0
U18-3.37	3-3/8	3-3/4	3/16	0.207 +0.01/0	3.375 +0/-0.002	3.376 +0.002/0	3.750 +0.002/0	3.375 +0/-0.002	3.749 +0/-0.002	3.750 +0.002/0
U18-3.37-25B	3-3/8	3-3/4	1/4	0.275 +0.01/0	3.375 +0/-0.002	3.376 +0.002/0	3.750 +0.002/0	3.375 +0/-0.002	3.749 +0/-0.002	3.750 +0.002/0
U18-3.37-37B	3-3/8	3-3/4	3/8	0.413 +0.01/0	3.375 +0/-0.002	3.376 +0.002/0	3.750 +0.002/0	3.375 +0/-0.002	3.749 +0/-0.002	3.750 +0.002/0
U18-3.37-SQB	3-3/8	3-3/4	3/16	0.207 +0.01/0	3.375 +0/-0.002	3.376 +0.002/0	3.750 +0.002/0	3.375 +0/-0.002	3.749 +0/-0.002	3.750 +0.002/0
U18-3.50	3-1/2	3-7/8	3/16	0.413 +0.01/0	3.500 +0/-0.002	3.501 +0.002/0	3.875 +0.002/0	3.500 +0/-0.002	3.874 +0/-0.002	3.875 +0.002/0
U18-3.50-37B	3-1/2	3-7/8	3/8	0.413 +0.01/0	3.500 +0/-0.002	3.501 +0.002/0	3.875 +0.002/0	3.500 +0/-0.002	3.874 +0/-0.002	3.875 +0.002/0
U18-3.50-SQB	3-1/2	3-7/8	3/16	0.207 +0.01/0	3.500 +0/-0.002	3.501 +0.002/0	3.875 +0.002/0	3.500 +0/-0.002	3.874 +0/-0.002	3.875 +0.002/0
U18-3.62	3-5/8	4	3/16	0.207 +0.01/0	3.625 +0/-0.002	3.626 +0.002/0	4.000 +0.002/0	3.625 +0/-0.002	3.999 +0/-0.002	4.000 +0.002/0
U18-3.62-37B	3-5/8	4	3/8	0.413 +0.01/0	3.625 +0/-0.002	3.626 +0.002/0	4.000 +0.002/0	3.625 +0/-0.002	3.999 +0/-0.002	4.000 +0.002/0
U18-3.62-SQB	3-5/8	4	3/16	0.207 +0.01/0	3.625 +0/-0.002	3.626 +0.002/0	4.000 +0.002/0	3.625 +0/-0.002	3.999 +0/-0.002	4.000 +0.002/0
U18-3.75	3-3/4	4-1/8	3/16	0.207 +0.01/0	3.750 +0/-0.002	3.751 +0.002/0	4.125 +0.002/0	3.750 +0/-0.002	4.124 +0/-0.002	4.125 +0.002/0
U18-3.75-37B	3-3/4	4-1/8	3/8	0.413 +0.01/0	3.750 +0/-0.002	3.751 +0.002/0	4.125 +0.002/0	3.750 +0/-0.002	4.124 +0/-0.002	4.125 +0.002/0
U18-3.87	3-7/8	4-1/4	3/16	0.207 +0.01/0	3.875 +0/-0.002	3.876 +0.002/0	4.250 +0.002/0	3.875 +0/-0.002	4.249 +0/-0.002	4.250 +0.002/0
U18-3.87-37B	3-7/8	4-1/4	3/8	0.413 +0.01/0	3.875 +0/-0.002	3.876 +0.002/0	4.250 +0.002/0	3.875 +0/-0.002	4.249 +0/-0.002	4.250 +0.002/0
U18-4.00	4	4-3/8	3/16	0.207 +0.01/0	4.000 +0/-0.002	4.001 +0.002/0	4.375 +0.002/0	4.000 +0/-0.002	4.374 +0/-0.002	4.375 +0.002/0
U18-4.00-37B	4	4-3/8	3/8	0.413 +0.01/0	4.000 +0/-0.002	4.001 +0.002/0	4.375 +0.002/0	4.000 +0/-0.002	4.374 +0/-0.002	4.375 +0.002/0
U18-4.00-SQB	4	4-3/8	3/16	0.207 +0.01/0	4.000 +0/-0.002	4.001 +0.002/0	4.375 +0.002/0	4.000 +0/-0.002	4.374 +0/-0.002	4.375 +0.002/0
U18-4.12	4-1/8	4-1/2	3/16	0.207 +0.01/0	4.125 +0/-0.002	4.126 +0.002/0	4.500 +0.002/0	4.125 +0/-0.002	4.499 +0/-0.002	4.500 +0.002/0
U18-4.12-37B	4-1/8	4-1/2	3/8	0.413 +0.01/0	4.125 +0/-0.002	4.126 +0.002/0	4.500 +0.002/0	4.125 +0/-0.002	4.499 +0/-0.002	4.500 +0.002/0
U18-4.12-37D	4-1/8	4-1/2	3/8	0.413 +0.01/0	4.125 +0/-0.002	4.126 +0.002/0	4.500 +0.002/0	4.125 +0/-0.002	4.499 +0/-0.002	4.500 +0.002/0
U18-4.25	4-1/4	4-5/8	3/16	0.207 +0.01/0	4.250 +0/-0.002	4.251 +0.002/0	4.625 +0.002/0	4.250 +0/-0.002	4.624 +0/-0.002	4.625 +0.002/0
U18-4.25-37B	4-1/4	4-5/8	3/8	0.413 +0.01/0	4.250 +0/-0.002	4.251 +0.002/0	4.625 +0.002/0	4.250 +0/-0.002	4.624 +0/-0.002	4.625 +0.002/0
U18-4.37	4-3/8	4-3/4	3/16	0.207 +0.01/0	4.375 +0/-0.002	4.376 +0.002/0	4.750 +0.002/0	4.375 +0/-0.002	4.749 +0/-0.002	4.750 +0.002/0
U18-4.37-37B	4-3/8	4-3/4	3/8	0.413 +0.01/0	4.375 +0/-0.002	4.376 +0.002/0	4.750 +0.002/0	4.375 +0/-0.002	4.749 +0/-0.002	4.750 +0.002/0
U18-4.50	4-1/2	4-7/8	3/16	0.413 +0.01/0	4.500 +0/-0.002	4.501 +0.002/0	4.875 +0.002/0	4.500 +0/-0.002	4.874 +0/-0.002	4.875 +0.002/0
U18-4.50-37B	4-1/2	4-7/8	3/8	0.413 +0.01/0	4.500 +0/-0.002	4.501 +0.002/0	4.875 +0.002/0	4.500 +0/-0.002	4.874 +0/-0.002	4.875 +0.002/0
U18-4.62	4-5/8	5	3/16	0.207 +0.01/0	4.625 +0/-0.002	4.626 +0.002/0	5.000 +0.002/0	4.625 +0/-0.002	4.999 +0/-0.002	5.000 +0.002/0
U18-4.62-37D	4-5/8	5	3/8	0.413 +0.01/0	4.625 +0/-0.002	4.626 +0.002/0	5.000 +0.002/0	4.625 +0/-0.002	4.999 +0/-0.002	5.000 +0.002/0
U18-4.75	4-3/4	5-1/8	3/16	0.207 +0.01/0	4.750 +0/-0.002	4.751 +0.002/0	5.125 +0.002/0	4.750 +0/-0.002	5.124 +0/-0.002	5.125 +0.002/0
U18-4.87	4-7/8	5-1/4	3/16	0.207 +0.01/0	4.875 +0/-0.002	4.876 +0.002/0	5.250 +0.002/0	4.875 +0/-0.002	5.249 +0/-0.002	5.250 +0.002/0
U18-5.00	5	5-3/8	3/16	0.207 +0.01/0	5.000 +0/-0.002	5.001 +0.002/0	5.375 +0.002/0	5.000 +0/-0.002	5.374 +0/-0.002	5.375 +0.002/0
U18-5.00-31D	5	5-3/8	5/16	0.344 +0.01/0	5.000 +0/-0.002	5.001 +0.002/0	5.375 +0.002/0	5.000 +0/-0.002	5.374 +0/-0.002	5.375 +0.002/0
U18-5.00-37D	5	5-3/8	3/8	0.413 +0.01/0	5.000 +0/-0.002	5.001 +0.002/0	5.375 +0.002/0	5.000 +0/-0.002	5.374 +0/-0.002	5.375 +0.002/0
U18-6.00	6	6-3/8	3/16	0.207 +0.01/0	6.000 +0/-0.002	6.001 +0.002/0	6.375 +0.002/0	6.000 +0/-0.002	6.374 +0/-0.002	6.375 +0.002/0
7/32" C/S										
U21-2.50-SQB	2-1/2	2-15/16	7/32	0.240 +0.01/0	2.500 +0/-0.002	2.501 +0.002/0	2.937 +0.003/0	2.500 +0/-0.002	2.936 +0/-0.002	2.937 +0.002/0
U21-2.81	2-13/16	3-1/4	7/32	0.240 +0.01/0	2.813 +0/-0.002	2.814 +0.002/0	3.250 +0.003/0	2.813 +0/-0.002	3.249 +0/-0.002	3.250 +0.002/0
U21-3.00	3	3-7/16	7/32	0.240 +0.01/0	3.000 +0/-0.002	3.001 +0.002/0	3.437 +0.003/0	3.000 +0/-0.002	3.436 +0/-0.002	3.437 +0.002/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/4" C/S										
U25-0.25	1/4	3/4	1/4	0.275 +0.01/0	0.250 +0/-0.002	0.251 +0.003/0	0.750 +0.003/0	0.250 +0/-0.003	0.749 +0/-0.002	0.750 +0.003/0
U25-0.31	5/16	13/16	1/4	0.275 +0.01/0	0.250 +0/-0.002	0.251 +0.003/0	0.812 +0.003/0	0.250 +0/-0.003	0.811 +0/-0.002	0.812 +0.003/0
U25-0.37	3/8	7/8	1/4	0.275 +0.01/0	0.375 +0/-0.002	0.376 +0.003/0	0.875 +0.003/0	0.375 +0/-0.003	0.874 +0/-0.002	0.875 +0.003/0
U25-0.43	7/16	15/16	1/4	0.275 +0.01/0	0.437 +0/-0.002	0.438 +0.003/0	0.937 +0.003/0	0.437 +0/-0.003	0.936 +0/-0.002	0.937 +0.003/0
U25-0.43-37B	7/16	15/16	3/8	0.413 +0.01/0	0.437 +0/-0.002	0.438 +0.003/0	0.937 +0.003/0	0.437 +0/-0.003	0.936 +0/-0.002	0.937 +0.003/0
U25-0.50	1/2	1	1/4	0.275 +0.01/0	0.500 +0/-0.002	0.501 +0.003/0	1.000 +0.003/0	0.500 +0/-0.003	0.999 +0/-0.002	1.000 +0.003/0
U25-0.50-37B	1/2	1	3/8	0.413 +0.01/0	0.500 +0/-0.002	0.501 +0.003/0	1.000 +0.003/0	0.500 +0/-0.003	0.999 +0/-0.002	1.000 +0.003/0
U25-0.56	9/16	1-1/16	1/4	0.275 +0.01/0	0.562 +0/-0.002	0.563 +0.003/0	1.062 +0.003/0	0.562 +0/-0.003	1.061 +0/-0.002	1.062 +0.003/0
U25-0.62	5/8	1-1/8	1/4	0.275 +0.01/0	0.625 +0/-0.002	0.626 +0.003/0	1.125 +0.003/0	0.625 +0/-0.003	1.124 +0/-0.002	1.125 +0.003/0
U25-0.62-37B	5/8	1-1/8	3/8	0.413 +0.01/0	0.625 +0/-0.002	0.626 +0.003/0	1.125 +0.003/0	0.625 +0/-0.003	1.124 +0/-0.002	1.125 +0.003/0
U25-0.68	11/16	1-3/16	1/4	0.275 +0.01/0	0.687 +0/-0.002	0.688 +0.003/0	1.187 +0.003/0	0.687 +0/-0.003	1.186 +0/-0.002	1.187 +0.003/0
U25-0.68-37B	11/16	1-3/16	3/8	0.413 +0.01/0	0.687 +0/-0.002	0.688 +0.003/0	1.187 +0.003/0	0.687 +0/-0.003	1.186 +0/-0.002	1.187 +0.003/0
U25-0.75	3/4	1-1/4	1/4	0.275 +0.01/0	0.750 +0/-0.002	0.751 +0.003/0	1.250 +0.003/0	0.750 +0/-0.003	1.249 +0/-0.002	1.250 +0.003/0
U25-0.75-37B	3/4	1-1/4	3/8	0.413 +0.01/0	0.750 +0/-0.002	0.751 +0.003/0	1.250 +0.003/0	0.750 +0/-0.003	1.249 +0/-0.002	1.250 +0.003/0
U25-0.75-SQB	3/4	1-1/4	1/4	0.275 +0.01/0	0.750 +0/-0.002	0.751 +0.003/0	1.250 +0.003/0	0.750 +0/-0.003	1.249 +0/-0.002	1.250 +0.003/0
U25-0.81	13/16	1-5/16	1/4	0.275 +0.01/0	0.812 +0/-0.002	0.813 +0.003/0	1.312 +0.003/0	0.812 +0/-0.003	1.311 +0/-0.002	1.312 +0.003/0
U25-0.81-37B	13/16	1-5/16	3/8	0.413 +0.01/0	0.812 +0/-0.002	0.813 +0.003/0	1.312 +0.003/0	0.812 +0/-0.003	1.311 +0/-0.002	1.312 +0.003/0
U25-0.87-37B	7/8	1-3/8	3/8	0.413 +0.01/0	0.875 +0/-0.002	0.876 +0.003/0	1.375 +0.003/0	0.875 +0/-0.003	1.374 +0/-0.002	1.375 +0.003/0
U25-0.87-37D	7/8	1-3/8	3/8	0.413 +0.01/0	0.875 +0/-0.002	0.876 +0.003/0	1.375 +0.003/0	0.875 +0/-0.003	1.374 +0/-0.002	1.375 +0.003/0
U25-0.87-SQB	7/8	1-3/8	1/4	0.275 +0.01/0	0.875 +0/-0.002	0.876 +0.003/0	1.375 +0.003/0	0.875 +0/-0.003	1.374 +0/-0.002	1.375 +0.003/0
U25-0.93	15/16	1-7/16	1/4	0.275 +0.01/0	0.937 +0/-0.002	0.938 +0.003/0	1.437 +0.003/0	0.937 +0/-0.003	1.436 +0/-0.002	1.437 +0.003/0
U25-1.00	1	1-1/2	1/4	0.275 +0.01/0	1.000 +0/-0.002	1.001 +0.003/0	1.500 +0.003/0	1.000 +0/-0.003	1.499 +0/-0.002	1.500 +0.003/0
U25-1.00-37B	1	1-1/2	3/8	0.413 +0.01/0	1.000 +0/-0.002	1.001 +0.003/0	1.500 +0.003/0	1.000 +0/-0.003	1.499 +0/-0.002	1.500 +0.003/0
U25-1.00-37D	1	1-1/2	3/8	0.413 +0.01/0	1.000 +0/-0.002	1.001 +0.003/0	1.500 +0.003/0	1.000 +0/-0.003	1.499 +0/-0.002	1.500 +0.003/0
U25-1.00-SQB	1	1-1/2	1/4	0.275 +0.01/0	1.000 +0/-0.002	1.001 +0.003/0	1.500 +0.003/0	1.000 +0/-0.003	1.499 +0/-0.002	1.500 +0.003/0
U25-1.06	1-1/16	1-9/16	1/4	0.275 +0.01/0	1.062 +0/-0.002	1.063 +0.003/0	1.562 +0.003/0	1.062 +0/-0.003	1.561 +0/-0.002	1.562 +0.003/0
U25-1.09	1-3/32	1-19/32	1/4	0.275 +0.01/0	1.094 +0/-0.002	1.095 +0.003/0	1.594 +0.003/0	1.094 +0/-0.003	1.593 +0/-0.002	1.594 +0.003/0
U25-1.12	1-1/8	1-5/8	1/4	0.275 +0.01/0	1.125 +0/-0.002	1.126 +0.003/0	1.625 +0.003/0	1.125 +0/-0.003	1.624 +0/-0.002	1.625 +0.003/0
U25-1.12-37B	1-1/8	1-5/8	3/8	0.413 +0.01/0	1.125 +0/-0.002	1.126 +0.003/0	1.625 +0.003/0	1.125 +0/-0.003	1.624 +0/-0.002	1.625 +0.003/0
U25-1.12-SQB	1-1/8	1-5/8	1/4	0.275 +0.01/0	1.125 +0/-0.002	1.126 +0.003/0	1.625 +0.003/0	1.125 +0/-0.003	1.624 +0/-0.002	1.625 +0.003/0
U25-1.18	1-3/16	1-11/16	1/4	0.275 +0.01/0	1.187 +0/-0.002	1.188 +0.003/0	1.687 +0.003/0	1.187 +0/-0.003	1.686 +0/-0.002	1.687 +0.003/0
U25-1.25	1-1/4	1-3/4	1/4	0.413 +0.01/0	1.250 +0/-0.002	1.251 +0.003/0	1.750 +0.003/0	1.250 +0/-0.003	1.749 +0/-0.002	1.750 +0.003/0
U25-1.25-37B	1-1/4	1-3/4	3/8	0.413 +0.01/0	1.250 +0/-0.002	1.251 +0.003/0	1.750 +0.003/0	1.250 +0/-0.003	1.749 +0/-0.002	1.750 +0.003/0
U25-1.25-37D	1-1/4	1-3/4	3/8	0.413 +0.01/0	1.250 +0/-0.002	1.251 +0.003/0	1.750 +0.003/0	1.250 +0/-0.003	1.749 +0/-0.002	1.750 +0.003/0
U25-1.25-SQB	1-1/4	1-3/4	1/4	0.275 +0.01/0	1.250 +0/-0.002	1.251 +0.003/0	1.750 +0.003/0	1.250 +0/-0.003	1.749 +0/-0.002	1.750 +0.003/0
U25-1.31	1-5/16	1-13/16	1/4	0.275 +0.01/0	1.312 +0/-0.002	1.313 +0.003/0	1.812 +0.003/0	1.312 +0/-0.003	1.811 +0/-0.002	1.812 +0.003/0
U25-1.31-37B	1-5/16	1-13/16	3/8	0.413 +0.01/0	1.312 +0/-0.002	1.313 +0.003/0	1.812 +0.003/0	1.312 +0/-0.003	1.811 +0/-0.002	1.812 +0.003/0
U25-1.37	1-3/8	1-7/8	1/4	0.275 +0.01/0	1.375 +0/-0.002	1.376 +0.003/0	1.875 +0.003/0	1.375 +0/-0.003	1.874 +0/-0.002	1.875 +0.003/0
U25-1.37-37B	1-3/8	1-7/8	3/8	0.413 +0.01/0	1.375 +0/-0.002	1.376 +0.003/0	1.875 +0.003/0	1.375 +0/-0.003	1.874 +0/-0.002	1.875 +0.003/0
U25-1.37-SQB	1-3/8	1-7/8	1/4	0.275 +0.01/0	1.375 +0/-0.002	1.376 +0.003/0	1.875 +0.003/0	1.375 +0/-0.003	1.874 +0/-0.002	1.875 +0.003/0
U25-1.43	1-7/16	1-15/16	1/4	0.275 +0.01/0	1.437 +0/-0.002	1.438 +0.003/0	1.937 +0.003/0	1.437 +0/-0.003	1.936 +0/-0.002	1.937 +0.003/0
U25-1.43-37B	1-7/16	1-15/16	1/4	0.275 +0.01/0	1.437 +0/-0.002	1.438 +0.003/0	1.937 +0.003/0	1.437 +0/-0.003	1.936 +0/-0.002	1.937 +0.003/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/4" C/S										
U25-1.50	1-1/2	2	1/4	0.275 +0.01/0	1.500 +0/-0.002	1.501 +0.003/0	2.000 +0.003/0	1.500 +0/-0.003	1.999 +0/-0.002	2.000 +0.003/0
U25-1.50-31B	1-1/2	2	5/16	0.344 +0.01/0	1.500 +0/-0.002	1.501 +0.003/0	2.000 +0.003/0	1.500 +0/-0.003	1.999 +0/-0.002	2.000 +0.003/0
U25-1.50-37B	1-1/2	2	3/8	0.413 +0.01/0	1.500 +0/-0.002	1.501 +0.003/0	2.000 +0.003/0	1.500 +0/-0.003	1.999 +0/-0.002	2.000 +0.003/0
U25-1.50-37D	1-1/2	2	3/8	0.413 +0.01/0	1.500 +0/-0.002	1.501 +0.003/0	2.000 +0.003/0	1.500 +0/-0.003	1.999 +0/-0.002	2.000 +0.003/0
U25-1.50-50B	1-1/2	2	1/2	0.550 +0.01/0	1.500 +0/-0.002	1.501 +0.003/0	2.000 +0.003/0	1.500 +0/-0.003	1.999 +0/-0.002	2.000 +0.003/0
U25-1.50-SQB	1-1/2	2	1/4	0.275 +0.01/0	1.500 +0/-0.002	1.501 +0.003/0	2.000 +0.003/0	1.500 +0/-0.003	1.999 +0/-0.002	2.000 +0.003/0
U25-1.62	1-5/8	2-1/8	1/4	0.275 +0.01/0	1.625 +0/-0.002	1.626 +0.003/0	2.125 +0.003/0	1.625 +0/-0.003	2.124 +0/-0.002	2.125 +0.003/0
U25-1.62-37B	1-5/8	2-1/8	3/8	0.413 +0.01/0	1.625 +0/-0.002	1.626 +0.003/0	2.125 +0.003/0	1.625 +0/-0.003	2.124 +0/-0.002	2.125 +0.003/0
U25-1.75	1-3/4	2-1/4	1/4	0.275 +0.01/0	1.750 +0/-0.002	1.751 +0.003/0	2.250 +0.003/0	1.750 +0/-0.003	2.249 +0/-0.002	2.250 +0.003/0
U25-1.75-31B	1-3/4	2-1/4	5/16	0.344 +0.01/0	1.750 +0/-0.002	1.751 +0.003/0	2.250 +0.003/0	1.750 +0/-0.003	2.249 +0/-0.002	2.250 +0.003/0
U25-1.75-37B	1-3/4	2-1/4	3/8	0.413 +0.01/0	1.750 +0/-0.002	1.751 +0.003/0	2.250 +0.003/0	1.750 +0/-0.003	2.249 +0/-0.002	2.250 +0.003/0
U25-1.75-37D	1-3/4	2-1/4	3/8	0.413 +0.01/0	1.750 +0/-0.002	1.751 +0.003/0	2.250 +0.003/0	1.750 +0/-0.003	2.249 +0/-0.002	2.250 +0.003/0
U25-1.75-SQB	1-3/4	2-1/4	1/4	0.275 +0.01/0	1.750 +0/-0.002	1.751 +0.003/0	2.250 +0.003/0	1.750 +0/-0.003	2.249 +0/-0.002	2.250 +0.003/0
U25-1.87	1-7/8	2-3/8	1/4	0.275 +0.01/0	1.875 +0/-0.002	1.876 +0.003/0	2.375 +0.003/0	1.875 +0/-0.003	2.374 +0/-0.002	2.375 +0.003/0
U25-1.87-37B	1-7/8	2-3/8	3/8	0.413 +0.01/0	1.875 +0/-0.002	1.876 +0.003/0	2.375 +0.003/0	1.875 +0/-0.003	2.374 +0/-0.002	2.375 +0.003/0
U25-2.00	2	2-1/2	1/4	0.275 +0.01/0	2.000 +0/-0.002	2.001 +0.003/0	2.500 +0.003/0	2.000 +0/-0.003	2.499 +0/-0.002	2.500 +0.003/0
U25-2.00-31B	2	2-1/2	5/16	0.344 +0.01/0	2.000 +0/-0.002	2.001 +0.003/0	2.500 +0.003/0	2.000 +0/-0.003	2.499 +0/-0.002	2.500 +0.003/0
U25-2.00-37B	2	2-1/2	3/8	0.413 +0.01/0	2.000 +0/-0.002	2.001 +0.003/0	2.500 +0.003/0	2.000 +0/-0.003	2.499 +0/-0.002	2.500 +0.003/0
U25-2.00-37D	2	2-1/2	3/8	0.413 +0.01/0	2.000 +0/-0.002	2.001 +0.003/0	2.500 +0.003/0	2.000 +0/-0.003	2.499 +0/-0.002	2.500 +0.003/0
U25-2.00-SQB	2	2-1/2	1/4	0.275 +0.01/0	2.000 +0/-0.002	2.001 +0.003/0	2.500 +0.003/0	2.000 +0/-0.003	2.499 +0/-0.002	2.500 +0.003/0
U25-2.12	2-1/8	2-5/8	1/4	0.275 +0.01/0	2.125 +0/-0.002	2.126 +0.003/0	2.625 +0.003/0	2.125 +0/-0.003	2.624 +0/-0.002	2.625 +0.003/0
U25-2.12-37B	2-1/8	2-5/8	3/8	0.413 +0.01/0	2.125 +0/-0.002	2.126 +0.003/0	2.625 +0.003/0	2.125 +0/-0.003	2.624 +0/-0.002	2.625 +0.003/0
U25-2.18-37B	2-3/16	2-11/16	3/8	0.413 +0.01/0	2.188 +0/-0.002	2.189 +0.003/0	2.688 +0.003/0	2.188 +0/-0.003	2.687 +0/-0.002	2.688 +0.003/0
U25-2.25	2-1/4	2-3/4	1/4	0.275 +0.01/0	2.250 +0/-0.002	2.251 +0.003/0	2.750 +0.003/0	2.250 +0/-0.003	2.749 +0/-0.002	2.750 +0.003/0
U25-2.25-37B	2-1/4	2-3/4	3/8	0.413 +0.01/0	2.250 +0/-0.002	2.251 +0.003/0	2.750 +0.003/0	2.250 +0/-0.003	2.749 +0/-0.002	2.750 +0.003/0
U25-2.25-37D	2-1/4	2-3/4	3/8	0.413 +0.01/0	2.250 +0/-0.002	2.251 +0.003/0	2.750 +0.003/0	2.250 +0/-0.003	2.749 +0/-0.002	2.750 +0.003/0
U25-2.37	2-3/8	2-7/8	1/4	0.275 +0.01/0	2.375 +0/-0.002	2.376 +0.003/0	2.875 +0.003/0	2.375 +0/-0.003	2.874 +0/-0.002	2.875 +0.003/0
U25-2.37-37B	2-3/8	2-7/8	3/8	0.413 +0.01/0	2.375 +0/-0.002	2.376 +0.003/0	2.875 +0.003/0	2.375 +0/-0.003	2.874 +0/-0.002	2.875 +0.003/0
U25-2.50	2-1/2	3	1/4	0.275 +0.01/0	2.500 +0/-0.002	2.501 +0.003/0	3.000 +0.003/0	2.500 +0/-0.003	2.999 +0/-0.002	3.000 +0.003/0
U25-2.50-31B	2-1/2	3	5/16	0.344 +0.01/0	2.500 +0/-0.002	2.501 +0.003/0	3.000 +0.003/0	2.500 +0/-0.003	2.999 +0/-0.002	3.000 +0.003/0
U25-2.50-31D	2-1/2	3	5/16	0.344 +0.01/0	2.500 +0/-0.002	2.501 +0.003/0	3.000 +0.003/0	2.500 +0/-0.003	2.999 +0/-0.002	3.000 +0.003/0
U25-2.50-37B	2-1/2	3	3/8	0.413 +0.01/0	2.500 +0/-0.002	2.501 +0.003/0	3.000 +0.003/0	2.500 +0/-0.003	2.999 +0/-0.002	3.000 +0.003/0
U25-2.50-37D	2-1/2	3	3/8	0.413 +0.01/0	2.500 +0/-0.002	2.501 +0.003/0	3.000 +0.003/0	2.500 +0/-0.003	2.999 +0/-0.002	3.000 +0.003/0
U25-2.50-50B	2-1/2	3	1/2	0.550 +0.01/0	2.500 +0/-0.002	2.501 +0.003/0	3.000 +0.003/0	2.500 +0/-0.003	2.999 +0/-0.002	3.000 +0.003/0
U25-2.50-SQB	2-1/2	3	1/4	0.275 +0.01/0	2.500 +0/-0.002	2.501 +0.003/0	3.000 +0.003/0	2.500 +0/-0.003	2.999 +0/-0.002	3.000 +0.003/0
U25-2.62	2-5/8	3-1/8	1/4	0.275 +0.01/0	2.625 +0/-0.002	2.626 +0.003/0	3.125 +0.003/0	2.625 +0/-0.003	3.124 +0/-0.002	3.125 +0.003/0
U25-2.62-37B	2-5/8	3-1/8	3/8	0.413 +0.01/0	2.625 +0/-0.002	2.626 +0.003/0	3.125 +0.003/0	2.625 +0/-0.003	3.124 +0/-0.002	3.125 +0.003/0
U25-2.75	2-3/4	3-1/4	1/4	0.275 +0.01/0	2.750 +0/-0.002	2.751 +0.003/0	3.250 +0.003/0	2.750 +0/-0.003	3.249 +0/-0.002	3.250 +0.003/0
U25-2.75-37B	2-3/4	3-1/4	3/8	0.413 +0.01/0	2.750 +0/-0.002	2.751 +0.003/0	3.250 +0.003/0	2.750 +0/-0.003	3.249 +0/-0.002	3.250 +0.003/0
U25-2.75-37D	2-3/4	3-1/4	3/8	0.413 +0.01/0	2.750 +0/-0.002	2.751 +0.003/0	3.250 +0.003/0	2.750 +0/-0.003	3.249 +0/-0.002	3.250 +0.003/0
U25-2.75-50B	2-3/4	3-1/4	1/2	0.550 +0.01/0	2.750 +0/-0.002	2.751 +0.003/0	3.250 +0.003/0	2.750 +0/-0.003	3.249 +0/-0.002	3.250 +0.003/0
U25-2.75-SQB	2-3/4	3-1/4	1/4	0.275 +0.01/0	2.750 +0/-0.002	2.751 +0.003/0	3.250 +0.003/0	2.750 +0/-0.003	3.249 +0/-0.002	3.250 +0.003/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/4" C/S										
U25-2.87	2-7/8	3-3/8	1/4	0.275 +0.01/0	2.875 +0/-0.002	2.876 +0.003/0	3.375 +0.003/0	2.875 +0/-0.003	3.374 +0/-0.002	3.375 +0.003/0
U25-2.87-37B	2-7/8	3-3/8	3/8	0.413 +0.01/0	2.875 +0/-0.002	2.876 +0.003/0	3.375 +0.003/0	2.875 +0/-0.003	3.374 +0/-0.002	3.375 +0.003/0
U25-3.00	3	3-1/2	1/4	0.275 +0.01/0	3.000 +0/-0.002	3.001 +0.003/0	3.500 +0.003/0	3.000 +0/-0.003	3.499 +0/-0.002	3.500 +0.003/0
U25-3.00-37B	3	3-1/2	3/8	0.413 +0.01/0	3.000 +0/-0.002	3.001 +0.003/0	3.500 +0.003/0	3.000 +0/-0.003	3.499 +0/-0.002	3.500 +0.003/0
U25-3.00-37D	3	3-1/2	3/8	0.413 +0.01/0	3.000 +0/-0.002	3.001 +0.003/0	3.500 +0.003/0	3.000 +0/-0.003	3.499 +0/-0.002	3.500 +0.003/0
U25-3.00-SQB	3	3-1/2	1/4	0.275 +0.01/0	3.000 +0/-0.002	3.001 +0.003/0	3.500 +0.003/0	3.000 +0/-0.003	3.499 +0/-0.002	3.500 +0.003/0
U25-3.12	3-1/8	3-5/8	1/4	0.275 +0.01/0	3.125 +0/-0.002	3.126 +0.003/0	3.625 +0.003/0	3.125 +0/-0.003	3.624 +0/-0.002	3.625 +0.003/0
U25-3.12-37B	3-1/8	3-5/8	3/8	0.413 +0.01/0	3.125 +0/-0.002	3.126 +0.003/0	3.625 +0.003/0	3.125 +0/-0.003	3.624 +0/-0.002	3.625 +0.003/0
U25-3.25	3-1/4	3-3/4	1/4	0.275 +0.01/0	3.250 +0/-0.002	3.251 +0.003/0	3.750 +0.003/0	3.250 +0/-0.003	3.749 +0/-0.002	3.750 +0.003/0
U25-3.25-37B	3-1/4	3-3/4	3/8	0.413 +0.01/0	3.250 +0/-0.002	3.251 +0.003/0	3.750 +0.003/0	3.250 +0/-0.003	3.749 +0/-0.002	3.750 +0.003/0
U25-3.25-37D	3-1/4	3-3/4	3/8	0.413 +0.01/0	3.250 +0/-0.002	3.251 +0.003/0	3.750 +0.003/0	3.250 +0/-0.003	3.749 +0/-0.002	3.750 +0.003/0
U25-3.25-50B	3-1/4	3-3/4	1/2	0.550 +0.01/0	3.250 +0/-0.002	3.251 +0.003/0	3.750 +0.003/0	3.250 +0/-0.003	3.749 +0/-0.002	3.750 +0.003/0
U25-3.37	3-3/8	3-7/8	1/4	0.275 +0.01/0	3.375 +0/-0.002	3.376 +0.003/0	3.875 +0.003/0	3.375 +0/-0.003	3.874 +0/-0.002	3.875 +0.003/0
U25-3.37-37B	3-3/8	3-7/8	3/8	0.413 +0.01/0	3.375 +0/-0.002	3.376 +0.003/0	3.875 +0.003/0	3.375 +0/-0.003	3.874 +0/-0.002	3.875 +0.003/0
U25-3.37-SQB	3-3/8	3-7/8	1/4	0.275 +0.01/0	3.375 +0/-0.002	3.376 +0.003/0	3.875 +0.003/0	3.375 +0/-0.003	3.874 +0/-0.002	3.875 +0.003/0
U25-3.50	3-1/2	4	1/4	0.275 +0.01/0	3.500 +0/-0.002	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.003	3.999 +0/-0.002	4.000 +0.003/0
U25-3.50-37B	3-1/2	4	3/8	0.413 +0.01/0	3.500 +0/-0.002	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.003	3.999 +0/-0.002	4.000 +0.003/0
U25-3.50-37D	3-1/2	4	3/8	0.413 +0.01/0	3.500 +0/-0.002	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.003	3.999 +0/-0.002	4.000 +0.003/0
U25-3.50-50B	3-1/2	4	1/2	0.550 +0.01/0	3.500 +0/-0.002	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.003	3.999 +0/-0.002	4.000 +0.003/0
U25-3.50-50D	3-1/2	4	1/2	0.550 +0.01/0	3.500 +0/-0.002	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.003	3.999 +0/-0.002	4.000 +0.003/0
U25-3.50-SQB	3-1/2	4	1/4	0.275 +0.01/0	3.500 +0/-0.002	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.003	3.999 +0/-0.002	4.000 +0.003/0
U25-3.62	3-5/8	4-1/8	1/4	0.275 +0.01/0	3.625 +0/-0.002	3.626 +0.003/0	4.125 +0.003/0	3.625 +0/-0.003	4.124 +0/-0.002	4.125 +0.003/0
U25-3.69-50B	3.690	4.190	1/2	0.550 +0.01/0	3.690 +0/-0.002	3.691 +0.003/0	4.190 +0.003/0	3.690 +0/-0.003	4.189 +0/-0.002	4.190 +0.003/0
U25-3.75-37B	3-3/4	4-1/4	3/8	0.413 +0.01/0	3.750 +0/-0.002	3.751 +0.003/0	4.250 +0.003/0	3.750 +0/-0.003	4.249 +0/-0.002	4.250 +0.003/0
U25-3.75-50B	3-3/4	4-1/4	1/2	0.550 +0.01/0	3.750 +0/-0.002	3.751 +0.003/0	4.250 +0.003/0	3.750 +0/-0.003	4.249 +0/-0.002	4.250 +0.003/0
U25-3.75-56B	3-3/4	4-1/4	9/16	0.619 +0.01/0	3.750 +0/-0.002	3.751 +0.003/0	4.250 +0.003/0	3.750 +0/-0.003	4.249 +0/-0.002	4.250 +0.003/0
U25-3.75-SQB	3-3/4	4-1/4	1/4	0.275 +0.01/0	3.750 +0/-0.002	3.751 +0.003/0	4.250 +0.003/0	3.750 +0/-0.003	4.249 +0/-0.002	4.250 +0.003/0
U25-3.87	3-7/8	4-3/8	1/4	0.275 +0.01/0	3.875 +0/-0.002	3.876 +0.003/0	4.375 +0.003/0	3.875 +0/-0.003	4.374 +0/-0.002	4.375 +0.003/0
U25-4.00	4	4-1/2	1/4	0.275 +0.01/0	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
U25-4.00-31B	4	4-1/2	5/16	0.344 +0.01/0	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
U25-4.00-37B	4	4-1/2	3/8	0.413 +0.01/0	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
U25-4.00-37D	4	4-1/2	3/8	0.413 +0.01/0	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
U25-4.00-50B	4	4-1/2	1/2	0.550 +0.01/0	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
U25-4.00-50D	4	4-1/2	1/2	0.550 +0.01/0	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
U25-4.00-56B	4	4-1/2	9/16	0.619 +0.01/0	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
U25-4.00-56D	4	4-1/2	9/16	0.619 +0.01/0	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
U25-4.00-56F	4	4-1/2	9/16	0.619 +0.01/0	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
U25-4.00-SQB	4	4-1/2	1/4	0.275 +0.01/0	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
U25-4.12	4-1/8	4-5/8	1/4	0.275 +0.01/0	4.125 +0/-0.002	4.126 +0.003/0	4.625 +0.003/0	4.125 +0/-0.003	4.624 +0/-0.002	4.625 +0.003/0
U25-4.12-37B	4-1/8	4-5/8	3/8	0.413 +0.01/0	4.125 +0/-0.002	4.126 +0.003/0	4.625 +0.003/0	4.125 +0/-0.003	4.624 +0/-0.002	4.625 +0.003/0
U25-4.25	4-1/4	4-3/4	1/4	0.275 +0.01/0	4.250 +0/-0.002	4.251 +0.003/0	4.750 +0.003/0	4.250 +0/-0.003	4.749 +0/-0.002	4.750 +0.003/0
U25-4.25-37B	4-1/4	4-3/4	3/8	0.413 +0.01/0	4.250 +0/-0.002	4.251 +0.003/0	4.750 +0.003/0	4.250 +0/-0.003	4.749 +0/-0.002	4.750 +0.003/0
U25-4.25-56B	4-1/4	4-3/4	9/16	0.619 +0.01/0	4.250 +0/-0.002	4.251 +0.003/0	4.750 +0.003/0	4.250 +0/-0.003	4.749 +0/-0.002	4.750 +0.003/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/4" C/S										
U25-4.37-56B	4-3/8	4-7/8	9/16	0.619 +0.01/0	4.375 +0/-0.002	4.376 +0.003/0	4.875 +0.003/0	4.375 +0/-0.003	4.874 +0/-0.002	4.875 +0.003/0
U25-4.37-SQB	4-3/8	4-7/8	1/4	0.275 +0.01/0	4.375 +0/-0.002	4.376 +0.003/0	4.875 +0.003/0	4.375 +0/-0.003	4.874 +0/-0.002	4.875 +0.003/0
U25-4.50	4-1/2	5	1/4	0.275 +0.01/0	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.999 +0/-0.002	5.000 +0.003/0
U25-4.50-31B	4-1/2	5	5/16	0.344 +0.01/0	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.999 +0/-0.002	5.000 +0.003/0
U25-4.50-37B	4-1/2	5	3/8	0.413 +0.01/0	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.999 +0/-0.002	5.000 +0.003/0
U25-4.50-37D	4-1/2	5	3/8	0.413 +0.01/0	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.999 +0/-0.002	5.000 +0.003/0
U25-4.50-50B	4-1/2	5	1/2	0.550 +0.01/0	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.999 +0/-0.002	5.000 +0.003/0
U25-4.50-50D	4-1/2	5	1/2	0.550 +0.01/0	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.999 +0/-0.002	5.000 +0.003/0
U25-4.50-56B	4-1/2	5	9/16	0.619 +0.01/0	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.999 +0/-0.002	5.000 +0.003/0
U25-4.50-56D	4-1/2	5	9/16	0.619 +0.01/0	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.999 +0/-0.002	5.000 +0.003/0
U25-4.50-62B	4-1/2	5	5/8	0.688 +0.01/0	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.999 +0/-0.002	5.000 +0.003/0
U25-4.62-56B	4-5/8	5-1/8	9/16	0.616 +0.01/0	4.625 +0/-0.002	4.626 +0.003/0	5.125 +0.003/0	4.625 +0/-0.003	5.124 +0/-0.002	5.125 +0.003/0
U25-4.62-SQB	4-5/8	5-1/8	1/4	0.275 +0.01/0	4.625 +0/-0.002	4.626 +0.003/0	5.125 +0.003/0	4.625 +0/-0.003	5.124 +0/-0.002	5.125 +0.003/0
U25-4.62-SQB	3	3-1/2	1/4	0.275 +0.01/0	4.625 +0/-0.002	4.626 +0.003/0	5.125 +0.003/0	4.625 +0/-0.003	5.124 +0/-0.002	5.125 +0.003/0
U25-4.75	4-3/4	5-1/4	1/4	0.275 +0.01/0	4.750 +0/-0.002	4.751 +0.003/0	5.250 +0.003/0	4.750 +0/-0.003	5.249 +0/-0.002	5.250 +0.003/0
U25-4.75-37B	4-3/4	5-1/4	3/8	0.413 +0.01/0	4.750 +0/-0.002	4.751 +0.003/0	5.250 +0.003/0	4.750 +0/-0.003	5.249 +0/-0.002	5.250 +0.003/0
U25-4.75-56B	4-3/4	5-1/4	9/16	0.616 +0.01/0	4.750 +0/-0.002	4.751 +0.003/0	5.250 +0.003/0	4.750 +0/-0.003	5.249 +0/-0.002	5.250 +0.003/0
U25-4.87	4-7/8	5-3/8	1/4	0.275 +0.01/0	4.875 +0/-0.002	4.876 +0.003/0	5.375 +0.003/0	4.875 +0/-0.003	5.374 +0/-0.002	5.375 +0.003/0
U25-5.00	5	5-1/2	1/4	0.275 +0.01/0	5.000 +0/-0.002	5.001 +0.003/0	5.500 +0.003/0	5.000 +0/-0.003	5.499 +0/-0.002	5.500 +0.003/0
U25-5.00-37B	5	5-1/2	3/8	0.413 +0.01/0	5.000 +0/-0.002	5.001 +0.003/0	5.500 +0.003/0	5.000 +0/-0.003	5.499 +0/-0.002	5.500 +0.003/0
U25-5.00-50B	5	5-1/2	1/2	0.550 +0.01/0	5.000 +0/-0.002	5.001 +0.003/0	5.500 +0.003/0	5.000 +0/-0.003	5.499 +0/-0.002	5.500 +0.003/0
U25-5.00-50D	5	5-1/2	1/2	0.550 +0.01/0	5.000 +0/-0.002	5.001 +0.003/0	5.500 +0.003/0	5.000 +0/-0.003	5.499 +0/-0.002	5.500 +0.003/0
U25-5.00-56B	5	5-1/2	9/16	0.616 +0.01/0	5.000 +0/-0.002	5.001 +0.003/0	5.500 +0.003/0	5.000 +0/-0.003	5.499 +0/-0.002	5.500 +0.003/0
U25-5.12	5-1/8	5-5/8	1/4	0.275 +0.01/0	5.125 +0/-0.002	5.126 +0.003/0	5.625 +0.003/0	5.125 +0/-0.003	5.624 +0/-0.002	5.625 +0.003/0
U25-5.25	5-1/4	5-3/4	1/4	0.275 +0.01/0	5.250 +0/-0.002	5.251 +0.003/0	5.750 +0.003/0	5.250 +0/-0.003	5.749 +0/-0.002	5.750 +0.003/0
U25-5.25-37B	5-1/4	5-3/4	3/8	0.413 +0.01/0	5.250 +0/-0.002	5.251 +0.003/0	5.750 +0.003/0	5.250 +0/-0.003	5.749 +0/-0.002	5.750 +0.003/0
U25-5.25-56B	5-1/4	5-3/4	9/16	0.616 +0.01/0	5.250 +0/-0.002	5.251 +0.003/0	5.750 +0.003/0	5.250 +0/-0.003	5.749 +0/-0.002	5.750 +0.003/0
U25-5.37	5-3/8	5-7/8	1/4	0.275 +0.01/0	5.375 +0/-0.002	5.376 +0.003/0	5.875 +0.003/0	5.375 +0/-0.003	5.874 +0/-0.002	5.875 +0.003/0
U25-5.50	5-1/2	6	1/4	0.275 +0.01/0	5.500 +0/-0.002	5.501 +0.003/0	6.000 +0.003/0	5.500 +0/-0.003	5.999 +0/-0.002	6.000 +0.003/0
U25-5.50-37B	5-1/2	6	3/8	0.275 +0.01/0	5.500 +0/-0.002	5.501 +0.003/0	6.000 +0.003/0	5.500 +0/-0.003	5.999 +0/-0.002	6.000 +0.003/0
U25-5.50-50D	5-1/2	6	1/2	0.550 +0.01/0	5.500 +0/-0.002	5.501 +0.003/0	6.000 +0.003/0	5.500 +0/-0.003	5.999 +0/-0.002	6.000 +0.003/0
U25-5.50-56B	5-1/2	6	9/16	0.616 +0.01/0	5.500 +0/-0.002	5.501 +0.003/0	6.000 +0.003/0	5.500 +0/-0.003	5.999 +0/-0.002	6.000 +0.003/0
U25-5.50-56D	5-1/2	6	9/16	0.616 +0.01/0	5.500 +0/-0.002	5.501 +0.003/0	6.000 +0.003/0	5.500 +0/-0.003	5.999 +0/-0.002	6.000 +0.003/0
U25-5.50-62D	5-1/2	6	5/8	0.682 +0.01/0	5.500 +0/-0.002	5.501 +0.003/0	6.000 +0.003/0	5.500 +0/-0.003	5.999 +0/-0.002	6.000 +0.003/0
U25-5.50-SQB	5-1/2	6	1/4	0.275 +0.01/0	5.500 +0/-0.002	5.501 +0.003/0	6.000 +0.003/0	5.500 +0/-0.003	5.999 +0/-0.002	6.000 +0.003/0
U25-5.62	5-5/8	6-1/8	1/4	0.275 +0.01/0	5.625 +0/-0.002	5.626 +0.003/0	6.125 +0.003/0	5.625 +0/-0.003	6.124 +0/-0.002	6.125 +0.003/0
U25-5.75	5-3/4	6-1/4	1/4	0.275 +0.01/0	5.750 +0/-0.002	5.751 +0.003/0	6.250 +0.003/0	5.750 +0/-0.003	6.249 +0/-0.002	6.250 +0.003/0
U25-5.75-37B	5-3/4	6-1/4	3/8	0.413 +0.01/0	5.750 +0/-0.002	5.751 +0.003/0	6.250 +0.003/0	5.750 +0/-0.003	6.249 +0/-0.002	6.250 +0.003/0
U25-5.75-56B	5-3/4	6-1/4	9/16	0.616 +0.01/0	5.750 +0/-0.002	5.751 +0.003/0	6.250 +0.003/0	5.750 +0/-0.003	6.249 +0/-0.002	6.250 +0.003/0
U25-6.00	6	6-1/2	1/4	0.275 +0.01/0	6.000 +0/-0.002	6.001 +0.003/0	6.500 +0.003/0	6.000 +0/-0.003	6.499 +0/-0.002	6.500 +0.003/0
U25-6.00-37B	6	6-1/2	3/8	0.413 +0.01/0	6.000 +0/-0.002	6.001 +0.003/0	6.500 +0.003/0	6.000 +0/-0.003	6.499 +0/-0.002	6.500 +0.003/0
U25-6.00-56B	6	6-1/2	9/16	0.616 +0.01/0	6.000 +0/-0.002	6.001 +0.003/0	6.500 +0.003/0	6.000 +0/-0.003	6.499 +0/-0.002	6.500 +0.003/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/4" C/S										
U25-6.00-56D	6	6-1/2	9/16	0.616 +0.01/0	6.000 +0/-0.002	6.001 +0.003/0	6.500 +0.003/0	6.000 +0/-0.003	6.499 +0/-0.002	6.500 +0.003/0
U25-6.25	6-1/4	6-3/4	1/4	0.275 +0.01/0	6.250 +0/-0.002	6.251 +0.003/0	6.750 +0.003/0	6.250 +0/-0.003	6.749 +0/-0.002	6.750 +0.003/0
U25-6.25-37B	6-1/4	6-3/4	3/8	0.413 +0.01/0	6.250 +0/-0.002	6.251 +0.003/0	6.750 +0.003/0	6.250 +0/-0.003	6.749 +0/-0.002	6.750 +0.003/0
U25-6.50	6-1/2	7	1/4	0.275 +0.01/0	6.500 +0/-0.002	6.501 +0.003/0	7.000 +0.003/0	6.500 +0/-0.003	6.999 +0/-0.002	7.000 +0.003/0
U25-6.50-37D	6-1/2	7	3/8	0.413 +0.01/0	6.500 +0/-0.002	6.501 +0.003/0	7.000 +0.003/0	6.500 +0/-0.003	6.999 +0/-0.002	7.000 +0.003/0
U25-6.50-56B	6-1/2	7	9/16	0.616 +0.01/0	6.500 +0/-0.002	6.501 +0.003/0	7.000 +0.003/0	6.500 +0/-0.003	6.999 +0/-0.002	7.000 +0.003/0
U25-6.50-SQB	6-1/2	7	1/4	0.275 +0.01/0	6.500 +0/-0.002	6.501 +0.003/0	7.000 +0.003/0	6.500 +0/-0.003	6.999 +0/-0.002	7.000 +0.003/0
U25-6.75	6-3/4	7-1/4	1/4	0.275 +0.01/0	6.750 +0/-0.002	6.751 +0.003/0	7.250 +0.003/0	6.750 +0/-0.003	7.249 +0/-0.002	7.250 +0.003/0
U25-6.75-37B	6-3/4	7-1/4	3/8	0.413 +0.01/0	6.750 +0/-0.002	6.751 +0.003/0	7.250 +0.003/0	6.750 +0/-0.003	7.249 +0/-0.002	7.250 +0.003/0
U25-6.75-56B	6-3/4	7-1/4	9/16	0.616 +0.01/0	6.750 +0/-0.002	6.751 +0.003/0	7.250 +0.003/0	6.750 +0/-0.003	7.249 +0/-0.002	7.250 +0.003/0
U25-6.75-56D	6-3/4	7-1/4	9/16	0.616 +0.01/0	6.750 +0/-0.002	6.751 +0.003/0	7.250 +0.003/0	6.750 +0/-0.003	7.249 +0/-0.002	7.250 +0.003/0
U25-7.00	7	7-1/2	1/4	0.275 +0.01/0	7.000 +0/-0.002	7.001 +0.003/0	7.500 +0.003/0	7.000 +0/-0.003	7.499 +0/-0.002	7.500 +0.003/0
U25-7.00-37B	7	7-1/2	3/8	0.413 +0.01/0	7.000 +0/-0.002	7.001 +0.003/0	7.500 +0.003/0	7.000 +0/-0.003	7.499 +0/-0.002	7.500 +0.003/0
U25-7.00-56B	7	7-1/2	9/16	0.616 +0.01/0	7.000 +0/-0.002	7.001 +0.003/0	7.500 +0.003/0	7.000 +0/-0.003	7.499 +0/-0.002	7.500 +0.003/0
U25-7.25	7-1/4	7-3/4	1/4	0.275 +0.01/0	7.250 +0/-0.002	7.251 +0.003/0	7.750 +0.003/0	7.250 +0/-0.003	7.749 +0/-0.002	7.750 +0.003/0
U25-7.50	7-1/2	8	1/4	0.275 +0.01/0	7.500 +0/-0.002	7.501 +0.003/0	8.000 +0.003/0	7.500 +0/-0.003	7.999 +0/-0.002	8.000 +0.003/0
U25-7.50-56B	7-1/2	8	9/16	0.616 +0.01/0	7.500 +0/-0.002	7.501 +0.003/0	8.000 +0.003/0	7.500 +0/-0.003	7.999 +0/-0.002	8.000 +0.003/0
U25-7.50-SQB	7-1/2	8	1/4	0.275 +0.01/0	7.500 +0/-0.002	7.501 +0.003/0	8.000 +0.003/0	7.500 +0/-0.003	7.999 +0/-0.002	8.000 +0.003/0
U25-7.75	7-3/4	8-1/4	1/4	0.275 +0.01/0	7.750 +0/-0.002	7.751 +0.003/0	8.250 +0.003/0	7.750 +0/-0.003	8.249 +0/-0.002	8.250 +0.003/0
U25-8.00	8	8-1/2	1/4	0.275 +0.01/0	8.000 +0/-0.002	8.001 +0.003/0	8.500 +0.003/0	8.000 +0/-0.003	8.499 +0/-0.002	8.500 +0.003/0
U25-8.00-56B	8	8-1/2	9/16	0.619 +0.01/0	8.000 +0/-0.002	8.001 +0.003/0	8.500 +0.003/0	8.000 +0/-0.003	8.499 +0/-0.002	8.500 +0.003/0
U25-8.12-56B	8-1/8	8-5/8	9/16	0.619 +0.01/0	8.125 +0/-0.002	8.126 +0.003/0	8.625 +0.003/0	8.125 +0/-0.003	8.624 +0/-0.002	8.625 +0.003/0
U25-8.25-56B	8-1/4	8-3/4	9/16	0.619 +0.01/0	8.250 +0/-0.002	8.251 +0.003/0	8.750 +0.003/0	8.250 +0/-0.003	8.749 +0/-0.002	8.750 +0.003/0
U25-8.50	8-1/2	9	1/4	0.275 +0.01/0	8.500 +0/-0.002	8.501 +0.003/0	9.000 +0.003/0	8.500 +0/-0.003	8.999 +0/-0.002	9.000 +0.003/0
U25-8.50-56B	8-1/2	9	9/16	0.619 +0.01/0	8.500 +0/-0.002	8.501 +0.003/0	9.000 +0.003/0	8.500 +0/-0.003	8.999 +0/-0.002	9.000 +0.003/0
U25-9.00	9	9-1/2	1/4	0.275 +0.01/0	9.000 +0/-0.002	9.001 +0.003/0	9.500 +0.003/0	9.000 +0/-0.003	9.499 +0/-0.002	9.500 +0.003/0
U25-9.50	9-1/2	10	1/4	0.275 +0.01/0	9.500 +0/-0.002	9.501 +0.003/0	10.000 +0.003/0	9.500 +0/-0.003	9.999 +0/-0.002	10.000 +0.003/0
U25-9.50-56B	9-1/2	10	9/16	0.619 +0.01/0	9.500 +0/-0.002	9.501 +0.003/0	10.000 +0.003/0	9.500 +0/-0.003	9.999 +0/-0.002	10.000 +0.003/0
U25-9.75	9-3/4	10-1/4	1/4	0.275 +0.01/0	9.750 +0/-0.002	9.751 +0.003/0	10.250 +0.003/0	9.750 +0/-0.003	10.249 +0/-0.002	10.250 +0.003/0
U25-10.00	10	10-1/2	1/4	0.275 +0.01/0	10.000 +0/-0.002	10.001 +0.003/0	10.500 +0.003/0	10.000 +0/-0.003	10.499 +0/-0.002	10.500 +0.003/0
U25-10.00-56B	10	10-1/2	9/16	0.618 +0.01/0	10.000 +0/-0.002	10.001 +0.003/0	10.500 +0.003/0	10.000 +0/-0.003	10.499 +0/-0.002	10.500 +0.003/0
U25-10.25	10-1/4	10-3/4	1/4	0.275 +0.01/0	10.250 +0/-0.002	10.251 +0.003/0	10.750 +0.003/0	10.250 +0/-0.003	10.749 +0/-0.002	10.750 +0.003/0
9/32" C/S										
U28-1.00	1	1-9/16	9/32	0.309 +0.01/0	1.000 +0/-0.002	1.001 +0.003/0	1.562 +0.004/0	1.000 +0/-0.003	1.561 +0/-0.002	1.563 +0.003/0
U28-2.20-50B	2.200	2.770	1/2	0.550 +0.01/0	2.200 +0/-0.002	2.201 +0.003/0	2.770 +0.004/0	2.200 +0/-0.003	2.769 +0/-0.002	2.770 +0.003/0
U28-3.18-50B	3-3/16	3-3/4	1/2	0.550 +0.01/0	3.188 +0/-0.002	3.189 +0.003/0	3.750 +0.004/0	3.188 +0/-0.003	3.749 +0/-0.002	3.750 +0.003/0
U28-3.20-50B	3.200	3.770	1/2	0.550 +0.01/0	3.200 +0/-0.002	3.201 +0.003/0	3.770 +0.004/0	3.200 +0/-0.003	3.769 +0/-0.002	3.770 +0.003/0
U28-5.43	5-7/16	6	9/32	0.309 +0.01/0	5.438 +0/-0.002	5.439 +0.003/0	6.000 +0.004/0	5.438 +0/-0.003	5.999 +0/-0.002	6.000 +0.003/0
U28-5.43-56B	5-7/16	6	9/16	0.619 +0.01/0	5.438 +0/-0.002	5.439 +0.003/0	6.000 +0.004/0	5.438 +0/-0.003	5.999 +0/-0.002	6.000 +0.003/0
5/16" C/S										
U31-0.25	1/4	7/8	5/16	0.344 +0.01/0	0.250 +0/-0.002	0.252 +0.003/0	0.875 +0.004/0	0.250 +0/-0.004	0.873 +0/-0.002	0.875 +0.003/0
U31-0.37	3/8	1	5/16	0.344 +0.01/0	0.375 +0/-0.002	0.377 +0.003/0	1.000 +0.004/0	0.375 +0/-0.004	0.998 +0/-0.002	1.000 +0.003/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
5/16" C/S										
U31-0.43	7/16	1-1/16	5/16	0.344 +0.01/0	0.438 +0/-0.002	0.440 +0.003/0	1.062 +0.004/0	0.438 +0/-0.004	1.060 +0/-0.002	1.062 +0.003/0
U31-0.50	1/2	1-1/8	5/16	0.344 +0.01/0	0.500 +0/-0.002	0.502 +0.003/0	1.125 +0.004/0	0.500 +0/-0.004	1.123 +0/-0.002	1.125 +0.003/0
U31-0.62	5/8	1-1/4	5/16	0.344 +0.01/0	0.625 +0/-0.002	0.627 +0.003/0	1.250 +0.004/0	0.625 +0/-0.004	1.248 +0/-0.002	1.250 +0.003/0
U31-0.75	3/4	1-3/8	5/16	0.344 +0.01/0	0.750 +0/-0.002	0.752 +0.003/0	1.375 +0.004/0	0.750 +0/-0.004	1.373 +0/-0.002	1.375 +0.003/0
U31-0.75-50B	3/4	1-3/8	1/2	0.550 +0.01/0	0.750 +0/-0.002	0.752 +0.003/0	1.375 +0.004/0	0.750 +0/-0.004	1.373 +0/-0.002	1.375 +0.003/0
U31-0.87	7/8	1-1/2	5/16	0.344 +0.01/0	0.875 +0/-0.002	0.877 +0.003/0	1.500 +0.004/0	0.875 +0/-0.004	1.498 +0/-0.002	1.500 +0.003/0
U31-1.00	1	1-5/8	5/16	0.344 +0.01/0	1.000 +0/-0.002	1.002 +0.003/0	1.625 +0.004/0	1.000 +0/-0.004	1.623 +0/-0.002	1.625 +0.003/0
U31-1.00-37B	1	1-5/8	3/8	0.413 +0.01/0	1.000 +0/-0.002	1.002 +0.003/0	1.625 +0.004/0	1.000 +0/-0.004	1.623 +0/-0.002	1.625 +0.003/0
U31-1.00-50B	1	1-5/8	1/2	0.550 +0.01/0	1.000 +0/-0.002	1.002 +0.003/0	1.625 +0.004/0	1.000 +0/-0.004	1.623 +0/-0.002	1.625 +0.003/0
U31-1.12-37B	1-1/8	1-3/4	3/8	0.413 +0.01/0	1.125 +0/-0.002	1.127 +0.003/0	1.750 +0.004/0	1.125 +0/-0.004	1.748 +0/-0.002	1.750 +0.003/0
U31-1.12-SQB	1-1/8	1-3/4	5/16	0.344 +0.01/0	1.125 +0/-0.002	1.127 +0.003/0	1.750 +0.004/0	1.125 +0/-0.004	1.748 +0/-0.002	1.750 +0.003/0
U31-1.18	1-3/16	1-13/16	5/16	0.344 +0.01/0	1.188 +0/-0.002	1.190 +0.003/0	1.812 +0.004/0	1.188 +0/-0.004	1.810 +0/-0.002	1.812 +0.003/0
U31-1.25	1-1/4	1-7/8	5/16	0.344 +0.01/0	1.250 +0/-0.002	1.252 +0.003/0	1.875 +0.004/0	1.250 +0/-0.004	1.873 +0/-0.002	1.875 +0.003/0
U31-1.25-37B	1-1/4	1-7/8	3/8	0.413 +0.01/0	1.250 +0/-0.002	1.252 +0.003/0	1.875 +0.004/0	1.250 +0/-0.004	1.873 +0/-0.002	1.875 +0.003/0
U31-1.25-50B	1-1-4	1-7/8	1/2	0.550 +0.01/0	1.250 +0/-0.002	1.252 +0.003/0	1.875 +0.004/0	1.250 +0/-0.004	1.873 +0/-0.002	1.875 +0.003/0
U31-1.25-50D	1-1/4	1-7/8	1/2	0.550 +0.01/0	1.250 +0/-0.002	1.252 +0.003/0	1.875 +0.004/0	1.250 +0/-0.004	1.873 +0/-0.002	1.875 +0.003/0
U31-1.25-SQB	1-1/4	1-7/8	5/16	0.344 +0.01/0	1.250 +0/-0.002	1.252 +0.003/0	1.875 +0.004/0	1.250 +0/-0.004	1.873 +0/-0.002	1.875 +0.003/0
U31-1.37	1-3/8	2	5/16	0.344 +0.01/0	1.375 +0/-0.002	1.377 +0.003/0	2.000 +0.004/0	1.375 +0/-0.004	1.998 +0/-0.002	2.000 +0.003/0
U31-1.37-37B	1-3/8	2	3/8	0.413 +0.01/0	1.375 +0/-0.002	1.377 +0.003/0	2.000 +0.004/0	1.375 +0/-0.004	1.998 +0/-0.002	2.000 +0.003/0
U31-1.37-50B	1-3/8	2	1/2	0.550 +0.01/0	1.375 +0/-0.002	1.377 +0.003/0	2.000 +0.004/0	1.375 +0/-0.004	1.998 +0/-0.002	2.000 +0.003/0
U31-1.37-50D	1-3/8	2	1/2	0.550 +0.01/0	1.375 +0/-0.002	1.377 +0.003/0	2.000 +0.004/0	1.375 +0/-0.004	1.998 +0/-0.002	2.000 +0.003/0
U31-1.37-SQB	1-3/8	2	5/16	0.344 +0.01/0	1.375 +0/-0.002	1.377 +0.003/0	2.000 +0.004/0	1.375 +0/-0.004	1.998 +0/-0.002	2.000 +0.003/0
U31-1.50	1-1/2	2-1/8	5/16	0.344 +0.01/0	1.500 +0/-0.002	1.502 +0.003/0	2.125 +0.004/0	1.500 +0/-0.004	2.123 +0/-0.002	2.125 +0.003/0
U31-1.50-37B	1-1/2	2-1/8	3/8	0.413 +0.01/0	1.500 +0/-0.002	1.502 +0.003/0	2.125 +0.004/0	1.500 +0/-0.004	2.123 +0/-0.002	2.125 +0.003/0
U31-1.50-43B	1-1/2	2-1/8	7/16	0.481 +0.01/0	1.500 +0/-0.002	1.502 +0.003/0	2.125 +0.004/0	1.500 +0/-0.004	2.123 +0/-0.002	2.125 +0.003/0
U31-1.50-50B	1-1/2	2-1/8	1/2	0.550 +0.01/0	1.500 +0/-0.002	1.502 +0.003/0	2.125 +0.004/0	1.500 +0/-0.004	2.123 +0/-0.002	2.125 +0.003/0
U31-1.50-50D	1-1/2	2-1/8	1/2	0.550 +0.01/0	1.500 +0/-0.002	1.502 +0.003/0	2.125 +0.004/0	1.500 +0/-0.004	2.123 +0/-0.002	2.125 +0.003/0
U31-1.62	1-5/8	2-1/4	5/16	0.344 +0.01/0	1.625 +0/-0.002	1.627 +0.003/0	2.250 +0.004/0	1.625 +0/-0.004	2.248 +0/-0.002	2.250 +0.003/0
U31-1.62-37B	1-5/8	2-1/4	3/8	0.413 +0.01/0	1.625 +0/-0.002	1.627 +0.003/0	2.250 +0.004/0	1.625 +0/-0.004	2.248 +0/-0.002	2.250 +0.003/0
U31-1.62-50B	1-5/8	2-1/4	1/2	0.550 +0.01/0	1.625 +0/-0.002	1.627 +0.003/0	2.250 +0.004/0	1.625 +0/-0.004	2.248 +0/-0.002	2.250 +0.003/0
U31-1.68	1-11/16	2-5/16	5/16	0.344 +0.01/0	1.688 +0/-0.002	1.690 +0.003/0	2.312 +0.004/0	1.688 +0/-0.004	2.310 +0/-0.002	2.312 +0.003/0
U31-1.75	1-3/4	2-3/8	5/16	0.344 +0.01/0	1.750 +0/-0.002	1.752 +0.003/0	2.375 +0.004/0	1.750 +0/-0.004	2.373 +0/-0.002	2.375 +0.003/0
U31-1.75-37B	1-3/4	2-3/8	3/8	0.413 +0.01/0	1.750 +0/-0.002	1.752 +0.003/0	2.375 +0.004/0	1.750 +0/-0.004	2.373 +0/-0.002	2.375 +0.003/0
U31-1.75-50B	1-3/4	2-3/8	1/2	0.550 +0.01/0	1.750 +0/-0.002	1.752 +0.003/0	2.375 +0.004/0	1.750 +0/-0.004	2.373 +0/-0.002	2.375 +0.003/0
U31-1.75-50D	1-3/4	2-3/8	1/2	0.550 +0.01/0	1.750 +0/-0.002	1.752 +0.003/0	2.375 +0.004/0	1.750 +0/-0.004	2.373 +0/-0.002	2.375 +0.003/0
U31-1.87	1-7/8	2-1/2	5/16	0.344 +0.01/0	1.875 +0/-0.002	1.877 +0.003/0	2.500 +0.004/0	1.875 +0/-0.004	2.498 +0/-0.002	2.500 +0.003/0
U31-1.87-37B	1-7/8	2-1/2	3/8	0.413 +0.01/0	1.875 +0/-0.002	1.877 +0.003/0	2.500 +0.004/0	1.875 +0/-0.004	2.498 +0/-0.002	2.500 +0.003/0
U31-1.87-50B	1-7/8	2-1/2	1/2	0.550 +0.01/0	1.875 +0/-0.002	1.877 +0.003/0	2.500 +0.004/0	1.875 +0/-0.004	2.498 +0/-0.002	2.500 +0.003/0
U31-1.87-50D	1-7/8	2-1/2	1/2	0.550 +0.01/0	1.875 +0/-0.002	1.877 +0.003/0	2.500 +0.004/0	1.875 +0/-0.004	2.498 +0/-0.002	2.500 +0.003/0
U31-1.93	1-15/16	2-9/16	5/16	0.344 +0.01/0	1.938 +0/-0.002	1.940 +0.003/0	2.562 +0.004/0	1.938 +0/-0.004	2.560 +0/-0.002	2.562 +0.003/0
U31-2.00	2	2-5/8	5/16	0.344 +0.01/0	2.000 +0/-0.002	2.002 +0.003/0	2.625 +0.004/0	2.000 +0/-0.004	2.623 +0/-0.002	2.625 +0.003/0
U31-2.00-37B	2	2-5/8	3/8	0.413 +0.01/0	2.000 +0/-0.002	2.002 +0.003/0	2.625 +0.004/0	2.000 +0/-0.004	2.623 +0/-0.002	2.625 +0.003/0
U31-2.00-50B	2	2-5/8	1/2	0.550 +0.01/0	2.000 +0/-0.002	2.002 +0.003/0	2.625 +0.004/0	2.000 +0/-0.004	2.623 +0/-0.002	2.625 +0.003/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
5/16" C/S										
U31-2.12-50B	2-1/8	2-3/4	1/2	0.550 +0.01/0	2.125 +0/-0.002	2.127 +0.003/0	2.750 +0.004/0	2.125 +0/-0.004	2.748 +0/-0.002	2.750 +0.003/0
U31-2.12-SQB	2-1/8	2-3/4	5/16	0.344 +0.01/0	2.125 +0/-0.002	2.127 +0.003/0	2.750 +0.004/0	2.125 +0/-0.004	2.748 +0/-0.002	2.750 +0.003/0
U31-2.25	2-1/4	2-7/8	5/16	0.344 +0.01/0	2.250 +0/-0.002	2.252 +0.003/0	2.875 +0.004/0	2.250 +0/-0.004	2.873 +0/-0.002	2.875 +0.003/0
U31-2.25-50B	2-1/4	2-7/8	1/2	0.550 +0.01/0	2.250 +0/-0.002	2.252 +0.003/0	2.875 +0.004/0	2.250 +0/-0.004	2.873 +0/-0.002	2.875 +0.003/0
U31-2.37	2-3/8	3	5/16	0.344 +0.01/0	2.375 +0/-0.002	2.377 +0.003/0	3.000 +0.004/0	2.375 +0/-0.004	2.998 +0/-0.002	3.000 +0.003/0
U31-2.37-50B	2-3/8	3	1/2	0.550 +0.01/0	2.375 +0/-0.002	2.377 +0.003/0	3.000 +0.004/0	2.375 +0/-0.004	2.998 +0/-0.002	3.000 +0.003/0
U31-2.37-50D	2-3/8	3	1/2	0.550 +0.01/0	2.375 +0/-0.002	2.377 +0.003/0	3.000 +0.004/0	2.375 +0/-0.004	2.998 +0/-0.002	3.000 +0.003/0
U31-2.50	2-1/2	3-1/8	5/16	0.344 +0.01/0	2.500 +0/-0.002	2.502 +0.003/0	3.125 +0.004/0	2.500 +0/-0.004	3.123 +0/-0.002	3.125 +0.003/0
U31-2.50-50B	2-1/2	3-1/8	1/2	0.550 +0.01/0	2.500 +0/-0.002	2.502 +0.003/0	3.125 +0.004/0	2.500 +0/-0.004	3.123 +0/-0.002	3.125 +0.003/0
U31-2.50-50D	2-1/2	3-1/8	1/2	0.550 +0.01/0	2.500 +0/-0.002	2.502 +0.003/0	3.125 +0.004/0	2.500 +0/-0.004	3.123 +0/-0.002	3.125 +0.003/0
U31-2.56	2-9/16	3-3/16	5/16	0.344 +0.01/0	2.563 +0/-0.002	2.565 +0.003/0	3.188 +0.004/0	2.563 +0/-0.004	3.186 +0/-0.002	3.188 +0.003/0
U31-2.62	2-5/8	3-1/4	5/16	0.344 +0.01/0	2.625 +0/-0.002	2.627 +0.003/0	3.250 +0.004/0	2.625 +0/-0.004	3.248 +0/-0.002	3.250 +0.003/0
U31-2.62-50B	2-5/8	3-1/4	1/2	0.550 +0.01/0	2.625 +0/-0.002	2.627 +0.003/0	3.250 +0.004/0	2.625 +0/-0.004	3.248 +0/-0.002	3.250 +0.003/0
U31-2.75	2-3/4	3-3/8	5/16	0.344 +0.01/0	2.750 +0/-0.002	2.752 +0.003/0	3.375 +0.004/0	2.750 +0/-0.004	3.373 +0/-0.002	3.375 +0.003/0
U31-2.75-50B	2-3/4	3-3/8	1/2	0.344 +0.01/0	2.750 +0/-0.002	2.752 +0.003/0	3.375 +0.004/0	2.750 +0/-0.004	3.373 +0/-0.002	3.375 +0.003/0
U31-2.87	2-7/8	3-1/2	5/16	0.344 +0.01/0	2.875 +0/-0.002	2.877 +0.003/0	3.500 +0.004/0	2.875 +0/-0.004	3.498 +0/-0.002	3.500 +0.003/0
U31-2.87-50B	2-7/8	3-1/2	1/2	0.550 +0.01/0	2.875 +0/-0.002	2.877 +0.003/0	3.500 +0.004/0	2.875 +0/-0.004	3.498 +0/-0.002	3.500 +0.003/0
U31-3.00	3	3-5/8	5/16	0.344 +0.01/0	3.000 +0/-0.002	3.002 +0.003/0	3.625 +0.004/0	3.000 +0/-0.004	3.623 +0/-0.002	3.625 +0.003/0
U31-3.00-37B	3	3-5/8	3/8	0.413 +0.01/0	3.000 +0/-0.002	3.002 +0.003/0	3.625 +0.004/0	3.000 +0/-0.004	3.623 +0/-0.002	3.625 +0.003/0
U31-3.00-50B	3	3-5/8	1/2	0.550 +0.01/0	3.000 +0/-0.002	3.002 +0.003/0	3.625 +0.004/0	3.000 +0/-0.004	3.623 +0/-0.002	3.625 +0.003/0
U31-3.12-SQB	3-1/8	3-3/4	5/16	0.344 +0.01/0	3.125 +0/-0.002	3.127 +0.003/0	3.750 +0.004/0	3.125 +0/-0.004	3.748 +0/-0.002	3.750 +0.003/0
U31-3.25	3-1/4	3-7/8	5/16	0.344 +0.01/0	3.250 +0/-0.002	3.252 +0.003/0	3.875 +0.004/0	3.250 +0/-0.004	3.873 +0/-0.002	3.875 +0.003/0
U31-3.25-50B	3-1/4	3-7/8	1/2	0.550 +0.01/0	3.250 +0/-0.002	3.252 +0.003/0	3.875 +0.004/0	3.250 +0/-0.004	3.873 +0/-0.002	3.875 +0.003/0
U31-3.37	3-3/8	4	5/16	0.344 +0.01/0	3.375 +0/-0.002	3.377 +0.003/0	4.000 +0.004/0	3.375 +0/-0.004	3.998 +0/-0.002	4.000 +0.003/0
U31-3.37-50B	3-3/8	4	1/2	0.550 +0.01/0	3.375 +0/-0.002	3.377 +0.003/0	4.000 +0.004/0	3.375 +0/-0.004	3.998 +0/-0.002	4.000 +0.003/0
U31-3.37-62B	3-3/8	4	5/8	0.682 +0.01/0	3.375 +0/-0.002	3.377 +0.003/0	4.000 +0.004/0	3.375 +0/-0.004	3.998 +0/-0.002	4.000 +0.003/0
U31-3.50	3-1/2	4-1/8	5/16	0.344 +0.01/0	3.500 +0/-0.002	3.502 +0.003/0	4.125 +0.004/0	3.500 +0/-0.004	4.123 +0/-0.002	4.125 +0.003/0
U31-3.50-50B	3-1/2	4-1/8	1/2	0.550 +0.01/0	3.500 +0/-0.002	3.502 +0.003/0	4.125 +0.004/0	3.500 +0/-0.004	4.123 +0/-0.002	4.125 +0.003/0
U31-3.50-50D	3-1/2	4-1/8	1/2	0.550 +0.01/0	3.500 +0/-0.002	3.502 +0.003/0	4.125 +0.004/0	3.500 +0/-0.004	4.123 +0/-0.002	4.125 +0.003/0
U31-3.62	3-5/8	4-1/4	5/16	0.344 +0.01/0	3.625 +0/-0.002	3.627 +0.003/0	4.250 +0.004/0	3.625 +0/-0.004	4.248 +0/-0.002	4.250 +0.003/0
U31-3.62-50B	3-5/8	4-1/4	1/2	0.550 +0.01/0	3.625 +0/-0.002	3.627 +0.003/0	4.250 +0.004/0	3.625 +0/-0.004	4.248 +0/-0.002	4.250 +0.003/0
U31-3.75	3-3/4	4-3/8	5/16	0.344 +0.01/0	3.750 +0/-0.002	3.752 +0.003/0	4.375 +0.004/0	3.750 +0/-0.004	4.373 +0/-0.002	4.375 +0.003/0
U31-3.75-37B	3-3/4	4-3/8	3/8	0.413 +0.01/0	3.750 +0/-0.002	3.752 +0.003/0	4.375 +0.004/0	3.750 +0/-0.004	4.373 +0/-0.002	4.375 +0.003/0
U31-3.75-50B	3-3/4	4-3/8	1/2	0.550 +0.01/0	3.750 +0/-0.002	3.752 +0.003/0	4.375 +0.004/0	3.750 +0/-0.004	4.373 +0/-0.002	4.375 +0.003/0
U31-3.75-62B	3-3/4	4-3/8	5/8	0.682 +0.01/0	3.750 +0/-0.002	3.752 +0.003/0	4.375 +0.004/0	3.750 +0/-0.004	4.373 +0/-0.002	4.375 +0.003/0
U31-3.87	3-7/8	4-1/2	5/16	0.344 +0.01/0	3.875 +0/-0.002	3.877 +0.003/0	4.500 +0.004/0	3.875 +0/-0.004	4.498 +0/-0.002	4.500 +0.003/0
U31-3.87-50B	3-7/8	4-1/2	1/2	0.550 +0.01/0	3.875 +0/-0.002	3.877 +0.003/0	4.500 +0.004/0	3.875 +0/-0.004	4.498 +0/-0.002	4.500 +0.003/0
U31-4.00	4	4-5/8	5/16	0.344 +0.01/0	4.000 +0/-0.002	4.002 +0.003/0	4.625 +0.004/0	4.000 +0/-0.004	4.623 +0/-0.002	4.625 +0.003/0
U31-4.00-56B	4	4-5/8	9/16	0.616 +0.01/0	4.000 +0/-0.002	4.002 +0.003/0	4.625 +0.004/0	4.000 +0/-0.004	4.623 +0/-0.002	4.625 +0.003/0
U31-4.12	4-1/8	4-3/4	5/16	0.344 +0.01/0	4.125 +0/-0.002	4.127 +0.003/0	4.750 +0.004/0	4.125 +0/-0.004	4.748 +0/-0.002	4.750 +0.003/0
U31-4.12-56B	4-1/8	4-3/4	9/16	0.616 +0.01/0	4.125 +0/-0.002	4.127 +0.003/0	4.750 +0.004/0	4.125 +0/-0.004	4.748 +0/-0.002	4.750 +0.003/0
U31-4.25	4-1/4	4-7/8	5/16	0.344 +0.01/0	4.250 +0/-0.002	4.252 +0.003/0	4.875 +0.004/0	4.250 +0/-0.004	4.873 +0/-0.002	4.875 +0.003/0
U31-4.25-56B	4-1/4	4-7/8	9/16	0.616 +0.01/0	4.250 +0/-0.002	4.252 +0.003/0	4.875 +0.004/0	4.250 +0/-0.004	4.873 +0/-0.002	4.875 +0.003/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
5/16" C/S										
U31-4.37	4-3/8	5	5/16	0.344 +0.01/0	4.375 +0/-0.002	4.377 +0.003/0	5.000 +0.004/0	4.375 +0/-0.004	4.998 +0/-0.002	5.000 +0.003/0
U31-4.37-50B	4-3/8	5	1/2	0.550 +0.01/0	4.375 +0/-0.002	4.377 +0.003/0	5.000 +0.004/0	4.375 +0/-0.004	4.998 +0/-0.002	5.000 +0.003/0
U31-4.37-56B	4-3/8	5	9/16	0.616 +0.01/0	4.375 +0/-0.002	4.377 +0.003/0	5.000 +0.004/0	4.375 +0/-0.004	4.998 +0/-0.002	5.000 +0.003/0
U31-4.50	4-1/2	5-1/8	5/16	0.344 +0.01/0	4.500 +0/-0.002	4.502 +0.003/0	5.125 +0.004/0	4.500 +0/-0.004	5.123 +0/-0.002	5.125 +0.003/0
U31-4.50-50B	4-1/2	5-1/8	1/2	0.550 +0.01/0	4.500 +0/-0.002	4.502 +0.003/0	5.125 +0.004/0	4.500 +0/-0.004	5.123 +0/-0.002	5.125 +0.003/0
U31-4.50-62B	4-1/2	5-1/8	5/8	0.682 +0.01/0	4.500 +0/-0.002	4.502 +0.003/0	5.125 +0.004/0	4.500 +0/-0.004	5.123 +0/-0.002	5.125 +0.003/0
U31-4.62-62B	4-5/8	5-1/4	5/8	0.682 +0.01/0	4.625 +0/-0.002	4.627 +0.003/0	5.250 +0.004/0	4.625 +0/-0.004	5.248 +0/-0.002	5.250 +0.003/0
U31-4.75	4-3/4	5-3/8	5/16	0.344 +0.01/0	4.750 +0/-0.002	4.752 +0.003/0	5.375 +0.004/0	4.750 +0/-0.004	5.373 +0/-0.002	5.375 +0.003/0
U31-4.75-62B	4-3/4	5-3/8	5/8	0.682 +0.01/0	4.750 +0/-0.002	4.752 +0.003/0	5.375 +0.004/0	4.750 +0/-0.004	5.373 +0/-0.002	5.375 +0.003/0
U31-4.87	4-7/8	5-1/2	5/16	0.344 +0.01/0	4.875 +0/-0.002	4.877 +0.003/0	5.500 +0.004/0	4.875 +0/-0.004	5.498 +0/-0.002	5.500 +0.003/0
U31-5.00	5	5-5/8	5/16	0.344 +0.01/0	5.000 +0/-0.002	5.002 +0.003/0	5.625 +0.004/0	5.000 +0/-0.004	5.623 +0/-0.002	5.625 +0.003/0
U31-5.00-62B	5	5-5/8	5/8	0.682 +0.01/0	5.000 +0/-0.002	5.002 +0.003/0	5.625 +0.004/0	5.000 +0/-0.004	5.623 +0/-0.002	5.625 +0.003/0
U31-5.00-62D	5	5-5/8	5/8	0.682 +0.01/0	5.000 +0/-0.002	5.002 +0.003/0	5.625 +0.004/0	5.000 +0/-0.004	5.623 +0/-0.002	5.625 +0.003/0
U31-5.12	5-1/8	5-3/4	5/16	0.344 +0.01/0	5.125 +0/-0.002	5.127 +0.003/0	5.750 +0.004/0	5.125 +0/-0.004	5.748 +0/-0.002	5.750 +0.003/0
U31-5.25	5-1/4	5-7/8	5/16	0.344 +0.01/0	5.250 +0/-0.002	5.252 +0.003/0	5.875 +0.004/0	5.250 +0/-0.004	5.873 +0/-0.002	5.875 +0.003/0
U31-5.25-62B	5-1/4	5-7/8	5/8	0.688 +0.01/0	5.250 +0/-0.002	5.252 +0.003/0	5.875 +0.004/0	5.250 +0/-0.004	5.873 +0/-0.002	5.875 +0.003/0
U31-5.37	5-3/8	6	5/16	0.344 +0.01/0	5.375 +0/-0.002	5.377 +0.003/0	6.000 +0.004/0	5.375 +0/-0.004	5.998 +0/-0.002	6.000 +0.003/0
U31-5.37-62B	5-3/8	6	5/8	0.688 +0.01/0	5.375 +0/-0.002	5.377 +0.003/0	6.000 +0.004/0	5.375 +0/-0.004	5.998 +0/-0.002	6.000 +0.003/0
U31-5.37-SQB	5-3/8	6	5/16	0.344 +0.01/0	5.375 +0/-0.002	5.377 +0.003/0	6.000 +0.004/0	5.375 +0/-0.004	5.998 +0/-0.002	6.000 +0.003/0
U31-5.50-62B	5-1/2	6-1/8	5/8	0.688 +0.01/0	5.500 +0/-0.002	5.502 +0.003/0	6.125 +0.004/0	5.500 +0/-0.004	6.123 +0/-0.002	6.125 +0.003/0
U31-5.50-SQB	5-1/2	6-1/8	5/16	0.344 +0.01/0	5.500 +0/-0.002	5.502 +0.003/0	6.125 +0.004/0	5.500 +0/-0.004	6.123 +0/-0.002	6.125 +0.003/0
U31-5.62	5-5/8	6-1/4	5/16	0.344 +0.01/0	5.625 +0/-0.002	5.627 +0.003/0	6.250 +0.004/0	5.625 +0/-0.004	6.248 +0/-0.002	6.250 +0.003/0
U31-5.75-62B	5-3/4	6-3/8	5/8	0.688 +0.01/0	5.750 +0/-0.002	5.752 +0.003/0	6.375 +0.004/0	5.750 +0/-0.004	6.373 +0/-0.002	6.375 +0.003/0
U31-5.87	5-7/8	6-1/2	5/16	0.344 +0.01/0	5.875 +0/-0.002	5.877 +0.003/0	6.500 +0.004/0	5.875 +0/-0.004	6.498 +0/-0.002	6.500 +0.003/0
U31-6.00	6	6-5/8	5/16	0.344 +0.01/0	6.000 +0/-0.002	6.002 +0.003/0	6.625 +0.004/0	6.000 +0/-0.004	6.623 +0/-0.002	6.625 +0.003/0
U31-6.00-62B	6	6-5/8	5/8	0.688 +0.01/0	6.000 +0/-0.002	6.002 +0.003/0	6.625 +0.004/0	6.000 +0/-0.004	6.623 +0/-0.002	6.625 +0.003/0
U31-6.12	6-1/8	6-3/4	5/16	0.344 +0.01/0	6.125 +0/-0.002	6.127 +0.003/0	6.750 +0.004/0	6.125 +0/-0.004	6.748 +0/-0.002	6.750 +0.003/0
U31-6.25	6-1/4	6-7/8	5/16	0.344 +0.01/0	6.250 +0/-0.002	6.252 +0.003/0	6.875 +0.004/0	6.250 +0/-0.004	6.873 +0/-0.002	6.875 +0.003/0
U31-6.37	6-3/8	7	5/16	0.344 +0.01/0	6.375 +0/-0.002	6.377 +0.003/0	7.000 +0.004/0	6.375 +0/-0.004	6.998 +0/-0.002	7.000 +0.003/0
U31-6.37-62D	6-3/8	7	5/8	0.688 +0.01/0	6.375 +0/-0.002	6.377 +0.003/0	7.000 +0.004/0	6.375 +0/-0.004	6.998 +0/-0.002	7.000 +0.003/0
U31-6.37N	6-3/8	7	5/16	0.344 +0.01/0	6.375 +0/-0.002	6.377 +0.003/0	7.000 +0.004/0	6.375 +0/-0.004	6.998 +0/-0.002	7.000 +0.003/0
U31-6.50	6-1/2	7-1/8	5/16	0.344 +0.01/0	6.500 +0/-0.002	6.502 +0.003/0	7.125 +0.004/0	6.500 +0/-0.004	7.123 +0/-0.002	7.125 +0.003/0
U31-6.50-62B	6-1/2	7-1/8	5/8	0.688 +0.01/0	6.500 +0/-0.002	6.502 +0.003/0	7.125 +0.004/0	6.500 +0/-0.004	7.123 +0/-0.002	7.125 +0.003/0
U31-6.62	6-5/8	7-1/4	5/16	0.344 +0.01/0	6.625 +0/-0.002	6.627 +0.003/0	7.250 +0.004/0	6.625 +0/-0.004	7.248 +0/-0.002	7.250 +0.003/0
U31-7.00-62B	7	7-5/8	5/8	0.688 +0.01/0	7.000 +0/-0.002	7.002 +0.003/0	7.625 +0.004/0	7.000 +0/-0.004	7.623 +0/-0.002	7.625 +0.003/0
U31-7.37	7-3/8	8	5/16	0.344 +0.01/0	7.375 +0/-0.002	7.377 +0.003/0	8.000 +0.004/0	7.375 +0/-0.004	7.998 +0/-0.002	8.000 +0.003/0
U31-7.37N	7-3/8	8	5/16	0.344 +0.01/0	7.375 +0/-0.002	7.377 +0.003/0	8.000 +0.004/0	7.375 +0/-0.004	7.998 +0/-0.002	8.000 +0.003/0
U31-8.00-62B	8	8-5/8	5/8	0.688 +0.01/0	8.000 +0/-0.002	8.002 +0.003/0	8.625 +0.004/0	8.000 +0/-0.004	8.623 +0/-0.002	8.625 +0.003/0
11/32" C/S										
U34-9.31	9-5/16	10	11/32	0.377 +0.01/0	9.312 +0/-0.002	9.314 +0.003/0	10.000 +0.009/0	9.312 +0/-0.004	9.998 +0/-0.002	10.000 +0.003/0
3/8" C/S										
U37-0.50	1/2	1-1/4	3/8	0.413 +0.01/0	0.500 +0/-0.002	0.502 +0.004/0	1.250 +0.005/0	0.500 +0/-0.005	1.248 +0/-0.002	1.250 +0.004/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
3/8" C/S										
U37-0.75	3/4	1-1/2	3/8	0.413 +0.01/0	0.875 +0/-0.002	0.877 +0.004/0	1.500 +0.005/0	0.875 +0/-0.005	1.498 +0/-0.002	1.500 +0.004/0
U37-0.81	13/16	1-9/16	3/8	0.413 +0.01/0	0.812 +0/-0.002	0.814 +0.004/0	1.562 +0.005/0	0.812 +0/-0.005	1.560 +0/-0.002	1.562 +0.004/0
U37-0.81-SQB	13/16	1-9/16	3/8	0.413 +0.01/0	0.812 +0/-0.002	0.814 +0.004/0	1.562 +0.005/0	0.812 +0/-0.005	1.560 +0/-0.002	1.562 +0.004/0
U37-0.87	7/8	1-5/8	3/8	0.413 +0.01/0	0.875 +0/-0.002	0.877 +0.004/0	1.625 +0.005/0	0.875 +0/-0.005	1.623 +0/-0.002	1.625 +0.004/0
U37-0.93	15/16	1-11/16	3/8	0.413 +0.01/0	0.937 +0/-0.002	0.939 +0.004/0	1.687 +0.005/0	0.937 +0/-0.005	1.685 +0/-0.002	1.687 +0.004/0
U37-1.00	1	1-3/4	3/8	0.413 +0.01/0	1.000 +0/-0.002	1.002 +0.004/0	1.750 +0.005/0	1.000 +0/-0.005	1.748 +0/-0.002	1.750 +0.004/0
U37-1.00-62D	1	1-3/4	5/8	0.688 +0.01/0	1.000 +0/-0.002	1.002 +0.004/0	1.750 +0.005/0	1.000 +0/-0.005	1.748 +0/-0.002	1.750 +0.004/0
U37-1.12	1-1/8	1-7/8	3/8	0.413 +0.01/0	1.125 +0/-0.002	1.127 +0.004/0	1.875 +0.005/0	1.125 +0/-0.005	1.873 +0/-0.002	1.875 +0.004/0
U37-1.25	1-1/4	2	3/8	0.413 +0.01/0	1.250 +0/-0.002	1.252 +0.004/0	2.000 +0.005/0	1.250 +0/-0.005	1.998 +0/-0.002	2.000 +0.004/0
U37-1.25-62D	1-1/4	2	5/8	0.688 +0.01/0	1.250 +0/-0.002	1.252 +0.004/0	2.000 +0.005/0	1.250 +0/-0.005	1.998 +0/-0.002	2.000 +0.004/0
U37-1.25-SQB	1-1/4	2	3/8	0.413 +0.01/0	1.250 +0/-0.002	1.252 +0.004/0	2.000 +0.005/0	1.250 +0/-0.005	1.998 +0/-0.002	2.000 +0.004/0
U37-1.37	1-3/8	2-1/8	3/8	0.413 +0.01/0	1.375 +0/-0.002	1.377 +0.004/0	2.125 +0.005/0	1.375 +0/-0.005	2.123 +0/-0.002	2.125 +0.004/0
U37-1.50	1-1/2	2-1/4	3/8	0.413 +0.01/0	1.500 +0/-0.002	1.502 +0.004/0	2.250 +0.005/0	1.500 +0/-0.005	2.248 +0/-0.002	2.250 +0.004/0
U37-1.50-50B	1-1/2	2-1/4	1/2	0.550 +0.01/0	1.500 +0/-0.002	1.502 +0.004/0	2.250 +0.005/0	1.500 +0/-0.005	2.248 +0/-0.002	2.250 +0.004/0
U37-1.50-62B	1-1/2	2-1/4	5/8	0.688 +0.01/0	1.500 +0/-0.002	1.502 +0.004/0	2.250 +0.005/0	1.500 +0/-0.005	2.248 +0/-0.002	2.250 +0.004/0
U37-1.56	1-9/16	2-5/16	3/8	0.413 +0.01/0	1.563 +0/-0.002	1.565 +0.004/0	2.312 +0.005/0	1.563 +0/-0.005	2.310 +0/-0.002	2.312 +0.004/0
U37-1.62-62B	1-5/8	2-3/8	5/8	0.688 +0.01/0	1.625 +0/-0.002	1.627 +0.004/0	2.375 +0.005/0	1.625 +0/-0.005	2.373 +0/-0.002	2.375 +0.004/0
U37-1.62-SQB	1-5/8	2-3/8	3/8	0.413 +0.01/0	1.625 +0/-0.002	1.627 +0.004/0	2.375 +0.005/0	1.625 +0/-0.005	2.373 +0/-0.002	2.375 +0.004/0
U37-1.75	1-3/4	2-1/2	3/8	0.413 +0.01/0	1.750 +0/-0.002	1.752 +0.004/0	2.500 +0.005/0	1.750 +0/-0.005	2.498 +0/-0.002	2.500 +0.004/0
U37-1.75-62B	1-3/4	2-1/2	5/8	0.688 +0.01/0	1.750 +0/-0.002	1.752 +0.004/0	2.500 +0.005/0	1.750 +0/-0.005	2.498 +0/-0.002	2.500 +0.004/0
U37-1.87	1-7/8	2-5/8	3/8	0.413 +0.01/0	1.875 +0/-0.002	1.877 +0.004/0	2.625 +0.005/0	1.875 +0/-0.005	2.623 +0/-0.002	2.625 +0.004/0
U37-2.00	2	2-3/4	3/8	0.413 +0.01/0	2.000 +0/-0.002	2.002 +0.004/0	2.750 +0.005/0	2.000 +0/-0.005	2.748 +0/-0.002	2.750 +0.004/0
U37-2.00-50B	2	2-3/4	1/2	0.550 +0.01/0	2.000 +0/-0.002	2.002 +0.004/0	2.750 +0.005/0	2.000 +0/-0.005	2.748 +0/-0.002	2.750 +0.004/0
U37-2.00-62B	2	2-3/4	5/8	0.688 +0.01/0	2.000 +0/-0.002	2.002 +0.004/0	2.750 +0.005/0	2.000 +0/-0.005	2.748 +0/-0.002	2.750 +0.004/0
U37-2.00-SQB	2	2-3/4	3/8	0.413 +0.01/0	2.000 +0/-0.002	2.002 +0.004/0	2.750 +0.005/0	2.000 +0/-0.005	2.748 +0/-0.002	2.750 +0.004/0
U37-2.12	2-1/8	2-7/8	3/8	0.413 +0.01/0	2.125 +0/-0.002	2.127 +0.004/0	2.875 +0.005/0	2.125 +0/-0.005	2.873 +0/-0.002	2.875 +0.004/0
U37-2.25	2-1/4	3	3/8	0.413 +0.01/0	2.250 +0/-0.002	2.252 +0.004/0	3.000 +0.005/0	2.250 +0/-0.005	2.998 +0/-0.002	3.000 +0.004/0
U37-2.25-50B	2-1/4	3	1/2	0.550 +0.01/0	2.250 +0/-0.002	2.252 +0.004/0	3.000 +0.005/0	2.250 +0/-0.005	2.998 +0/-0.002	3.000 +0.004/0
U37-2.25-62B	2-1/4	3	5/8	0.688 +0.01/0	2.250 +0/-0.002	2.252 +0.004/0	3.000 +0.005/0	2.250 +0/-0.005	2.998 +0/-0.002	3.000 +0.004/0
U37-2.25-62D	2-1/4	3	5/8	0.688 +0.01/0	2.250 +0/-0.002	2.252 +0.004/0	3.000 +0.005/0	2.250 +0/-0.005	2.998 +0/-0.002	3.000 +0.004/0
U37-2.25-SQB	2-1/4	3	3/8	0.413 +0.01/0	2.250 +0/-0.002	2.252 +0.004/0	3.000 +0.005/0	2.250 +0/-0.005	2.998 +0/-0.002	3.000 +0.004/0
U37-2.37	2-3/8	3-1/8	3/8	0.413 +0.01/0	2.375 +0/-0.002	2.377 +0.004/0	3.125 +0.005/0	2.375 +0/-0.005	3.123 +0/-0.002	3.125 +0.004/0
U37-2.50	2-1/2	3-1/4	3/8	0.413 +0.01/0	2.500 +0/-0.002	2.502 +0.004/0	3.250 +0.005/0	2.500 +0/-0.005	3.248 +0/-0.002	3.250 +0.004/0
U37-2.50-50B	2-1/2	3-1/4	1/2	0.550 +0.01/0	2.500 +0/-0.002	2.502 +0.004/0	3.250 +0.005/0	2.500 +0/-0.005	3.248 +0/-0.002	3.250 +0.004/0
U37-2.50-62B	2-1/2	3-1/4	5/8	0.688 +0.01/0	2.500 +0/-0.002	2.502 +0.004/0	3.250 +0.005/0	2.500 +0/-0.005	3.248 +0/-0.002	3.250 +0.004/0
U37-2.50-62D	2-1/2	3-1/4	5/8	0.688 +0.01/0	2.500 +0/-0.002	2.502 +0.004/0	3.250 +0.005/0	2.500 +0/-0.005	3.248 +0/-0.002	3.250 +0.004/0
U37-2.50-62DF	2-1/2	3-1/4	5/8	0.688 +0.01/0	2.500 +0/-0.002	2.502 +0.004/0	3.250 +0.005/0	2.500 +0/-0.005	3.248 +0/-0.002	3.250 +0.004/0
U37-2.50-SQB	2-1/2	3-1/4	3/8	0.413 +0.01/0	2.500 +0/-0.002	2.502 +0.004/0	3.250 +0.005/0	2.500 +0/-0.005	3.248 +0/-0.002	3.250 +0.004/0
U37-2.62	2-5/8	3-3/8	3/8	0.413 +0.01/0	2.625 +0/-0.002	2.627 +0.004/0	3.375 +0.005/0	2.625 +0/-0.005	3.373 +0/-0.002	3.375 +0.004/0
U37-2.62-62B	2-5/8	3-3/8	5/8	0.688 +0.01/0	2.625 +0/-0.002	2.627 +0.004/0	3.375 +0.005/0	2.625 +0/-0.005	3.373 +0/-0.002	3.375 +0.004/0
U37-2.75	2-3/4	3-1/2	3/8	0.413 +0.01/0	2.750 +0/-0.002	2.752 +0.004/0	3.500 +0.005/0	2.750 +0/-0.005	3.498 +0/-0.002	3.500 +0.004/0
U37-2.75-50B	2-3/4	3-1/2	1/2	0.550 +0.01/0	2.750 +0/-0.002	2.752 +0.004/0	3.500 +0.005/0	2.750 +0/-0.005	3.498 +0/-0.002	3.500 +0.004/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
3/8" C/S										
U37-2.75-50D	2-3/4	3-1/2	1/2	0.550 +0.01/0	2.750 +0/-0.002	2.752 +0.004/0	3.500 +0.005/0	2.750 +0/-0.005	3.498 +0/-0.002	3.500 +0.004/0
U37-2.75-62B	2-3/4	3-1/2	5/8	0.688 +0.01/0	2.750 +0/-0.002	2.752 +0.004/0	3.500 +0.005/0	2.750 +0/-0.005	3.498 +0/-0.002	3.500 +0.004/0
U37-2.75-62D	2-3/4	3-1/2	5/8	0.688 +0.01/0	2.750 +0/-0.002	2.752 +0.004/0	3.500 +0.005/0	2.750 +0/-0.005	3.498 +0/-0.002	3.500 +0.004/0
U37-2.81	2-13/16	3-9/16	3/8	0.413 +0.01/0	2.812 +0/-0.002	2.814 +0.004/0	3.562 +0.005/0	2.812 +0/-0.005	3.560 +0/-0.002	3.562 +0.004/0
U37-2.93	2-15/16	3-11/16	3/8	0.413 +0.01/0	2.937 +0/-0.002	2.939 +0.004/0	3.687 +0.005/0	2.937 +0/-0.005	3.685 +0/-0.002	3.687 +0.004/0
U37-3.00	3	3-3/4	3/8	0.413 +0.01/0	3.000 +0/-0.002	3.002 +0.004/0	3.750 +0.005/0	3.000 +0/-0.005	3.748 +0/-0.002	3.750 +0.004/0
U37-3.00-50B	3	3-3/4	1/2	0.550 +0.01/0	3.000 +0/-0.002	3.002 +0.004/0	3.750 +0.005/0	3.000 +0/-0.005	3.748 +0/-0.002	3.750 +0.004/0
U37-3.00-62B	3	3-3/4	5/8	0.688 +0.01/0	3.000 +0/-0.002	3.002 +0.004/0	3.750 +0.005/0	3.000 +0/-0.005	3.748 +0/-0.002	3.750 +0.004/0
U37-3.00-SQB	3	3-3/4	3/8	0.413 +0.01/0	3.000 +0/-0.002	3.002 +0.004/0	3.750 +0.005/0	3.000 +0/-0.005	3.748 +0/-0.002	3.750 +0.004/0
U37-3.12-SQB	3-1/8	3-7/8	3/8	0.413 +0.01/0	3.125 +0/-0.002	3.127 +0.004/0	3.875 +0.005/0	3.125 +0/-0.005	3.873 +0/-0.002	3.875 +0.004/0
U37-3.25	3-1/4	4	3/8	0.413 +0.01/0	3.250 +0/-0.002	3.252 +0.004/0	4.000 +0.005/0	3.250 +0/-0.005	3.998 +0/-0.002	4.000 +0.004/0
U37-3.25-50B	3-1/4	4	1/2	0.550 +0.01/0	3.250 +0/-0.002	3.252 +0.004/0	4.000 +0.005/0	3.250 +0/-0.005	3.998 +0/-0.002	4.000 +0.004/0
U37-3.25-62B	3-1/4	4	5/8	0.688 +0.01/0	3.250 +0/-0.002	3.252 +0.004/0	4.000 +0.005/0	3.250 +0/-0.005	3.998 +0/-0.002	4.000 +0.004/0
U37-3.37	3-3/8	4-1/8	3/8	0.413 +0.01/0	3.375 +0/-0.002	3.377 +0.004/0	4.125 +0.005/0	3.375 +0/-0.005	4.123 +0/-0.002	4.125 +0.004/0
U37-3.37-62B	3-3/8	4-1/8	5/8	0.688 +0.01/0	3.375 +0/-0.002	3.377 +0.004/0	4.125 +0.005/0	3.375 +0/-0.005	4.123 +0/-0.002	4.125 +0.004/0
U37-3.50	3-1/2	4-1/4	3/8	0.413 +0.01/0	3.500 +0/-0.002	3.502 +0.004/0	4.250 +0.005/0	3.500 +0/-0.005	4.248 +0/-0.002	4.250 +0.004/0
U37-3.50-50D	3-1/2	4-1/4	1/2	0.550 +0.01/0	3.500 +0/-0.002	3.502 +0.004/0	4.250 +0.005/0	3.500 +0/-0.005	4.248 +0/-0.002	4.250 +0.004/0
U37-3.50-62B	3-1/2	4-1/4	5/8	0.688 +0.01/0	3.500 +0/-0.002	3.502 +0.004/0	4.250 +0.005/0	3.500 +0/-0.005	4.248 +0/-0.002	4.250 +0.004/0
U37-3.62	3-5/8	4-3/8	3/8	0.413 +0.01/0	3.625 +0/-0.002	3.627 +0.004/0	4.375 +0.005/0	3.625 +0/-0.005	4.373 +0/-0.002	4.375 +0.004/0
U37-3.62-50B	3-5/8	4-3/8	1/2	0.550 +0.01/0	3.625 +0/-0.002	3.627 +0.004/0	4.375 +0.005/0	3.625 +0/-0.005	4.373 +0/-0.002	4.375 +0.004/0
U37-3.62-62B	3-5/8	4-3/8	5/8	0.688 +0.01/0	3.625 +0/-0.002	3.627 +0.004/0	4.375 +0.005/0	3.625 +0/-0.005	4.373 +0/-0.002	4.375 +0.004/0
U37-3.75	3-3/4	4-1/2	3/8	0.413 +0.01/0	3.750 +0/-0.002	3.752 +0.004/0	4.500 +0.005/0	3.750 +0/-0.005	4.498 +0/-0.002	4.500 +0.004/0
U37-3.75-50D	3-3/4	4-1/2	1/2	0.550 +0.01/0	3.750 +0/-0.002	3.752 +0.004/0	4.500 +0.005/0	3.750 +0/-0.005	4.498 +0/-0.002	4.500 +0.004/0
U37-3.75-62B	3-3/4	4-1/2	5/8	0.688 +0.01/0	3.750 +0/-0.002	3.752 +0.004/0	4.500 +0.005/0	3.750 +0/-0.005	4.498 +0/-0.002	4.500 +0.004/0
U37-3.75-SQB	3-3/4	4-1/2	3/8	0.413 +0.01/0	3.750 +0/-0.002	3.752 +0.004/0	4.500 +0.005/0	3.750 +0/-0.005	4.498 +0/-0.002	4.500 +0.004/0
U37-3.87	3-7/8	4-5/8	3/8	0.413 +0.01/0	3.875 +0/-0.002	3.877 +0.004/0	4.625 +0.005/0	3.875 +0/-0.005	4.623 +0/-0.002	4.625 +0.004/0
U37-4.00	4	4-3/4	3/8	0.413 +0.01/0	4.000 +0/-0.002	4.002 +0.004/0	4.750 +0.005/0	4.000 +0/-0.005	4.748 +0/-0.002	4.750 +0.004/0
U37-4.00-50D	4	4-3/4	1/2	0.550 +0.01/0	4.000 +0/-0.002	4.002 +0.004/0	4.750 +0.005/0	4.000 +0/-0.005	4.748 +0/-0.002	4.750 +0.004/0
U37-4.00-62B	4	4-3/4	5/8	0.688 +0.01/0	4.000 +0/-0.002	4.002 +0.004/0	4.750 +0.005/0	4.000 +0/-0.005	4.748 +0/-0.002	4.750 +0.004/0
U37-4.00-62D	4	4-3/4	5/8	0.688 +0.01/0	4.000 +0/-0.002	4.002 +0.004/0	4.750 +0.005/0	4.000 +0/-0.005	4.748 +0/-0.002	4.750 +0.004/0
U37-4.12	4-1/8	4-7/8	3/8	0.413 +0.01/0	4.125 +0/-0.002	4.127 +0.004/0	4.875 +0.005/0	4.125 +0/-0.005	4.873 +0/-0.002	4.875 +0.004/0
U37-4.25	4-1/4	5	3/8	0.413 +0.01/0	4.250 +0/-0.002	4.252 +0.004/0	5.000 +0.005/0	4.250 +0/-0.005	4.998 +0/-0.002	5.000 +0.004/0
U37-4.25-50B	4-1/4	5	1/2	0.550 +0.01/0	4.250 +0/-0.002	4.252 +0.004/0	5.000 +0.005/0	4.250 +0/-0.005	4.998 +0/-0.002	5.000 +0.004/0
U37-4.25-50D	4-1/4	5	1/2	0.550 +0.01/0	4.250 +0/-0.002	4.252 +0.004/0	5.000 +0.005/0	4.250 +0/-0.005	4.998 +0/-0.002	5.000 +0.004/0
U37-4.25-62B	4-1/4	5	5/8	0.688 +0.01/0	4.250 +0/-0.002	4.252 +0.004/0	5.000 +0.005/0	4.250 +0/-0.005	4.998 +0/-0.002	5.000 +0.004/0
U37-4.25-62D	4-1/4	5	5/8	0.688 +0.01/0	4.250 +0/-0.002	4.252 +0.004/0	5.000 +0.005/0	4.250 +0/-0.005	4.998 +0/-0.002	5.000 +0.004/0
U37-4.25-SQB	4-1/4	5	3/8	0.413 +0.01/0	4.250 +0/-0.002	4.252 +0.004/0	5.000 +0.005/0	4.250 +0/-0.005	4.998 +0/-0.002	5.000 +0.004/0
U37-4.37	4-3/8	5-1/8	3/8	0.413 +0.01/0	4.375 +0/-0.002	4.377 +0.004/0	5.125 +0.005/0	4.375 +0/-0.005	5.123 +0/-0.002	5.125 +0.004/0
U37-4.37-62B	4-3/8	5-1/8	5/8	0.688 +0.01/0	4.375 +0/-0.002	4.377 +0.004/0	5.125 +0.005/0	4.375 +0/-0.005	5.123 +0/-0.002	5.125 +0.004/0
U37-4.50	4-1/2	5-1/4	3/8	0.413 +0.01/0	4.500 +0/-0.002	4.502 +0.004/0	5.250 +0.005/0	4.500 +0/-0.005	5.248 +0/-0.002	5.250 +0.004/0
U37-4.50-62B	4-1/2	5-1/4	5/8	0.688 +0.01/0	4.500 +0/-0.002	4.502 +0.004/0	5.250 +0.005/0	4.500 +0/-0.005	5.248 +0/-0.002	5.250 +0.004/0
U37-4.50-SQB	4-1/2	5-1/4	3/8	0.413 +0.01/0	4.500 +0/-0.002	4.502 +0.004/0	5.250 +0.005/0	4.500 +0/-0.005	5.248 +0/-0.002	5.250 +0.004/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
3/8" C/S										
U37-4.62	4-5/8	5-3/8	3/8	0.413 +0.01/0	4.625 +0/-0.002	4.627 +0.004/0	5.375 +0.005/0	4.625 +0/-0.005	5.373 +0/-0.002	5.375 +0.004/0
U37-4.62-62B	4-5/8	5-3/8	5/8	0.688 +0.01/0	4.625 +0/-0.002	4.627 +0.004/0	5.375 +0.005/0	4.625 +0/-0.005	5.373 +0/-0.002	5.375 +0.004/0
U37-4.75-50B	4-3/4	5-1/2	1/2	0.550 +0.01/0	4.750 +0/-0.002	4.752 +0.004/0	5.500 +0.005/0	4.750 +0/-0.005	5.498 +0/-0.002	5.500 +0.004/0
U37-4.75-62B	4-3/4	5-1/2	5/8	0.688 +0.01/0	4.750 +0/-0.002	4.752 +0.004/0	5.500 +0.005/0	4.750 +0/-0.005	5.498 +0/-0.002	5.500 +0.004/0
U37-4.75-SQB	4-3/4	5-1/2	3/8	0.413 +0.01/0	4.750 +0/-0.002	4.752 +0.004/0	5.500 +0.005/0	4.750 +0/-0.005	5.498 +0/-0.002	5.500 +0.004/0
U37-4.87	4-7/8	5-5/8	3/8	0.413 +0.01/0	4.875 +0/-0.002	4.877 +0.004/0	5.625 +0.005/0	4.875 +0/-0.005	5.623 +0/-0.002	5.625 +0.004/0
U37-4.87-62B	4-7/8	5-5/8	5/8	0.688 +0.01/0	4.875 +0/-0.002	4.877 +0.004/0	5.625 +0.005/0	4.875 +0/-0.005	5.623 +0/-0.002	5.625 +0.004/0
U37-5.00-62B	5	5-3/4	5/8	0.688 +0.01/0	5.000 +0/-0.002	5.002 +0.004/0	5.750 +0.005/0	5.000 +0/-0.005	5.748 +0/-0.002	5.750 +0.004/0
U37-5.00-SQB	5	5-3/4	3/8	0.413 +0.01/0	5.000 +0/-0.002	5.002 +0.004/0	5.750 +0.005/0	5.000 +0/-0.005	5.748 +0/-0.002	5.750 +0.004/0
U37-5.25	5-1/4	6	3/8	0.413 +0.01/0	5.250 +0/-0.002	5.252 +0.004/0	6.000 +0.005/0	5.250 +0/-0.005	5.998 +0/-0.002	6.000 +0.004/0
U37-5.25-50B	5-1/4	6	1/2	0.550 +0.01/0	5.250 +0/-0.002	5.252 +0.004/0	6.000 +0.005/0	5.250 +0/-0.005	5.998 +0/-0.002	6.000 +0.004/0
U37-5.25-50D	5-1/4	6	1/2	0.550 +0.01/0	5.250 +0/-0.002	5.252 +0.004/0	6.000 +0.005/0	5.250 +0/-0.005	5.998 +0/-0.002	6.000 +0.004/0
U37-5.25-62B	5-1/4	6	5/8	0.688 +0.01/0	5.250 +0/-0.002	5.252 +0.004/0	6.000 +0.005/0	5.250 +0/-0.005	5.998 +0/-0.002	6.000 +0.004/0
U37-5.25-62D	5-1/4	6	5/8	0.688 +0.01/0	5.250 +0/-0.002	5.252 +0.004/0	6.000 +0.005/0	5.250 +0/-0.005	5.998 +0/-0.002	6.000 +0.004/0
U37-5.25-SQB	5-1/4	6	3/8	0.413 +0.01/0	5.250 +0/-0.002	5.252 +0.004/0	6.000 +0.005/0	5.250 +0/-0.005	5.998 +0/-0.002	6.000 +0.004/0
U37-5.37	5-3/8	6-1/8	3/8	0.413 +0.01/0	5.375 +0/-0.002	5.377 +0.004/0	6.125 +0.005/0	5.375 +0/-0.005	6.123 +0/-0.002	6.125 +0.004/0
U37-5.37-62B	5-3/8	6-1/8	5/8	0.688 +0.01/0	5.375 +0/-0.002	5.377 +0.004/0	6.125 +0.005/0	5.375 +0/-0.005	6.123 +0/-0.002	6.125 +0.004/0
U37-5.50-62B	5-1/2	6-1/4	5/8	0.688 +0.01/0	5.500 +0/-0.002	5.502 +0.004/0	6.250 +0.005/0	5.500 +0/-0.005	6.248 +0/-0.002	6.250 +0.004/0
U37-5.50-SQB	5-1/2	6-1/4	3/8	0.413 +0.01/0	5.500 +0/-0.002	5.502 +0.004/0	6.250 +0.005/0	5.500 +0/-0.005	6.248 +0/-0.002	6.250 +0.004/0
U37-5.75	5-3/4	6-1/2	3/8	0.413 +0.01/0	5.750 +0/-0.002	5.752 +0.004/0	6.500 +0.005/0	5.750 +0/-0.005	6.498 +0/-0.002	6.500 +0.004/0
U37-5.75-62B	5-3/4	6-1/2	5/8	0.688 +0.01/0	5.750 +0/-0.002	5.752 +0.004/0	6.500 +0.005/0	5.750 +0/-0.005	6.498 +0/-0.002	6.500 +0.004/0
U37-5.87	5-7/8	6-5/8	3/8	0.413 +0.01/0	5.875 +0/-0.002	5.877 +0.004/0	6.625 +0.005/0	5.875 +0/-0.005	6.623 +0/-0.002	6.625 +0.004/0
U37-5.87-62B	5-7/8	6-5/8	5/8	0.688 +0.01/0	5.875 +0/-0.002	5.877 +0.004/0	6.625 +0.005/0	5.875 +0/-0.005	6.623 +0/-0.002	6.625 +0.004/0
U37-6.00-62B	6	6-3/4	5/8	0.688 +0.01/0	6.000 +0/-0.002	6.002 +0.004/0	6.750 +0.005/0	6.000 +0/-0.005	6.748 +0/-0.002	6.750 +0.004/0
U37-6.00-SQB	6	6-3/4	3/8	0.413 +0.01/0	6.000 +0/-0.002	6.002 +0.004/0	6.750 +0.005/0	6.000 +0/-0.005	6.748 +0/-0.002	6.750 +0.004/0
U37-6.25	6-1/4	7	3/8	0.413 +0.01/0	6.250 +0/-0.002	6.252 +0.004/0	7.000 +0.005/0	6.250 +0/-0.005	6.998 +0/-0.002	7.000 +0.004/0
U37-6.25-50D	6-1/4	7	1/2	0.550 +0.01/0	6.250 +0/-0.002	6.252 +0.004/0	7.000 +0.005/0	6.250 +0/-0.005	6.998 +0/-0.002	7.000 +0.004/0
U37-6.25-62B	6-1/4	7	5/8	0.688 +0.01/0	6.250 +0/-0.002	6.252 +0.004/0	7.000 +0.005/0	6.250 +0/-0.005	6.998 +0/-0.002	7.000 +0.004/0
U37-6.37	6-3/8	7-1/8	3/8	0.413 +0.01/0	6.375 +0/-0.002	6.377 +0.004/0	7.125 +0.005/0	6.375 +0/-0.005	7.123 +0/-0.002	7.125 +0.004/0
U37-6.50	6-1/2	7-1/4	3/8	0.413 +0.01/0	6.500 +0/-0.002	6.502 +0.004/0	7.250 +0.005/0	6.500 +0/-0.005	7.248 +0/-0.002	7.250 +0.004/0
U37-6.50-50B	6-1/2	7-1/4	1/2	0.550 +0.01/0	6.500 +0/-0.002	6.502 +0.004/0	7.250 +0.005/0	6.500 +0/-0.005	7.248 +0/-0.002	7.250 +0.004/0
U37-6.50-62B	6-1/2	7-1/4	5/8	0.688 +0.01/0	6.500 +0/-0.002	6.502 +0.004/0	7.250 +0.005/0	6.500 +0/-0.005	7.248 +0/-0.002	7.250 +0.004/0
U37-6.75-62B	6-3/4	7-1/2	5/8	0.688 +0.01/0	6.750 +0/-0.002	6.752 +0.004/0	7.500 +0.005/0	6.750 +0/-0.005	7.498 +0/-0.002	7.500 +0.004/0
U37-6.87-62B	6-7/8	7-5/8	5/8	0.688 +0.01/0	6.875 +0/-0.002	6.877 +0.004/0	7.625 +0.005/0	6.875 +0/-0.005	7.623 +0/-0.002	7.625 +0.004/0
U37-7.00	7	7-3/4	3/8	0.413 +0.01/0	7.000 +0/-0.002	7.002 +0.004/0	7.750 +0.005/0	7.000 +0/-0.005	7.748 +0/-0.002	7.750 +0.004/0
U37-7.00-50B	7	7-3/4	1/2	0.550 +0.01/0	7.000 +0/-0.002	7.002 +0.004/0	7.750 +0.005/0	7.000 +0/-0.005	7.748 +0/-0.002	7.750 +0.004/0
U37-7.00-62B	7	7-3/4	5/8	0.688 +0.01/0	7.000 +0/-0.002	7.002 +0.004/0	7.750 +0.005/0	7.000 +0/-0.005	7.748 +0/-0.002	7.750 +0.004/0
U37-7.25	7-1/4	8	3/8	0.413 +0.01/0	7.250 +0/-0.002	7.252 +0.004/0	8.000 +0.005/0	7.250 +0/-0.005	7.998 +0/-0.002	8.000 +0.004/0
U37-7.25-50D	7-1/4	8	1/2	0.550 +0.01/0	7.250 +0/-0.002	7.252 +0.004/0	8.000 +0.005/0	7.250 +0/-0.005	7.998 +0/-0.002	8.000 +0.004/0
U37-7.25-62B	7-1/4	8	5/8	0.688 +0.01/0	7.250 +0/-0.002	7.252 +0.004/0	8.000 +0.005/0	7.250 +0/-0.005	7.998 +0/-0.002	8.000 +0.004/0
U37-7.25-SQB	7-1/4	8	3/8	0.413 +0.01/0	7.250 +0/-0.002	7.252 +0.004/0	8.000 +0.005/0	7.250 +0/-0.005	7.998 +0/-0.002	8.000 +0.004/0
U37-7.50-50B	7-1/2	8-1/4	1/2	0.550 +0.01/0	7.500 +0/-0.002	7.502 +0.004/0	8.250 +0.005/0	7.500 +0/-0.005	8.248 +0/-0.002	8.250 +0.004/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
3/8" C/S										
U37-7.75	7-3/4	8-1/2	3/8	0.413 +0.01/0	7.750 +0/-0.002	7.752 +0.004/0	8.500 +0.005/0	7.750 +0/-0.005	8.498 +0/-0.002	8.500 +0.004/0
U37-7.75-62B	7-3/4	8-1/2	5/8	0.688 +0.01/0	7.750 +0/-0.002	7.752 +0.004/0	8.500 +0.005/0	7.750 +0/-0.005	8.498 +0/-0.002	8.500 +0.004/0
U37-8.00-50D	8	8-3/4	1/2	0.550 +0.01/0	8.000 +0/-0.002	8.002 +0.004/0	8.750 +0.005/0	8.000 +0/-0.005	8.748 +0/-0.002	8.750 +0.004/0
U37-8.00-62B	8	8-3/4	5/8	0.688 +0.01/0	8.000 +0/-0.002	8.002 +0.004/0	8.750 +0.005/0	8.000 +0/-0.005	8.748 +0/-0.002	8.750 +0.004/0
U37-8.25	8-1/4	9	3/8	0.413 +0.01/0	8.250 +0/-0.002	8.252 +0.004/0	9.000 +0.005/0	8.250 +0/-0.005	8.998 +0/-0.002	9.000 +0.004/0
U37-8.25-62B	8-1/4	9	5/8	0.688 +0.01/0	8.250 +0/-0.002	8.252 +0.004/0	9.000 +0.005/0	8.250 +0/-0.005	8.998 +0/-0.002	9.000 +0.004/0
U37-8.75-62D	8-3/4	9-1/2	5/8	0.688 +0.01/0	8.750 +0/-0.002	8.752 +0.004/0	9.500 +0.005/0	8.750 +0/-0.005	9.498 +0/-0.002	9.500 +0.004/0
U37-9.00	9	9-3/4	3/8	0.413 +0.01/0	9.000 +0/-0.002	9.002 +0.004/0	9.750 +0.005/0	9.000 +0/-0.005	9.748 +0/-0.002	9.750 +0.004/0
U37-9.00-62B	9	9-3/4	5/8	0.688 +0.01/0	9.000 +0/-0.002	9.002 +0.004/0	9.750 +0.005/0	9.000 +0/-0.005	9.748 +0/-0.002	9.750 +0.004/0
U37-9.25	9-1/4	10	3/8	0.413 +0.01/0	9.250 +0/-0.002	9.252 +0.004/0	10.000 +0.005/0	9.250 +0/-0.005	9.998 +0/-0.002	10.000 +0.004/0
U37-9.25-50D	9-1/4	10	1/2	0.550 +0.01/0	9.250 +0/-0.002	9.252 +0.004/0	10.000 +0.005/0	9.250 +0/-0.005	9.998 +0/-0.002	10.000 +0.004/0
U37-9.25-62B	9-1/4	10	5/8	0.688 +0.01/0	9.250 +0/-0.002	9.252 +0.004/0	10.000 +0.005/0	9.250 +0/-0.005	9.998 +0/-0.002	10.000 +0.004/0
U37-9.50	9-1/2	10-1/4	3/8	0.413 +0.01/0	9.500 +0/-0.002	9.502 +0.004/0	10.250 +0.005/0	9.500 +0/-0.005	10.248 +0/-0.002	10.250 +0.004/0
U37-9.50-62B	9-1/2	10-1/4	5/8	0.688 +0.01/0	9.500 +0/-0.002	9.502 +0.004/0	10.250 +0.005/0	9.500 +0/-0.005	10.248 +0/-0.002	10.250 +0.004/0
U37-9.75-62B	9-3/4	10-1/2	5/8	0.688 +0.01/0	9.750 +0/-0.002	9.752 +0.004/0	10.500 +0.005/0	9.750 +0/-0.005	10.498 +0/-0.002	10.500 +0.004/0
U37-10.00	10	10-3/4	3/8	0.413 +0.01/0	10.000 +0/-0.002	10.002 +0.004/0	10.750 +0.005/0	10.000 +0/-0.005	10.748 +0/-0.002	10.750 +0.004/0
U37-10.00-62B	10	10-3/4	5/8	0.688 +0.01/0	10.000 +0/-0.002	10.002 +0.004/0	10.750 +0.005/0	10.000 +0/-0.005	10.748 +0/-0.002	10.750 +0.004/0
U37-10.50-62B	10-1/2	11-1/4	5/8	0.688 +0.01/0	10.500 +0/-0.002	10.502 +0.004/0	11.250 +0.005/0	10.500 +0/-0.005	11.248 +0/-0.002	11.250 +0.004/0
U37-11.00-62B	11	11-3/4	5/8	0.688 +0.01/0	11.000 +0/-0.002	11.002 +0.004/0	11.750 +0.005/0	11.000 +0/-0.005	11.748 +0/-0.002	11.750 +0.004/0
U37-11.25	11-1/4	12	3/8	0.413 +0.01/0	11.250 +0/-0.002	11.252 +0.004/0	12.000 +0.005/0	11.250 +0/-0.005	11.998 +0/-0.002	12.000 +0.004/0
U37-11.25-62B	11-1/4	12	5/8	0.688 +0.01/0	11.250 +0/-0.002	11.252 +0.004/0	12.000 +0.005/0	11.250 +0/-0.005	11.998 +0/-0.002	12.000 +0.004/0
U37-11.25-62D	11-1/4	12	5/8	0.688 +0.01/0	11.250 +0/-0.002	11.252 +0.004/0	12.000 +0.005/0	11.250 +0/-0.005	11.998 +0/-0.002	12.000 +0.004/0
U37-12.00-62B	12	12-3/4	5/8	0.688 +0.01/0	12.000 +0/-0.002	12.002 +0.004/0	12.750 +0.005/0	12.000 +0/-0.005	12.748 +0/-0.002	12.750 +0.004/0
U37-12.25	12-1/4	13	3/8	0.413 +0.01/0	12.250 +0/-0.002	12.252 +0.004/0	13.000 +0.005/0	12.250 +0/-0.005	12.998 +0/-0.002	13.000 +0.004/0
U37-13.25	13-1/4	14	3/8	0.413 +0.01/0	13.250 +0/-0.002	13.252 +0.004/0	14.000 +0.005/0	13.250 +0/-0.005	13.998 +0/-0.002	14.000 +0.004/0
U37-14.25-62B	14-1/4	15	5/8	0.413 +0.01/0	14.250 +0/-0.002	14.252 +0.004/0	15.000 +0.005/0	14.250 +0/-0.005	14.998 +0/-0.002	15.000 +0.004/0
U37-19.50	19-1/2	20-1/4	3/8	0.413 +0.01/0	19.500 +0/-0.002	19.500 +0.004/0	20.250 +0.005/0	19.500 +0/-0.005	19.498 +0/-0.002	19.500 +0.004/0
7/16" C/S										
U43-1.50	1-1/2	2-3/8	7/16	0.481 +0.01/0	1.500 +0/-0.002	1.502 +0.004/0	2.375 +0.005/0	1.500 +0/-0.005	2.373 +0/-0.002	2.375 +0.004/0
U43-2.50	2-1/2	3-3/8	7/16	0.481 +0.01/0	2.500 +0/-0.002	2.502 +0.004/0	3.375 +0.005/0	2.500 +0/-0.005	3.373 +0/-0.002	3.375 +0.004/0
U43-3.12	3-1/8	4	7/16	0.481 +0.01/0	3.125 +0/-0.002	3.127 +0.004/0	4.000 +0.005/0	3.125 +0/-0.005	3.998 +0/-0.002	4.000 +0.004/0
U43-3.87-75B	3-7/8	4-3/4	3/4	0.825 +0.01/0	3.875 +0/-0.002	3.877 +0.004/0	4.750 +0.005/0	3.875 +0/-0.005	4.748 +0/-0.002	4.750 +0.004/0
U43-4.50	4-1/2	5-3/8	7/16	0.481 +0.01/0	4.500 +0/-0.002	4.502 +0.004/0	5.375 +0.005/0	4.500 +0/-0.005	5.373 +0/-0.002	5.375 +0.004/0
U43-4.75	4-3/4	5-5/8	7/16	0.481 +0.01/0	4.750 +0/-0.002	4.752 +0.004/0	5.625 +0.005/0	4.750 +0/-0.005	5.623 +0/-0.002	5.625 +0.004/0
U43-4.75-75B	4-3/4	5-5/8	3/4	0.825 +0.01/0	4.750 +0/-0.002	4.752 +0.004/0	5.625 +0.005/0	4.750 +0/-0.005	5.623 +0/-0.002	5.625 +0.004/0
U43-5.12	5-1/8	6	7/16	0.481 +0.01/0	5.125 +0/-0.002	5.127 +0.004/0	6.000 +0.005/0	5.125 +0/-0.005	5.998 +0/-0.002	6.000 +0.004/0
U43-5.25	5-1/4	6-1/8	7/16	0.481 +0.01/0	5.250 +0/-0.002	5.252 +0.004/0	6.125 +0.005/0	5.250 +0/-0.005	6.123 +0/-0.002	6.125 +0.004/0
1/2" C/S										
U50-1.00	1	2	1/2	0.550 +0.01/0	1.000 +0/-0.003	1.002 +0.005/0	2.000 +0.007/0	1.000 +0/-0.007	1.998 +0/-0.003	2.000 +0.005/0
U50-1.25	1-1/4	2-1/4	1/2	0.550 +0.01/0	1.250 +0/-0.003	1.252 +0.005/0	2.250 +0.007/0	1.250 +0/-0.007	2.248 +0/-0.003	2.250 +0.005/0
U50-1.50	1-1/2	2-1/2	1/2	0.550 +0.01/0	1.500 +0/-0.003	1.502 +0.005/0	2.500 +0.007/0	1.500 +0/-0.007	2.498 +0/-0.003	2.500 +0.005/0
U50-1.75	1-3/4	2-3/4	1/2	0.550 +0.01/0	1.750 +0/-0.003	1.752 +0.005/0	2.750 +0.007/0	1.750 +0/-0.007	2.748 +0/-0.003	2.750 +0.005/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/2" C/S										
U50-1.87-62B	1-7/8	2-7/8	5/8	0.688 +0.01/0	1.875 +0/-0.003	1.877 +0.005/0	2.875 +0.007/0	1.875 +0/-0.007	2.873 +0/-0.003	2.875 +0.005/0
U50-2.00	2	3	1/2	0.550 +0.01/0	2.000 +0/-0.003	2.002 +0.005/0	3.000 +0.007/0	2.000 +0/-0.007	2.998 +0/-0.003	3.000 +0.005/0
U50-2.00-75B	2	3	3/4	0.825 +0.01/0	2.000 +0/-0.003	2.002 +0.005/0	3.000 +0.007/0	2.000 +0/-0.007	2.998 +0/-0.003	3.000 +0.005/0
U50-2.00-SQB	2	3	1/2	0.550 +0.01/0	2.000 +0/-0.003	2.002 +0.005/0	3.000 +0.007/0	2.000 +0/-0.007	2.998 +0/-0.003	3.000 +0.005/0
U50-2.25	2-1/4	3-1/4	1/2	0.550 +0.01/0	2.250 +0/-0.003	2.252 +0.005/0	3.250 +0.007/0	2.250 +0/-0.007	3.248 +0/-0.003	3.250 +0.005/0
U50-2.37-SQB	2-3/8	3-3/8	1/2	0.550 +0.01/0	2.375 +0/-0.003	2.377 +0.005/0	3.375 +0.007/0	2.375 +0/-0.007	3.373 +0/-0.003	3.375 +0.005/0
U50-2.50	2-1/2	3-1/2	1/2	0.550 +0.01/0	2.500 +0/-0.003	2.502 +0.005/0	3.500 +0.007/0	2.500 +0/-0.007	3.498 +0/-0.003	3.500 +0.005/0
U50-2.50-75B	2-1/2	3-1/2	3/4	0.825 +0.01/0	2.500 +0/-0.003	2.502 +0.005/0	3.500 +0.007/0	2.500 +0/-0.007	3.498 +0/-0.003	3.500 +0.005/0
U50-2.75	2-3/4	3-3/4	1/2	0.550 +0.01/0	2.750 +0/-0.003	2.752 +0.005/0	3.750 +0.007/0	2.750 +0/-0.007	3.748 +0/-0.003	3.750 +0.005/0
U50-3.00	3	4	1/2	0.550 +0.01/0	3.000 +0/-0.003	3.002 +0.005/0	4.000 +0.007/0	3.000 +0/-0.007	3.998 +0/-0.003	4.000 +0.005/0
U50-3.00-62B	3	4	5/8	0.688 +0.01/0	3.000 +0/-0.003	3.002 +0.005/0	4.000 +0.007/0	3.000 +0/-0.007	3.998 +0/-0.003	4.000 +0.005/0
U50-3.00-75B	3	4	3/4	0.825 +0.01/0	3.000 +0/-0.003	3.002 +0.005/0	4.000 +0.007/0	3.000 +0/-0.007	3.998 +0/-0.003	4.000 +0.005/0
U50-3.00-75D	3	4	3/4	0.825 +0.01/0	3.000 +0/-0.003	3.002 +0.005/0	4.000 +0.007/0	3.000 +0/-0.007	3.998 +0/-0.003	4.000 +0.005/0
U50-3.00-SQB	3	4	1/2	0.550 +0.01/0	3.000 +0/-0.003	3.002 +0.005/0	4.000 +0.007/0	3.000 +0/-0.007	3.998 +0/-0.003	4.000 +0.005/0
U50-3.25	3-1/4	4-1/4	1/2	0.550 +0.01/0	3.250 +0/-0.003	3.252 +0.005/0	4.250 +0.007/0	3.250 +0/-0.007	4.248 +0/-0.003	4.250 +0.005/0
U50-3.50	3-1/2	4-1/2	1/2	0.550 +0.01/0	3.500 +0/-0.003	3.502 +0.005/0	4.500 +0.007/0	3.500 +0/-0.007	4.498 +0/-0.003	4.500 +0.005/0
U50-3.50-75B	3-1/2	4-1/2	3/4	0.825 +0.01/0	3.500 +0/-0.003	3.502 +0.005/0	4.500 +0.007/0	3.500 +0/-0.007	4.498 +0/-0.003	4.500 +0.005/0
U50-3.50-75D	3-1/2	4-1/2	3/4	0.825 +0.01/0	3.500 +0/-0.003	3.502 +0.005/0	4.500 +0.007/0	3.500 +0/-0.007	4.498 +0/-0.003	4.500 +0.005/0
U50-3.62	3-5/8	4-5/8	1/2	0.550 +0.01/0	3.625 +0/-0.003	3.627 +0.005/0	4.625 +0.007/0	3.625 +0/-0.007	4.623 +0/-0.003	4.625 +0.005/0
U50-3.75	3-3/4	4-3/4	1/2	0.550 +0.01/0	3.750 +0/-0.003	3.752 +0.005/0	4.750 +0.007/0	3.750 +0/-0.007	4.748 +0/-0.003	4.750 +0.005/0
U50-4.00	4	5	1/2	0.550 +0.01/0	4.000 +0/-0.003	4.002 +0.005/0	5.000 +0.007/0	4.000 +0/-0.007	4.998 +0/-0.003	5.000 +0.005/0
U50-4.00-67D	4	5	.67	0.737 +0.01/0	4.000 +0/-0.003	4.002 +0.005/0	5.000 +0.007/0	4.000 +0/-0.007	4.998 +0/-0.003	5.000 +0.005/0
U50-4.00-75B	4	5	3/4	0.825 +0.01/0	4.000 +0/-0.003	4.002 +0.005/0	5.000 +0.007/0	4.000 +0/-0.007	4.998 +0/-0.003	5.000 +0.005/0
U50-4.00-SQB	4	5	1/2	0.550 +0.01/0	4.000 +0/-0.003	4.002 +0.005/0	5.000 +0.007/0	4.000 +0/-0.007	4.998 +0/-0.003	5.000 +0.005/0
U50-4.25	4-1/4	5-1/4	1/2	0.550 +0.01/0	4.250 +0/-0.003	4.252 +0.005/0	5.250 +0.007/0	4.250 +0/-0.007	5.248 +0/-0.003	5.250 +0.005/0
U50-4.25-75B	4-1/4	5-1/4	3/4	0.825 +0.01/0	4.250 +0/-0.003	4.252 +0.005/0	5.250 +0.007/0	4.250 +0/-0.007	5.248 +0/-0.003	5.250 +0.005/0
U50-4.50	4-1/2	5-1/2	1/2	0.550 +0.01/0	4.500 +0/-0.003	4.502 +0.005/0	5.500 +0.007/0	4.500 +0/-0.007	5.498 +0/-0.003	5.500 +0.005/0
U50-4.50-75B	4-1/2	5-1/2	3/4	0.825 +0.01/0	4.500 +0/-0.003	4.502 +0.005/0	5.500 +0.007/0	4.500 +0/-0.007	5.498 +0/-0.003	5.500 +0.005/0
U50-4.50-75D	4-1/2	5-1/2	3/4	0.825 +0.01/0	4.500 +0/-0.003	4.502 +0.005/0	5.500 +0.007/0	4.500 +0/-0.007	5.498 +0/-0.003	5.500 +0.005/0
U50-4.75	4-3/4	5-3/4	1/2	0.550 +0.01/0	4.750 +0/-0.003	4.752 +0.005/0	5.750 +0.007/0	4.750 +0/-0.007	5.748 +0/-0.003	5.750 +0.005/0
U50-4.75-69B	4-3/4	5-3/4	11/16	0.756 +0.01/0	4.750 +0/-0.003	4.752 +0.005/0	5.750 +0.007/0	4.750 +0/-0.007	5.748 +0/-0.003	5.750 +0.005/0
U50-5.00	5	6	1/2	0.550 +0.01/0	5.000 +0/-0.003	5.002 +0.005/0	6.000 +0.007/0	5.000 +0/-0.007	5.998 +0/-0.003	6.000 +0.005/0
U50-5.00-75B	5	6	3/4	0.825 +0.01/0	5.000 +0/-0.003	5.002 +0.005/0	6.000 +0.007/0	5.000 +0/-0.007	5.998 +0/-0.003	6.000 +0.005/0
U50-5.00-75D	5	6	3/4	0.825 +0.01/0	5.000 +0/-0.003	5.002 +0.005/0	6.000 +0.007/0	5.000 +0/-0.007	5.998 +0/-0.003	6.000 +0.005/0
U50-5.00-SQB	5	6	1/2	0.550 +0.01/0	5.000 +0/-0.003	5.002 +0.005/0	6.000 +0.007/0	5.000 +0/-0.007	5.998 +0/-0.003	6.000 +0.005/0
U50-5.25	5-1/4	6-1/4	1/2	0.550 +0.01/0	5.250 +0/-0.003	5.252 +0.005/0	6.250 +0.007/0	5.250 +0/-0.007	6.248 +0/-0.003	6.250 +0.005/0
U50-5.25-75B	5-1/4	6-1/4	3/4	0.825 +0.01/0	5.250 +0/-0.003	5.252 +0.005/0	6.250 +0.007/0	5.250 +0/-0.007	6.248 +0/-0.003	6.250 +0.005/0
U50-5.37-75B	5-3/8	6-3/8	3/4	0.825 +0.01/0	5.375 +0/-0.003	5.377 +0.005/0	6.375 +0.007/0	5.375 +0/-0.007	6.373 +0/-0.003	6.375 +0.005/0
U50-5.50	5-1/2	6-1/2	1/2	0.550 +0.01/0	5.500 +0/-0.003	5.502 +0.005/0	6.500 +0.007/0	5.500 +0/-0.007	6.498 +0/-0.003	6.500 +0.005/0
U50-5.50-75B	5-1/2	6-1/2	3/4	0.825 +0.01/0	5.500 +0/-0.003	5.502 +0.005/0	6.500 +0.007/0	5.500 +0/-0.007	6.498 +0/-0.003	6.500 +0.005/0
U50-5.50-75D	5-1/2	6-1/2	3/4	0.825 +0.01/0	5.500 +0/-0.003	5.502 +0.005/0	6.500 +0.007/0	5.500 +0/-0.007	6.498 +0/-0.003	6.500 +0.005/0
U50-5.75	5-3/4	6-3/4	1/2	0.550 +0.01/0	5.750 +0/-0.003	5.752 +0.005/0	6.750 +0.007/0	5.750 +0/-0.007	6.748 +0/-0.003	6.750 +0.005/0
U50-5.75-75B	5-3/4	6-3/4	3/4	0.825 +0.01/0	5.750 +0/-0.003	5.752 +0.005/0	6.750 +0.007/0	5.750 +0/-0.007	6.748 +0/-0.003	6.750 +0.005/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/2" C/S										
U50-6.00-75B	6	7	3/4	0.825 +0.01/0	6.000 +0/-0.003	6.002 +0.005/0	7.000 +0.007/0	6.000 +0/-0.007	6.998 +0/-0.003	7.000 +0.005/0
U50-6.00-75D	6	7	3/4	0.825 +0.01/0	6.000 +0/-0.003	6.002 +0.005/0	7.000 +0.007/0	6.000 +0/-0.007	6.998 +0/-0.003	7.000 +0.005/0
U50-6.00-SQB	6	7	1/2	0.550 +0.01/0	6.000 +0/-0.003	6.002 +0.005/0	7.000 +0.007/0	6.000 +0/-0.007	6.998 +0/-0.003	7.000 +0.005/0
U50-6.25	6-1/4	7-1/4	1/2	0.550 +0.01/0	6.250 +0/-0.003	6.252 +0.005/0	7.250 +0.007/0	6.250 +0/-0.007	7.248 +0/-0.003	7.250 +0.005/0
U50-6.50	6-1/2	7-1/2	1/2	0.550 +0.01/0	6.500 +0/-0.003	6.502 +0.005/0	7.500 +0.007/0	6.500 +0/-0.007	7.498 +0/-0.003	7.500 +0.005/0
U50-6.50-75B	6-1/2	7-1/2	3/4	0.825 +0.01/0	6.500 +0/-0.003	6.502 +0.005/0	7.500 +0.007/0	6.500 +0/-0.007	7.498 +0/-0.003	7.500 +0.005/0
U50-6.75-75B	6-3/4	7-3/4	3/4	0.825 +0.01/0	6.750 +0/-0.003	6.752 +0.005/0	7.750 +0.007/0	6.750 +0/-0.007	7.748 +0/-0.003	7.750 +0.005/0
U50-7.00	7	8	1/2	0.550 +0.01/0	7.000 +0/-0.003	7.002 +0.005/0	8.000 +0.007/0	7.000 +0/-0.007	7.998 +0/-0.003	8.000 +0.005/0
U50-7.00-75B	7	8	3/4	0.825 +0.01/0	7.000 +0/-0.003	7.002 +0.005/0	8.000 +0.007/0	7.000 +0/-0.007	7.998 +0/-0.003	8.000 +0.005/0
U50-7.25	7-1/4	8-1/4	1/2	0.550 +0.01/0	7.250 +0/-0.003	7.252 +0.005/0	8.250 +0.007/0	7.250 +0/-0.007	8.248 +0/-0.003	8.250 +0.005/0
U50-7.50	7-1/2	8-1/2	1/2	0.550 +0.01/0	7.500 +0/-0.003	7.502 +0.005/0	8.500 +0.007/0	7.500 +0/-0.007	8.498 +0/-0.003	8.500 +0.005/0
U50-7.50-75D	7-1/2	8-1/2	3/4	0.825 +0.01/0	7.500 +0/-0.003	7.502 +0.005/0	8.500 +0.007/0	7.500 +0/-0.007	8.498 +0/-0.003	8.500 +0.005/0
U50-8.00	8	9	1/2	0.550 +0.01/0	8.000 +0/-0.003	8.002 +0.005/0	9.000 +0.007/0	8.000 +0/-0.007	8.998 +0/-0.003	9.000 +0.005/0
U50-8.00-75B	8	9	3/4	0.825 +0.01/0	8.000 +0/-0.003	8.002 +0.005/0	9.000 +0.007/0	8.000 +0/-0.007	8.998 +0/-0.003	9.000 +0.005/0
U50-8.00-75D	8	9	3/4	0.825 +0.01/0	8.000 +0/-0.003	8.002 +0.005/0	9.000 +0.007/0	8.000 +0/-0.007	8.998 +0/-0.003	9.000 +0.005/0
U50-8.50	8-1/2	9-1/2	1/2	0.550 +0.01/0	8.500 +0/-0.003	8.502 +0.005/0	9.500 +0.007/0	8.500 +0/-0.007	9.498 +0/-0.003	9.500 +0.005/0
U50-8.50-75B	8-1/2	9-1/2	3/4	0.825 +0.01/0	8.500 +0/-0.003	8.502 +0.005/0	9.500 +0.007/0	8.500 +0/-0.007	9.498 +0/-0.003	9.500 +0.005/0
U50-8.75	8-3/4	9-3/4	1/2	0.550 +0.01/0	8.750 +0/-0.003	8.752 +0.005/0	9.750 +0.007/0	8.750 +0/-0.007	9.748 +0/-0.003	9.750 +0.005/0
U50-9.00	9	10	1/2	0.550 +0.01/0	9.000 +0/-0.003	9.002 +0.005/0	10.000 +0.007/0	9.000 +0/-0.007	9.998 +0/-0.003	10.000 +0.005/0
U50-9.00-75B	9	10	3/4	0.825 +0.01/0	9.000 +0/-0.003	9.002 +0.005/0	10.000 +0.007/0	9.000 +0/-0.007	9.998 +0/-0.003	10.000 +0.005/0
U50-9.00N	9	10	1/2	0.550 +0.01/0	9.000 +0/-0.003	9.002 +0.005/0	10.000 +0.007/0	9.000 +0/-0.007	9.998 +0/-0.003	10.000 +0.005/0
U50-9.25-75B	9-1/4	10-1/4	3/4	0.825 +0.01/0	9.250 +0/-0.003	9.252 +0.005/0	10.250 +0.007/0	9.250 +0/-0.007	10.248 +0/-0.003	10.250 +0.005/0
U50-9.50	9-1/2	10-1/2	1/2	0.550 +0.01/0	9.500 +0/-0.003	9.502 +0.005/0	10.500 +0.007/0	9.500 +0/-0.007	10.498 +0/-0.003	10.500 +0.005/0
U50-10.00	10	11	1/2	0.550 +0.01/0	10.000 +0/-0.003	10.002 +0.005/0	11.000 +0.007/0	10.000 +0/-0.007	10.998 +0/-0.003	11.000 +0.005/0
U50-10.00-75B	10	11	3/4	0.825 +0.01/0	10.000 +0/-0.003	10.002 +0.005/0	11.000 +0.007/0	10.000 +0/-0.007	10.998 +0/-0.003	11.000 +0.005/0
U50-10.00-75D	10	11	3/4	0.825 +0.01/0	10.000 +0/-0.003	10.002 +0.005/0	11.000 +0.007/0	10.000 +0/-0.007	10.998 +0/-0.003	11.000 +0.005/0
U50-10.50	10-1/2	11-1/2	1/2	0.550 +0.01/0	10.500 +0/-0.003	10.502 +0.005/0	11.500 +0.007/0	10.500 +0/-0.007	11.498 +0/-0.003	11.500 +0.005/0
U50-10.62-75B	10-5/8	11-5/8	3/4	0.825 +0.01/0	10.625 +0/-0.003	10.627 +0.005/0	11.625 +0.007/0	10.625 +0/-0.007	11.623 +0/-0.003	11.625 +0.005/0
U50-11.00	11	12	1/2	0.550 +0.01/0	11.000 +0/-0.003	11.002 +0.005/0	12.000 +0.007/0	11.000 +0/-0.007	11.998 +0/-0.003	12.000 +0.005/0
U50-11.00-75B	11	12	3/4	0.825 +0.01/0	11.000 +0/-0.003	11.002 +0.005/0	12.000 +0.007/0	11.000 +0/-0.007	11.998 +0/-0.003	12.000 +0.005/0
U50-11.50-75D	11-1/2	12-1/2	3/4	0.825 +0.01/0	11.500 +0/-0.003	11.502 +0.005/0	12.500 +0.007/0	11.500 +0/-0.007	12.498 +0/-0.003	12.500 +0.005/0
U50-12.00	12	13	1/2	0.550 +0.01/0	12.000 +0/-0.003	12.002 +0.005/0	13.000 +0.007/0	12.000 +0/-0.007	12.998 +0/-0.003	13.000 +0.005/0
U50-12.00-75B	12	13	3/4	0.825 +0.01/0	12.000 +0/-0.003	12.002 +0.005/0	13.000 +0.007/0	12.000 +0/-0.007	12.998 +0/-0.003	13.000 +0.005/0
U50-13.00	13	14	1/2	0.550 +0.01/0	13.000 +0/-0.003	13.002 +0.005/0	14.000 +0.007/0	13.000 +0/-0.007	13.998 +0/-0.003	14.000 +0.005/0
U50-13.00-75B	13	14	3/4	0.825 +0.01/0	13.000 +0/-0.003	13.002 +0.005/0	14.000 +0.007/0	13.000 +0/-0.007	13.998 +0/-0.003	14.000 +0.005/0
U50-13.50-75D	13-1/2	14-1/2	3/4	0.825 +0.01/0	13.500 +0/-0.003	13.502 +0.005/0	14.500 +0.007/0	13.500 +0/-0.007	14.498 +0/-0.003	14.500 +0.005/0
U50-14.00-75B	14	15	3/4	0.825 +0.01/0	14.000 +0/-0.003	14.002 +0.005/0	15.000 +0.007/0	14.000 +0/-0.007	14.998 +0/-0.003	15.000 +0.005/0
U50-15.00	15	16	1/2	0.550 +0.01/0	15.000 +0/-0.003	15.002 +0.005/0	16.000 +0.007/0	15.000 +0/-0.007	15.998 +0/-0.003	16.000 +0.005/0
U50-15.00-75B	15	16	3/4	0.825 +0.01/0	15.000 +0/-0.003	15.002 +0.005/0	16.000 +0.007/0	15.000 +0/-0.007	15.998 +0/-0.003	16.000 +0.005/0
U50-15.50-75D	15-1/2	16-1/2	3/4	0.825 +0.01/0	15.500 +0/-0.003	15.502 +0.005/0	16.500 +0.007/0	15.500 +0/-0.007	16.498 +0/-0.003	16.500 +0.005/0
U50-17.00-75B	17	18	3/4	0.825 +0.01/0	17.000 +0/-0.003	17.002 +0.005/0	18.000 +0.007/0	17.000 +0/-0.007	17.998 +0/-0.003	18.000 +0.005/0

STYLE 800 POLYURETHANE U-SEALS

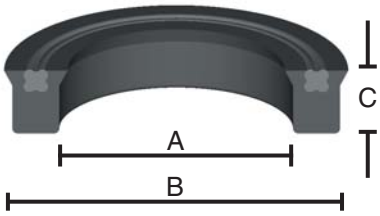
Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
5/8" C/S										
U62-1.25	1-1/4	2-1/2	5/8	0.688 +0.01/0	1.250 +0/-0.003	1.252 +0.006/0	2.500 +0.009/0	1.250 +0/-0.009	2.498 +0/-0.003	2.500 +0.006/0
U62-1.75	1-3/4	3	5/8	0.688 +0.01/0	1.750 +0/-0.003	1.752 +0.006/0	3.000 +0.009/0	1.750 +0/-0.009	2.998 +0/-0.003	3.000 +0.006/0
U62-2.75	2-3/4	4	5/8	0.688 +0.01/0	2.750 +0/-0.003	2.752 +0.006/0	4.000 +0.009/0	2.750 +0/-0.009	3.998 +0/-0.003	4.000 +0.006/0
U62-3.00	3	4-1/4	5/8	0.688 +0.01/0	3.000 +0/-0.003	3.002 +0.006/0	4.250 +0.009/0	3.000 +0/-0.009	4.248 +0/-0.003	4.250 +0.006/0
U62-3.25	3-1/4	4-1/2	5/8	0.688 +0.01/0	3.250 +0/-0.003	3.252 +0.006/0	4.500 +0.009/0	3.250 +0/-0.009	4.498 +0/-0.003	4.500 +0.006/0
U62-3.50	3-1/2	4-3/4	5/8	0.688 +0.01/0	3.500 +0/-0.003	3.502 +0.006/0	4.750 +0.009/0	3.500 +0/-0.009	4.748 +0/-0.003	4.750 +0.006/0
U62-3.75	3-3/4	5	5/8	0.688 +0.01/0	3.750 +0/-0.003	3.752 +0.006/0	5.000 +0.009/0	3.750 +0/-0.009	4.998 +0/-0.003	5.000 +0.006/0
U62-4.00	4	5-1/4	5/8	0.688 +0.01/0	4.000 +0/-0.003	4.002 +0.006/0	5.250 +0.009/0	4.000 +0/-0.009	5.248 +0/-0.003	5.250 +0.006/0
U62-4.25	4-1/4	5-1/2	5/8	0.688 +0.01/0	4.250 +0/-0.003	4.252 +0.006/0	5.500 +0.009/0	4.250 +0/-0.009	5.498 +0/-0.003	5.500 +0.006/0
U62-4.75	4-3/4	6	5/8	0.688 +0.01/0	4.750 +0/-0.003	4.752 +0.006/0	6.000 +0.009/0	4.750 +0/-0.009	5.998 +0/-0.003	6.000 +0.006/0
U62-4.75-75D	4-3/4	6	3/4	0.825 +0.01/0	4.750 +0/-0.003	4.752 +0.006/0	6.000 +0.009/0	4.750 +0/-0.009	5.998 +0/-0.003	6.000 +0.006/0
U62-5.00	5	6-1/4	5/8	0.688 +0.01/0	5.000 +0/-0.003	5.002 +0.006/0	6.250 +0.009/0	5.000 +0/-0.009	6.248 +0/-0.003	6.250 +0.006/0
U62-5.25	5-1/4	6-1/2	5/8	0.688 +0.01/0	5.250 +0/-0.003	5.252 +0.006/0	6.500 +0.009/0	5.250 +0/-0.009	6.498 +0/-0.003	6.500 +0.006/0
U62-5.50	5-1/2	6-3/4	5/8	0.688 +0.01/0	5.500 +0/-0.003	5.502 +0.006/0	6.750 +0.009/0	5.500 +0/-0.009	6.748 +0/-0.003	6.750 +0.006/0
U62-5.75	5-3/4	7	5/8	0.688 +0.01/0	5.750 +0/-0.003	5.752 +0.006/0	7.000 +0.009/0	5.750 +0/-0.009	6.998 +0/-0.003	7.000 +0.006/0
U62-6.00	6	7-1/4	5/8	0.688 +0.01/0	6.000 +0/-0.003	6.002 +0.006/0	7.250 +0.009/0	6.000 +0/-0.009	7.248 +0/-0.003	7.250 +0.006/0
U62-6.25	6-1/4	7-1/2	5/8	0.688 +0.01/0	6.250 +0/-0.003	6.252 +0.006/0	7.500 +0.009/0	6.250 +0/-0.009	7.498 +0/-0.003	7.500 +0.006/0
U62-7.00-100B	7	8-1/4	1	1.100 +0.01/0	7.000 +0/-0.003	7.002 +0.006/0	8.250 +0.009/0	7.000 +0/-0.009	8.248 +0/-0.003	8.250 +0.006/0
U62-7.25	7-1/4	8-1/2	5/8	0.688 +0.01/0	7.250 +0/-0.003	7.252 +0.006/0	8.500 +0.009/0	7.250 +0/-0.009	8.498 +0/-0.003	8.500 +0.006/0
U62-8.00	8	9-1/4	5/8	0.688 +0.01/0	8.000 +0/-0.003	8.002 +0.006/0	9.250 +0.009/0	8.000 +0/-0.009	9.248 +0/-0.003	9.250 +0.006/0
U62-8.50	8-1/2	9-3/4	5/8	0.688 +0.01/0	8.500 +0/-0.003	8.502 +0.006/0	9.750 +0.009/0	8.500 +0/-0.009	9.748 +0/-0.003	9.750 +0.006/0
U62-8.75	8-3/4	10	5/8	0.688 +0.01/0	8.750 +0/-0.003	8.752 +0.006/0	10.000 +0.009/0	8.750 +0/-0.009	9.998 +0/-0.003	10.000 +0.006/0
U62-9.00	9	10-1/4	5/8	0.688 +0.01/0	9.000 +0/-0.003	9.002 +0.006/0	10.250 +0.009/0	9.000 +0/-0.009	10.248 +0/-0.003	10.250 +0.006/0
U62-9.50	9-1/2	10-3/4	5/8	0.688 +0.01/0	9.500 +0/-0.003	9.502 +0.006/0	10.750 +0.009/0	9.500 +0/-0.009	10.748 +0/-0.003	10.750 +0.006/0
U62-9.75	9-3/4	11	5/8	0.688 +0.01/0	9.750 +0/-0.003	9.752 +0.006/0	11.000 +0.009/0	9.750 +0/-0.009	10.998 +0/-0.003	11.000 +0.006/0
U62-10.00-100B	10	11-1/4	1	1.100 +0.01/0	10.000 +0/-0.003	10.002 +0.006/0	11.250 +0.009/0	10.000 +0/-0.009	11.248 +0/-0.003	11.250 +0.006/0
U62-12.00	12	13-1/4	5/8	0.682 +0.01/0	12.000 +0/-0.003	12.002 +0.006/0	13.250 +0.009/0	12.000 +0/-0.009	13.248 +0/-0.003	13.250 +0.006/0
U62-14.00-100D	14	15-1/4	1	1.100 +0.01/0	14.000 +0/-0.003	14.002 +0.006/0	15.250 +0.009/0	14.000 +0/-0.009	15.248 +0/-0.003	15.250 +0.006/0
U62-14.75-100B	14-3/4	16	1	1.100 +0.01/0	14.750 +0/-0.003	14.752 +0.006/0	16.000 +0.009/0	14.750 +0/-0.009	15.998 +0/-0.003	16.000 +0.006/0
3/4" C/S										
U75-3.50-SQB	3-1/2	5	3/4	0.825 +0.01/0	3.500 +0/-0.004	3.502 +0.007/0	5.000 +0.011/0	3.500 +0/-0.011	4.998 +0/-0.004	5.000 +0.007/0
U75-4.50	4-1/2	6	3/4	0.825 +0.01/0	4.500 +0/-0.004	4.502 +0.007/0	6.000 +0.011/0	4.500 +0/-0.011	5.998 +0/-0.004	6.000 +0.007/0
U75-6.00	6	7-1/2	3/4	0.825 +0.01/0	6.000 +0/-0.004	6.002 +0.007/0	7.500 +0.011/0	6.000 +0/-0.011	7.498 +0/-0.004	7.500 +0.007/0
U75-6.50	6-1/2	8	3/4	0.825 +0.01/0	6.500 +0/-0.004	6.502 +0.007/0	8.000 +0.011/0	6.500 +0/-0.011	7.998 +0/-0.004	8.000 +0.007/0
U75-7.00	7	8-1/2	3/4	0.825 +0.01/0	7.000 +0/-0.004	7.002 +0.007/0	8.500 +0.011/0	7.000 +0/-0.011	8.498 +0/-0.004	8.500 +0.007/0
U75-8.00	8	9-1/2	3/4	0.825 +0.01/0	8.000 +0/-0.004	8.002 +0.007/0	9.500 +0.011/0	8.000 +0/-0.011	9.498 +0/-0.004	9.500 +0.007/0
U75-9.50	9-1/2	11	3/4	0.825 +0.01/0	9.500 +0/-0.004	9.502 +0.007/0	11.000 +0.011/0	9.500 +0/-0.011	10.998 +0/-0.004	11.000 +0.007/0
U75-10.00	10	11-1/2	3/4	0.825 +0.01/0	10.000 +0/-0.003	10.002 +0.006/0	11.500 +0.009/0	10.000 +0/-0.009	11.498 +0/-0.003	11.500 +0.006/0
U75-10.50	10-1/2	12	3/4	0.825 +0.01/0	10.500 +0/-0.003	10.502 +0.006/0	12.000 +0.009/0	10.500 +0/-0.009	11.998 +0/-0.003	12.000 +0.006/0
U75-11.00	11	12-1/2	3/4	0.825 +0.01/0	11.000 +0/-0.003	11.002 +0.006/0	12.500 +0.009/0	11.000 +0/-0.009	12.498 +0/-0.003	12.500 +0.006/0
U75-12.50	12-1/2	14	3/4	0.825 +0.01/0	12.500 +0/-0.003	12.502 +0.006/0	14.000 +0.009/0	12.500 +0/-0.009	13.998 +0/-0.003	14.000 +0.006/0
U75-14.00	14	15-1/2	3/4	0.825 +0.01/0	14.000 +0/-0.003	14.002 +0.006/0	15.500 +0.009/0	14.000 +0/-0.009	15.498 +0/-0.003	15.500 +0.006/0

STYLE 800 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
3/4" C/S										
U75-14.50	14-1/2	16	3/4	0.825 +0.01/0	16.000 +0/-0.003	16.002 +0.006/0	14.500 +0.009/0	16.000 +0/-0.009	14.498 +0/-0.003	14.500 +0.006/0
1" C/S										
U100-10.00	10	12	1	1.100 +0.01/0	10.000 +0/-0.004	10.002 +0.007/0	12.000 +0.011/0	10.000 +0/-0.011	11.998 +0/-0.004	12.000 +0.007/0
U100-12.00-150D	12	14	1-1/2	1.650 +0.01/0	12.000 +0/-0.004	12.002 +0.007/0	14.000 +0.011/0	12.000 +0/-0.011	13.998 +0/-0.004	14.000 +0.007/0
U100-14.00-150D	14	16	1-1/2	1.650 +0.01/0	14.000 +0/-0.004	14.002 +0.007/0	16.000 +0.011/0	14.000 +0/-0.011	15.998 +0/-0.004	16.000 +0.007/0
U100-15.00	15	17	1	1.100 +0.01/0	15.000 +0/-0.004	15.002 +0.007/0	17.000 +0.011/0	15.000 +0/-0.011	16.998 +0/-0.004	17.000 +0.007/0
U100-16.00	16	18	1	1.100 +0.01/0	16.000 +0/-0.004	16.002 +0.007/0	18.000 +0.011/0	16.000 +0/-0.011	17.998 +0/-0.004	18.000 +0.007/0
U100-18.00	18	20	1	1.100 +0.01/0	18.000 +0/-0.004	18.002 +0.007/0	20.000 +0.011/0	18.000 +0/-0.011	19.998 +0/-0.004	20.000 +0.007/0
U100-20.00	20	22	1	1.100 +0.01/0	20.000 +0/-0.004	20.002 +0.007/0	22.000 +0.011/0	20.000 +0/-0.011	21.998 +0/-0.004	22.000 +0.007/0

STYLE 800 PM U-SEALS

Our Style 800 orange Hytrel U-seals offer superior resistance to abrasion, extrusion, and heat. As a drop-in replacement for our standard Style 800 U-seals, they can prolong equipment life under today's increased demands. These seals are suitable for both petroleum-based and water-based fluids.



PART NUMBERS

U 12 - 0.18 - 25BPM

Type of Seal | Cross Section | Inside Diameter | Height

SEAL INFORMATION	
MATERIAL	55D HYTREL SEAL FKM ENERGIZER
TEMPERATURE RANGE	-65° TO +275° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)

Standard -
Height and cross section are equal, thus giving a square seal. Utilizes type "D" lip
Typical Part Number
U25-0.18PM

Deep -
Utilizes the same "D" lip, but the seal height is greater than the cross section, thus giving a retangular shape.
Typical Part Number
U25-2.00-37DPM

Type SQB -
Same dimensions as the Standard seal. Beveled lip design provides better film breaking. Utilizes type "B" lip.
Typical Part Number
U25-2.50-SQBPM

Type B -
Same dimensions as the Deep seal. Beveled lip design provides better film breaking.
Utilizes type "B" lip.
Typical Part Number
U25-2.25-37BPM

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.
1/8" C/S			
U12-0.18PM	3/16	7/16	1/8
U12-0.25-25BPM	1/4	1/2	1/4
U12-0.25-SQBPM	1/4	1/2	1/8
U12-0.31-SQBPM	5/16	9/16	1/8
U12-0.50-25BPM	1/2	3/4	1/4
U12-0.50-SQBPM	1/2	3/4	1/8
U12-0.62-25BPM	5/8	7/8	1/4
U12-0.75-25BPM	3/4	1	1/4
U12-0.75-SQBPM	3/4	1	1/8
U12-0.81-SQBPM	13/16	1-1/16	1/8
U12-0.87-25BPM	7/8	1-1/8	1/4
U12-1.00-25BPM	1	1-1/4	1/4

STYLE 800 PM U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.
1/8" C/S			
U12-1.00-SQBPM	1	1-1/4	1/8
U12-1.12-25BPM	1-1/8	1-3/8	1/4
U12-1.12-SQBPM	1-1/8	1-3/8	1/8
U12-1.25-25BPM	1-1/4	1-1/2	1/4
U12-1.37-SQBPM	1-3/8	1-5/8	1/8
U12-1.50-25BPM	1-1/2	1-3/4	1/4
U12-1.50-SQBPM	1-1/2	1-3/4	1/8
3/16" C/S			
U18-0.50PM	1/2	7/8	3/16
U18-0.62-SQBPM	5/8	1	3/16
U18-0.75-SQBPM	3/4	1-1/8	3/16
U18-1.00-SQBPM	1	1-3/8	3/16
U18-1.12-SQBPM	1-1/8	1-1/2	3/16
U18-1.25-SQBPM	1-1/4	1-5/8	3/16
U18-1.37-31BPM	1-3/8	1-3/4	5/16
U18-1.37-SQBPM	1-3/8	1-3/4	3/16
U18-1.50-SQBPM	1-1/2	1-7/8	3/16
U18-1.62-37BPM	1-5/8	2	3/8
U18-1.62-SQBPM	1-5/8	2	3/16
U18-1.75-31BPM	1-3/4	2-1/8	5/16
U18-1.75-37BPM	1-3/4	2-1/8	3/8
U18-1.75PM	1-3/4	2-1/8	3/16
U18-1.75-SQBPM	1-3/4	2-1/8	3/16
U18-1.87-37BPM	1-7/8	2-1/4	3/8
U18-1.87-SQBPM	1-7/8	2-1/4	3/16
U18-2.00-27DPM	2	2-3/8	.27
U18-2.00-37BPM	2	2-3/8	3/8
U18-2.00-SQBPM	2	2-3/8	3/16
U18-2.25-SQBPM	2-1/4	2-5/8	3/16
U18-3.12-37BPM	3-1/8	3-1/2	3/8
U18-3.12-SQBPM	3-1/8	3-1/2	3/16
1/4" C/S			
U25-1.00-37BPM	1	1-1/2	3/8
U25-1.18PM	1-3/16	1-11/16	1/4
U25-1.50-37BPM	1-1/2	2	3/8
U25-1.50-SQBPM	1-1/2	2	1/4
U25-1.75-37BPM	1-3/4	2-1/4	3/8
U25-2.00-37BPM	2	2-1/2	3/8
U25-2.00-37DPM	2	2-1/2	3/8
1/4" C/S			

STYLE 800 PM U-SEALS

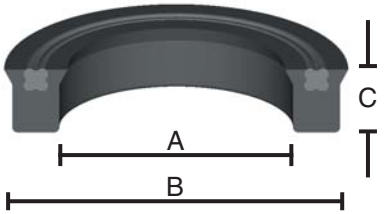
Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.
U25-2.00PM	2	2-1/2	1/4
U25-2.00-SQBPM	2	2-1/2	1/4
U25-2.12-37BPM	2-1/8	2-5/8	3/8
U25-2.25-37BPM	2-1/4	2-3/4	3/8
U25-2.25PM	2-1/4	2-3/4	1/4
U25-2.37-37BPM	2-3/8	2-7/8	3/8
U25-2.50-37DPM	2-1/2	3	3/8
U25-2.50PM	2-1/2	3	1/4
U25-2.50-SQBPM	2-1/2	3	1/4
U25-2.75-SQBPM	2-3/4	3-1/4	1/4
U25-3.00PM	3	3-1/2	1/4
U25-3.00-SQBPM	3	3-1/2	1/4
U25-3.25-37BPM	3-1/4	3-3/4	3/8
U25-3.50-37BPM	3-1/2	4	3/8
U25-3.50PM	3-1/2	4	1/4
U25-4.00-56BPM	4	4-1/2	9/16
U25-4.50PM	4-1/2	5	1/4
U25-5.00PM	5	5-1/2	1/4
U25-5.50PM	5-1/2	6	1/4
5/16" C/S			
U31-1.50-37BPM	1-1/2	2-1/8	3/8
U31-1.50-50BPM	1-1/2	2-1/8	1/2
U31-2.37PM	2-3/8	3	5/16
U31-2.50-50BPM	2-1/2	3-1/8	1/2
U31-3.00-50BPM	3	3-5/8	1/2
U31-5.37-SQBPM	5-3/8	6	5/16
3/8" C/S			
U37-2.50-50BPM	2-1/2	3-1/4	1/2
U37-2.75PM	2-3/4	3-1/2	3/8
U37-3.25-62BPM	3-1/4	4	5/8
U37-3.25PM	3-1/4	4	3/8
U37-3.50-62BPM	3-1/2	4-1/4	5/8
U37-3.75-62BPM	3-3/4	4-1/2	5/8
U37-4.00-62BPM	4	4-3/4	5/8
U37-4.25-50DPM	4-1/4	5	1/2
U37-4.25-62BPM	4-1/4	5	5/8
U37-4.50-62BPM	4-1/2	5-1/4	5/8
U37-5.00-62BPM	5	5-3/4	5/8
U37-5.25-62BPM	5-1/4	6	5/8
3/8" C/S			

STYLE 800 PM U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.
U37-5.25PM	5-1/4	6	3/8
U37-5.50-62BPM	5-1/2	6-1/4	5/8
U37-6.25-62BPM	6-1/4	7	5/8
U37-6.25PM	6-1/4	7	3/8
U37-7.25PM	7-1/4	8	3/8
1/2" C/S			
U50-2.25PM	2-1/4	3-1/4	1/2

STYLE 800 HIGH TEMPERATURE POLYURETHANE U-SEALS

Style 800 U-seals are molded from tough, abrasion-resistant polyurethane. The four lobed expander ring energizes the sealing lips, even at zero pressure, to help prevent "weeping" when the system is idle.

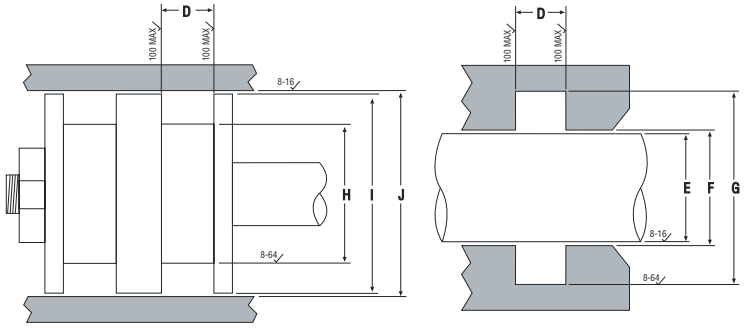


PART NUMBERS

U 12 - 0.18 - 25

Type of Seal | Cross Section | Inside Diameter | Height

SEAL INFORMATION	
MATERIAL	95A URETHANE
TEMPERATURE RANGE	-40° TO +225° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)



Standard -
Height and cross section are equal, thus giving a square seal.
Utilizes type "D" lip
Typical Part Number
U25-2.50

Deep -
Utilizes the same "D" lip, but the seal height is greater than the cross section, thus giving a retangular shape.
Typical Part Number
U25-2.50-37D

Type SQB -
Same dimensions as the Standard seal. Beveled lip design provides better film breaking. Utilizes type "B" lip.
Typical Part Number
U25-2.50-SQB

Type B -
Same dimensions as the Deep seal. Beveled lip design provides better film breaking.
Utilizes type "B" lip.
Typical Part Number
U25-2.50-37B

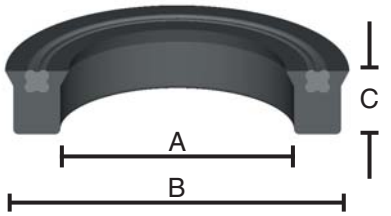
Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/8" C/S										
U12-1.00-25BHT	1	1-1/4	1/4	0.275 +0.01/0	1.000 +0/-0.001	1.001 +0.002/0	1.250 +0.002/0	1.000 +0/-0.001	1.249 +0/-0.001	1.250 +0.002/0
U12-1.00-SQBHT	1	1-1/4	1/8	0.138 +0.01/0	1.000 +0/-0.001	1.001 +0.002/0	1.250 +0.002/0	1.000 +0/-0.001	1.249 +0/-0.001	1.250 +0.002/0
U12-1.12-25BHT	1-1/8	1-3/8	1/4	0.275 +0.01/0	1.125 +0/-0.001	1.126 +0.002/0	1.375 +0.002/0	1.125 +0/-0.001	1.374 +0/-0.001	1.375 +0.002/0
U12-1.25-25BHT	1-1/4	1-1/2	1/4	0.275 +0.01/0	1.250 +0/-0.001	1.251 +0.002/0	1.500 +0.002/0	1.250 +0/-0.001	1.499 +0/-0.001	1.500 +0.002/0
3/16" C/S										
U18-0.87-31BHT	7/8	1-1/4	5/16	0.344 +0.01/0	0.875 +0/-0.001	0.876 +0.002/0	1.250 +0.002/0	0.875 +0/-0.001	1.249 +0/-0.001	1.250 +0.003/0
U18-1.00-31BHT	1	1-3/8	5/16	0.344 +0.01/0	1.000 +0/-0.001	1.001 +0.002/0	1.375 +0.002/0	1.000 +0/-0.001	1.374 +0/-0.001	1.375 +0.003/0
U18-1.12-SQBHT	1-1/8	1-1/2	3/16	0.207 +0.01/0	1.125 +0/-0.001	1.126 +0.002/0	1.500 +0.002/0	1.125 +0/-0.001	1.499 +0/-0.001	1.500 +0.003/0
U18-1.25-31BHT	1-1/4	1-5/8	5/16	0.344 +0.01/0	1.250 +0/-0.002	1.251 +0.002/0	1.625 +0.002/0	1.250 +0/-0.002	1.624 +0/-0.001	1.625 +0.003/0
U18-1.25-SQBHT	1-1/4	1-5/8	3/16	0.207 +0.01/0	1.250 +0/-0.002	1.251 +0.002/0	1.625 +0.002/0	1.250 +0/-0.001	1.624 +0/-0.001	1.625 +0.003/0
U18-1.31-31BHT	1-5/16	1-11/16	5/16	0.344 +0.01/0	1.312 +0/-0.002	1.313 +0.002/0	1.687 +0.002/0	1.312 +0/-0.002	1.686 +0/-0.001	1.687 +0.003/0
U18-1.50-37BHT	1-1/2	1-7/8	3/8	0.413 +0.01/0	1.500 +0/-0.002	1.501 +0.002/0	1.875 +0.002/0	1.500 +0/-0.002	1.874 +0/-0.001	1.875 +0.003/0
U18-1.62-37BHT	1-5/8	2	3/8	0.413 +0.01/0	1.625 +0/-0.002	1.626 +0.002/0	2.000 +0.002/0	1.625 +0/-0.002	1.999 +0/-0.001	2.000 +0.003/0
U18-1.75-37BHT	1-3/4	2-1/8	3/8	0.413 +0.01/0	1.750 +0/-0.002	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.124 +0/-0.001	2.125 +0.003/0

STYLE 800 HIGH TEMPERATURE POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
3/16" C/S										
U18-1.87-37BHT	1-7/8	2-1/4	3/8	0.413 +0.01/0	1.875 +0/-0.002	1.876 +0.002/0	2.250 +0.003/0	1.875 +0/-0.002	2.249 +0/-0.001	2.250 +0.003/0
1/4" C/S										
U25-1.25-SQBHT	1-1/4	1-3/4	1/4	0.275 +0.01/0	1.250 +0/-0.002	1.251 +0.003/0	1.750 +0.003/0	1.250 +0/-0.002	1.749 +0/-0.002	1.750 +0.003/0
U25-1.25-37BHT	1-1/4	1-3/4	3/8	0.413 +0.01/0	1.250 +0/-0.002	1.251 +0.003/0	1.750 +0.003/0	1.500 +0/-0.002	1.749 +0/-0.002	1.750 0.003/-0
U25-1.50-37BHT	1-1/2	2	3/8	0.413 +0.01/0	1.500 +0/-0.002	1.501 +0.003/0	2.000 +0.003/0	1.500 +0/-0.003	1.999 +0/-0.002	2.000 +0.003/0
U25-1.75-37BHT	1-3/4	2-1/4	3/8	0.413 +0.01/0	1.750 +0/-0.002	1.751 +0.003/0	2.250 +0.003/0	1.750 +0/-0.003	2.124 +0/-0.002	2.250 +0.003/0
U25-2.00-37BHT	2	2-1/2	3/8	0.413 +0.01/0	2.000 +0/-0.002	2.001 +0.003/0	2.500 +0.003/0	2.000 +0/-0.003	2.499 +0/-0.002	2.500 +0.003/0
U25-2.00-SQBHT	2	2-1/2	1/4	0.275 +0.01/0	2.000 +0/-0.002	2.001 +0.003/0	2.500 +0.003/0	2.000 +0/-0.003	2.499 +0/-0.002	2.500 +0.003/0
U25-2.25-37BHT	2-1/4	2-3/4	3/8	0.413 +0.01/0	2.250 +0/-0.001	2.251 +0.002/0	2.750 +0.002/0	2.250 +0/-0.001	2.749 +0/-0.001	2.750 +0.002/0
U25-2.50-37BHT	2-1/2	3	3/8	0.413 +0.01/0	2.500 +0/-0.002	2.501 +0.003/0	3.000 +0.003/0	2.500 +0/-0.003	2.999 +0/-0.002	3.000 +0.003/0
U25-2.50-SQBHT	2-1/2	3	1/4	0.275 +0.01/0	2.500 +0/-0.002	2.501 +0.003/0	3.000 +0.003/0	2.500 +0/-0.003	2.999 +0/-0.002	3.000 +0.003/0
U25-2.62-37BHT	2-5/8	3-1/8	3/8	0.413 +0.01/0	2.625 +0/-0.002	2.626 +0.003/0	3.125 +0.003/0	2.625 +0/-0.003	3.124 +0/-0.002	3.125 +0.003/0
U25-3.00-37BHT	3	3-1/2	3/8	0.413 +0.01/0	3.000 +0/-0.002	3.001 +0.003/0	3.500 +0.003/0	3.000 +0/-0.003	3.499 +0/-0.002	3.500 +0.003/0
U25-3.00-SQBHT	3	3-1/2	1/4	0.275 +0.01/0	3.000 +0/-0.002	3.001 +0.003/0	3.500 +0.003/0	3.000 +0/-0.003	3.499 +0/-0.002	3.500 +0.003/0
U25-3.25-37BHT	3-1/4	3-3/4	3/8	0.413 +0.01/0	3.250 +0/-0.002	3.251 +0.003/0	3.750 +0.003/0	3.250 +0/-0.003	3.749 +0/-0.002	3.750 +0.003/0
U25-3.50-37BHT	3-1/2	4	3/8	0.413 +0.01/0	3.500 +0/-0.002	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.003	3.999 +0/-0.002	4.000 +0.003/0
U25-4.00-37BHT	4	4-1/2	3/8	0.413 +0.01/0	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0

STYLE 800 FLUOROCARBON U-SEALS

Utilizing the same profiles as the Style 800 Polyurethane U-Seal line, these u-seals are molded from a fluorocarbon compound. While being compatible with a broader range of fluids, these fluorocarbon seals will also operate continuously at temperatures from -20° to +400° F. **NOTE:** If you are not sure of fluid/seal compatibility, please refer to the fluid compatibility chart in the appendix or contact our Engineering Department.



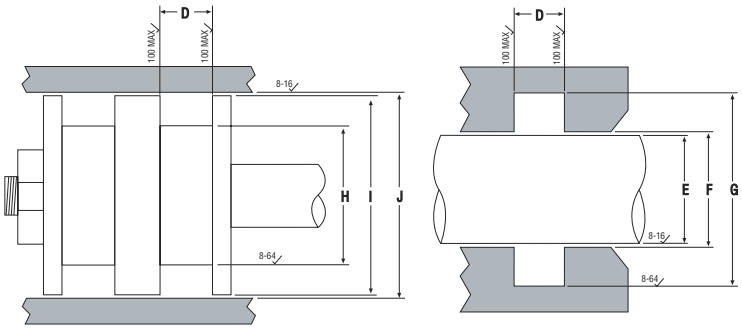
SEAL INFORMATION	
MATERIAL	95A FLUOROCARBON
TEMPERATURE RANGE	-20° TO +400° F
PRESSURE RANGE	0 TO 2,000 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)

V= VITON (FLUOROCARBON)
D= DEEP
B= B-LIP

PART NUMBERS

U 12 - 0.18 - 25

Type of Seal | Cross Section | Inside Diameter | Height



Standard -
Height and cross section are equal, thus giving a square seal.
Utilizes type "D" lip
Typical Part Number
U25-2.50

Deep -
Utilizes the same "D" lip, but the seal height is greater than the cross section, thus giving a retangular shape.
Typical Part Number
U25-2.50-37D

Type SQB -
Same dimensions as the Standard seal. Beveled lip design provides better film breaking. Utilizes type "B" lip.
Typical Part Number
U25-2.50-SQB

Type B -
Same dimensions as the Deep seal. Beveled lip design provides better film breaking.
Utilizes type "B" lip.
Typical Part Number
U25-2.50-37B

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/8" C/S										
U12-0.25V	1/4	1/2	1/8	0.138 +0.01/0	0.250 +0/-0.001	0.257 +0.002/0	0.500 +0.002/0	0.250 +0/-0.001	0.499 +0/-0.001	0.500 +0.002/0
U12-0.31V	5/16	9/16	1/8	0.138 +0.01/0	0.250 +0/-0.001	0.257 +0.002/0	0.500 +0.002/0	0.250 +0/-0.001	0.499 +0/-0.001	0.500 +0.002/0
U12-0.37V	3/8	5/8	1/8	0.138 +0.01/0	0.375 +0/-0.001	0.376 +0.002/0	0.625 +0.002/0	0.375 +0/-0.001	0.624 +0/-0.001	0.625 +0.002/0
U12-0.50-25BV	1/2	3/4	1/4	0.275 +0.01/0	0.500 +0/-0.001	0.501 +0.002/0	0.750 +0.002/0	0.500 +0/-0.001	0.749 +0/-0.001	0.750 +0.002/0
U12-0.50V	1/2	3/4	1/8	0.138 +0.01/0	0.500 +0/-0.001	0.501 +0.002/0	0.750 +0.002/0	0.500 +0/-0.001	0.749 +0/-0.001	0.750 +0.002/0
U12-0.62-25BV	5/8	7/8	1/4	0.275 +0.01/0	0.625 +0/-0.001	0.626 +0.002/0	0.875 +0.002/0	0.625 +0/-0.001	0.874 +0/-0.001	0.875 +0.002/0
U12-0.62V	5/8	7/8	1/8	0.138 +0.01/0	0.625 +0/-0.001	0.626 +0.002/0	0.875 +0.002/0	0.625 +0/-0.001	0.874 +0/-0.001	0.875 +0.002/0
U12-0.75-25BV	3/4	1	1/4	0.275 +0.01/0	0.750 +0/-0.001	0.751 +0.002/0	1.000 +0.002/0	0.750 +0/-0.001	0.999 +0/-0.001	1.000 +0.002/0
U12-0.75V	3/4	1	1/8	0.138 +0.01/0	0.750 +0/-0.001	0.751 +0.002/0	1.000 +0.002/0	0.750 +0/-0.001	0.999 +0/-0.001	1.000 +0.002/0
U12-0.87V	7/8	1-1/8	1/8	0.138 +0.01/0	0.875 +0/-0.001	0.876 +0.002/0	1.125 +0.002/0	0.875 +0/-0.001	1.124 +0/-0.001	1.125 +0.002/0
U12-1.00-25BV	1	1-1/4	1/4	0.275 +0.01/0	1.000 +0/-0.001	1.001 +0.002/0	1.250 +0.002/0	1.000 +0/-0.001	1.249 +0/-0.001	1.250 +0.002/0
U12-1.00V	1	1-1/4	1/8	0.138 +0.01/0	1.000 +0/-0.001	1.001 +0.002/0	1.250 +0.002/0	1.000 +0/-0.001	1.249 +0/-0.001	1.250 +0.002/0
U12-1.25-25BV	1-1/4	1-1/2	1/4	0.275 +0.01/0	1.250 +0/-0.001	1.251 +0.002/0	1.500 +0.002/0	1.250 +0/-0.001	1.499 +0/-0.001	1.500 +0.002/0
U12-1.25V	1-1/4	1-1/2	1/8	0.138 +0.01/0	1.250 +0/-0.001	1.251 +0.002/0	1.500 +0.002/0	1.250 +0/-0.001	1.499 +0/-0.001	1.500 +0.002/0

STYLE 800 FLUOROCARBON U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/8" C/S										
U12-1.37-25DV	1-3/8	1-5/8	1/4	0.275 +0.01/0	1.375 +0/-0.001	1.376 +0.002/0	1.625 +0.002/0	1.375 +0/-0.001	1.624 +0/-0.001	1.625 +0.002/0
U12-1.37V	1-3/8	1-5/8	1/8	0.138 +0.01/0	1.375 +0/-0.001	1.376 +0.002/0	1.625 +0.002/0	1.375 +0/-0.001	1.624 +0/-0.001	1.625 +0.002/0
U12-1.50-25BV	1 1/2	1-3/4	1/4	0.275 +0.01/0	1.500 +0/-0.001	1.501 +0.002/0	1.750 +0.002/0	1.500 +0/-0.001	1.749 +0/-0.001	1.750 +0.002/0
U12-1.50V	1-1/2	1-3/4	1/8	0.138 +0.01/0	1.500 +0/-0.001	1.501 +0.002/0	1.750 +0.002/0	1.500 +0/-0.001	1.749 +0/-0.001	1.750 +0.002/0
U12-1.75V	1-3/4	2	1/8	0.138 +0.01/0	1.750 +0/-0.001	1.751 +0.002/0	2.000 +0.002/0	1.750 +0/-0.001	1.999 +0/-0.001	2.000 +0.002/0
U12-2.00V	2	2-1/4	1/8	0.138 +0.01/0	2.000 +0/-0.001	2.001 +0.002/0	2.250 +0.002/0	2.000 +0/-0.001	2.249 +0/-0.001	2.250 +0.002/0
5/32" C/S										
U15-1.00V	1	1-5/16	5/32	0.172 +0.01/0	1.000 +0/-0.001	1.001 +0.002/0	1.312 +0.002/0	1.000 +0/-0.001	1.311 +0/-0.001	1.312 +0.002/0
U15-1.18V	1-3/16	1-1/2	5/32	0.172 +0.01/0	1.187 +0/-0.001	1.188 +0.002/0	1.500 +0.002/0	1.187 +0/-0.001	1.499 +0/-0.001	1.500 +0.002/0
U15-1.37V	1-3/8	1-11/16	5/32	0.172 +0.01/0	1.375 +0/-0.001	1.376 +0.002/0	1.687 +0.002/0	1.375 +0/-0.001	1.686 +0/-0.001	1.687 +0.002/0
3/16" C/S										
U18-0.37V	3/8	3/4	3/16	0.207 +0.01/0	0.375 +0/-0.002	0.376 +0.002/0	0.750 +0.002/0	0.375 +0/-0.002	0.749 +0/-0.002	0.750 +0.002/0
U18-0.50-31BV	1/2	7/8	5/16	0.344 +0.01/0	0.500 +0/-0.002	0.501 +0.002/0	0.875 +0.002/0	0.500 +0/-0.002	0.874 +0/-0.002	0.875 +0.002/0
U18-0.62V	5/8	1	3/16	0.207 +0.01/0	0.625 +0/-0.002	0.626 +0.002/0	1.000 +0.002/0	0.625 +0/-0.002	0.999 +0/-0.002	1.000 +0.002/0
U18-0.62-31BV	5/8	1	5/16	0.344 +0.01/0	0.625 +0/-0.002	0.626 +0.002/0	1.000 +0.002/0	0.625 +0/-0.002	0.999 +0/-0.002	1.000 +0.002/0
U18-0.75-31BV	3/4	1-1/8	5/16	0.344 +0.01/0	0.750 +0/-0.002	0.751 +0.002/0	1.125 +0.002/0	0.750 +0/-0.002	1.124 +0/-0.002	1.125 +0.002/0
U18-1.00-31BV	1	1-3/8	5/16	0.344 +0.01/0	1.000 +0/-0.002	1.001 +0.002/0	1.375 +0.002/0	1.000 +0/-0.002	1.374 +0/-0.002	1.375 +0.002/0
U18-1.00V	1	1-3/8	3/16	0.207 +0.01/0	1.000 +0/-0.002	1.001 +0.002/0	1.375 +0.002/0	1.000 +0/-0.002	1.374 +0/-0.002	1.375 +0.002/0
U18-1.12-31BV	1-1/8	1-1/2	5/16	0.344 +0.01/0	1.125 +0/-0.002	1.126 +0.002/0	1.500 +0.002/0	1.125 +0/-0.002	1.499 +0/-0.002	1.500 +0.002/0
U18-1.12V	1-1/8	1-1/2	3/16	0.207 +0.01/0	1.125 +0/-0.002	1.126 +0.002/0	1.500 +0.002/0	1.125 +0/-0.002	1.499 +0/-0.002	1.500 +0.002/0
U18-1.25-31BV	1-1/4	1-5/8	5/16	0.344 +0.01/0	1.250 +0/-0.002	1.251 +0.002/0	1.625 +0.002/0	1.250 +0/-0.002	1.624 +0/-0.002	1.625 +0.002/0
U18-1.25V	1-1/4	1-5/8	3/16	0.207 +0.01/0	1.250 +0/-0.002	1.251 +0.002/0	1.625 +0.002/0	1.250 +0/-0.002	1.624 +0/-0.002	1.625 +0.002/0
U18-1.37-25BV	1-3/8	1-3/4	1/4	0.275 +0.01/0	1.375 +0/-0.002	1.376 +0.002/0	1.750 +0.002/0	1.375 +0/-0.002	1.749 +0/-0.002	1.750 +0.002/0
U18-1.37-31BV	1-3/8	1-3/4	5/16	0.344 +0.01/0	1.375 +0/-0.002	1.376 +0.002/0	1.750 +0.002/0	1.375 +0/-0.002	1.749 +0/-0.002	1.750 +0.002/0
U18-1.37V	1-3/8	1-3/4	3/16	0.207 +0.01/0	1.375 +0/-0.002	1.376 +0.002/0	1.750 +0.002/0	1.375 +0/-0.002	1.749 +0/-0.002	1.750 +0.002/0
U18-1.50-25BV	1-1/2	1-7/8	3/16	0.275 +0.01/0	1.500 +0/-0.002	1.501 +0.002/0	1.875 +0.002/0	1.500 +0/-0.002	1.874 +0/-0.002	1.875 +0.002/0
U18-1.50-37BV	1-1/2	1-7/8	3/8	0.413 +0.01/0	1.500 +0/-0.002	1.501 +0.002/0	1.875 +0.002/0	1.500 +0/-0.002	1.874 +0/-0.002	1.875 +0.002/0
U18-1.50V	1-1/2	1-7/8	3/16	0.207 +0.01/0	1.500 +0/-0.002	1.501 +0.002/0	1.875 +0.002/0	1.500 +0/-0.002	1.874 +0/-0.002	1.875 +0.002/0
U18-1.75-31BV	1-3/4	2-1/8	5/16	0.344 +0.01/0	1.750 +0/-0.002	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0
U18-1.62-37BV	1-5/8	2	3/8	0.413 +0.01/0	1.625 +0/-0.002	1.626 +0.002/0	2.000 +0.002/0	1.625 +0/-0.002	1.999 +0/-0.002	2.000 +0.002/0
U18-1.62V	1-5/8	2	3/16	0.207 +0.01/0	1.625 +0/-0.002	1.626 +0.002/0	2.000 +0.002/0	1.625 +0/-0.002	1.999 +0/-0.002	2.000 +0.002/0
U18-1.68V	1-11/16	2-1/16	3/16	0.207 +0.01/0	1.687 +0/-0.002	1.688 +0.002/0	2.062 +0.002/0	1.687 +0/-0.002	2.061 +0/-0.002	2.062 +0.002/0
U18-1.75-37BV	1-3/4	2-1/8	3/8	0.413 +0.01/0	1.750 +0/-0.002	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0
U18-1.75V	1-3/4	2-1/8	3/16	0.207 +0.01/0	1.750 +0/-0.002	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0
U18-2.00-37BV	2	2-3/8	3/8	0.413 +0.01/0	2.000 +0/-0.002	2.001 +0.002/0	2.375 +0.002/0	2.000 +0/-0.002	2.374 +0/-0.002	2.375 +0.002/0
U18-2.00V	2	2-3/8	3/16	0.207 +0.01/0	2.000 +0/-0.002	2.001 +0.002/0	2.375 +0.002/0	2.000 +0/-0.002	2.374 +0/-0.002	2.375 +0.002/0
U18-2.12-37BV	2-1/8	2-1/2	3/8	0.413 +0.01/0	2.125 +0/-0.002	2.126 +0.002/0	2.500 +0.002/0	2.125 +0/-0.002	2.499 +0/-0.002	2.500 +0.002/0
U18-2.12V	2-1/8	2-1/2	3/16	0.207 +0.01/0	2.125 +0/-0.002	2.126 +0.002/0	2.500 +0.002/0	2.250 +0/-0.002	2.499 +0/-0.002	2.500 +0.002/0
U18-2.25V	2-1/4	2-5/8	3/16	0.207 +0.01/0	2.250 +0/-0.002	2.251 +0.002/0	2.625 +0.002/0	2.250 +0/-0.002	2.624 +0/-0.002	2.625 +0.002/0
U18-2.50-25DV	2-1/2	2-7/8	1/4	0.275 +0.01/0	2.250 +0/-0.002	2.251 +0.002/0	2.625 +0.002/0	2.250 +0/-0.002	2.624 +0/-0.002	2.625 +0.002/0

STYLE 800 FLUOROCARBON U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
3/16" C/S										
U18-2.50-37BV	2-1/2	2-7/8	3/8	0.413 +0.01/0	2.500 +0/-0.002	2.501 +0.002/0	2.875 +0.002/0	2.500 +0/-0.002	2.874 +0/-0.002	2.875 +0.002/0
U18-2.50V	2-1/2	2-7/8	3/16	0.207 +0.01/0	2.500 +0/-0.002	2.501 +0.002/0	2.875 +0.002/0	0.250 +0/-0.002	2.874 +0/-0.002	2.875 +0.002/0
U18-2.62-37BV	2-5/8	3	3/8	0.413 +0.01/0	2.625 +0/-0.002	2.626 +0.002/0	3.000 +0.002/0	2.625 +0/-0.002	2.999 +0/-0.002	3.000 +0.002/0
U18-2.62V	2-5/8	3	3/16	0.207 +0.01/0	2.625 +0/-0.002	2.626 +0.002/0	3.000 +0.002/0	2.625 +0/-0.002	2.999 +0/-0.002	3.000 +0.002/0
U18-2.75V	2-3/4	3-1/8	3/16	0.207 +0.01/0	2.750 +0/-0.002	2.751 +0.002/0	3.125 +0.002/0	2.750 +0/-0.002	3.124 +0/-0.002	3.125 +0.002/0
U18-2.87V	2-7/8	3-1/4	3/16	0.207 +0.01/0	2.875 +0/-0.002	2.876 +0.002/0	3.250 +0.002/0	2.875 +0/-0.002	3.249 +0/-0.002	3.250 +0.002/0
U18-3.00-37BV	3	3-3/8	3/8	0.413 +0.01/0	3.000 +0/-0.002	3.001 +0.002/0	3.375 +0.002/0	3.000 +0/-0.002	3.374 +0/-0.002	3.375 +0.002/0
U18-3.00V	3	3-3/8	3/16	0.207 +0.01/0	3.000 +0/-0.002	3.001 +0.002/0	3.375 +0.002/0	3.000 +0/-0.002	3.374 +0/-0.002	3.375 +0.002/0
U18-3.25-37BV	3-1/4	3-5/8	3/8	0.413 +0.01/0	3.250 +0/-0.002	3.251 +0.002/0	3.625 +0.002/0	3.250 +0/-0.002	3.624 +0/-0.002	3.625 +0.002/0
U18-3.50-37BV	3-1/2	3-7/8	3/8	0.413 +0.01/0	3.500 +0/-0.002	3.501 +0.002/0	3.875 +0.002/0	3.500 +0/-0.002	3.874 +0/-0.002	3.875 +0.002/0
U18-3.62V	3-5/8	4	3/16	0.207 +0.01/0	3.625 +0/-0.002	3.626 +0.002/0	4.000 +0.002/0	3.625 +0/-0.002	3.999 +0/-0.002	4.000 +0.002/0
7/32" C/S										
U21-2.81V	2-13/16	3-1/4	7/32	0.241 +0.01/0	2.812 +0/-0.002	2.813 +0.002/0	3.250 +0.002/0	2.812 +0/-0.002	3.249 +0/-0.002	3.250 +0.002/0
1/4" C/S										
U25-0.62V	5/8	1-1/8	1/4	0.275 +0.01/0	0.625 +0/-0.002	0.626 +0.003/0	1.125 +0.003/0	0.625 +0/-0.003	1.124 +0/-0.002	1.125 +0.003/0
U25-0.75-37BV	3/4	1-1/4	3/8	0.413 +0.01/0	0.750 +0/-0.002	0.751 +0.003/0	1.250 +0.003/0	0.750 +0/-0.003	1.249 +0/-0.002	1.250 +0.003/0
U25-0.87-37BV	7/8	1-3/8	3/8	0.413 +0.01/0	0.875 +0/-0.002	0.876 +0.003/0	1.375 +0.003/0	0.875 +0/-0.003	1.374 +0/-0.002	1.375 +0.003/0
U25-1.00-37BV	1	1-1/2	3/8	0.413 +0.01/0	1.000 +0/-0.002	1.001 +0.003/0	1.500 +0.003/0	1.000 +0/-0.003	1.499 +0/-0.002	1.500 +0.003/0
U25-1.00V	1	1-1/2	1/4	0.275 +0.01/0	1.000 +0/-0.002	1.001 +0.003/0	1.500 +0.003/0	1.000 +0/-0.003	1.499 +0/-0.002	1.500 +0.003/0
U25-1.12-37BV	1-1/8	1-5/8	3/8	0.413 +0.01/0	1.125 +0/-0.002	1.126 +0.003/0	1.625 +0.003/0	1.125 +0/-0.003	1.624 +0/-0.002	1.625 +0.003/0
U25-1.12V	1-1/8	1-5/8	1/4	0.275 +0.01/0	1.125 +0/-0.002	1.126 +0.003/0	1.625 +0.003/0	1.125 +0/-0.003	1.624 +0/-0.002	1.625 +0.003/0
U25-1.25-37BV	1-1/4	1-3/4	3/8	0.413 +0.01/0	1.250 +0/-0.002	1.251 +0.003/0	1.750 +0.003/0	1.250 +0/-0.003	1.749 +0/-0.002	1.750 +0.003/0
U25-1.25V	1-1/4	1-3/4	1/4	0.275 +0.01/0	1.250 +0/-0.002	1.251 +0.003/0	1.750 +0.003/0	1.250 +0/-0.003	1.749 +0/-0.002	1.750 +0.003/0
U25-1.37-37BV	1-3/8	1-7/8	3/8	0.413 +0.01/0	1.375 +0/-0.002	1.376 +0.003/0	1.875 +0.003/0	1.375 +0/-0.003	1.874 +0/-0.002	1.875 +0.003/0
U25-1.37V	1-3/8	1-7/8	1/4	0.275 +0.01/0	1.375 +0/-0.002	1.376 +0.003/0	1.875 +0.003/0	1.375 +0/-0.003	1.874 +0/-0.002	1.875 +0.003/0
U25-1.50-37BV	1-1/2	2	3/8	0.413 +0.01/0	1.500 +0/-0.002	1.501 +0.003/0	2.000 +0.003/0	1.500 +0/-0.003	1.999 +0/-0.002	2.000 +0.003/0
U25-1.50V	1-1/2	2	1/4	0.275 +0.01/0	1.500 +0/-0.002	1.501 +0.003/0	2.000 +0.003/0	1.500 +0/-0.003	1.999 +0/-0.002	2.000 +0.003/0
U25-1.75-37BV	1-3/4	2-1/4	3/8	0.413 +0.01/0	1.750 +0/-0.002	1.751 +0.003/0	2.250 +0.003/0	1.750 +0/-0.003	2.249 +0/-0.002	2.250 +0.003/0
U25-1.75V	1-3/4	2-1/4	1/4	0.275 +0.01/0	1.750 +0/-0.002	1.751 +0.003/0	2.250 +0.003/0	1.750 +0/-0.003	2.249 +0/-0.002	2.250 +0.003/0
U25-2.00-37BV	2	2-1/2	3/8	0.413 +0.01/0	2.000 +0/-0.002	2.001 +0.003/0	2.500 +0.003/0	2.000 +0/-0.003	2.499 +0/-0.002	2.500 +0.003/0
U25-2.00-37DV	2	2-1/2	3/8	0.413 +0.01/0	2.000 +0/-0.002	2.001 +0.003/0	2.500 +0.003/0	2.000 +0/-0.003	2.499 +0/-0.002	2.500 +0.003/0
U25-2.00V	2	2-1/2	1/4	0.275 +0.01/0	2.000 +0/-0.002	2.001 +0.003/0	2.500 +0.003/0	2.000 +0/-0.003	2.499 +0/-0.002	2.500 +0.003/0
U25-2.25-37BV	2-1/4	2-3/4	3/8	0.413 +0.01/0	2.250 +0/-0.002	2.251 +0.003/0	2.750 +0.003/0	2.250 +0/-0.003	2.749 +0/-0.002	2.750 +0.003/0
U25-2.25V	2-1/4	2-3/4	1/4	0.275 +0.01/0	2.250 +0/-0.002	2.251 +0.003/0	2.750 +0.003/0	2.250 +0/-0.003	2.749 +0/-0.002	2.750 +0.003/0
U25-2.50-37BV	2-1/2	3	3/8	0.413 +0.01/0	2.500 +0/-0.002	2.501 +0.003/0	3.000 +0.003/0	2.500 +0/-0.003	2.999 +0/-0.002	3.000 +0.003/0
U25-2.50-37DV	2-1/2	3	3/8	0.413 +0.01/0	2.500 +0/-0.002	2.501 +0.003/0	3.000 +0.003/0	2.500 +0/-0.003	2.999 +0/-0.002	3.000 +0.003/0
U25-2.50V	2-1/2	3	1/4	0.275 +0.01/0	2.500 +0/-0.002	2.501 +0.003/0	3.000 +0.003/0	2.500 +0/-0.003	2.999 +0/-0.002	3.000 +0.003/0
U25-2.62-37BV	2-5/8	3-1/8	3/8	0.413 +0.01/0	2.625 +0/-0.002	2.626 +0.003/0	3.125 +0.003/0	2.625 +0/-0.003	3.124 +0/-0.002	3.125 +0.003/0
U25-2.75-37BV	2-3/4	3-1/4	3/8	0.413 +0.01/0	2.750 +0/-0.002	2.751 +0.003/0	3.250 +0.003/0	2.750 +0/-0.003	3.249 +0/-0.002	3.250 +0.003/0
U25-2.75V	2-3/4	3-1/4	1/4	0.275 +0.01/0	2.750 +0/-0.002	2.751 +0.003/0	3.250 +0.003/0	2.750 +0/-0.003	3.249 +0/-0.002	3.250 +0.003/0

STYLE 800 FLUOROCARBON U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/4" C/S										
U25-3.00-37BV	3	3-1/2	3/8	0.413 +0.01/0	3.000 +0/-0.002	3.001 +0.003/0	3.500 +0.003/0	3.000 +0/-0.003	3.499 +0/-0.002	3.500 +0.003/0
U25-3.00V	3	3-1/2	1/4	0.275 +0.01/0	3.000 +0/-0.002	3.001 +0.003/0	3.500 +0.003/0	3.000 +0/-0.003	3.499 +0/-0.002	3.500 +0.003/0
U25-3.25-37BV	3-1/4	3-3/4	3/8	0.413 +0.01/0	3.250 +0/-0.002	3.251 +0.003/0	3.750 +0.003/0	3.250 +0/-0.003	3.749 +0/-0.002	3.750 +0.003/0
U25-3.25V	3-1/4	3-3/4	1/4	0.275 +0.01/0	3.250 +0/-0.002	3.251 +0.003/0	3.750 +0.003/0	3.250 +0/-0.003	3.749 +0/-0.002	3.750 +0.003/0
U25-3.50-37BV	3-1/2	4	3/8	0.413 +0.01/0	3.500 +0/-0.002	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.003	3.999 +0/-0.002	4.000 +0.003/0
U25-3.50-37DV	3-1/2	4	3/8	0.413 +0.01/0	3.500 +0/-0.002	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.003	3.999 +0/-0.002	4.000 +0.003/0
U25-3.50V	3-1/2	4	1/4	0.275 +0.01/0	3.500 +0/-0.002	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.003	3.999 +0/-0.002	4.000 +0.003/0
U25-4.00-37BV	4	4-1/2	3/8	0.413 +0.01/0	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
U25-4.00-56BV	4	4-1/2	9/16	0.619 +0.01/0	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
U25-4.00V	4	4-1/2	1/4	0.275 +0.01/0	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
U25-4.25-56BV	4-1/4	4-3/4	9/16	0.619 +0.01/0	4.250 +0/-0.002	4.251 +0.003/0	4.750 +0.003/0	4.250 +0/-0.003	4.749 +0/-0.002	4.750 +0.003/0
U25-4.50V	4-1/2	5	1/4	0.275 +0.01/0	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.999 +0/-0.002	5.000 +0.003/0
U25-4.75-56BV	4-3/4	5-1/4	9/16	0.616 +0.01/0	4.750 +0/-0.002	4.751 +0.003/0	5.250 +0.003/0	4.750 +0/-0.003	5.249 +0/-0.002	5.250 +0.003/0
U25-5.00-37BV	5	5-1/2	3/8	0.413 +0.01/0	5.000 +0/-0.002	5.001 +0.003/0	5.500 +0.003/0	5.000 +0/-0.003	5.499 +0/-0.002	5.500 +0.003/0
U25-5.00-56BV	5	5-1/2	9/16	0.616 +0.01/0	5.000 +0/-0.002	5.001 +0.003/0	5.500 +0.003/0	5.000 +0/-0.003	5.499 +0/-0.002	5.500 +0.003/0
U25-5.00V	5	5-1/2	1/4	0.275 +0.01/0	5.000 +0/-0.002	5.001 +0.003/0	5.500 +0.003/0	5.000 +0/-0.003	5.499 +0/-0.002	5.500 +0.003/0
U25-5.50V	5-1/2	6	1/4	0.275 +0.01/0	5.500 +0/-0.002	5.501 +0.003/0	6.000 +0.003/0	5.500 +0/-0.003	5.999 +0/-0.002	6.000 +0.003/0
9/32" C/S										
U28-5.43V	5-7/16	6	9/32	0.308 +0.010/0	5.437 +0/-0.002	5.439 +0.003/0	6.000 +0.003/0	5.437 +0/-0.003	5.999 +0/-0.002	6.000 +0.003/0
5/16" C/S										
U31-1.00V	1	1-5/8	5/16	0.344 +0.01/0	1.000 +0/-0.002	1.002 +0.003/0	1.625 +0.004/0	1.000 +0/-0.004	1.623 +0/-0.002	1.625 +0.003/0
U31-1.25V	1-1/4	1-7/8	5/16	0.344 +0.01/0	1.250 +0/-0.002	1.252 +0.003/0	1.875 +0.004/0	1.250 +0/-0.004	1.873 +0/-0.002	1.875 +0.003/0
U31-1.37-50BV	1-3/8	2	1/2	0.550 +0.01/0	1.375 +0/-0.002	1.377 +0.003/0	2.000 +0.004/0	1.375 +0/-0.004	1.998 +0/-0.002	2.000 +0.003/0
U31-1.37V	1-3/8	2	5/16	0.344 +0.01/0	1.375 +0/-0.002	1.377 +0.003/0	2.000 +0.004/0	1.375 +0/-0.004	1.998 +0/-0.002	2.000 +0.003/0
U31-1.50V	1-1/2	2-1/8	5/16	0.344 +0.01/0	1.500 +0/-0.002	1.502 +0.003/0	2.125 +0.004/0	1.500 +0/-0.004	2.123 +0/-0.002	2.125 +0.003/0
U31-1.75-50BV	1-3/4	2-3/8	1/2	0.550 +0.01/0	1.750 +0/-0.002	1.752 +0.003/0	2.375 +0.004/0	1.750 +0/-0.004	2.373 +0/-0.002	2.375 +0.003/0
U31-1.75V	1-3/4	2-3/8	5/16	0.344 +0.01/0	1.750 +0/-0.002	1.752 +0.003/0	2.375 +0.004/0	1.750 +0/-0.004	2.373 +0/-0.002	2.375 +0.003/0
U31-2.00-50BV	2	2-5/8	1/2	0.550 +0.01/0	2.000 +0/-0.002	2.002 +0.003/0	2.625 +0.004/0	2.000 +0/-0.004	2.623 +0/-0.002	2.625 +0.003/0
U31-2.00V	2	2-5/8	5/16	0.344 +0.01/0	2.000 +0/-0.002	2.002 +0.003/0	2.625 +0.004/0	2.000 +0/-0.004	2.623 +0/-0.002	2.625 +0.003/0
U31-2.25V	2-1/4	2-7/8	5/16	0.344 +0.01/0	2.250 +0/-0.002	2.252 +0.003/0	2.875 +0.004/0	2.250 +0/-0.004	2.873 +0/-0.002	2.875 +0.003/0
U31-2.37-50BV	2-3/8	3	1/2	0.550 +0.01/0	2.375 +0/-0.002	2.377 +0.003/0	3.000 +0.004/0	2.375 +0/-0.004	2.998 +0/-0.002	3.000 +0.003/0
U31-2.37V	2-3/8	3	5/16	0.344 +0.01/0	2.375 +0/-0.002	2.377 +0.003/0	3.000 +0.004/0	2.375 +0/-0.004	2.998 +0/-0.002	3.000 +0.003/0
U31-2.50V	2-1/2	3-1/8	5/16	0.344 +0.01/0	2.500 +0/-0.002	2.502 +0.003/0	3.125 +0.004/0	2.500 +0/-0.004	3.123 +0/-0.002	3.125 +0.003/0
U31-2.62-50BV	2-5/8	3-1/4	1/2	0.550 +0.01/0	2.625 +0/-0.002	2.627 +0.003/0	3.250 +0.004/0	2.625 +0/-0.004	3.248 +0/-0.002	3.250 +0.003/0
U31-2.75-50BV	2-3/4	3-3/8	1/2	0.344 +0.01/0	2.750 +0/-0.002	2.752 +0.003/0	3.375 +0.004/0	2.750 +0/-0.004	3.373 +0/-0.002	3.375 +0.003/0
U31-2.75V	2-3/4	3-3/8	5/16	0.344 +0.01/0	2.750 +0/-0.002	2.752 +0.003/0	3.375 +0.004/0	2.750 +0/-0.004	3.373 +0/-0.002	3.375 +0.003/0
U31-3.00V	3	3-5/8	5/16	0.344 +0.01/0	3.000 +0/-0.002	3.002 +0.003/0	3.625 +0.004/0	3.000 +0/-0.004	3.623 +0/-0.002	3.625 +0.003/0
U31-3.25V	3-1/4	3-7/8	5/16	0.344 +0.01/0	3.250 +0/-0.002	3.252 +0.003/0	3.875 +0.004/0	3.250 +0/-0.004	3.873 +0/-0.002	3.875 +0.003/0
U31-3.50V	3-1/2	4-1/8	5/16	0.344 +0.01/0	3.500 +0/-0.002	3.502 +0.003/0	4.125 +0.004/0	3.500 +0/-0.004	4.123 +0/-0.002	4.125 +0.003/0
U31-3.62V	3-5/8	4-1/4	5/16	0.344 +0.01/0	3.625 +0/-0.002	3.626 +0.003/0	4.250 +0.004/0	3.625 +0/-0.004	4.249 +0/-0.002	4.250 +0.003/0

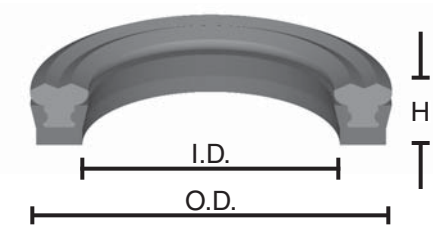
STYLE 800 FLUOROCARBON U-SEALS

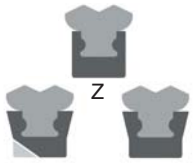
Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
5/16" C/S										
U31-4.00V	4	4-5/8	5/16	0.344 +0.01/0	4.000 +0/-0.002	4.002 +0.003/0	4.625 +0.004/0	4.000 +0/-0.004	4.623 +0/-0.002	4.625 +0.003/0
U31-4.37-50DV	4-3/8	5	1/2	0.550 +0.01/0	4.375 +0/-0.002	4.377 +0.003/0	5.000 +0.004/0	4.375 +0/-0.004	4.998 +0/-0.002	5.000 +0.003/0
U31-4.37V	4-3/8	5	5/16	0.344 +0.01/0	4.375 +0/-0.002	4.377 +0.003/0	5.000 +0.004/0	4.375 +0/-0.004	4.998 +0/-0.002	5.000 +0.003/0
U31-5.37V	5-3/8	6	5/16	0.344 +0.01/0	5.375 +0/-0.002	5.377 +0.003/0	6.000 +0.004/0	5.375 +0/-0.004	5.998 +0/-0.002	6.000 +0.003/0
U31-6.37V	6-3/8	7	5/16	0.344 +0.01/0	6.375 +0/-0.002	6.377 +0.003/0	7.000 +0.004/0	6.375 +0/-0.004	6.998 +0/-0.002	7.000 +0.003/0
U31-7.37V	7-3/8	8	5/16	0.344 +0.01/0	7.375 +0/-0.002	7.377 +0.003/0	8.000 +0.004/0	7.375 +0/-0.004	7.998 +0/-0.002	8.000 +0.003/0
3/8" C/S										
U37-1.75-62BV	1-3/4	2-1/2	5/8	0.688 +0.01/0	1.750 +0/-0.002	1.752 +0.004/0	2.500 +0.005/0	1.750 +0/-0.005	2.498 +0/-0.002	2.500 +0.004/0
U37-2.75-62BV	2-3/4	3-1/2	5/8	0.688 +0.01/0	2.750 +0/-0.002	2.752 +0.004/0	3.500 +0.005/0	2.750 +0/-0.005	3.498 +0/-0.002	3.500 +0.004/0
U37-3.00-62BV	3	3-3/4	5/8	0.688 +0.01/0	3.000 +0/-0.002	3.002 +0.004/0	3.750 +0.005/0	3.000 +0/-0.005	3.748 +0/-0.002	3.750 +0.004/0
U37-3.25V	3-1/4	4	3/8	0.413 +0.01/0	3.250 +0/-0.002	3.252 +0.004/0	4.000 +0.005/0	3.250 +0/-0.005	3.998 +0/-0.002	4.000 +0.004/0
U37-3.50-62BV	3-1/2	4-1/4	5/8	0.688 +0.01/0	3.500 +0/-0.002	3.502 +0.004/0	4.250 +0.005/0	3.500 +0/-0.005	4.248 +0/-0.002	4.250 +0.004/0
U37-3.75-62BV	3-3/4	4-1/2	5/8	0.688 +0.01/0	3.750 +0/-0.002	3.752 +0.004/0	4.500 +0.005/0	3.750 +0/-0.005	4.498 +0/-0.002	4.500 +0.004/0
U37-4.00-62BV	4	4-3/4	5/8	0.688 +0.01/0	4.000 +0/-0.002	4.002 +0.004/0	4.750 +0.005/0	4.000 +0/-0.005	4.748 +0/-0.002	4.750 +0.004/0
U37-4.25-62DV	4-1/4	5	5/8	0.688 +0.01/0	4.250 +0/-0.002	4.252 +0.004/0	5.000 +0.005/0	4.250 +0/-0.005	4.998 +0/-0.002	5.000 +0.004/0
U37-4.25V	4-1/4	5	3/8	0.413 +0.01/0	4.250 +0/-0.002	4.252 +0.004/0	5.000 +0.005/0	4.250 +0/-0.005	4.998 +0/-0.002	5.000 +0.004/0
U37-4.50-62BV	4-1/2	5-1/4	5/8	0.688 +0.01/0	4.500 +0/-0.002	4.502 +0.004/0	5.250 +0.005/0	4.500 +0/-0.005	5.248 +0/-0.002	5.250 +0.004/0
U37-4.75-62BV	4-3/4	5-1/2	5/8	0.688 +0.01/0	4.750 +0/-0.002	4.752 +0.004/0	5.500 +0.005/0	4.750 +0/-0.005	5.498 +0/-0.002	5.500 +0.004/0
U37-5.00-62BV	5	5-3/4	5/8	0.688 +0.01/0	5.000 +0/-0.002	5.002 +0.004/0	5.750 +0.005/0	5.000 +0/-0.005	5.748 +0/-0.002	5.750 +0.004/0
U37-5.00V	5	5-3/4	3/8	0.413 +0.01/0	5.000 +0/-0.002	5.002 +0.004/0	5.750 +0.005/0	5.000 +0/-0.005	5.748 +0/-0.002	5.750 +0.004/0
U37-5.25-62DV	5-1/4	6	5/8	0.688 +0.01/0	5.250 +0/-0.002	5.252 +0.004/0	6.000 +0.005/0	5.250 +0/-0.005	5.998 +0/-0.002	6.000 +0.004/0
U37-5.25V	5-1/4	6	3/8	0.413 +0.01/0	5.250 +0/-0.002	5.252 +0.004/0	6.000 +0.005/0	5.250 +0/-0.005	5.998 +0/-0.002	6.000 +0.004/0
U37-5.50-62BV	5-1/2	6-1/4	5/8	0.688 +0.01/0	5.500 +0/-0.002	5.502 +0.004/0	6.250 +0.005/0	5.500 +0/-0.005	6.248 +0/-0.002	6.250 +0.004/0
U37-5.50V	5-1/2	6-1/4	3/8	0.413 +0.01/0	5.500 +0/-0.002	5.502 +0.004/0	6.250 +0.005/0	5.500 +0/-0.005	6.248 +0/-0.002	6.250 +0.004/0
U37-6.00-62BV	6	6-3/4	5/8	0.688 +0.01/0	6.000 +0/-0.002	6.002 +0.004/0	6.750 +0.005/0	6.000 +0/-0.005	6.748 +0/-0.002	6.750 +0.004/0
U37-6.25-50DV	6-1/4	7	1/2	0.550 +0.01/0	6.250 +0/-0.002	6.252 +0.004/0	7.000 +0.005/0	6.250 +0/-0.005	6.998 +0/-0.002	7.000 +0.004/0
U37-6.25-62BV	6-1/4	7	5/8	0.688 +0.01/0	6.250 +0/-0.002	6.252 +0.004/0	7.000 +0.005/0	6.250 +0/-0.005	6.998 +0/-0.002	7.000 +0.004/0
U37-6.25V	6-1/4	7	3/8	0.413 +0.01/0	6.250 +0/-0.002	6.252 +0.004/0	7.000 +0.005/0	6.250 +0/-0.005	6.998 +0/-0.002	7.000 +0.004/0
U37-6.50V	6-1/2	7 1/4	3/8	0.413 +0.01/0	6.500 +0/-0.002	6.502 +0.004/0	7.250 +0.005/0	6.500 +0/-0.005	7.248 +0/-0.002	7.250 +0.004/0
U37-7.25-62DV	7-1/4	8	5/8	0.688 +0.01/0	7.250 +0/-0.002	7.252 +0.004/0	8.000 +0.005/0	7.250 +0/-0.005	7.998 +0/-0.002	8.000 +0.004/0
U37-7.25V	7-1/4	8	3/8	0.413 +0.01/0	7.250 +0/-0.002	7.252 +0.004/0	8.000 +0.005/0	7.250 +0/-0.005	7.998 +0/-0.002	8.000 +0.004/0
U37-9.25V	9-1/4	10	3/8	0.413 +0.01/0	9.250 +0/-0.002	9.252 +0.004/0	10.000 +0.005/0	9.250 +0/-0.005	9.998 +0/-0.002	10.000 +0.004/0
1/2" C/S										
U50-4.00V	4	5	1/2	0.550 +0.01/0	4.000 +0/-0.002	4.002 +0.004/0	5.000 +0.005/0	4.000 +0/-0.005	3.998 +0/-0.002	5.000 +0.004/0
U50-5.00V	5	6	1/2	0.550 +0.01/0	5.000 +0/-0.002	5.002 +0.004/0	6.000 +0.005/0	5.000 +0/-0.005	4.998 +0/-0.002	6.000 +0.004/0
U50-6.00-75DV	6	7	3/4	0.825 +0.01/0	6.000 +0/-0.002	6.002 +0.004/0	7.000 +0.005/0	6.000 +0/-0.005	5.998 +0/-0.002	7.000 +0.004/0
U50-6.00V	6	7	1/2	0.550 +0.01/0	6.000 +0/-0.002	6.002 +0.004/0	7.000 +0.005/0	6.000 +0/-0.005	5.998 +0/-0.002	7.000 +0.004/0
U50-7.00V	7	8	1/2	0.550 +0.01/0	7.000 +0/-0.002	7.002 +0.004/0	8.000 +0.005/0	7.000 +0/-0.005	6.998 +0/-0.002	8.000 +0.004/0
U50-8.00V	8	9	1/2	0.550 +0.01/0	8.000 +0/-0.002	8.002 +0.004/0	9.000 +0.005/0	8.000 +0/-0.005	7.998 +0/-0.002	9.000 +0.004/0
U50-9.00V	9	10	1/2	0.550 +0.01/0	9.000 +0/-0.002	9.002 +0.004/0	10.000 +0.005/0	9.000 +0/-0.005	8.998 +0/-0.002	10.000 +0.004/0

Z-SEALS

The Z-Seal™ is a squeeze type seal, combining the excellent sealability and low compression set of a resilient rubber lip with the greater anti-extrusion characteristics of a hard thermoplastic base. Under low pressure conditions, the sealing lip provides its own compressive seal force. As pressure increases, hydrostatic pressure is mechanically transmitted through the elastomeric seal element into the anti-extrusion base. The applied force then deflects radially in a controlled manner, closing the extrusion gap behind the sealing lip. Under this condition, maximum sealing effectiveness is achieved.

SUFFIX: ZF = FLUOROTREL (-40° TO +235° F)
ZL = LOW TEMPERATURE NITRILE SEALING LIP (-65° TO +200° F)
ZLF = (-65° TO +200° F)





SEAL INFORMATION	
MATERIAL	95A URETHANE 70A NITRILE RUBBER
TEMPERATURE RANGE	-40° TO +200° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)

Part Number	I.D.	O.D.	H.
1/8" C/S			
U12-0.50-25DZ	1/2	3/4	1/4
U12-0.75-18DZ	3/4	1	3/16
U12-0.75-25DZ	3/4	1	1/4
U12-0.87-25DZ	7/8	1-1/8	1/4
U12-0.87-25Z	7/8	1-1/8	1/4
U12-1.00-25DZ	1	1-1/4	1/4
U12-1.00-25DZLF	1	1-1/4	1/4
U12-1.12-25DZ	1-1/8	1-3/8	1/4
U12-1.25-25DZ	1-1/4	1-1/2	1/4
5/32" C/S			
U15-1.50-31DZ	1-1/2	1-13/16	5/16
3/16" C/S			
U18-1.00-31DZ	1	1-3/8	5/16
U18-1.00-31Z	1	1-3/8	5/16
U18-1.12-31DZ	1-1/8	1-1/2	5/16
U18-1.12-31Z	1-1/8	1-1/2	5/16
U18-1.18-31DZ	1-1/8	1-9/16	5/16
U18-1.25-31DZ	1-1/4	1-5/8	5/16
U18-1.25-31Z	1-1/4	1-5/8	5/16
U18-1.25-37DZLF	1-1/4	1-5/8	3/8
U18-1.25-37Z	1-1/4	1-5/8	3/8
U18-1.37-31DZ	1-3/8	1-3/4	5/16
U18-1.37-31DZLF	1-3/8	1-3/4	5/16
U18-1.50-31DZ	1-1/2	1-7/8	5/16
U18-1.50-37DZ	1-1/2	1-7/8	3/8
U18-1.50-37Z	1-1/2	1-7/8	3/8
U18-1.62-31DZ	1-5/8	2	5/16
U18-1.62-37Z	1-5/8	2	3/8

Part Number	I.D.	O.D.	H.
3/16" C/S			
U18-1.75-25Z	1-3/4	2-1/8	1/4
U18-1.75-37DZ	1-3/4	2-1/8	3/8
U18-1.75-37Z	1-3/4	2-1/8	3/8
U18-1.87-37Z	1-7/8	2-1/4	3/8
U18-2.00-25Z	2	2-3/8	1/4
U18-2.00-31DZ	2	2-3/8	5/16
U18-2.00-37DZ	2	2-3/8	3/8
U18-2.00-37Z	2	2-3/8	3/8
U18-2.25-37DZ	2-1/4	3	3/8
U18-2.37-31DZ	2-3/8	2-3/4	5/16
U18-2.75-31DZ	2-3/4	3-1/8	5/16
U18-2.50-37Z	2-1/2	2-7/8	3/8
U18-3.00-37Z	3	3-3/8	3/8
U18-3.50-37Z	3-1/2	3-7/8	3/8
U18-4.00-37ZF	4	4-3/8	3/8
1/4" C/S			
U25-0.37-37DZ	3/8	7/8	3/8
U25-1.00-37DZ	1	1-1/2	3/8
U25-1.00-37Z	1	1-1/2	3/8
U25-1.00-56DZ	1	1-1/2	9/16
U25-1.25-37DZ	1-1/4	1-3/4	3/8
U25-1.25-37Z	1-1/4	1-3/4	3/8
U25-1.50-37DZ	1-1/2	2	3/8
U25-1.50-37DZR	1-1/2	2	3/8
U25-1.50-37Z	1-1/2	2	3/8
U25-1.75-31ZF	1-3/4	2-1/4	5/16
U25-1.75-37DZF	1-3/4	2-1/4	3/8
U25-1.75-37Z	1-3/4	2-1/4	3/8

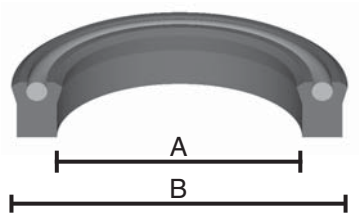
Z-SEALS

Part Number	I.D.	O.D.	H.
1/4" C/S			
U25-1.75-37ZF	1-3/4	2-1/4	3/8
U25-2.00-37DZ	2	2-1/2	3/8
U25-2.00-37DZF	2	2-1/2	3/8
U25-2.00-37DZR	2	2-1/2	3/8
U25-2.00-37Z	2	2-1/2	3/8
U25-2.25-37DZLF	2-1/4	2-1/2	3/8
U25-2.25-37Z	2-1/4	2-3/4	3/8
U25-2.37-37Z	2-3/8	2-7/8	3/8
U25-2.50-37DZ	2-1/2	3	3/8
U25-2.50-37DZF	2-1/2	3	3/8
U25-2.50-37DZR	2-1/2	3	3/8
U25-2.50-37Z	2-1/2	3	3/8
U25-2.50-37ZF	2-1/2	3	3/8
U25-2.62-37DZ	2-5/8	3-1/8	3/8
U25-2.62-37Z	2-5/8	3-1/8	3/8
U25-2.75-37DZ	2-3/4	3-1/4	3/8
U25-2.75-37DZLF	2-3/4	3-1/4	3/8
U25-2.75-37DZR	2-3/4	3-1/4	3/8
U25-2.75-37Z	2-3/4	3-1/4	3/8
U25-3.00-37DZ	3	3-1/2	3/8
U25-3.00-37DZF	3	3-1/2	3/8
U25-3.00-37DZR	3	3-1/2	3/8
U25-3.00-37Z	3	3-1/2	3/8
U25-3.25-37Z	3-1/4	3-3/4	3/8
U25-3.37-37DZ	3-3/8	3-7/8	3/8
U25-3.50-37DZ	3-1/2	4	3/8
U25-3.50-37DZF	3-1/2	4	3/8
U25-3.50-37Z	3-1/2	4	3/8
U25-3.75-37DZ	3-7/8	4-3/8	3/8
U25-3.75-37Z	3-3/4	4-1/4	3/8
U25-3.75-56DZ	3-3/4	4-1/4	9/16
U25-3.87-37DZ	3-7/8	4-3/8	3/8
U25-4.00-37DZLF	4	4-3/4	3/8
U25-4.00-37Z	4	4-1/2	3/8
U25-4.50-37DZR	4-1/2	5	3/8
U25-4.50-37Z	4-1/2	5	3/8
U25-4.50-56DZ	4-1/2	5	9/16
U25-5.00-56Z	5	5-1/2	9/16
U25-5.25-56DZ	5-1/4	5-3/4	9/16
U25-5.50-37Z	5-1/2	6	3/8
U25-5.50-56ZF	5-1/2	6	9/16
U25-6.50-37DZ	6-1/2	7	3/8

Part Number	I.D.	O.D.	H.
5/16" C/S			
U31-1.37-50Z	1-3/8	2	1/2
U31-1.87-50Z	1-7/8	2-1/2	1/2
U31-2.50-50DZL	2-1/2	3-1/8	1/2
U31-3.00-50DZLF	3	3-5/8	1/2
U31-3.50-50DZ	3-1/2	4-1/8	1/2
U31-4.50-62DZLF	4-1/2	5-1/8	5/8
U31-4.50-62Z	4-1/2	5-1/8	5/8
U31-7.00-62DZ	7	7-5/8	5/8
U31-10.50-62DZ	10-1/2	11-1/18	5/8
U31-13.00-62DZR	13	13-5/8	5/8
3/8" C/S			
U37-1.75-62Z	1-3/4	2-1/2	5/8
U37-2.25-62Z	2-1/4	3	5/8
U37-2.50-62DZ	2-1/2	3-1/4	5/8
U37-2.50-62Z	2-1/2	3-1/4	5/8
U37-2.62-62Z	2-5/8	3-3/8	5/8
U37-2.75-62Z	2-3/4	3-1/2	5/8
U37-3.00-62Z	3	3-3/4	5/8
U37-3.25-62Z	3-1/4	4	5/8
U37-3.50-62DZ	3-1/2	4-1/4	5/8
U37-3.62-62Z	3-5/8	4-3/8	5/8
U37-3.75-62Z	3-3/4	4-1/2	5/8
U37-4.00-62Z	4	4-3/4	5/8
U37-4.25-62Z	4-1/4	5	5/8
U37-4.37-50Z	4-3/8	5-1/8	1/2
U37-4.50-62Z	4-1/2	5-1/4	5/8
U37-4.50-62DZ	4-1/2	5-1/4	5/8
U37-4.50-62DZR	4-1/2	5-1/4	5/8
U37-4.75-62Z	4-3/4	5-1/2	5/8
U37-5.25-62DZR	5-1/4	6	5/8
U37-5.25-62Z	5-1/4	6	5/8
U37-5.50-62Z	5-1/2	6-1/4	5/8
U37-5.75-62Z	5-3/4	6-1/2	5/8
U37-6.00-56Z	6	6-3/4	9/16
U37-6.00-62Z	6	6-3/4	5/8
U37-6.25-62Z	6-1/4	7	5/8
U37-7.00-62DZ	7	7-3/4	5/8
U37-7.00-62DZR	7	7-3/4	5/8
1/2" C/S			
U50-12.00-75DZR	12	13	3/4
U50-14.00-75DZR	14	15	3/4

STYLE 850 POLYURETHANE U-SEALS

Style 850 u-seals offer excellent resistance to extrusion and abrasion. The round cross-section expander offers energized sealing from zero to 5,000 psi.



BFM = 58D DUROMETER FLUOROTREL
-65° TO +275° F

BHN = 85A DUROMETER
HYDROGENATED NITRILE
-50° to +320° F

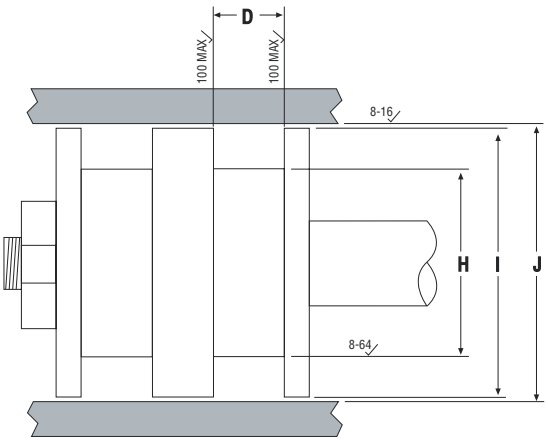
BPM = 58D DUROMETER POLYMYTE
-65° to +275° F
-65° to +180° F IN WATER BASED FLUIDS

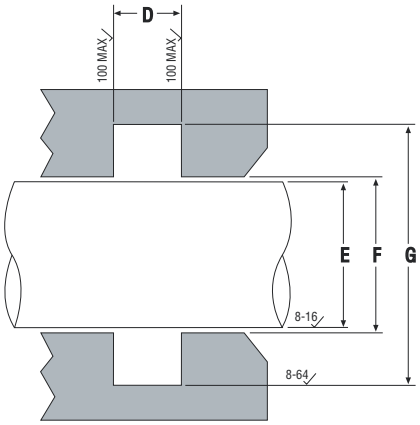
PART NUMBERS

P 125 - 00.125 - 250

Type of Seal	Cross Section	Inside Diameter	Height

SEAL INFORMATION	
MATERIAL	95A URETHANE
TEMPERATURE RANGE	-40° TO +200° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)





Standard -
Height and cross section are equal, thus giving a square seal. Utilizes type "D" lip
Typical Part Number
P25-02.500

Deep -
Utilizes the same "D" lip, but the seal height is greater than the cross section, thus giving a retangular shape.
Typical Part Number
P25-02.500-37D

Type B -
Same dimensions as the Deep seal. Beveled lip design provides better film breaking.
Utilizes type "B" lip.
Typical Part Number
U25-02.500-37B

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/8" C/S										
P125-00.062	1/16	5/16	1/8	0.138 +0.015/0	0.062 +0/-0.001	0.063 +0.002/0	0.312 +0.002/0	0.062 +0/-0.002	0.311 +0/-0.001	0.312 +0.002/0
P125-00.125-250B	1/8	3/8	1/4	0.275 +0.015/0	0.125 +0/-0.001	0.126 +0.002/0	0.375 +0.002/0	0.125 +0/-0.002	0.374 +0/-0.001	0.375 +0.002/0
P125-00.187-250B	3/16	7/16	1/4	0.275 +0.015/0	0.187 +0/-0.001	0.188 +0.002/0	0.437 +0.002/0	0.187 +0/-0.002	0.436 +0/-0.001	0.437 +0.002/0
P125-00.250	1/4	1/2	1/8	0.138 +0.015/0	0.250 +0/-0.001	0.251 +0.002/0	0.500 +0.002/0	0.250 +0/-0.002	0.499 +0/-0.001	0.500 +0.002/0
P125-00.250-250B	1/4	1/2	1/4	0.275 +0.015/0	0.250 +0/-0.001	0.251 +0.002/0	0.500 +0.002/0	0.250 +0/-0.002	0.499 +0/-0.001	0.500 +0.002/0
P125-00.312-250B	5/16	9/16	1/4	0.275 +0.015/0	0.312 +0/-0.001	0.313 +0.002/0	0.562 +0.002/0	0.312 +0/-0.002	0.561 +0/-0.001	0.562 +0.002/0
P125-00.375	3/8	5/8	1/8	0.138 +0.015/0	0.375 +0/-0.001	0.376 +0.002/0	0.625 +0.002/0	0.375 +0/-0.002	0.624 +0/-0.001	0.625 +0.002/0
P125-00.375-187B	3/8	5/8	3/16	0.206 +0.015/0	0.375 +0/-0.001	0.376 +0.002/0	0.625 +0.002/0	0.375 +0/-0.002	0.624 +0/-0.001	0.625 +0.002/0
P125-00.375-250B	3/8	5/8	1/4	0.275 +0.015/0	0.375 +0/-0.001	0.376 +0.002/0	0.625 +0.002/0	0.375 +0/-0.002	0.624 +0/-0.001	0.625 +0.002/0
P125-00.500	1/2	3/4	1/8	0.138 +0.015/0	0.500 +0/-0.001	0.501 +0.002/0	0.750 +0.002/0	0.500 +0/-0.002	0.749 +0/-0.001	0.750 +0.002/0
P125-00.500-125B	1/2	3/4	1/8	0.138 +0.015/0	0.500 +0/-0.001	0.501 +0.002/0	0.750 +0.002/0	0.500 +0/-0.002	0.749 +0/-0.001	0.750 +0.002/0
P125-00.500-250B	1/2	3/4	1/4	0.275 +0.015/0	0.500 +0/-0.001	0.501 +0.002/0	0.750 +0.002/0	0.500 +0/-0.002	0.749 +0/-0.001	0.750 +0.002/0

STYLE 850 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/8" C/S										
P125-00.500-250D	1/2	3/4	1/4	0.275 +0.015/0	0.500 +0/-0.001	0.501 +0.002/0	0.750 +0.002/0	0.500 +0/-0.002	0.749 +0/-0.001	0.750 +0.002/0
P125-00.562-SQB	9/16	13/16	1/8	0.138 +0.015/0	0.562 +0/-0.001	0.563 +0.002/0	0.812 +0.002/0	0.562 +0/-0.002	0.811 +0/-0.001	0.812 +0.002/0
P125-00.625	5/8	7/8	1/8	0.138 +0.015/0	0.625 +0/-0.001	0.626 +0.002/0	0.875 +0.002/0	0.625 +0/-0.002	0.874 +0/-0.001	0.875 +0.002/0
P125-00.625-187B	5/8	7/8	3/16	0.206 +0.015/0	0.625 +0/-0.001	0.626 +0.002/0	0.875 +0.002/0	0.625 +0/-0.002	0.874 +0/-0.001	0.875 +0.002/0
P125-00.625-250B	5/8	7/8	1/4	0.275 +0.015/0	0.625 +0/-0.001	0.626 +0.002/0	0.875 +0.002/0	0.625 +0/-0.002	0.874 +0/-0.001	0.875 +0.002/0
P125-00.687	11/16	15/16	1/8	0.138 +0.015/0	0.687 +0/-0.001	0.688 +0.002/0	0.937 +0.002/0	0.687 +0/-0.002	0.936 +0/-0.001	0.937 +0.002/0
P125-00.750	3/4	1	1/8	0.138 +0.015/0	0.750 +0/-0.001	0.751 +0.002/0	1.000 +0.002/0	0.750 +0/-0.002	0.999 +0/-0.001	1.000 +0.002/0
P125-00.750-125B	3/4	1	1/8	0.138 +0.015/0	0.750 +0/-0.001	0.751 +0.002/0	1.000 +0.002/0	0.750 +0/-0.002	0.999 +0/-0.001	1.000 +0.002/0
P125-00.750-250B	3/4	1	1/4	0.275 +0.015/0	0.750 +0/-0.001	0.751 +0.002/0	1.000 +0.002/0	0.750 +0/-0.002	0.999 +0/-0.001	1.000 +0.002/0
P125-00.750-250D	3/4	1	1/4	0.275 +0.015/0	0.750 +0/-0.001	0.751 +0.002/0	1.000 +0.002/0	0.750 +0/-0.002	0.999 +0/-0.001	1.000 +0.002/0
P125-00.812	13/16	1-1/16	1/8	0.138 +0.015/0	0.812 +0/-0.001	0.813 +0.002/0	1.062 +0.002/0	0.812 +0/-0.002	1.061 +0/-0.001	1.062 +0.002/0
P125-00.812-250B	13/16	1-1/16	1/4	0.275 +0.015/0	0.812 +0/-0.001	0.813 +0.002/0	1.062 +0.002/0	0.812 +0/-0.002	1.061 +0/-0.001	1.062 +0.002/0
P125-00.875	7/8	1-1/8	1/8	0.138 +0.015/0	0.875 +0/-0.001	0.876 +0.002/0	1.125 +0.002/0	0.875 +0/-0.002	1.124 +0/-0.001	1.125 +0.002/0
P125-00.875-250B	7/8	1-1/8	1/4	0.275 +0.015/0	0.875 +0/-0.001	0.876 +0.002/0	1.125 +0.002/0	0.875 +0/-0.002	1.124 +0/-0.001	1.125 +0.002/0
P125-00.937	15/16	1-3/16	1/8	0.138 +0.015/0	0.937 +0/-0.001	0.938 +0.002/0	1.187 +0.002/0	0.937 +0/-0.002	1.186 +0/-0.001	1.187 +0.002/0
P125-01.000	1	1-1/4	1/8	0.138 +0.015/0	1.000 +0/-0.001	1.001 +0.002/0	1.250 +0.002/0	1.000 +0/-0.002	1.249 +0/-0.001	1.250 +0.002/0
P125-01.000-187B	1	1-1/4	3/16	0.206 +0.015/0	1.000 +0/-0.001	1.001 +0.002/0	1.250 +0.002/0	1.000 +0/-0.002	1.249 +0/-0.001	1.250 +0.002/0
P125-01.000-250B	1	1-1/4	1/4	0.275 +0.015/0	1.000 +0/-0.001	1.001 +0.002/0	1.250 +0.002/0	1.000 +0/-0.002	1.249 +0/-0.001	1.250 +0.002/0
P125-01.000-250D	1	1-1/4	1/4	0.275 +0.015/0	1.000 +0/-0.001	1.001 +0.002/0	1.250 +0.002/0	1.000 +0/-0.002	1.249 +0/-0.001	1.250 +0.002/0
P125-01.062-250B	1-1/16	1-5/16	1/4	0.275 +0.015/0	1.062 +0/-0.001	1.063 +0.002/0	1.312 +0.002/0	1.062 +0/-0.002	1.311 +0/-0.001	1.312 +0.002/0
P125-01.125	1-1/8	1-3/8	1/8	0.138 +0.015/0	1.125 +0/-0.001	1.126 +0.002/0	1.375 +0.002/0	1.125 +0/-0.002	1.374 +0/-0.001	1.375 +0.002/0
P125-01.125-187B	1-1/8	1-3/8	3/16	0.206 +0.015/0	1.125 +0/-0.002	1.126 +0.002/0	1.375 +0.002/0	1.125 +0/-0.002	1.374 +0/-0.002	1.375 +0.002/0
P125-01.125-250B	1-1/8	1-3/8	1/4	0.275 +0.015/0	1.125 +0/-0.001	1.126 +0.002/0	1.375 +0.002/0	1.125 +0/-0.002	1.374 +0/-0.001	1.375 +0.002/0
P125-01.187	1-3/16	1-7/16	1/8	0.138 +0.015/0	1.187 +0/-0.001	1.188 +0.002/0	1.437 +0.002/0	1.187 +0/-0.002	1.436 +0/-0.001	1.437 +0.002/0
P125-01.187-250B	1-3/16	1-7/16	1/4	0.275 +0.015/0	1.187 +0/-0.001	1.188 +0.002/0	1.437 +0.002/0	1.187 +0/-0.002	1.436 +0/-0.001	1.437 +0.002/0
P125-01.250	1-1/4	1-1/2	1/8	0.138 +0.015/0	1.250 +0/-0.001	1.251 +0.002/0	1.500 +0.002/0	1.250 +0/-0.002	1.499 +0/-0.001	1.500 +0.002/0
P125-01.250-187B	1-1/4	1-1/2	3/16	0.206 +0.015/0	1.250 +0/-0.001	1.251 +0.002/0	1.500 +0.002/0	1.250 +0/-0.002	1.499 +0/-0.001	1.500 +0.002/0
P125-01.250-250B	1-1/4	1-1/2	1/4	0.275 +0.015/0	1.250 +0/-0.001	1.251 +0.002/0	1.500 +0.002/0	1.250 +0/-0.002	1.499 +0/-0.001	1.500 +0.002/0
P125-01.375	1-3/8	1-5/8	1/8	0.138 +0.015/0	1.375 +0/-0.001	1.376 +0.002/0	1.625 +0.002/0	1.375 +0/-0.002	1.624 +0/-0.001	1.625 +0.002/0
P125-01.375-250B	1-3/8	1-5/8	1/4	0.275 +0.015/0	1.375 +0/-0.001	1.376 +0.002/0	1.625 +0.002/0	1.375 +0/-0.002	1.624 +0/-0.001	1.625 +0.002/0
P125-01.500	1-1/2	1-3/4	1/8	0.138 +0.015/0	1.500 +0/-0.001	1.501 +0.002/0	1.750 +0.002/0	1.500 +0/-0.002	1.749 +0/-0.001	1.750 +0.002/0
P125-01.500-250B	1-1/2	1-3/4	1/4	0.275 +0.015/0	1.500 +0/-0.001	1.501 +0.002/0	1.750 +0.002/0	1.500 +0/-0.002	1.749 +0/-0.001	1.750 +0.002/0
P125-01.500-250D	1-1/2	1-3/4	1/4	0.275 +0.015/0	1.500 +0/-0.001	1.501 +0.002/0	1.750 +0.002/0	1.500 +0/-0.002	1.749 +0/-0.001	1.750 +0.002/0
P125-01.625	1-5/8	1-7/8	1/8	0.138 +0.015/0	1.625 +0/-0.001	1.626 +0.002/0	1.875 +0.002/0	1.625 +0/-0.002	1.874 +0/-0.001	1.500 +0.002/0
P125-01.750	1-3/4	2	1/8	0.138 +0.015/0	1.750 +0/-0.001	1.751 +0.002/0	2.000 +0.002/0	1.750 +0/-0.002	1.999 +0/-0.001	2.000 +0.002/0
P125-01.750-250D	1-3/4	2	1/4	0.275 +0.015/0	1.750 +0/-0.001	1.751 +0.002/0	2.000 +0.002/0	1.750 +0/-0.002	1.999 +0/-0.001	2.000 +0.002/0
P125-01.875	1-7/8	2-1/8	1/8	0.138 +0.015/0	1.875 +0/-0.001	1.876 +0.002/0	2.125 +0.002/0	1.875 +0/-0.002	2.124 +0/-0.001	2.125 +0.002/0
P125-02.000	2	2-1/4	1/8	0.138 +0.015/0	2.000 +0/-0.001	2.001 +0.002/0	2.250 +0.002/0	2.000 +0/-0.002	2.249 +0/-0.001	2.250 +0.002/0
P125-02.000-250B	2	2-1/4	1/4	0.275 +0.015/0	2.000 +0/-0.001	2.001 +0.002/0	2.250 +0.002/0	2.000 +0/-0.002	2.249 +0/-0.001	2.250 +0.002/0
P125-02.000-250D	2	2-1/4	1/4	0.275 +0.015/0	2.000 +0/-0.001	2.001 +0.002/0	2.250 +0.002/0	2.000 +0/-0.002	2.249 +0/-0.001	2.250 +0.002/0
1/8" C/S										
P125-02.500-250B	2-1/2	2-3/4	1/4	0.275 +0.015/0	2.500 +0/-0.001	2.501 +0.002/0	2.750 +0.002/0	2.500 +0/-0.002	2.749 +0/-0.001	2.750 +0.002/0

STYLE 850 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
P125-03.000	3	3-1/4	1/8	0.138 +0.015/0	3.000 +0/-0.001	3.001 +0.002/0	3.250 +0.002/0	3.000 +0/-0.002	3.249 +0/-0.001	3.250 +0.002/0
P125-03.250	3-1/4	3-1/2	1/8	0.138 +0.015/0	3.250 +0/-0.001	3.251 +0.002/0	3.500 +0.002/0	3.250 +0/-0.002	3.499 +0/-0.001	3.500 +0.002/0
P125-03.500	3-1/2	3-3/4	1/8	0.138 +0.015/0	3.500 +0/-0.001	3.501 +0.002/0	3.750 +0.002/0	3.500 +0/-0.002	3.749 +0/-0.001	3.750 +0.002/0
P125-03.750	3-3/4	4	1/8	0.138 +0.015/0	3.750 +0/-0.001	3.751 +0.002/0	4.000 +0.002/0	3.750 +0/-0.002	3.999 +0/-0.001	4.000 +0.002/0
P125-04.500	4-1/2	4-3/4	1/8	0.138 +0.015/0	4.500 +0/-0.001	4.501 +0.002/0	4.750 +0.002/0	4.500 +0/-0.002	4.749 +0/-0.001	4.750 +0.002/0
P125-04.750	4-3/4	5	1/8	0.138 +0.015/0	4.750 +0/-0.001	4.751 +0.002/0	5.000 +0.002/0	4.750 +0/-0.002	4.999 +0/-0.001	5.000 +0.002/0
5/32" C/S										
P156-01.000	1	1-5/16	5/32	0.172 +0.015/0	1.000 +0/-0.001	1.001 +0.002/0	1.312 +0.002/0	1.000 +0/-0.002	1.311 +0/-0.001	1.312 +0.002/0
P156-01.187	1-3/16	1-1/2	5/32	0.172 +0.015/0	1.187 +0/-0.001	1.188 +0.002/0	1.500 +0.002/0	1.187 +0/-0.002	1.499 +0/-0.001	1.500 +0.002/0
P156-01.375	1-3/8	1-11/16	5/32	0.172 +0.015/0	1.375 +0/-0.001	1.376 +0.002/0	1.687 +0.002/0	1.375 +0/-0.002	1.686 +0/-0.001	1.687 +0.002/0
3/16" C/S										
P187-00.375	3/8	3/4	3/16	0.206 +0.015/0	0.375 +0/-0.002	0.376 +0.002/0	0.750 +0.002/0	0.375 +0/-0.002	0.749 +0/-0.002	0.750 +0.002/0
P187-00.500	1/2	7/8	3/16	0.206 +0.015/0	0.500 +0/-0.002	0.501 +0.002/0	0.875 +0.002/0	0.500 +0/-0.002	0.874 +0/-0.002	0.875 +0.002/0
P187-00.500-312B	1/2	7/8	5/16	0.343 +0.015/0	0.500 +0/-0.002	0.501 +0.002/0	0.875 +0.002/0	0.500 +0/-0.002	0.874 +0/-0.002	0.875 +0.002/0
P187-00.562	9/16	15/16	3/16	0.206 +0.015/0	0.562 +0/-0.002	0.563 +0.002/0	0.937 +0.002/0	0.562 +0/-0.002	0.936 +0/-0.002	0.937 +0.002/0
P187-00.625-312B	5/8	1	5/16	0.343 +0.015/0	0.625 +0/-0.002	0.626 +0.002/0	1.000 +0.002/0	0.625 +0/-0.002	0.999 +0/-0.002	1.000 +0.002/0
P187-00.750	3/4	1-1/8	3/16	0.207 +0.015/0	0.750 +0/-0.002	0.751 +0.002/0	1.125 +0.002/0	0.750 +0/-0.002	1.124 +0/-0.002	1.125 +0.002/0
P187-00.750-312B	3/4	1-1/8	5/16	0.343 +0.015/0	0.750 +0/-0.002	0.751 +0.002/0	1.125 +0.002/0	0.750 +0/-0.002	1.124 +0/-0.002	1.125 +0.002/0
P187-00.750-312D	3/4	1-1/8	5/16	0.343 +0.015/0	0.750 +0/-0.002	0.751 +0.002/0	1.125 +0.002/0	0.750 +0/-0.002	1.124 +0/-0.002	1.125 +0.002/0
P187-00.875	7/8	1-1/4	3/16	0.207 +0.015/0	0.875 +0/-0.002	0.876 +0.002/0	1.250 +0.002/0	0.875 +0/-0.002	1.249 +0/-0.002	1.250 +0.002/0
P187-00.875-312B	7/8	1-1/4	5/16	0.343 +0.015/0	0.875 +0/-0.002	0.876 +0.002/0	1.250 +0.002/0	0.875 +0/-0.002	1.249 +0/-0.002	1.250 +0.002/0
P187-00.875-375D	7/8	1-1/4	3/8	0.413 +0.015/0	0.875 +0/-0.002	0.876 +0.002/0	1.250 +0.002/0	0.875 +0/-0.002	1.249 +0/-0.002	1.250 +0.002/0
P187-00.937	15/16	1-5/16	3/16	0.206 +0.015/0	0.937 +0/-0.002	0.938 +0.002/0	1.312 +0.002/0	0.937 +0/-0.002	1.311 +0/-0.002	1.312 +0.002/0
P187-00.937-312B	15/16	1-5/16	5/16	0.343 +0.015/0	0.937 +0/-0.002	0.938 +0.002/0	1.312 +0.002/0	0.937 +0/-0.002	1.311 +0/-0.002	1.312 +0.002/0
P187-01.000	1	1-3/8	3/16	0.343 +0.015/0	1.000 +0/-0.002	1.001 +0.002/0	1.375 +0.002/0	1.000 +0/-0.002	1.374 +0/-0.002	1.375 +0.002/0
P187-01.000-287B	1	1-3/8	9/32	0.316 +0.015/0	1.000 +0/-0.002	1.001 +0.002/0	1.375 +0.002/0	1.000 +0/-0.002	1.374 +0/-0.002	1.375 +0.002/0
P187-01.000-312B	1	1-3/8	5/16	0.343 +0.015/0	1.000 +0/-0.002	1.001 +0.002/0	1.375 +0.002/0	1.000 +0/-0.002	1.374 +0/-0.002	1.375 +0.002/0
P187-01.000-312D	1	1-3/8	5/16	0.343 +0.015/0	1.000 +0/-0.002	1.001 +0.002/0	1.375 +0.002/0	1.000 +0/-0.002	1.374 +0/-0.002	1.375 +0.002/0
P187-01.125	1-1/8	1-1/2	3/16	0.206 +0.015/0	1.125 +0/-0.002	1.126 +0.002/0	1.500 +0.002/0	1.125 +0/-0.002	1.499 +0/-0.002	1.500 +0.002/0
P187-01.125-187B	1-1/8	1-1/2	3/16	0.206 +0.015/0	1.125 +0/-0.002	1.126 +0.002/0	1.500 +0.002/0	1.125 +0/-0.002	1.499 +0/-0.002	1.500 +0.002/0
P187-01.125-312B	1-1/8	1-1/2	5/16	0.343 +0.015/0	1.125 +0/-0.002	1.126 +0.002/0	1.500 +0.002/0	1.125 +0/-0.002	1.499 +0/-0.002	1.500 +0.002/0
P187-01.187	1-3/16	1-9/16	3/16	0.206 +0.015/0	1.187 +0/-0.002	1.188 +0.002/0	1.562 +0.002/0	1.187 +0/-0.002	1.561 +0/-0.002	1.562 +0.002/0
P187-01.250	1-1/4	1-5/8	3/16	0.207 +0.015/0	1.250 +0/-0.002	1.251 +0.002/0	1.625 +0.002/0	1.250 +0/-0.002	1.624 +0/-0.002	1.625 +0.002/0
P187-01.250-250B	1-1/4	1-5/8	1/4	0.275 +0.015/0	1.250 +0/-0.002	1.251 +0.002/0	1.625 +0.002/0	1.250 +0/-0.002	1.624 +0/-0.002	1.625 +0.002/0
P187-01.250-312B	1-1/4	1-5/8	5/16	0.343 +0.015/0	1.250 +0/-0.002	1.251 +0.002/0	1.625 +0.002/0	1.250 +0/-0.002	1.624 +0/-0.002	1.625 +0.002/0
P187-01.250-312D	1-1/4	1-5/8	5/16	0.343 +0.015/0	1.250 +0/-0.002	1.251 +0.002/0	1.625 +0.002/0	1.250 +0/-0.002	1.624 +0/-0.002	1.625 +0.002/0
P187-01.250-375B	1-1/4	1-5/8	3/8	0.413 +0.015/0	1.250 +0/-0.002	1.251 +0.002/0	1.625 +0.002/0	1.250 +0/-0.002	1.624 +0/-0.002	1.625 +0.002/0
P187-01.312	1-5/16	1-11/16	3/16	0.205 +0.015/0	1.312 +0/-0.002	1.313 +0.002/0	1.687 +0.002/0	1.312 +0/-0.002	1.686 +0/-0.002	1.687 +0.002/0
P187-01.312-312B	1-5/16	1-11/16	5/16	0.343 +0.015/0	1.312 +0/-0.002	1.313 +0.002/0	1.687 +0.002/0	1.312 +0/-0.002	1.686 +0/-0.002	1.687 +0.002/0
3/16" C/S										
P187-01.375	1-3/8	1-3/4	3-1/6	0.206 +0.015/0	1.375 +0/-0.002	1.376 +0.002/0	1.750 +0.002/0	1.375 +0/-0.002	1.749 +0/-0.002	1.750 +0.002/0
P187-01.375-312B	1-3/8	1-3/4	5/16	0.343 +0.015/0	1.375 +0/-0.002	1.376 +0.002/0	1.750 +0.002/0	1.375 +0/-0.002	1.749 +0/-0.002	1.750 +0.002/0
P187-01.375-312D	1-3/8	1-3/4	5/16	0.343 +0.015/0	1.375 +0/-0.002	1.376 +0.002/0	1.750 +0.002/0	1.375 +0/-0.002	1.749 +0/-0.002	1.750 +0.002/0

STYLE 850 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
P187-01.500	1-1/2	1-7/8	3/16	0.206 +0.015/0	1.500 +0/-0.002	1.501 +0.002/0	1.875 +0.002/0	1.500 +0/-0.002	1.874 +0/-0.002	1.875 +0.002/0
P187-01.500-187B	1-1/2	1-7/8	3/16	0.206 +0.015/0	1.500 +0/-0.002	1.501 +0.002/0	1.875 +0.002/0	1.500 +0/-0.002	1.874 +0/-0.002	1.875 +0.002/0
P187-01.500-312B	1-1/2	1-7/8	5/16	0.206 +0.015/0	1.500 +0/-0.002	1.501 +0.002/0	1.875 +0.002/0	1.500 +0/-0.002	1.874 +0/-0.002	1.875 +0.002/0
P187-01.500-375B	1-1/2	1-7/8	3/8	0.413 +0.015/0	1.500 +0/-0.002	1.501 +0.002/0	1.875 +0.002/0	1.500 +0/-0.002	1.874 +0/-0.002	1.875 +0.002/0
P187-01.500-375BP	1-1/2	1-7/8	3/8	0.413 +0.015/0	1.500 +0/-0.002	1.501 +0.002/0	1.875 +0.002/0	1.500 +0/-0.002	1.874 +0/-0.002	1.875 +0.002/0
P187-01.562	1-9/16	1-15/16	3/16	0.206 +0.015/0	1.562 +0/-0.002	1.563 +0.002/0	1.937 +0.002/0	1.562 +0/-0.002	1.936 +0/-0.002	1.937 +0.002/0
P187-01.625	1-5/8	2	3/16	0.206 +0.015/0	1.625 +0/-0.002	1.626 +0.002/0	2.000 +0.002/0	1.625 +0/-0.002	1.999 +0/-0.002	2.000 +0.002/0
P187-01.625-250D	1-5/8	2	1/4	0.275 +0.015/0	1.625 +0/-0.002	1.626 +0.002/0	2.000 +0.002/0	1.625 +0/-0.002	1.999 +0/-0.002	2.000 +0.002/0
P187-01.625-312B	1-5/8	2	5/16	0.343 +0.015/0	1.625 +0/-0.002	1.626 +0.002/0	2.000 +0.002/0	1.625 +0/-0.002	1.999 +0/-0.002	2.000 +0.002/0
P187-01.625-375B	1-5/8	2	3/8	0.413 +0.015/0	1.625 +0/-0.002	1.626 +0.002/0	2.000 +0.002/0	1.625 +0/-0.002	1.999 +0/-0.002	2.000 +0.002/0
P187-01.625-375D	1-5/8	2	3/8	0.413 +0.015/0	1.625 +0/-0.002	1.626 +0.002/0	2.000 +0.002/0	1.625 +0/-0.002	1.999 +0/-0.002	2.000 +0.002/0
P187-01.750	1-3/4	2-1/8	3/16	0.206 +0.015/0	1.750 +0/-0.001	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0
P187-01.750-230B	1-3/4	2-1/8	.230	0.253 +0.015/0	1.750 +0/-0.002	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0
P187-01.750-250D	1-3/4	2-1/8	1/4	0.275 +0.015/0	1.750 +0/-0.002	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0
P187-01.750-312B	1-3/4	2-1/8	5/16	0.343 +0.015/0	1.750 +0/-0.002	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0
P187-01.750-375B	1-3/4	2-1/8	3/8	0.413 +0.015/0	1.750 +0/-0.002	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0
P187-01.750-375BC	1-3/4	2-1/8	3/8	0.413 +0.015/0	1.750 +0/-0.002	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0
P187-01.875	1-7/8	2-1/4	3/16	0.206 +0.015/0	1.875 +0/-0.002	1.876 +0.002/0	2.250 +0.002/0	1.875 +0/-0.002	2.249 +0/-0.002	2.250 +0.002/0
P187-01.875-375B	1-7/8	2-1/4	3/8	0.413 +0.015/0	1.875 +0/-0.002	1.876 +0.002/0	2.250 +0.002/0	1.875 +0/-0.002	2.249 +0/-0.002	2.250 +0.002/0
P187-01.875-375D	1-7/8	2-1/4	3/8	0.413 +0.015/0	1.875 +0/-0.002	1.876 +0.002/0	2.250 +0.002/0	1.875 +0/-0.002	2.249 +0/-0.002	2.250 +0.002/0
P187-02.000	2	2-3/8	3/16	0.206 +0.015/0	2.000 +0/-0.002	2.001 +0.002/0	2.375 +0.002/0	2.000 +0/-0.002	2.374 +0/-0.002	2.375 +0.002/0
P187-02.000-230B	2	2-3/8	.230	0.253 +0.015/0	2.000 +0/-0.002	2.001 +0.002/0	2.375 +0.002/0	2.000 +0/-0.002	2.374 +0/-0.002	2.375 +0.002/0
P187-02.000-250B	2	2-3/8	1/4	0.275 +0.015/0	2.000 +0/-0.002	2.001 +0.002/0	2.375 +0.002/0	2.000 +0/-0.002	2.374 +0/-0.002	2.375 +0.002/0
P187-02.000-275B	2	2-3/8	17/64	0.303 +0.015/0	2.000 +0/-0.002	2.001 +0.002/0	2.375 +0.002/0	2.000 +0/-0.002	2.374 +0/-0.002	2.375 +0.002/0
P187-02.000-312B	2	2-3/8	5/16	0.343 +0.015/0	2.000 +0/-0.002	2.001 +0.002/0	2.375 +0.002/0	2.000 +0/-0.002	2.374 +0/-0.002	2.375 +0.002/0
P187-02.000-375B	2	2-3/8	3/8	0.413 +0.015/0	2.000 +0/-0.002	2.001 +0.002/0	2.375 +0.002/0	2.000 +0/-0.002	2.374 +0/-0.002	2.375 +0.002/0
P187-02.125	2-1/8	2-1/2	3/16	0.206 +0.015/0	2.125 +0/-0.002	2.126 +0.002/0	2.500 +0.002/0	2.125 +0/-0.002	2.499 +0/-0.002	2.500 +0.002/0
P187-02.125-187B	2-1/8	2-1/2	3/16	0.206 +0.015/0	2.125 +0/-0.002	2.126 +0.002/0	2.500 +0.002/0	2.125 +0/-0.002	2.499 +0/-0.002	2.500 +0.002/0
P187-02.125-312D	2-1/8	2-1/2	5/16	0.343 +0.015/0	2.125 +0/-0.002	2.126 +0.002/0	2.500 +0.002/0	2.125 +0/-0.002	2.499 +0/-0.002	2.500 +0.002/0
P187-02.125-375B	2-1/8	2-1/2	3/8	0.413 +0.015/0	2.125 +0/-0.002	2.126 +0.002/0	2.500 +0.002/0	2.125 +0/-0.002	2.499 +0/-0.002	2.500 +0.002/0
P187-02.125-375D	2-1/8	2-1/2	3/8	0.413 +0.015/0	2.125 +0/-0.002	2.126 +0.002/0	2.500 +0.002/0	2.125 +0/-0.002	2.499 +0/-0.002	2.500 +0.002/0
P187-02.250	2-1/4	2-5/8	3/16	0.343 +0.015/0	2.250 +0/-0.002	2.251 +0.002/0	2.625 +0.002/0	2.250 +0/-0.002	2.624 +0/-0.002	2.625 +0.002/0
P187-02.250-375B	2-1/4	2-5/8	3/8	0.413 +0.015/0	2.250 +0/-0.002	2.251 +0.002/0	2.625 +0.002/0	2.250 +0/-0.002	2.624 +0/-0.002	2.625 +0.002/0
P187-02.250-375D	2-1/4	2-5/8	3/8	0.413 +0.015/0	2.250 +0/-0.002	2.251 +0.002/0	2.625 +0.002/0	2.250 +0/-0.002	2.624 +0/-0.002	2.625 +0.002/0
P187-02.375	2-3/8	2-3/4	3/16	0.206 +0.015/0	2.375 +0/-0.002	2.376 +0.002/0	2.750 +0.002/0	2.375 +0/-0.002	2.749 +0/-0.002	2.750 +0.002/0
P187-02.375-375B	2-3/8	2-3/4	3/8	0.413 +0.015/0	2.375 +0/-0.002	2.376 +0.002/0	2.750 +0.002/0	2.375 +0/-0.002	2.749 +0/-0.002	2.750 +0.002/0
P187-02.500	2-1/2	2-7/8	3/16	0.206 +0.015/0	2.500 +0/-0.002	2.501 +0.002/0	2.875 +0.002/0	2.500 +0/-0.002	2.874 +0/-0.002	2.875 +0.002/0
3/16" C/S										
P187-02.500-250B	2-1/2	2-7/8	1/4	0.275 +0.015/0	2.500 +0/-0.002	2.501 +0.002/0	2.875 +0.002/0	2.500 +0/-0.002	2.874 +0/-0.002	2.875 +0.002/0
P187-02.500-375B	2-1/2	2-7/8	3/8	0.413 +0.015/0	2.500 +0/-0.002	2.501 +0.002/0	2.875 +0.002/0	2.500 +0/-0.002	2.874 +0/-0.002	2.875 +0.002/0
P187-02.500-375BPM	2-1/2	2-7/8	3/8	0.413 +0.015/0	2.500 +0/-0.002	2.501 +0.002/0	2.875 +0.002/0	2.500 +0/-0.002	2.874 +0/-0.002	2.875 +0.002/0
P187-02.500-375D	2-1/2	2-7/8	3/8	0.413 +0.015/0	2.500 +0/-0.002	2.501 +0.002/0	2.875 +0.002/0	2.500 +0/-0.002	2.874 +0/-0.002	2.875 +0.002/0
P187-02.625	2-5/8	3	3/16	0.206 +0.015/0	2.625 +0/-0.002	2.626 +0.002/0	3.000 +0.002/0	2.625 +0/-0.002	2.999 +0/-0.002	3.000 +0.002/0

STYLE 850 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
P187-02.625-375B	2-5/8	3	3/8	0.413 +0.015/0	2.625 +0/-0.002	2.626 +0.002/0	3.000 +0.002/0	2.625 +0/-0.002	2.999 +0/-0.002	3.000 +0.002/0
P187-02.625-375D	2-5/8	3	3/8	0.413 +0.015/0	2.625 +0/-0.002	2.626 +0.002/0	3.000 +0.002/0	2.625 +0/-0.002	2.999 +0/-0.002	3.000 +0.002/0
P187-02.750	2-3/4	3-1/8	3/16	0.206 +0.015/0	2.750 +0/-0.002	2.751 +0.002/0	3.125 +0.002/0	2.750 +0/-0.002	3.124 +0/-0.002	3.125 +0.002/0
P187-02.750-187B	2-3/4	3-1/8	3/16	0.206 +0.015/0	2.750 +0/-0.002	2.751 +0.002/0	3.125 +0.002/0	2.750 +0/-0.002	3.124 +0/-0.002	3.125 +0.002/0
P187-02.750-375B	2-3/4	3-1/8	3/8	0.413 +0.015/0	2.750 +0/-0.002	2.751 +0.002/0	3.125 +0.002/0	2.750 +0/-0.002	3.124 +0/-0.002	3.125 +0.002/0
P187-02.750-375D	2-3/4	3-1/8	3/8	0.413 +0.015/0	2.750 +0/-0.002	2.751 +0.002/0	3.125 +0.002/0	2.750 +0/-0.002	3.124 +0/-0.002	3.125 +0.002/0
P187-02.875	2-7/8	3-1/4	3/16	0.206 +0.015/0	2.875 +0/-0.002	2.876 +0.002/0	3.250 +0.002/0	2.875 +0/-0.002	3.249 +0/-0.002	3.250 +0.002/0
P187-03.000	3	3-3/8	3/16	0.206 +0.015/0	3.000 +0/-0.002	3.001 +0.002/0	3.375 +0.002/0	3.000 +0/-0.002	3.374 +0/-0.002	3.375 +0.002/0
P187-03.000-375B	3	3-3/8	3/8	0.413 +0.015/0	3.000 +0/-0.002	3.001 +0.002/0	3.375 +0.002/0	3.000 +0/-0.002	3.374 +0/-0.002	3.375 +0.002/0
P187-03.125	3-1/8	3-1/2	3/16	0.206 +0.015/0	3.125 +0/-0.002	3.126 +0.002/0	3.500 +0.002/0	3.125 +0/-0.002	3.499 +0/-0.002	3.500 +0.002/0
P187-03.125-187B	3-1/8	3-1/2	3/16	0.206 +0.015/0	3.125 +0/-0.002	3.126 +0.002/0	3.500 +0.002/0	3.125 +0/-0.002	3.499 +0/-0.002	3.500 +0.002/0
P187-03.125-375B	3-1/8	3-1/2	3/8	0.413 +0.015/0	3.125 +0/-0.002	3.126 +0.002/0	3.500 +0.002/0	3.125 +0/-0.002	3.499 +0/-0.002	3.500 +0.002/0
P187-03.250	3-1/4	3-5/8	3/16	0.206 +0.015/0	3.250 +0/-0.002	3.251 +0.002/0	3.625 +0.002/0	3.250 +0/-0.002	3.624 +0/-0.002	3.625 +0.002/0
P187-03.375	3-3/8	3-3/4	3/16	0.206 +0.015/0	3.375 +0/-0.002	3.376 +0.002/0	3.750 +0.002/0	3.375 +0/-0.002	3.749 +0/-0.002	3.750 +0.002/0
P187-03.375-187B	3-3/8	3-3/4	3/16	0.206 +0.015/0	3.375 +0/-0.002	3.376 +0.002/0	3.750 +0.002/0	3.375 +0/-0.002	3.749 +0/-0.002	3.750 +0.002/0
P187-03.375-375B	3-3/8	3-3/4	3/8	0.413 +0.015/0	3.375 +0/-0.002	3.376 +0.002/0	3.750 +0.002/0	3.375 +0/-0.002	3.749 +0/-0.002	3.750 +0.002/0
P187-03.500	3-1/2	3-7/8	3/16	0.206 +0.015/0	3.500 +0/-0.002	3.501 +0.002/0	3.875 +0.002/0	3.500 +0/-0.002	3.874 +0/-0.002	3.875 +0.002/0
P187-03.500-375B	3-1/2	3-7/8	3/8	0.413 +0.015/0	3.500 +0/-0.002	3.501 +0.002/0	3.875 +0.002/0	3.500 +0/-0.002	3.874 +0/-0.002	3.875 +0.002/0
P187-03.500-375D	3-1/2	3-7/8	3/8	0.413 +0.015/0	3.500 +0/-0.002	3.501 +0.002/0	3.875 +0.002/0	3.500 +0/-0.002	3.874 +0/-0.002	3.875 +0.002/0
P187-03.625	3-5/8	4	3/16	0.206 +0.015/0	3.625 +0/-0.002	3.626 +0.002/0	4.000 +0.002/0	3.625 +0/-0.002	3.999 +0/-0.002	4.000 +0.002/0
P187-03.625-375B	3-5/8	4	3/8	0.413 +0.015/0	3.625 +0/-0.002	3.626 +0.002/0	4.000 +0.002/0	3.625 +0/-0.002	3.999 +0/-0.002	4.000 +0.002/0
P187-03.625-375D	3-5/8	4	3/8	0.413 +0.015/0	3.625 +0/-0.002	3.626 +0.002/0	4.000 +0.002/0	3.625 +0/-0.002	3.999 +0/-0.002	4.000 +0.002/0
P187-03.750	3-3/4	4-1/8	3/16	0.206 +0.015/0	3.750 +0/-0.002	3.751 +0.002/0	4.125 +0.002/0	3.750 +0/-0.002	4.124 +0/-0.002	4.125 +0.002/0
P187-03.750-375B	3-3/4	4-1/8	3/8	0.413 +0.015/0	3.750 +0/-0.002	3.751 +0.002/0	4.125 +0.002/0	3.750 +0/-0.002	4.124 +0/-0.002	4.125 +0.002/0
P187-04.000-375B	4	4-3/8	3/8	0.413 +0.015/0	4.000 +0/-0.002	4.001 +0.002/0	4.375 +0.002/0	4.000 +0/-0.002	4.374 +0/-0.002	4.375 +0.002/0
P187-04.000-375D	4	4-3/8	3/8	0.413 +0.015/0	4.000 +0/-0.002	4.001 +0.002/0	4.375 +0.002/0	4.000 +0/-0.002	4.374 +0/-0.002	4.375 +0.002/0
P187-04.125	4-1/8	4-1/2	3/16	0.206 +0.015/0	4.125 +0/-0.002	4.126 +0.002/0	4.500 +0.002/0	4.125 +0/-0.002	4.499 +0/-0.002	4.500 +0.002/0
P187-04.250-375B	4-1/4	4-5/8	3/8	0.413 +0.015/0	4.250 +0/-0.002	4.251 +0.002/0	4.625 +0.002/0	4.250 +0/-0.002	4.624 +0/-0.002	4.625 +0.002/0
P187-04.250-375D	4-1/4	4-5/8	3/8	0.413 +0.015/0	4.250 +0/-0.002	4.251 +0.002/0	4.625 +0.002/0	4.250 +0/-0.002	4.624 +0/-0.002	4.625 +0.002/0
P187-04.375-375D	4-3/8	4-3/4	3/8	0.413 +0.015/0	4.375 +0/-0.002	4.376 +0.002/0	4.750 +0.002/0	4.375 +0/-0.002	4.749 +0/-0.002	4.750 +0.002/0
P187-04.500	4-1/2	4-7/8	3/16	0.206 +0.015/0	4.500 +0/-0.002	4.501 +0.002/0	4.875 +0.002/0	4.500 +0/-0.002	4.874 +0/-0.002	4.875 +0.002/0
P187-04.750	4-3/4	5-1/8	3/16	0.206 +0.015/0	4.750 +0/-0.002	4.751 +0.002/0	5.125 +0.002/0	4.750 +0/-0.002	5.124 +0/-0.002	5.125 +0.002/0
P187-05.500-375B	5-1/2	5-7/8	3/8	0.413 +0.015/0	5.500 +0/-0.002	5.501 +0.002/0	5.875 +0.002/0	5.500 +0/-0.002	5.874 +0/-0.002	5.875 +0.002/0
P187-05.875	5-7/8	6-/14	3/16	0.206 +0.015/0	5.875 +0/-0.002	5.876 +0.002/0	6.250 +0.002/0	5.875 +0/-0.002	6.249 +0/-0.002	6.250 +0.002/0
7/32" C/S										
P218-02.500	2-1/2	2-15/16	7/32	0.240 +0.015/0	2.500 +0/-0.002	2.501 +0.002/0	2.937 +0.002/0	2.500 +0/-0.002	2.936 +0/-0.002	2.937 +0.002/0
P218-02.562	2-9/16	3	7/32	0.240 +0.015/0	2.562 +0/-0.002	2.563 +0.002/0	3.000 +0.002/0	2.562 +0/-0.002	2.999 +0/-0.002	3.000 +0.002/0
1/4" C/S										
P250-00.500	1/2	1	1/4	0.275 +0.015/0	0.500 +0/-0.002	0.501 +0.003/0	1.000 +0.003/0	0.500 +0/-0.003	0.999 +0/-0.002	1.000 +0.003/0
P250-00.500-375B	1/2	1	3/8	0.413 +0.015/0	0.500 +0/-0.002	0.501 +0.003/0	1.000 +0.003/0	0.500 +0/-0.003	0.999 +0/-0.002	1.000 +0.003/0
P250-00.500-375D	1/2	1	3/8	0.413 +0.015/0	0.500 +0/-0.002	0.501 +0.003/0	1.000 +0.003/0	0.500 +0/-0.003	0.999 +0/-0.002	1.000 +0.003/0
P250-00.625	5/8	1-1/8	1/4	0.275 +0.015/0	0.625 +0/-0.002	0.626 +0.003/0	1.125 +0.003/0	0.625 +0/-0.003	1.124 +0/-0.002	1.125 +0.003/0

STYLE 850 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
P250-00.625-375B	5/8	1-1/8	3/8	0.413 +0.015/0	0.625 +0/-0.002	0.626 +0.003/0	1.125 +0.003/0	0.625 +0/-0.003	1.124 +0/-0.002	1.125 +0.003/0
P250-00.687	11/16	1-3/16	1/4	0.275 +0.015/0	0.687 +0/-0.002	0.688 +0.003/0	1.187 +0.003/0	0.687 +0/-0.003	1.186 +0/-0.002	1.187 +0.003/0
P250-00.750	3/4	1-1/4	1/4	0.275 +0.015/0	0.750 +0/-0.002	0.751 +0.003/0	1.250 +0.003/0	0.750 +0/-0.003	1.249 +0/-0.002	1.250 +0.003/0
P250-00.750-375B	3/4	1-1/4	3/8	0.413 +0.015/0	0.750 +0/-0.002	0.751 +0.003/0	1.250 +0.003/0	0.750 +0/-0.003	1.249 +0/-0.002	1.250 +0.003/0
P250-00.875-375B	7/8	1-3/8	3/8	0.413 +0.015/0	0.875 +0/-0.002	0.876 +0.003/0	1.375 +0.003/0	0.875 +0/-0.003	1.374 +0/-0.002	1.375 +0.003/0
P250-00.937	15/16	1-7/16	1/4	0.275 +0.015/0	0.937 +0/-0.002	0.938 +0.003/0	1.437 +0.003/0	0.937 +0/-0.003	1.436 +0/-0.002	1.437 +0.003/0
P250-01.000	1	1-1/2	1/4	0.275 +0.015/0	1.000 +0/-0.002	1.001 +0.003/0	1.500 +0.003/0	1.000 +0/-0.003	1.499 +0/-0.002	1.500 +0.003/0
P250-01.000-375B	1	1-1/2	3/8	0.413 +0.015/0	1.000 +0/-0.002	1.001 +0.003/0	1.500 +0.003/0	1.000 +0/-0.003	1.499 +0/-0.002	1.500 +0.003/0
P250-01.125	1-1/8	1-5/8	1/4	0.275 +0.015/0	1.125 +0/-0.002	1.126 +0.003/0	1.625 +0.003/0	1.125 +0/-0.003	1.624 +0/-0.002	1.625 +0.003/0
P250-01.125-375B	1-1/8	1-5/8	3/8	0.413 +0.015/0	1.125 +0/-0.002	1.126 +0.003/0	1.625 +0.003/0	1.125 +0/-0.003	1.624 +0/-0.002	1.625 +0.003/0
P250-01.187	1-3/16	1-11/16	1/4	0.275 +0.015/0	1.187 +0/-0.002	1.188 +0.003/0	1.687 +0.003/0	1.187 +0/-0.003	1.686 +0/-0.002	1.687 +0.003/0
P250-01.250	1-1/4	1-3/4	1/4	0.275 +0.015/0	1.250 +0/-0.002	1.251 +0.003/0	1.750 +0.003/0	1.250 +0/-0.003	1.749 +0/-0.002	1.750 +0.003/0
P250-01.250-375B	1-1/4	1-3/4	3/8	0.413 +0.015/0	1.250 +0/-0.002	1.251 +0.003/0	1.750 +0.003/0	1.250 +0/-0.003	1.749 +0/-0.002	1.750 +0.003/0
P250-01.375	1-3/8	1-7/8	1/4	0.275 +0.015/0	1.375 +0/-0.002	1.376 +0.002/0	1.875 +0.002/0	1.375 +0/-0.002	1.874 +0/-0.002	1.875 +0.002/0
P250-01.375-375B	1-3/8	1-7/8	3/8	0.413 +0.015/0	1.375 +0/-0.002	1.376 +0.003/0	1.875 +0.003/0	1.375 +0/-0.003	1.874 +0/-0.002	1.875 +0.003/0
P250-01.500	1-1/2	2	1/4	0.275 +0.015/0	1.500 +0/-0.002	1.501 +0.002/0	2.000 +0.002/0	1.500 +0/-0.002	1.999 +0/-0.002	2.000 +0.002/0
P250-01.500-250B	1 1-2	2	1/4	0.275 +0.015/0	1.500 +0/-0.002	1.501 +0.003/0	2.000 +0.003/0	1.500 +0/-0.003	1.999 +0/-0.002	2.000 +0.003/0
P250-01.500-375B	1-1/2	2	3/8	0.413 +0.015/0	1.500 +0/-0.002	1.501 +0.003/0	2.000 +0.003/0	1.500 +0/-0.003	1.999 +0/-0.002	2.000 +0.003/0
P250-01.500-375D	1-1/2	2	3/8	0.413 +0.015/0	1.500 +0/-0.002	1.501 +0.003/0	2.000 +0.003/0	1.500 +0/-0.003	1.999 +0/-0.002	2.000 +0.003/0
P250-01.625	1-5/8	2-1/8	1/4	0.275 +0.015/0	1.625 +0/-0.002	1.626 +0.003/0	2.125 +0.003/0	1.625 +0/-0.003	2.124 +0/-0.002	2.125 +0.003/0
P250-01.625-375B	1-5/8	2-1/8	3/8	0.413 +0.015/0	1.625 +0/-0.002	1.626 +0.003/0	2.125 +0.003/0	1.625 +0/-0.003	2.124 +0/-0.002	2.125 +0.003/0
P250-01.750	1-3/4	2-1/4	1/4	0.275 +0.015/0	1.750 +0/-0.002	1.751 +0.003/0	2.250 +0.003/0	1.750 +0/-0.003	2.249 +0/-0.002	2.250 +0.003/0
P250-01.750-375B	1-3/4	2-1/4	3/8	0.413 +0.015/0	1.750 +0/-0.002	1.751 +0.003/0	2.250 +0.003/0	1.750 +0/-0.003	2.249 +0/-0.002	2.250 +0.003/0
P250-01.875	1-7/8	2-3/8	1/4	0.275 +0.015/0	1.875 +0/-0.002	1.876 +0.003/0	2.375 +0.003/0	1.875 +0/-0.003	2.374 +0/-0.002	2.375 +0.003/0
P250-01.875-375B	1-7/8	2-3/8	3/8	0.413 +0.015/0	1.875 +0/-0.002	1.876 +0.003/0	2.375 +0.003/0	1.875 +0/-0.003	2.374 +0/-0.002	2.375 +0.003/0
P250-02.000	2	2-1/2	1/4	0.275 +0.015/0	2.000 +0/-0.002	2.001 +0.003/0	2.500 +0.003/0	2.000 +0/-0.003	2.499 +0/-0.002	2.500 +0.003/0
P250-02.000-250B	2	2-1/2	1/4	0.275 +0.015/0	2.000 +0/-0.002	2.001 +0.003/0	2.500 +0.003/0	2.000 +0/-0.003	2.499 +0/-0.002	2.500 +0.003/0
P250-02.000-375B	2	2-1/2	3/8	0.413 +0.015/0	2.000 +0/-0.002	2.001 +0.003/0	2.500 +0.003/0	2.000 +0/-0.003	2.499 +0/-0.002	2.500 +0.003/0
P250-02.000-375D	2	2-1/2	3/8	0.413 +0.015/0	2.000 +0/-0.002	2.001 +0.003/0	2.500 +0.003/0	2.000 +0/-0.003	2.499 +0/-0.002	2.500 +0.003/0
P250-02.125-375B	2-1/8	2-5/8	3/8	0.413 +0.015/0	2.125 +0/-0.002	2.126 +0.003/0	2.625 +0.003/0	2.125 +0/-0.003	2.624 +0/-0.002	2.625 +0.003/0
P250-02.250	2-1/4	2-3/4	1/4	0.275 +0.015/0	2.250 +0/-0.002	2.251 +0.003/0	2.750 +0.003/0	2.250 +0/-0.003	2.749 +0/-0.002	2.750 +0.003/0
P250-02.250-375B	2-1/4	2-3/4	3/8	0.413 +0.015/0	2.250 +0/-0.002	2.251 +0.003/0	2.750 +0.003/0	2.250 +0/-0.003	2.749 +0/-0.002	2.750 +0.003/0
P250-02.250-375D	2-1/4	2-3/4	3/8	0.413 +0.015/0	2.250 +0/-0.002	2.251 +0.003/0	2.750 +0.003/0	2.250 +0/-0.003	2.749 +0/-0.002	2.750 +0.003/0
1/4" C/S										
P250-02.375	2-3/8	2-7/8	1/4	0.275 +0.015/0	2.375 +0/-0.002	2.376 +0.003/0	2.875 +0.003/0	2.375 +0/-0.003	2.874 +0/-0.002	2.875 +0.003/0
P250-02.375-375B	2-3/8	2-7/8	3/8	0.413 +0.015/0	2.375 +0/-0.002	2.376 +0.003/0	2.875 +0.003/0	2.375 +0/-0.003	2.874 +0/-0.002	2.875 +0.003/0
P250-02.500	2-1/2	3	1/4	0.275 +0.015/0	2.500 +0/-0.002	2.501 +0.003/0	3.000 +0.003/0	2.500 +0/-0.003	2.999 +0/-0.002	3.000 +0.003/0
P250-02.500-375B	2-1/2	3	3/8	0.413 +0.015/0	2.500 +0/-0.002	2.501 +0.003/0	3.000 +0.003/0	2.500 +0/-0.003	2.999 +0/-0.002	3.000 +0.003/0
P250-02.500-375D	2-1/2	3	3/8	0.413 +0.015/0	2.500 +0/-0.002	2.501 +0.003/0	3.000 +0.003/0	2.500 +0/-0.003	2.999 +0/-0.002	3.000 +0.003/0
P250-02.625-375B	2-5/8	3-1/8	3/8	0.413 +0.015/0	2.625 +0/-0.002	2.626 +0.003/0	3.125 +0.003/0	2.625 +0/-0.003	3.124 +0/-0.002	3.125 +0.003/0
P250-02.750	2-3/4	3-1/4	1/4	0.275 +0.015/0	2.750 +0/-0.002	2.751 +0.003/0	3.250 +0.003/0	2.750 +0/-0.003	3.249 +0/-0.002	3.250 +0.003/0
P250-02.750-375B	2-3/4	3-1/4	3/8	0.413 +0.015/0	2.750 +0/-0.002	2.751 +0.003/0	3.250 +0.003/0	2.750 +0/-0.003	3.249 +0/-0.002	3.250 +0.003/0
P250-02.750-375BPM	2-3/4	3-1/4	3/8	0.413 +0.015/0	2.750 +0/-0.002	2.751 +0.003/0	3.250 +0.003/0	2.750 +0/-0.003	3.249 +0/-0.002	3.250 +0.003/0

STYLE 850 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
P250-02.750-375D	2-3/4	3-1/4	3/8	0.413 +0.015/0	2.750 +0/-0.002	2.751 +0.003/0	3.250 +0.003/0	2.750 +0/-0.003	3.249 +0/-0.002	3.250 +0.003/0
P250-02.875-375B	2-7/8	3-3/8	3/8	0.413 +0.015/0	2.875 +0/-0.002	2.876 +0.003/0	3.375 +0.003/0	2.875 +0/-0.003	3.374 +0/-0.002	3.375 +0.003/0
P250-03.000	3	3-1/2	1/4	0.275 +0.015/0	3.000 +0/-0.002	3.001 +0.003/0	3.500 +0.003/0	3.000 +0/-0.003	3.499 +0/-0.002	3.500 +0.003/0
P250-03.000-375B	3	3-1/2	3/8	0.413 +0.015/0	3.000 +0/-0.002	3.001 +0.003/0	3.500 +0.003/0	3.000 +0/-0.003	3.499 +0/-0.002	3.500 +0.003/0
P250-03.000-375D	3	3-1/2	3/8	0.413 +0.015/0	3.000 +0/-0.002	3.001 +0.003/0	3.500 +0.003/0	3.000 +0/-0.003	3.499 +0/-0.002	3.500 +0.003/0
P250-03.125	3-1/8	3-5/8	1/4	0.275 +0.015/0	3.125 +0/-0.002	3.126 +0.003/0	3.625 +0.003/0	3.125 +0/-0.003	3.624 +0/-0.002	3.625 +0.003/0
P250-03.250	3-1/4	3-3/4	1/4	0.275 +0.015/0	3.250 +0/-0.002	3.251 +0.003/0	3.750 +0.003/0	3.250 +0/-0.003	3.749 +0/-0.002	3.750 +0.003/0
P250-03.250-375B	3-1/4	3-3/4	3/8	0.413 +0.015/0	3.250 +0/-0.002	3.251 +0.003/0	3.750 +0.003/0	3.250 +0/-0.003	3.749 +0/-0.002	3.750 +0.003/0
P250-03.250-375D	3-1/4	3-3/4	3/8	0.413 +0.015/0	3.250 +0/-0.002	3.251 +0.003/0	3.750 +0.003/0	3.250 +0/-0.003	3.749 +0/-0.002	3.750 +0.003/0
P250-03.500	3-1/2	4	1/4	0.275 +0.015/0	3.500 +0/-0.002	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.003	3.999 +0/-0.002	4.000 +0.003/0
P250-03.500-312BHN	3-1/2	4	5/16	0.344 +0.015/0	3.500 +0/-0.002	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.003	3.999 +0/-0.002	4.000 +0.003/0
P250-03.500-375B	3-1/2	4	3/8	0.413 +0.015/0	3.500 +0/-0.002	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.003	3.999 +0/-0.002	4.000 +0.003/0
P250-03.500-375BPM	3-1/2	4	3/8	0.413 +0.015/0	3.500 +0/-0.002	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.003	3.999 +0/-0.002	4.000 +0.003/0
P250-03.500-375D	3-1/2	4	3/8	0.413 +0.015/0	3.500 +0/-0.002	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.003	3.999 +0/-0.002	4.000 +0.003/0
P250-03.625-375B	3-5/8	4-1/8	3/8	0.413 +0.015/0	3.625 +0/-0.002	3.626 +0.003/0	4.125 +0.003/0	3.625 +0/-0.003	4.124 +0/-0.002	4.125 +0.003/0
P250-03.750	3-3/4	4-1/4	1/4	0.275 +0.015/0	3.750 +0/-0.002	3.751 +0.003/0	4.250 +0.003/0	3.750 +0/-0.003	4.249 +0/-0.002	4.250 +0.003/0
P250-03.750-375B	3-3/4	4-1/4	3/8	0.275 +0.015/0	3.750 +0/-0.002	3.751 +0.003/0	4.250 +0.003/0	3.750 +0/-0.003	4.249 +0/-0.002	4.250 +0.003/0
P250-03.750-375D	3-3/4	4-1/4	3/8	0.275 +0.015/0	3.750 +0/-0.002	3.751 +0.003/0	4.250 +0.003/0	3.750 +0/-0.003	4.249 +0/-0.002	4.250 +0.003/0
P250-04.000	4	4-1/2	1/4	0.275 +0.015/0	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
P250-04.000-312BHN	4	4-1/2	5/16	0.344 +0.015/0	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
P250-04.000-375B	4	4-1/2	3/8	0.413 +0.015/0	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
P250-04.000-375D	4	4-1/2	3/8	0.413 +0.015/0	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
P250-04.000-562B	4	4-1/2	9/16	0.618 +0.015/0	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
P250-04.000-562D	4	4-1/2	9/16	0.618 +0.015/0	4.125 +0/-0.002	4.126 +0.003/0	4.625 +0.003/0	4.125 +0/-0.003	4.624 +0/-0.002	4.625 +0.003/0
P250-04.250	4-1/4	4-3/4	1/4	0.275 +0.015/0	4.250 +0/-0.002	4.251 +0.003/0	4.750 +0.003/0	4.250 +0/-0.003	4.749 +0/-0.002	4.750 +0.003/0
P250-04.250-375B	4-1/4	4-3/4	3/8	0.413 +0.015/0	4.250 +0/-0.002	4.251 +0.003/0	4.750 +0.003/0	4.250 +0/-0.003	4.749 +0/-0.002	4.750 +0.003/0
P250-04.250-375BPM	4-1/4	4-3/4	3/8	0.413 +0.015/0	4.250 +0/-0.002	4.251 +0.003/0	4.750 +0.003/0	4.250 +0/-0.003	4.749 +0/-0.002	4.750 +0.003/0
P250-04.250-562B	4-1/4	4-3/4	9/16	0.618 +0.015/0	4.250 +0/-0.002	4.251 +0.003/0	4.750 +0.003/0	4.250 +0/-0.003	4.749 +0/-0.002	4.750 +0.003/0
P250-04.250-562D	4-1/4	4-3/4	9/16	0.618 +0.015/0	4.250 +0/-0.002	4.251 +0.003/0	4.750 +0.003/0	4.250 +0/-0.003	4.749 +0/-0.002	4.750 +0.003/0
P250-04.375	4-3/8	4-7/8	1/4	0.275 +0.015/0	4.375 +0/-0.002	4.376 +0.003/0	4.875 +0.003/0	4.375 +0/-0.003	4.874 +0/-0.002	4.875 +0.003/0
P250-04.500	4-1/2	5	1/4	0.275 +0.015/0	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.999 +0/-0.002	5.000 +0.003/0
1/4" C/S										
P250-04.500-312BHN	4-1/2	5	5/16	0.344 +0.015/0	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.999 +0/-0.002	5.000 +0.003/0
P250-04.500-375B	4-1/2	5	3/8	0.413 +0.015/0	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.999 +0/-0.002	5.000 +0.003/0
P250-04.500-375D	4-1/2	5	3/8	0.413 +0.015/0	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.999 +0/-0.002	5.000 +0.003/0
P250-04.500-562B	4-1/2	5	9/16	0.618 +0.015/0	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.999 +0/-0.002	5.000 +0.003/0
P250-04.500-562D	4-1/2	5	9/16	0.618 +0.015/0	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.999 +0/-0.002	5.000 +0.003/0
P250-04.750	4-3/4	5-1/4	1/4	0.275 +0.015/0	4.750 +0/-0.002	4.751 +0.003/0	5.250 +0.003/0	4.750 +0/-0.003	5.249 +0/-0.002	5.250 +0.003/0
P250-04.750-375B	4-3/4	5-1/4	3/8	0.413 +0.015/0	4.750 +0/-0.002	4.751 +0.003/0	5.250 +0.003/0	4.750 +0/-0.003	5.249 +0/-0.002	5.250 +0.003/0
P250-04.750-562B	4-3/4	5-1/4	9/16	0.618 +0.015/0	4.750 +0/-0.002	4.751 +0.003/0	5.250 +0.003/0	4.750 +0/-0.003	5.249 +0/-0.002	5.250 +0.003/0
P250-04.750-562D	4-3/4	5-1/4	9/16	0.618 +0.015/0	4.750 +0/-0.002	4.751 +0.003/0	5.250 +0.003/0	4.750 +0/-0.003	5.249 +0/-0.002	5.250 +0.003/0
P250-05.000	5	5-1/2	1/4	0.275 +0.015/0	5.000 +0/-0.002	5.001 +0.003/0	5.500 +0.003/0	5.000 +0/-0.003	5.499 +0/-0.002	5.500 +0.003/0
P250-05.000-375B	5	5-1/2	3/8	0.413 +0.015/0	5.000 +0/-0.002	5.001 +0.003/0	5.500 +0.003/0	5.000 +0/-0.003	5.499 +0/-0.002	5.500 +0.003/0
P250-05.000-375D	5	5-1/2	3/8	0.413 +0.015/0	5.000 +0/-0.002	5.001 +0.003/0	5.500 +0.003/0	5.000 +0/-0.003	5.499 +0/-0.002	5.500 +0.003/0

STYLE 850 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
P250-05.000-562B	5	5-1/2	9/16	0.618 +0.015/0	5.000 +0/-0.002	5.001 +0.003/0	5.500 +0.003/0	5.000 +0/-0.003	5.499 +0/-0.002	5.500 +0.003/0
P250-05.000-562D	5	5-1/2	9/16	0.618 +0.015/0	5.000 +0/-0.002	5.001 +0.003/0	5.500 +0.003/0	5.000 +0/-0.003	5.499 +0/-0.002	5.500 +0.003/0
P250-05.250	5-1/4	5-3/4	1/4	0.275 +0.015/0	5.250 +0/-0.002	5.251 +0.003/0	5.750 +0.003/0	5.250 +0/-0.003	5.749 +0/-0.002	5.750 +0.003/0
P250-05.250-375BPM	5-1/4	5-3/4	3/8	0.413 +0.015/0	5.250 +0/-0.002	5.251 +0.003/0	5.750 +0.003/0	5.250 +0/-0.003	5.749 +0/-0.002	5.750 +0.003/0
P250-05.375	5-3/8	5-7/8	1/4	0.275 +0.015/0	5.375 +0/-0.002	5.376 +0.003/0	5.875 +0.003/0	5.375 +0/-0.003	5.874 +0/-0.002	5.875 +0.003/0
P250-05.500	5-1/2	6	1/4	0.275 +0.015/0	5.500 +0/-0.002	5.501 +0.003/0	6.000 +0.003/0	5.500 +0/-0.003	5.999 +0/-0.002	6.000 +0.003/0
P250-05.500-375B	5-1/2	6	3/8	0.413 +0.015/0	5.500 +0/-0.002	5.501 +0.003/0	6.000 +0.003/0	5.500 +0/-0.003	5.999 +0/-0.002	6.000 +0.003/0
P250-05.500-375D	5-1/2	6	3/8	0.413 +0.015/0	5.500 +0/-0.002	5.501 +0.003/0	6.000 +0.003/0	5.500 +0/-0.003	5.999 +0/-0.002	6.000 +0.003/0
P250-05.500-562B	5-1/2	6	9/16	0.618 +0.015/0	5.500 +0/-0.002	5.501 +0.003/0	6.000 +0.003/0	5.500 +0/-0.003	5.999 +0/-0.002	6.000 +0.003/0
P250-05.500-562D	5-1/2	6	9/16	0.618 +0.015/0	5.500 +0/-0.002	5.501 +0.003/0	6.000 +0.003/0	5.500 +0/-0.003	5.999 +0/-0.002	6.000 +0.003/0
P250-05.625	5-5/8	6-1/8	1/4	0.275 +0.015/0	5.625 +0/-0.002	5.626 +0.003/0	6.125 +0.003/0	5.625 +0/-0.003	6.124 +0/-0.002	6.125 +0.003/0
P250-05.750-375BPM	5-3/4	6-1/4	3/8	0.413 +0.015/0	5.500 +0/-0.002	5.501 +0.003/0	6.000 +0.003/0	5.500 +0/-0.003	5.999 +0/-0.002	6.000 +0.003/0
P250-05.750-562B	5-3/4	6-1/4	9/16	0.618 +0.015/0	5.750 +0/-0.002	5.751 +0.003/0	6.250 +0.003/0	5.750 +0/-0.003	6.249 +0/-0.002	6.250 +0.003/0
P250-05.750-562D	5-3/4	6-1/4	9/16	0.618 +0.015/0	5.750 +0/-0.002	5.751 +0.003/0	6.250 +0.003/0	5.750 +0/-0.003	6.249 +0/-0.002	6.250 +0.003/0
P250-06.000	6	6-1/2	1/4	0.275 +0.015/0	6.000 +0/-0.002	6.001 +0.003/0	6.500 +0.003/0	6.000 +0/-0.003	6.499 +0/-0.002	6.500 +0.003/0
P250-06.000-375B	6	6-1/2	3/8	0.413 +0.015/0	6.000 +0/-0.002	6.001 +0.003/0	6.500 +0.003/0	6.000 +0/-0.003	6.499 +0/-0.002	6.500 +0.003/0
P250-06.000-562B	6	6-1/2	9/16	0.618 +0.015/0	6.000 +0/-0.002	6.001 +0.003/0	6.500 +0.003/0	6.000 +0/-0.003	6.499 +0/-0.002	6.500 +0.003/0
P250-06.000-562D	6	6-1/2	9/16	0.618 +0.015/0	6.000 +0/-0.002	6.001 +0.003/0	6.500 +0.003/0	6.000 +0/-0.003	6.499 +0/-0.002	6.500 +0.003/0
P250-06.250-562B	6-1/4	6-3/4	9/16	0.618 +0.015/0	6.250 +0/-0.002	6.251 +0.003/0	6.750 +0.003/0	6.250 +0/-0.003	6.749 +0/-0.002	6.750 +0.003/0
P250-06.500	6-1/2	7	1/4	0.275 +0.015/0	6.500 +0/-0.002	6.501 +0.003/0	7.000 +0.003/0	6.500 +0/-0.003	6.999 +0/-0.002	7.000 +0.003/0
P250-06.500-375B	6-1/2	7	3/8	0.413 +0.015/0	6.500 +0/-0.002	6.501 +0.003/0	7.000 +0.003/0	6.500 +0/-0.003	6.999 +0/-0.002	7.000 +0.003/0
P250-06.500-375D	6-1/2	7	3/8	0.413 +0.015/0	6.500 +0/-0.002	6.501 +0.003/0	7.000 +0.003/0	6.500 +0/-0.003	6.999 +0/-0.002	7.000 +0.003/0
P250-06.500-562B	6-1/2	7	9/16	0.618 +0.015/0	6.500 +0/-0.002	6.501 +0.003/0	7.000 +0.003/0	6.500 +0/-0.003	6.999 +0/-0.002	7.000 +0.003/0
P250-06.500-562D	6-1/2	7	9/16	0.618 +0.015/0	6.500 +0/-0.002	6.501 +0.003/0	7.000 +0.003/0	6.500 +0/-0.003	6.999 +0/-0.002	7.000 +0.003/0
P250-06.750	6-3/4	7-1/4	1/4	0.275 +0.015/0	6.750 +0/-0.002	6.751 +0.003/0	7.250 +0.003/0	6.750 +0/-0.003	7.249 +0/-0.002	7.250 +0.003/0
P250-06.750-562B	6-3/4	7-1/4	9/16	0.618 +0.015/0	6.750 +0/-0.002	6.751 +0.003/0	7.250 +0.003/0	6.750 +0/-0.003	7.249 +0/-0.002	7.250 +0.003/0
P250-07.000-375B	7	7-1/2	3/8	0.413 +0.015/0	7.000 +0/-0.002	7.001 +0.003/0	7.500 +0.003/0	7.000 +0/-0.003	7.499 +0/-0.002	7.500 +0.003/0
P250-07.000-562B	7	7-1/2	9/16	0.618 +0.015/0	7.000 +0/-0.002	7.001 +0.003/0	7.500 +0.003/0	7.000 +0/-0.003	7.499 +0/-0.002	7.500 +0.003/0
1/4" C/S										
P250-07.500	7-1/2	8	1/4	0.275 +0.015/0	7.500 +0/-0.002	7.501 +0.003/0	8.000 +0.003/0	7.500 +0/-0.003	7.999 +0/-0.002	8.000 +0.003/0
P250-07.500-562B	7-1/2	8	9/16	0.618 +0.015/0	7.500 +0/-0.002	7.501 +0.003/0	8.000 +0.003/0	7.500 +0/-0.003	7.999 +0/-0.002	8.000 +0.003/0
P250-07.500-562D	7-1/2	8	9/16	0.618 +0.015/0	7.500 +0/-0.002	7.501 +0.003/0	8.000 +0.003/0	7.500 +0/-0.003	7.999 +0/-0.002	8.000 +0.003/0
P250-08.000-562B	8	8-1/2	9/16	0.618 +0.015/0	8.000 +0/-0.002	8.001 +0.003/0	8.500 +0.003/0	8.000 +0/-0.003	8.499 +0/-0.002	8.500 +0.003/0
P250-08.500-562B	8-1/2	9	9/16	0.618 +0.015/0	8.500 +0/-0.002	8.501 +0.003/0	9.000 +0.003/0	8.500 +0/-0.003	8.999 +0/-0.002	9.000 +0.003/0
P250-09.750-562B	9-3/4	10-1/4	9/16	0.618 +0.015/0	9.750 +0/-0.002	9.751 +0.003/0	10.250 +0.003/0	9.750 +0/-0.003	10.249 +0/-0.002	10.250 +0.003/0
P250-10.000-562B	10	10-1/2	9/16	0.618 +0.015/0	10.000 +0/-0.002	10.001 +0.003/0	10.500 +0.003/0	10.000 +0/-0.003	10.499 +0/-0.002	10.500 +0.003/0
P250-11.500	11-1/2	12	1/4	0.275 +0.015/0	11.500 +0/-0.002	11.501 +0.003/0	12.000 +0.003/0	11.500 +0/-0.003	11.999 +0/-0.002	12.000 +0.003/0
9/32" C/S										
P281-05.000-343BHN	5	5-9/16	11/32	0.378 +0.015/0	5.000 +0/-0.002	5.001 +0.003/0	5.563 +0.003/0	5.000 +0/-0.003	5.562 +0/-0.002	5.563 +0.003/0
5/16" C/S										
P312-00.875	7/8	1-1/2	5/16	0.343 +0.015/0	0.875 +0/-0.002	0.877 +0.003/0	1.500 +0.004/0	0.875 +0/-0.004	1.498 +0/-0.002	1.500 +0.003/0
P312-01.000-500B	1	1-5/8	1/2	0.550 +0.015/0	1.000 +0/-0.002	1.002 +0.003/0	1.625 +0.004/0	1.000 +0/-0.004	1.623 +0/-0.002	1.625 +0.003/0
P312-01.000-500D	1	1-5/8	1/2	0.550 +0.015/0	1.000 +0/-0.002	1.002 +0.003/0	1.625 +0.004/0	1.000 +0/-0.004	1.623 +0/-0.002	1.625 +0.003/0

STYLE 850 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
P312-01.187	1-3/16	1-13/16	5/16	0.343 +0.015/0	1.187 +0/-0.002	1.189 +0.003/0	1.812 +0.004/0	1.187 +0/-0.004	1.810 +0/-0.002	1.812 +0.003/0
P312-01.250-500B	1-1/4	1-7/8	1/2	0.550 +0.015/0	1.250 +0/-0.002	1.252 +0.003/0	1.875 +0.004/0	1.250 +0/-0.004	1.873 +0/-0.002	1.875 +0.003/0
P312-01.375	1-3/8	2	5/16	0.343 +0.015/0	1.375 +0/-0.002	1.377 +0.003/0	2.000 +0.004/0	1.375 +0/-0.004	1.998 +0/-0.002	2.000 +0.003/0
P312-01.375-500B	1-3/8	2	1/2	0.550 +0.015/0	1.375 +0/-0.002	1.377 +0.003/0	2.000 +0.004/0	1.375 +0/-0.004	1.998 +0/-0.002	2.000 +0.003/0
P312-01.500	1-1/2	2-1/8	5/16	0.343 +0.015/0	1.500 +0/-0.002	1.502 +0.003/0	2.125 +0.004/0	1.500 +0/-0.004	2.123 +0/-0.002	2.125 +0.003/0
P312-01.500-500B	1-1/2	2-1/8	1/2	0.550 +0.015/0	1.500 +0/-0.002	1.502 +0.003/0	2.125 +0.004/0	1.500 +0/-0.004	2.123 +0/-0.002	2.125 +0.003/0
P312-01.500-500D	1-1/2	2-1/8	1/2	0.550 +0.015/0	1.500 +0/-0.002	1.502 +0.003/0	2.125 +0.004/0	1.500 +0/-0.004	2.123 +0/-0.002	2.125 +0.003/0
P312-01.625	1-5/8	2-1/4	5/16	0.343 +0.015/0	1.625 +0/-0.002	1.627 +0.003/0	2.250 +0.004/0	1.625 +0/-0.004	2.248 +0/-0.002	2.250 +0.003/0
P312-01.750	1-3/4	2-3/8	5/16	0.343 +0.015/0	1.750 +0/-0.002	1.752 +0.003/0	2.375 +0.004/0	1.750 +0/-0.004	2.373 +0/-0.002	2.375 +0.003/0
P312-01.750-500B	1-3/4	2-3/8	1/2	0.550 +0.015/0	1.750 +0/-0.002	1.752 +0.003/0	2.375 +0.004/0	1.750 +0/-0.004	2.373 +0/-0.002	2.375 +0.003/0
P312-01.750-500D	1-3/4	2-3/8	1/2	0.550 +0.015/0	1.750 +0/-0.002	1.752 +0.003/0	2.375 +0.004/0	1.750 +0/-0.004	2.373 +0/-0.002	2.375 +0.003/0
P312-01.875	1-7/8	2-1/2	5/16	0.343 +0.015/0	1.875 +0/-0.002	1.877 +0.003/0	2.500 +0.004/0	1.875 +0/-0.004	2.498 +0/-0.002	2.500 +0.003/0
P312-01.875-500B	1-7/8	2-1/2	1/2	0.550 +0.015/0	1.875 +0/-0.002	1.877 +0.003/0	2.500 +0.004/0	1.875 +0/-0.004	2.498 +0/-0.002	2.500 +0.003/0
P312-02.000	2	2-5/8	5/16	0.343 +0.015/0	2.000 +0/-0.002	2.002 +0.003/0	2.625 +0.004/0	2.000 +0/-0.004	2.623 +0/-0.002	2.625 +0.003/0
P312-02.000-500B	2	2-5/8	1/2	0.550 +0.015/0	2.000 +0/-0.002	2.002 +0.003/0	2.625 +0.004/0	2.000 +0/-0.004	2.623 +0/-0.002	2.625 +0.003/0
P312-02.000-500D	2	2-5/8	1/2	0.550 +0.015/0	2.000 +0/-0.002	2.002 +0.003/0	2.625 +0.004/0	2.000 +0/-0.004	2.623 +0/-0.002	2.625 +0.003/0
P312-02.125-500B	2-1/8	2-3/4	1/2	0.550 +0.015/0	2.125 +0/-0.002	2.126 +0.003/0	2.750 +0.004/0	2.125 +0/-0.004	2.749 +0/-0.002	2.750 +0.003/0
P312-02.250	2-1/4	2-7/8	5/16	0.343 +0.015/0	2.250 +0/-0.002	2.252 +0.003/0	2.875 +0.004/0	2.250 +0/-0.004	2.873 +0/-0.002	2.875 +0.003/0
P312-02.250-500B	2-1/4	2-7/8	1/2	0.550 +0.015/0	2.250 +0/-0.002	2.252 +0.003/0	2.875 +0.004/0	2.250 +0/-0.004	2.873 +0/-0.002	2.875 +0.003/0
P312-02.375	2-3/8	3	5/16	0.343 +0.015/0	2.375 +0/-0.002	2.377 +0.003/0	3.000 +0.004/0	2.375 +0/-0.004	2.998 +0/-0.002	3.000 +0.003/0
P312-02.375-500B	2-3/8	3	1/2	0.550 +0.015/0	2.375 +0/-0.002	2.377 +0.003/0	3.000 +0.004/0	2.375 +0/-0.004	2.998 +0/-0.002	3.000 +0.003/0
P312-02.375-500D	2-3/8	3	1/2	0.550 +0.015/0	2.375 +0/-0.002	2.377 +0.003/0	3.000 +0.004/0	2.375 +0/-0.004	2.998 +0/-0.002	3.000 +0.003/0
P312-02.500	2-1/2	3-1/8	5/16	0.343 +0.015/0	2.500 +0/-0.002	2.502 +0.003/0	3.125 +0.004/0	2.500 +0/-0.004	3.123 +0/-0.002	3.125 +0.003/0
P312-02.500-500B	2-1/2	3-1/8	1/2	0.550 +0.015/0	2.500 +0/-0.002	2.502 +0.003/0	3.125 +0.004/0	2.500 +0/-0.004	3.123 +0/-0.002	3.125 +0.003/0
P312-02.625-500B	2-5/8	3-1/4	1/2	0.550 +0.015/0	2.625 +0/-0.002	2.627 +0.003/0	3.250 +0.004/0	2.625 +0/-0.004	3.248 +0/-0.002	3.250 +0.003/0
P312-02.750	2-3/4	3-3/8	5/16	0.343 +0.015/0	2.750 +0/-0.002	2.752 +0.003/0	3.375 +0.004/0	2.750 +0/-0.004	3.373 +0/-0.002	3.375 +0.003/0
5/16" C/S										
P312-02.750-500B	2-3/4	3-3/8	1/2	0.550 +0.015/0	2.750 +0/-0.002	2.752 +0.003/0	3.375 +0.004/0	2.750 +0/-0.004	3.373 +0/-0.002	3.375 +0.003/0
P312-03.000-500B	3	3-5/8	1/2	0.550 +0.015/0	3.000 +0/-0.002	3.002 +0.003/0	3.625 +0.004/0	3.000 +0/-0.004	3.623 +0/-0.002	3.625 +0.003/0
P312-03.125	3-1/8	3-3/4	5/16	0.343 +0.015/0	3.125 +0/-0.002	3.127 +0.003/0	3.750 +0.004/0	3.125 +0/-0.004	3.748 +0/-0.002	3.750 +0.003/0
P312-03.250-500B	3-1/4	3-7/8	1/2	0.550 +0.015/0	3.250 +0/-0.002	3.252 +0.003/0	3.875 +0.004/0	3.250 +0/-0.004	3.873 +0/-0.002	3.875 +0.003/0
P312-03.375	3-3/8	4	5/16	0.343 +0.015/0	3.375 +0/-0.002	3.377 +0.003/0	4.000 +0.004/0	3.375 +0/-0.004	3.998 +0/-0.002	4.000 +0.003/0
P312-03.375-500B	3-3/8	4	1/2	0.550 +0.015/0	3.375 +0/-0.002	3.377 +0.003/0	4.000 +0.004/0	3.375 +0/-0.004	3.998 +0/-0.002	4.000 +0.003/0
P312-03.375-500D	3-3/8	4	1/2	0.550 +0.015/0	3.375 +0/-0.002	3.377 +0.003/0	4.000 +0.004/0	3.375 +0/-0.004	3.998 +0/-0.002	4.000 +0.003/0
P312-03.500	3-1/2	4-1/8	5/16	0.343 +0.015/0	3.500 +0/-0.002	3.502 +0.003/0	4.125 +0.004/0	3.500 +0/-0.004	4.123 +0/-0.002	4.125 +0.003/0
P312-03.500-500B	3-1/2	4-1/8	1/2	0.550 +0.015/0	3.500 +0/-0.002	3.502 +0.003/0	4.125 +0.004/0	3.500 +0/-0.004	4.123 +0/-0.002	4.125 +0.003/0
P312-03.750	3-3/4	4-3/8	5/16	0.343 +0.015/0	3.750 +0/-0.002	3.752 +0.003/0	4.375 +0.004/0	3.750 +0/-0.004	4.373 +0/-0.002	4.375 +0.003/0
P312-03.750-375B	3-3/4	4-3/8	3/8	0.413 +0.015/0	3.750 +0/-0.002	3.752 +0.003/0	4.375 +0.004/0	3.750 +0/-0.004	4.373 +0/-0.002	4.375 +0.003/0
P312-03.875-500D	3-7/8	4-1/2	1/2	0.550 +0.015/0	3.875 +0/-0.002	3.877 +0.003/0	4.500 +0.004/0	3.875 +0/-0.004	4.498 +0/-0.002	4.500 +0.003/0
P312-04.000	4	4-5/8	5/16	0.343 +0.015/0	4.000 +0/-0.002	4.002 +0.003/0	4.625 +0.004/0	4.000 +0/-0.004	4.623 +0/-0.002	4.625 +0.003/0
P312-04.000-562B	4	4-5/8	9/16	0.618 +0.015/0	4.000 +0/-0.002	4.002 +0.003/0	4.625 +0.004/0	4.000 +0/-0.004	4.623 +0/-0.002	4.625 +0.003/0
P312-04.125-562B	4-1/8	4-3/4	9/16	0.618 +0.015/0	4.125 +0/-0.002	4.127 +0.003/0	4.750 +0.004/0	4.125 +0/-0.004	4.748 +0/-0.002	4.750 +0.003/0
P312-04.250-562B	4-1/4	4-7/8	9/16	0.618 +0.015/0	4.250 +0/-0.002	4.252 +0.003/0	4.875 +0.004/0	4.250 +0/-0.004	4.873 +0/-0.002	4.875 +0.003/0

STYLE 850 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
P312-04.375	4-3/8	5	5/16	0.343 +0.015/0	4.375 +0/-0.002	4.377 +0.003/0	5.000 +0.004/0	4.375 +0/-0.004	4.998 +0/-0.002	5.000 +0.003/0
P312-04.375-500D	4-3/8	5	1/2	0.550 +0.015/0	4.375 +0/-0.002	4.377 +0.003/0	5.000 +0.004/0	4.375 +0/-0.004	4.998 +0/-0.002	5.000 +0.003/0
P312-04.375-562D	4-3/8	5	9/16	0.618 +0.015/0	4.375 +0/-0.002	4.377 +0.003/0	5.000 +0.004/0	4.375 +0/-0.004	4.998 +0/-0.002	5.000 +0.003/0
P312-04.750	4-3/4	5-3/8	5/16	0.343 +0.015/0	4.750 +0/-0.002	4.752 +0.003/0	5.375 +0.004/0	4.750 +0/-0.004	5.373 +0/-0.002	5.375 +0.003/0
P312-04.750-625B	4-3/4	5-3/8	5/8	0.688 +0.015/0	4.750 +0/-0.002	4.752 +0.003/0	5.375 +0.004/0	4.750 +0/-0.004	5.373 +0/-0.002	5.375 +0.003/0
P312-04.875	4-7/8	5-1/2	5/16	0.343 +0.015/0	4.875 +0/-0.002	4.877 +0.003/0	5.500 +0.004/0	4.875 +0/-0.004	5.498 +0/-0.002	5.500 +0.003/0
P312-05.375-625D	5-3/8	6	5/8	0.343 +0.015/0	5.375 +0/-0.002	5.376 +0.003/0	6.000 +0.004/0	6.000 +0/-0.004	5.998 +0/-0.002	5.875 +0.003/0
P312-05.500	5-1/2	6-1/8	5/16	0.343 +0.015/0	5.500 +0/-0.002	5.502 +0.003/0	6.125 +0.004/0	5.500 +0/-0.004	6.123 +0/-0.002	6.125 +0.003/0
P312-05.500-375BHN	5-1/2	6-1/8	3/8	0.413 +0.015/0	5.500 +0/-0.002	5.502 +0.003/0	6.125 +0.004/0	5.500 +0/-0.004	6.123 +0/-0.002	6.125 +0.003/0
P312-07.000	7	7-5/8	5/16	0.343 +0.015/0	7.000 +0/-0.002	7.002 +0.003/0	7.625 +0.004/0	7.000 +0/-0.004	7.623 +0/-0.002	7.625 +0.003/0
P312-07.250	7-1/4	7-7/8	5/16	0.343 +0.015/0	7.250 +0/-0.002	7.252 +0.003/0	7.875 +0.004/0	7.250 +0/-0.004	7.873 +0/-0.002	7.875 +0.003/0
P312-07.375	7-3/8	8	5/16	0.343 +0.015/0	7.375 +0/-0.002	7.377 +0.003/0	8.000 +0.004/0	7.375 +0/-0.004	7.998 +0/-0.002	8.000 +0.003/0
P312-07.875-625B	7-7/8	8-1/2	5/8	0.688 +0.015/0	7.875 +0/-0.002	7.877 +0.003/0	8.500 +0.004/0	7.875 +0/-0.004	8.498 +0/-0.002	8.500 +0.003/0
P312-08.000	8	8-5/8	5/16	0.343 +0.015/0	8.000 +0/-0.002	8.002 +0.003/0	8.625 +0.004/0	8.000 +0/-0.004	8.623 +0/-0.002	8.625 +0.003/0
3/8" C/S										
P375-00.750	3/4	1-1/2	3/8	0.413 +0.015/0	0.750 +0/-0.002	0.752 +0.004/0	1.500 +0.005/0	0.750 +0/-0.005	1.498 +0/-0.002	1.500 +0.004/0
P375-00.875	7/8	1-5/8	3/8	0.413 +0.015/0	0.875 +0/-0.002	0.877 +0.004/0	1.625 +0.005/0	0.875 +0/-0.005	1.623 +0/-0.002	1.625 +0.004/0
P375-01.250	1-1/4	2	3/8	0.413 +0.015/0	1.250 +0/-0.002	1.252 +0.004/0	2.000 +0.005/0	1.250 +0/-0.005	1.998 +0/-0.002	2.000 +0.004/0
P375-01.375	1-3/8	2-1/8	3/8	0.413 +0.015/0	1.375 +0/-0.002	1.377 +0.004/0	2.125 +0.005/0	1.375 +0/-0.005	2.123 +0/-0.002	2.125 +0.004/0
P375-01.375-625B	1-3/8	2-1/8	5/8	0.688 +0.015/0	1.375 +0/-0.002	1.377 +0.004/0	2.125 +0.005/0	1.375 +0/-0.005	2.123 +0/-0.002	2.125 +0.004/0
P375-01.500	1-1/2	2-1/4	3/8	0.413 +0.015/0	1.500 +0/-0.002	1.502 +0.004/0	2.250 +0.005/0	1.500 +0/-0.005	2.248 +0/-0.002	2.250 +0.004/0
P375-01.500-625B	1-1/2	2-1/4	5/8	0.688 +0.015/0	1.500 +0/-0.002	1.502 +0.004/0	2.250 +0.005/0	1.500 +0/-0.005	2.248 +0/-0.002	2.250 +0.004/0
P375-01.625	1-5/8	2-3/8	3/8	0.413 +0.015/0	1.625 +0/-0.002	1.627 +0.004/0	2.375 +0.005/0	1.625 +0/-0.005	2.373 +0/-0.002	2.375 +0.004/0
P375-01.750	1-3/4	2-1/2	3/8	0.413 +0.015/0	1.750 +0/-0.002	1.752 +0.004/0	2.500 +0.005/0	1.750 +0/-0.005	2.498 +0/-0.002	2.500 +0.004/0
3/8" C/S										
P375-01.750-625B	1-3/4	2-1/2	5/8	0.688 +0.015/0	1.750 +0/-0.002	1.752 +0.004/0	2.500 +0.005/0	1.750 +0/-0.005	2.498 +0/-0.002	2.500 +0.004/0
P375-02.000	2	2-3/4	3/8	0.413 +0.015/0	2.000 +0/-0.002	2.002 +0.004/0	2.750 +0.005/0	2.000 +0/-0.005	2.748 +0/-0.002	2.750 +0.004/0
P375-02.000-625B	2	2-3/4	5/8	0.688 +0.015/0	2.000 +0/-0.002	2.002 +0.004/0	2.750 +0.005/0	2.000 +0/-0.005	2.748 +0/-0.002	2.750 +0.004/0
P375-02.000-625D	2	2-3/4	5/8	0.688 +0.015/0	2.000 +0/-0.002	2.002 +0.004/0	2.750 +0.005/0	2.000 +0/-0.005	2.748 +0/-0.002	2.750 +0.004/0
P375-02.125	2-1/8	2-7/8	3/8	0.413 +0.015/0	2.125 +0/-0.002	2.124 +0.004/0	2.875 +0.005/0	2.125 +0/-0.005	2.874 +0/-0.002	2.875 +0.004/0
P375-02.250-625B	2-1/4	3	5/8	0.688 +0.015/0	2.250 +0/-0.002	2.252 +0.004/0	3.000 +0.005/0	2.250 +0/-0.005	2.998 +0/-0.002	3.000 +0.004/0
P375-02.250-625D	2-1/4	3	5/8	0.688 +0.015/0	2.250 +0/-0.002	2.252 +0.004/0	3.000 +0.005/0	2.250 +0/-0.005	2.998 +0/-0.002	3.000 +0.004/0
P375-02.375-625B	2-3/8	3-1/8	5/8	0.688 +0.015/0	2.375 +0/-0.002	2.377 +0.004/0	3.125 +0.005/0	2.375 +0/-0.005	3.123 +0/-0.002	3.125 +0.004/0
P375-02.500	2-1/2	3-1/4	3/8	0.413 +0.015/0	2.500 +0/-0.002	2.502 +0.004/0	3.250 +0.005/0	2.500 +0/-0.005	3.248 +0/-0.002	3.250 +0.004/0
P375-02.500-625B	2-1/2	3-1/4	5/8	0.688 +0.015/0	2.500 +0/-0.002	2.502 +0.004/0	3.250 +0.005/0	2.500 +0/-0.005	3.248 +0/-0.002	3.250 +0.004/0
P375-02.500-625D	2-1/2	3-1/4	5/8	0.688 +0.015/0	2.500 +0/-0.002	2.502 +0.004/0	3.250 +0.005/0	2.500 +0/-0.005	3.248 +0/-0.002	3.250 +0.004/0
P375-02.625-625B	2-5/8	3-3/8	5/8	0.688 +0.015/0	2.625 +0/-0.002	2.627 +0.004/0	3.375 +0.005/0	2.625 +0/-0.005	3.373 +0/-0.002	3.375 +0.004/0
P375-02.750	2-3/4	3-1/2	3/8	0.413 +0.015/0	2.750 +0/-0.002	2.752 +0.004/0	3.500 +0.005/0	2.750 +0/-0.005	3.498 +0/-0.002	3.500 +0.004/0
P375-02.750-625B	2-3/4	3-1/2	5/8	0.688 +0.015/0	2.750 +0/-0.002	2.752 +0.004/0	3.500 +0.005/0	2.750 +0/-0.005	3.498 +0/-0.002	3.500 +0.004/0
P375-03.000	3	3-3/4	3/8	0.413 +0.015/0	3.000 +0/-0.002	3.002 +0.004/0	3.750 +0.005/0	3.000 +0/-0.005	3.748 +0/-0.002	3.750 +0.004/0
P375-03.000-625B	3	3-3/4	5/8	0.688 +0.015/0	3.000 +0/-0.002	3.002 +0.004/0	3.750 +0.005/0	3.000 +0/-0.005	3.748 +0/-0.002	3.750 +0.004/0
P375-03.000-625D	3	3-3/4	5/8	0.688 +0.015/0	3.000 +0/-0.002	3.002 +0.004/0	3.750 +0.005/0	3.000 +0/-0.005	3.748 +0/-0.002	3.750 +0.004/0
P375-03.250	3-1/4	4	3/8	0.413 +0.015/0	3.250 +0/-0.002	3.252 +0.004/0	4.000 +0.005/0	3.250 +0/-0.005	3.998 +0/-0.002	4.000 +0.004/0

STYLE 850 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
P375-03.250-625B	3-1/4	4	5/8	0.688 +0.015/0	3.250 +0/-0.002	3.252 +0.004/0	4.000 +0.005/0	3.250 +0/-0.005	3.998 +0/-0.002	4.000 +0.004/0
P375-03.250-625D	3-1/4	4	5/8	0.688 +0.015/0	3.250 +0/-0.002	3.252 +0.004/0	4.000 +0.005/0	3.250 +0/-0.005	3.998 +0/-0.002	4.000 +0.004/0
P375-03.375-625B	3-3/8	4-1/8	5/8	0.688 +0.015/0	3.375 +0/-0.002	3.377 +0.004/0	4.125 +0.005/0	3.375 +0/-0.005	4.123 +0/-0.002	4.125 +0.004/0
P375-03.500	3-1/2	4-1/4	3/8	0.413 +0.015/0	3.500 +0/-0.002	3.502 +0.004/0	4.250 +0.005/0	3.500 +0/-0.005	4.248 +0/-0.002	4.250 +0.004/0
P375-03.500-625B	3-1/2	4-1/4	5/8	0.688 +0.015/0	3.500 +0/-0.002	3.502 +0.004/0	4.250 +0.005/0	3.500 +0/-0.005	4.248 +0/-0.002	4.250 +0.004/0
P375-03.500-625D	3-1/2	4-1/4	5/8	0.688 +0.015/0	3.500 +0/-0.002	3.502 +0.004/0	4.250 +0.005/0	3.500 +0/-0.005	4.248 +0/-0.002	4.250 +0.004/0
P375-03.625-625B	3-5/8	4-3/8	5/8	0.688 +0.015/0	3.625 +0/-0.002	3.627 +0.004/0	4.375 +0.005/0	3.625 +0/-0.005	4.373 +0/-0.002	4.375 +0.004/0
P375-03.750	3-3/4	4-1/2	3/8	0.413 +0.015/0	3.750 +0/-0.002	3.752 +0.004/0	4.500 +0.005/0	3.750 +0/-0.005	4.498 +0/-0.002	4.500 +0.004/0
P375-03.750-625B	3-3/4	4-1/2	5/8	0.688 +0.015/0	3.750 +0/-0.002	3.752 +0.004/0	4.500 +0.005/0	3.750 +0/-0.005	4.498 +0/-0.002	4.500 +0.004/0
P375-04.000	4	4-3/4	3/8	0.413 +0.015/0	4.000 +0/-0.002	4.002 +0.004/0	4.750 +0.005/0	4.000 +0/-0.005	4.748 +0/-0.002	4.750 +0.004/0
P375-04.000-625B	4	4-3/4	5/8	0.688 +0.015/0	4.000 +0/-0.002	4.002 +0.004/0	4.750 +0.005/0	4.000 +0/-0.005	4.748 +0/-0.002	4.750 +0.004/0
P375-04.250	4-1/4	5	3/8	0.413 +0.015/0	4.250 +0/-0.002	4.252 +0.004/0	5.000 +0.005/0	4.250 +0/-0.005	4.998 +0/-0.002	5.000 +0.004/0
P375-04.250-375B	4-1/4	5	3/8	0.413 +0.015/0	4.250 +0/-0.002	4.252 +0.004/0	5.000 +0.005/0	4.250 +0/-0.005	4.998 +0/-0.002	5.000 +0.004/0
P375-04.250-625B	4-1/4	5	5/8	0.688 +0.015/0	4.250 +0/-0.002	4.252 +0.004/0	5.000 +0.005/0	4.250 +0/-0.005	4.998 +0/-0.002	5.000 +0.004/0
P375-04.250-625D	4-1/4	5	5/8	0.688 +0.015/0	4.250 +0/-0.002	4.252 +0.004/0	5.000 +0.005/0	4.250 +0/-0.005	4.998 +0/-0.002	5.000 +0.004/0
P375-04.500	4-1/2	5-1/4	3/8	0.413 +0.015/0	4.500 +0/-0.002	4.502 +0.004/0	5.250 +0.005/0	4.500 +0/-0.005	5.248 +0/-0.002	5.250 +0.004/0
P375-04.500-625B	4-1/2	5-1/4	5/8	0.688 +0.015/0	4.500 +0/-0.002	4.502 +0.004/0	5.250 +0.005/0	4.500 +0/-0.005	5.248 +0/-0.002	5.250 +0.004/0
P375-04.750	4-3/4	5-1/2	3/8	0.413 +0.015/0	4.750 +0/-0.002	4.752 +0.004/0	5.500 +0.005/0	4.750 +0/-0.005	5.498 +0/-0.002	5.500 +0.004/0
P375-04.750-625B	4-3/4	5-1/2	5/8	0.688 +0.015/0	4.750 +0/-0.002	4.752 +0.004/0	5.500 +0.005/0	4.750 +0/-0.005	5.498 +0/-0.002	5.500 +0.004/0
P375-04.750-625D	4-3/4	5-1/2	5/8	0.688 +0.015/0	4.750 +0/-0.002	4.752 +0.004/0	5.500 +0.005/0	4.750 +0/-0.005	5.498 +0/-0.002	5.500 +0.004/0
P375-05.000	5	5-3/4	3/8	0.413 +0.015/0	5.000 +0/-0.002	5.002 +0.004/0	5.750 +0.005/0	5.000 +0/-0.005	5.748 +0/-0.002	5.750 +0.004/0
P375-05.000-625B	5	5-3/4	5/8	0.688 +0.015/0	5.000 +0/-0.002	5.002 +0.004/0	5.750 +0.005/0	5.000 +0/-0.005	5.748 +0/-0.002	5.750 +0.004/0
3/8" C/S										
P375-05.250	5-1/4	6	3/8	0.412 +0.015/0	5.250 +0/-0.002	5.252 +0.004/0	6.000 +0.005/0	5.250 +0/-0.005	5.998 +0/-0.002	6.000 +0.004/0
P375-05.250-500B	5-1/4	6	1/2	0.550 +0.015/0	5.250 +0/-0.002	5.252 +0.004/0	6.000 +0.005/0	5.250 +0/-0.005	5.998 +0/-0.002	6.000 +0.004/0
P375-05.250-500D	5-1/4	6	1/2	0.550 +0.015/0	5.250 +0/-0.002	5.252 +0.004/0	6.000 +0.005/0	5.250 +0/-0.005	5.998 +0/-0.002	6.000 +0.004/0
P375-05.250-625B	5-1/4	6	5/8	0.688 +0.015/0	5.250 +0/-0.002	5.252 +0.004/0	6.000 +0.005/0	5.250 +0/-0.005	5.998 +0/-0.002	6.000 +0.004/0
P375-05.250-625D	5-1/4	6	5/8	0.688 +0.015/0	5.250 +0/-0.002	5.252 +0.004/0	6.000 +0.005/0	5.250 +0/-0.005	5.998 +0/-0.002	6.000 +0.004/0
P375-05.500	5-1/2	6-1/4	3/8	0.412 +0.015/0	5.500 +0/-0.002	5.502 +0.004/0	6.250 +0.005/0	5.500 +0/-0.005	6.248 +0/-0.002	6.250 +0.004/0
P375-05.500-625B	5-1/2	6-1/4	5/8	0.688 +0.015/0	5.500 +0/-0.002	5.502 +0.004/0	6.250 +0.005/0	5.500 +0/-0.005	6.248 +0/-0.002	6.250 +0.004/0
P375-05.750	5-3/4	6-1/2	3/8	0.412 +0.015/0	5.750 +0/-0.002	5.752 +0.004/0	6.500 +0.005/0	5.750 +0/-0.005	6.498 +0/-0.002	6.500 +0.004/0
P375-05.750-625B	5-3/4	6-1/2	5/8	0.688 +0.015/0	5.750 +0/-0.002	5.752 +0.004/0	6.500 +0.005/0	5.750 +0/-0.005	6.498 +0/-0.002	6.500 +0.004/0
P375-05.750-625D	5-3/4	6-1/2	5/8	0.688 +0.015/0	5.750 +0/-0.002	5.752 +0.004/0	6.500 +0.005/0	5.750 +0/-0.005	6.498 +0/-0.002	6.500 +0.004/0
P375-06.000	6	6-3/4	3/8	0.412 +0.015/0	6.000 +0/-0.002	6.002 +0.004/0	6.750 +0.005/0	6.000 +0/-0.005	6.748 +0/-0.002	6.750 +0.004/0
P375-06.000-625B	6	6-3/4	5/8	0.688 +0.015/0	6.000 +0/-0.002	6.002 +0.004/0	6.750 +0.005/0	6.000 +0/-0.005	6.748 +0/-0.002	6.750 +0.004/0
P375-06.250	6-1/4	7	3/8	0.412 +0.015/0	6.250 +0/-0.002	6.252 +0.004/0	7.000 +0.005/0	6.250 +0/-0.005	6.998 +0/-0.002	7.000 +0.004/0
P375-06.250-500D	6-1/4	7	1/2	0.550 +0.015/0	6.250 +0/-0.002	6.252 +0.004/0	7.000 +0.005/0	6.250 +0/-0.005	6.998 +0/-0.002	7.000 +0.004/0
P375-06.250-625B	6-1/4	7	5/8	0.688 +0.015/0	6.250 +0/-0.002	6.252 +0.004/0	7.000 +0.005/0	6.250 +0/-0.005	6.998 +0/-0.002	7.000 +0.004/0
P375-06.250-625D	6-1/4	7	5/8	0.688 +0.015/0	6.250 +0/-0.002	6.252 +0.004/0	7.000 +0.005/0	6.250 +0/-0.005	6.998 +0/-0.002	7.000 +0.004/0
P375-06.500	6-1/2	7-1/4	3/8	0.412 +0.015/0	6.500 +0/-0.002	6.502 +0.004/0	7.250 +0.005/0	6.500 +0/-0.005	7.248 +0/-0.002	7.250 +0.004/0
P375-06.500-625B	6-1/2	7-1/4	5/8	0.688 +0.015/0	6.500 +0/-0.002	6.502 +0.004/0	7.250 +0.005/0	6.500 +0/-0.005	7.248 +0/-0.002	7.250 +0.004/0
P375-06.750-625B	6-3/4	7-1/2	5/8	0.688 +0.015/0	6.750 +0/-0.002	6.752 +0.004/0	7.500 +0.005/0	6.750 +0/-0.005	7.498 +0/-0.002	7.500 +0.004/0
P375-07.000-625B	7	7-3/4	5/8	0.688 +0.015/0	7.000 +0/-0.002	7.002 +0.004/0	7.750 +0.005/0	7.000 +0/-0.005	7.748 +0/-0.002	7.750 +0.004/0

STYLE 850 POLYURETHANE U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
P375-07.250-625B	7-1/4	8	5/8	0.688 +0.015/0	7.250 +0/-0.002	7.252 +0.004/0	8.000 +0.005/0	7.250 +0/-0.005	7.998 +0/-0.002	8.000 +0.004/0
P375-07.250-625D	7-1/4	8	5/8	0.688 +0.015/0	7.250 +0/-0.002	7.252 +0.004/0	8.000 +0.005/0	7.250 +0/-0.005	7.998 +0/-0.002	8.000 +0.004/0
P375-07.500	7-1/2	8-1/4	3/8	0.412 +0.015/0	7.500 +0/-0.002	7.502 +0.004/0	8.250 +0.005/0	7.500 +0/-0.005	8.248 +0/-0.002	8.250 +0.004/0
P375-07.500-625B	7-1/2	8-1/4	5/8	0.688 +0.015/0	7.500 +0/-0.002	7.502 +0.004/0	8.250 +0.005/0	7.500 +0/-0.005	8.248 +0/-0.002	8.250 +0.004/0
P375-08.000	8	8-3/4	3/8	0.412 +0.015/0	8.000 +0/-0.002	8.002 +0.004/0	8.750 +0.005/0	8.000 +0/-0.005	8.748 +0/-0.002	8.750 +0.004/0
P375-08.250-625B	8-1/4	9	5/8	0.688 +0.015/0	8.250 +0/-0.002	8.252 +0.004/0	9.000 +0.005/0	8.250 +0/-0.005	8.998 +0/-0.002	9.000 +0.004/0
P375-08.750	8-3/4	9-1/2	3/8	0.412 +0.015/0	8.750 +0/-0.002	8.752 +0.004/0	9.500 +0.005/0	8.750 +0/-0.005	9.498 +0/-0.002	9.500 +0.004/0
P375-10.000	10	10-3/4	3/8	0.412 +0.015/0	10.000 +0/-0.002	10.002 +0.004/0	10.750 +0.005/0	10.000 +0/-0.005	10.748 +0/-0.002	10.750 +0.004/0
1/2" C/S										
P500-01.500	1-1/2	2-1/2	1/2	0.550 +0.015/0	1.500 +0/-0.003	1.502 +0.005/0	2.500 +0.007/0	1.500 +0/-0.007	2.498 +0/-0.003	2.500 +0.005/0
P500-01.750-750B	1-3/4	2-3/4	3/4	0.825 +0.015/0	1.750 +0/-0.003	1.752 +0.005/0	2.750 +0.007/0	1.750 +0/-0.007	2.748 +0/-0.003	2.750 +0.005/0
P500-02.000-750B	2	3	3/4	0.825 +0.015/0	2.000 +0/-0.003	2.002 +0.005/0	3.000 +0.007/0	2.000 +0/-0.007	2.998 +0/-0.003	3.000 +0.005/0
P500-02.500	2-1/2	3-1/2	1/2	0.550 +0.015/0	2.500 +0/-0.003	2.502 +0.005/0	3.500 +0.007/0	2.500 +0/-0.007	3.498 +0/-0.003	3.500 +0.005/0
P500-02.500-750B	2-1/2	3-1/2	3/4	0.825 +0.015/0	2.500 +0/-0.003	2.502 +0.005/0	3.500 +0.007/0	2.500 +0/-0.007	3.498 +0/-0.003	3.500 +0.005/0
P500-03.000	3	4	1/2	0.550 +0.015/0	3.000 +0/-0.003	3.002 +0.005/0	4.000 +0.007/0	3.000 +0/-0.007	3.998 +0/-0.003	4.000 +0.005/0
P500-03.000-750B	3	4	3/4	0.825 +0.015/0	3.000 +0/-0.003	3.002 +0.005/0	4.000 +0.007/0	3.000 +0/-0.007	3.998 +0/-0.003	4.000 +0.005/0
P500-03.250-750B	3-1/4	4-1/4	3/4	0.825 +0.015/0	3.250 +0/-0.003	3.252 +0.005/0	4.250 +0.007/0	3.250 +0/-0.007	4.248 +0/-0.003	4.250 +0.005/0
P500-03.500-625	3-1/2	4-1/2	5/8	0.687 +0.015/0	3.500 +0/-0.003	3.502 +0.005/0	4.500 +0.007/0	3.500 +0/-0.007	4.498 +0/-0.003	4.500 +0.005/0
P500-04.000	4	5	1/2	0.550 +0.015/0	4.000 +0/-0.003	4.002 +0.005/0	5.000 +0.007/0	4.000 +0/-0.007	4.998 +0/-0.003	5.000 +0.005/0
P500-04.000-750B	4	5	3/4	0.825 +0.015/0	4.000 +0/-0.003	4.002 +0.005/0	5.000 +0.007/0	4.000 +0/-0.007	4.998 +0/-0.003	5.000 +0.005/0
1/2" C/S										
P500-04.250	4-1/4	5-1/4	1/2	0.550 +0.015/0	4.250 +0/-0.003	4.252 +0.005/0	5.250 +0.007/0	4.250 +0/-0.007	5.248 +0/-0.003	5.250 +0.005/0
P500-04.500-750B	4-1/2	5-1/2	3/4	0.825 +0.015/0	4.500 +0/-0.003	4.502 +0.005/0	5.500 +0.007/0	4.500 +0/-0.007	5.498 +0/-0.003	5.500 +0.005/0
P500-05.000	5	6	1/2	0.550 +0.015/0	5.000 +0/-0.003	5.002 +0.005/0	6.000 +0.007/0	5.000 +0/-0.007	5.998 +0/-0.003	6.000 +0.005/0
P500-05.000-750B	5	6	3/4	0.825 +0.015/0	5.000 +0/-0.003	5.002 +0.005/0	6.000 +0.007/0	5.000 +0/-0.007	5.998 +0/-0.003	6.000 +0.005/0
P500-05.500-750B	5-1/2	6-1/2	3/4	0.825 +0.015/0	5.500 +0/-0.003	5.502 +0.005/0	6.500 +0.007/0	5.500 +0/-0.007	6.498 +0/-0.003	6.500 +0.005/0
P500-06.000	6	7	1/2	0.550 +0.015/0	6.000 +0/-0.003	6.002 +0.005/0	7.000 +0.007/0	6.000 +0/-0.007	6.998 +0/-0.003	7.000 +0.005/0
P500-06.000-750B	6	7	3/4	0.825 +0.015/0	6.000 +0/-0.003	6.002 +0.005/0	7.000 +0.007/0	6.000 +0/-0.007	6.998 +0/-0.003	7.000 +0.005/0
P500-07.000	7	8	1/2	0.550 +0.015/0	7.000 +0/-0.003	7.002 +0.005/0	8.000 +0.007/0	7.000 +0/-0.007	7.998 +0/-0.003	8.000 +0.005/0
P500-07.000-750B	7	8	3/4	0.825 +0.015/0	7.000 +0/-0.003	7.002 +0.005/0	8.000 +0.007/0	7.000 +0/-0.007	7.998 +0/-0.003	8.000 +0.005/0
P500-07.000-750D	7	8	3/4	0.825 +0.015/0	7.000 +0/-0.003	7.002 +0.005/0	8.000 +0.007/0	7.000 +0/-0.007	7.998 +0/-0.003	8.000 +0.005/0
P500-08.000	8	9	1/2	0.550 +0.015/0	8.000 +0/-0.003	8.002 +0.005/0	9.000 +0.007/0	8.000 +0/-0.007	8.998 +0/-0.003	9.000 +0.005/0
P500-08.000-750B	8	9	3/4	0.825 +0.015/0	8.000 +0/-0.003	8.002 +0.005/0	9.000 +0.007/0	8.000 +0/-0.007	8.998 +0/-0.003	9.000 +0.005/0
P500-09.000	9	10	1/2	0.550 +0.015/0	9.000 +0/-0.003	9.002 +0.005/0	10.000 +0.007/0	9.000 +0/-0.007	9.998 +0/-0.003	10.000 +0.005/0
5/8" C/S										
P625-02.750	2-3/4	4	5/8	0.688 +0.015/0	2.750 +0/-0.003	2.753 +0.006/0	4.000 +0.007/0	2.750 +0/-0.009	3.997 +0/-0.003	4.000 +0.006/0
P625-03.250	3-1/4	4-1/2	5/8	0.688 +0.015/0	3.250 +0/-0.003	3.253 +0.006/0	4.500 +0.007/0	3.250 +0/-0.009	4.497 +0/-0.003	4.500 +0.006/0
P625-04.750	4-3/4	6	5/8	0.688 +0.015/0	4.750 +0/-0.003	4.753 +0.006/0	6.000 +0.007/0	4.750 +0/-0.009	5.997 +0/-0.003	6.000 +0.006/0

STYLE 850 POLYURETHANE U-SEALS

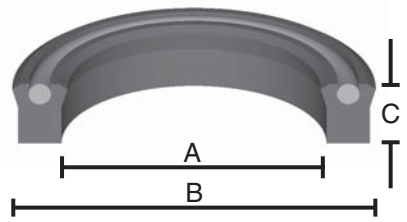
DON'T DAMAGE THAT U-SEAL
TRY OUR
ROD U-SEAL INSTALLATION TOOLS

These handy tools aid U-seal installation, eliminating the risk of damaging the seal lip.

Part Number	Seal ID Range
IT 100	3/4” to 1-1/4”
IT 150	1-3/8” to 1-7/8”
IT 200	2” to 3”
IT 100-NN	3/4” to 1-1/4”
IT 150-NN	1-3/8” to 1-7/8”
IT 200-NN	2” to 3”

STYLE 850 FLUOROCARBON U-SEALS

Utilizing the same profiles as the Style 850 Polyurethane U-Seals, these u-seals are molded from a fluorocarbon compound. While being compatible with a broader range of fluids, these fluorocarbon seals will also operate continuously at temperatures from -20° to +400° F. **NOTE:** If you are not sure of fluid/seal compatibility, please refer to the fluid compatibility chart in the appendix or contact our Engineering Department.

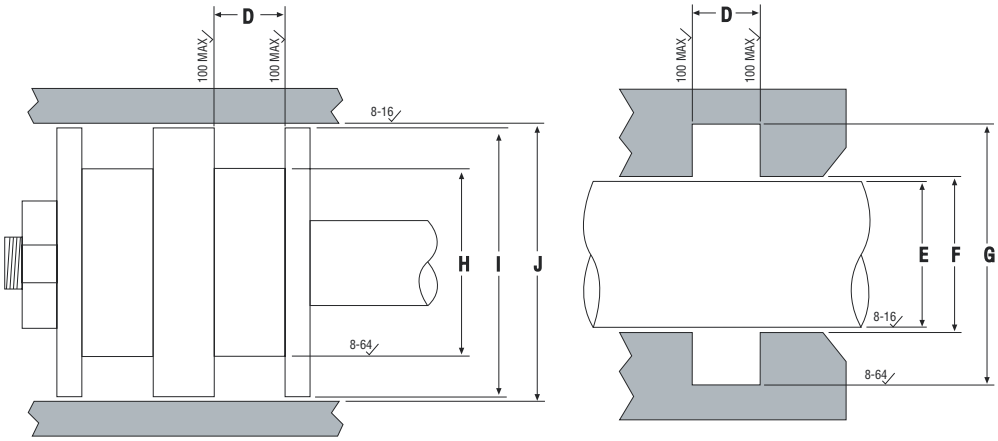


PART NUMBERS

P 125 - 00.125 - 250

Type of Seal | Cross Section | Inside Diameter | Height

SEAL INFORMATION	
MATERIAL	90A FLUOROCARBON
TEMPERATURE RANGE	-20° TO +400° F
PRESSURE RANGE	0 TO 2,000 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)



Standard -
Height and cross section are equal, thus giving a square seal. Utilizes type "D" lip
Typical Part Number
P250-02.500

Deep -
Utilizes the same "D" lip, but the seal height is greater than the cross section, thus giving a retangular shape.
Typical Part Number
P250-02.500-375D

Type B -
Same dimensions as the Deep seal. Beveled lip design provides better film breaking.
Utilizes type "B" lip.
Typical Part Number
P250-02.500-375B

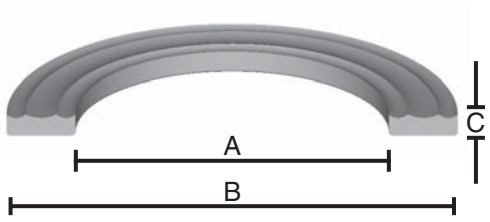
Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/8" C/S										
P125-00.500V	1/2	3/4	1/8	0.138 +0.015/0	0.500 +0/-0.001	0.501 +0.002/0	0.750 +0.002/0	0.500 +0/-0.002	0.749 +0/-0.001	0.750 +0.002/0
P125-00.625-SQBV	5/8	7/8	1/8	0.138 +0.015/0	0.625 +0/-0.001	0.626 +0.002/0	0.875 +0.002/0	0.625 +0/-0.002	0.874 +0/-0.001	0.875 +0.002/0
P156-01.000-SQBV	1	1-5/16	5/32	0.172 +0.015/0	1.000 +0/-0.001	1.001 +0.002/0	1.312 +0.002/0	1.000 +0/-0.002	1.311 +0/-0.001	1.312 +0.002/0
P156-01.375-SQBV	1-3/8	1-11/16	5/32	0.172 +0.015/0	1.375 +0/-0.001	1.376 +0.002/0	1.687 +0.002/0	1.375 +0/-0.002	1.686 +0/-0.001	1.687 +0.002/0
P187-01.750-SQBV	1-3/4	2-1/8	3/16	0.206 +0.015/0	1.750 +0/-0.001	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0
P187-02.000-SQBV	2	2-3/8	3/16	0.206 +0.015/0	2.000 +0/-0.002	2.001 +0.002/0	2.375 +0.002/0	2.000 +0/-0.002	2.374 +0/-0.002	2.375 +0.002/0
P218-02.500-SQBV	2-1/2	2-15/16	7/32	0.241 +0.015/0	2.500 +0/-0.002	2.501 +0.003/0	2.937 +0.003/0	2.500 +0/-0.003	2.936 +0/-0.003	2.937 +0.002/0
P218-03.000-SQBV	3	3-7/16	7/32	0.241 +0.015/0	3.000 +0/-0.002	3.001 +0.003/0	3.437 +0.003/0	3.000 +0/-0.003	3.436 +0/-0.003	3.437 +0.002/0
P250-00.750V	3/4	1-1/4	1/4	0.281 +0.015/0	0.750 +0/-0.001	0.751 +0.002/0	1.250 +0.002/0	0.750 +0/-0.002	1.249 +0/-0.001	0.875 +0.002/0

STYLE 850 FLUOROCARBON U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/8" C/S										
P250-03.500-312BV	3-1/2	4	5/16	0.344 +0.015/0	3.500 +0/-0.002	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.003	3.999 +0/-0.002	4.000 +0.003/0
P250-03.500-SQBV	3-1/2	4	1/4	0.275 +0.015/0	3.500 +0/-0.002	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.003	3.999 +0/-0.002	4.000 +0.003/0
P250-04.000-312BV	4	4-1/2	5/16	0.344 +0.015/0	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
P250-04.000-SQBV	4	4-1/2	1/4	0.275 +0.015/0	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
P250-04.500-312BV	4-1/2	5	5/16	0.344 +0.015/0	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.999 +0/-0.002	5.000 +0.003/0
P250-04.500-SQBV	4-1/2	5	1/4	0.275 +0.015/0	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.999 +0/-0.002	5.000 +0.003/0
9/32" C/S										
P281-05.000-343BV	5	5-9/16	11/32	0.378 +0.015/0	5.000 +0/-0.002	5.001 +0.003/0	5.563 +0.003/0	5.000 +0/-0.003	5.561 +0/-0.002	5.563 +0.003/0
P281-05.000-SQBV	5	5-9/16	9/32	0.309 +0.015/0	5.000 +0/-0.002	5.001 +0.003/0	5.563 +0.003/0	5.000 +0/-0.003	5.561 +0/-0.002	5.563 +0.003/0
5/16" C/S										
P312-05.500-375BV	5-1/2	6-1/8	3/8	0.413 +0.015/0	5.500 +0/-0.002	5.502 +0.003/0	6.125 +0.004/0	5.500 +0/-0.004	6.123 +0/-0.002	6.125 +0.003/0
P312-05.500-SQBV	5-1/2	6-1/8	5/16	0.343 +0.015/0	5.500 +0/-0.002	5.502 +0.003/0	6.125 +0.004/0	5.500 +0/-0.004	6.123 +0/-0.002	6.125 +0.003/0

STYLE 855 PRC RINGS

Used as a companion to our "B" lip configured Style 850 u-seal, Style 855 PRC rings convert a uni-directional u-seal into a bi-directional seal. **NOTE:** Height dimension is the increase in groove width required.

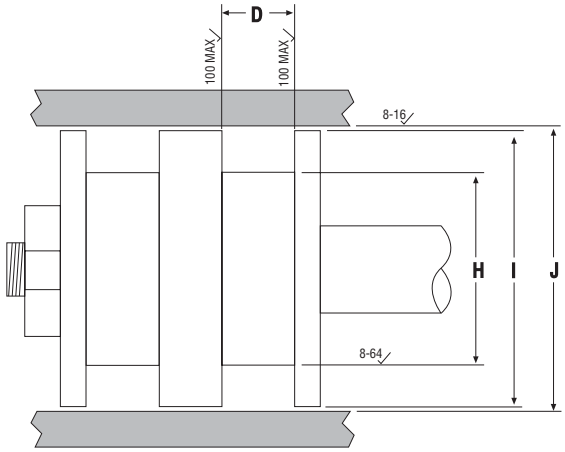


PART NUMBERS

PRC 125 - 01.000

Type of Seal | Cross Section | Inside Diameter

SEAL INFORMATION	
MATERIAL	95A URETHANE
TEMPERATURE RANGE	-40° TO +200° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia)



PRC PART NUMBER	ACCOMPANYING STYLE 850 PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH W/ STYLE 850	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/8" C/S								
PRC125-01.000	P125-01.000-156B	1	1-1/4	.065	0.237 +0.015/0	1.000 +0/-0.002	1.249 +0/-0.001	1.250 +0.002/0
	P125-01.000-187B	1	1-1/4	.065	0.271 +0.015/0	1.000 +0/-0.002	1.249 +0/-0.001	1.250 +0.002/0
	P125-01.000-250B	1	1-1/4	.065	0.340 +0.015/0	1.000 +0/-0.002	1.249 +0/-0.001	1.250 +0.002/0
PRC125-01.250	P125-01.250-187B	1-1/4	1-1/2	.065	0.271 +0.015/0	1.250 +0/-0.002	1.499 +0/-0.001	1.500 +0.002/0
	P125-01.250-250B	1-1/4	1-1/2	.065	0.340 +0.015/0	1.250 +0/-0.002	1.499 +0/-0.001	1.500 +0.002/0
3/16" C/S								
PRC187-01.125	P187-01.125-187B	1-1/8	1-1/2	.109	0.315 +0.015/0	1.125 +0/-0.002	1.499 +0/-0.002	1.500 +0.002/0
	P187-01.125-312B	1-1/8	1-1/2	.109	0.453 +0.015/0	1.125 +0/-0.002	1.499 +0/-0.002	1.500 +0.002/0
PRC187-01.375	P187-01.375-312B	1-3/8	1-3/4	.109	0.453 +0.015/0	1.375 +0/-0.002	1.749 +0/-0.002	1.750 +0.002/0
PRC187-01.500	P187-01.500-187B	1-1/2	1-7/8	.109	0.315 +0.015/0	1.500 +0/-0.002	1.874 +0/-0.002	1.875 +0.002/0
	P187-01.500-375B	1-1/2	1-7/8	.109	0.522 +0.015/0	1.500 +0/-0.002	1.874 +0/-0.002	1.875 +0.002/0
PRC187-01.625	P187-01.625-312B	1-5/8	2	.109	0.453 +0.015/0	1.625 +0/-0.002	1.999 +0/-0.002	2.000 +0.002/0
	P187-01.625-375B	1-5/8	2	.109	0.522 +0.015/0	1.625 +0/-0.002	1.999 +0/-0.002	2.000 +0.002/0
PRC187-01.750	P187-01.750-230B	1-3/4	2-1/8	.109	0.362 +0.015/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0
	P187-01.750-312B	1-3/4	2-1/8	.109	0.453 +0.015/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0

STYLE 855 PRC RINGS

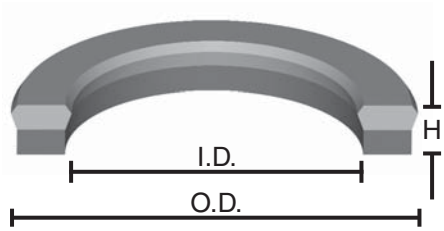
PRC PART NUMBER	ACCOMPANYING STYLE 850 PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH W/ STYLE 850	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
3/16" C/S								
	P187-01.750-375B	1-3/4	2-1/8	.109	0.522 +0.015/0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/0
PRC187-02.375	P187-02.375-375B	2-3/8	2-3/4	.109	0.522 +0.015/0	2.375 +0/-0.002	2.749 +0/-0.002	2.750 +0.002/0
PRC187-02.625	P187-02.625-375B	2-5/8	3	.109	0.522 +0.015/0	2.625 +0/-0.002	2.999 +0/-0.002	3.000 +0.002/0
PRC187-03.000	P187-03.000-375B	3	3-3/8	.109	0.522 +0.015/0	3.000 +0/-0.002	3.374 +0/-0.002	3.375 +0.002/0
PRC187-03.125	P187-03.125-187B	3-1/8	3-1/2	.109	0.315 +0.015/0	3.125 +0/-0.002	3.499 +0/-0.002	3.500 +0.002/0
	P187-03.125-375B	3-1/8	3-1/2	.109	0.522 +0.015/0	3.125 +0/-0.002	3.499 +0/-0.002	3.500 +0.002/0
PRC187-03.625	P187-03.625-375B	3-5/8	4	.109	0.522 +0.015/0	3.625 +0/-0.002	3.999 +0/-0.002	4.000 +0.002/0
1/4" C/S								
PRC250-01.000	P250-01.000-375B	1	1-1/2	.137	0.522 +0.015/0	1.000 +0/-0.003	1.499 +0/-0.002	1.500 +0.003/0
PRC250-01.500	P250-01.500-250B	1-1/2	2	.137	0.412 +0.015/0	1.500 +0/-0.003	1.999 +0/-0.002	2.000 +0.003/0
	P250-01.500-375B	1-1/2	2	.137	0.550 +0.015/0	1.500 +0/-0.003	1.999 +0/-0.002	2.000 +0.003/0
PRC250-01.750	P250-01.750-375B	1-3/4	2-1/4	.137	0.550 +0.015/0	1.750 +0/-0.003	2.249 +0/-0.002	2.250 +0.003/0
PRC250-02.000	P250-02.000-250B	2	2-1/2	.137	0.412 +0.015/0	2.000 +0/-0.003	2.499 +0/-0.002	2.500 +0.003/0
	P250-02.000-375B	2	2-1/2	.137	0.550 +0.015/0	2.000 +0/-0.003	2.499 +0/-0.002	2.500 +0.003/0
PRC250-02.250	P250-02.250-375B	2-1/4	2-3/4	.137	0.550 +0.015/0	2.250 +0/-0.003	2.749 +0/-0.002	2.750 +0.003/0
	P250-02.500-375B	2-1/2	3	.137	0.550 +0.015/0	2.500 +0/-0.003	2.999 +0/-0.002	3.000 +0.003/0
PRC250-02.500	P250-02.500-375B	2-1/2	3	.137	0.550 +0.015/0	2.500 +0/-0.002	2.999 +0/-0.001	3.000 +0.002/0
PRC250-02.750	P250-02.750-375B	2-3/4	3-1/4	.137	0.550 +0.015/0	2.750 +0/-0.003	3.249 +0/-0.002	3.250 +0.003/0
PRC250-03.000	P250-03.000-375B	3	3-1/2	.137	0.550 +0.015/0	3.000 +0/-0.003	3.499 +0/-0.002	3.500 +0.003/0
PRC250-03.250	P250-03.250-375B	3-1/4	3-3/4	.137	0.550 +0.015/0	3.250 +0/-0.003	3.749 +0/-0.002	3.750 +0.003/0
PRC250-03.500	P250-03.500-375B	3-1/2	4	.137	0.550 +0.015/0	3.500 +0/-0.003	3.999 +0/-0.002	4.000 +0.003/0
PRC250-04.000	P250-04.000-375B	4	4-1/2	.137	0.550 +0.015/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
	P250-04.000-562B	4	4-1/2	.137	0.756 +0.015/0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/0
PRC250-04.250	P250-04.250-375B	4-1/4	4-3/4	.137	0.550 +0.015/0	4.250 +0/-0.003	4.749 +0/-0.002	4.750 +0.003/0
	P250-04.250-562B	4-1/4	4-3/4	.137	0.756 +0.015/0	4.250 +0/-0.003	4.749 +0/-0.002	4.750 +0.003/0
PRC250-04.500	P250-04.500-375B	4-1/2	5	.137	0.550 +0.015/0	4.500 +0/-0.003	4.999 +0/-0.002	5.000 +0.003/0
	P250-04.500-562B	4-1/2	5	.137	0.756 +0.015/0	4.500 +0/-0.003	4.999 +0/-0.002	5.000 +0.003/0
PRC250-05.000	P250-05.000-375B	5	5-1/2	.137	0.550 +0.015/0	5.000 +0/-0.003	5.499 +0/-0.002	5.500 +0.003/0
	P250-05.000-562B	5	5-1/2	.137	0.756 +0.015/0	5.000 +0/-0.003	5.499 +0/-0.002	5.500 +0.003/0
PRC250-05.500	P250-05.500-375B	5-1/2	6	.137	0.550 +0.015/0	5.500 +0/-0.003	5.999 +0/-0.002	6.000 +0.003/0
	P250-05.500-562B	5-1/2	6	.137	0.756 +0.015/0	5.500 +0/-0.003	5.999 +0/-0.002	6.000 +0.003/0
PRC250-06.000	P250-06.000-375B	6	6-1/2	.137	0.550 +0.015/0	6.000 +0/-0.003	6.499 +0/-0.002	6.500 +0.003/0
	P250-06.000-562B	6	6-1/2	.137	0.756 +0.015/0	6.000 +0/-0.003	6.499 +0/-0.002	6.500 +0.003/0
PRC250-06.500	P250-06.500-375B	6-1/2	7	.137	0.550 +0.015/0	6.500 +0/-0.003	6.999 +0/-0.002	7.000 +0.003/0
	P250-06.500-562B	6-1/2	7	.137	0.756 +0.015/0	6.500 +0/-0.003	6.999 +0/-0.002	7.000 +0.003/0
5/16" C/S								
PRC312-02.375	P312-02.375-500B	2-3/8	3	.160	0.715 +0.015/0	2.375 +0/-0.004	2.998 +0/-0.002	3.000 +0.003/0
PRC312-03.375	P312-03.375-500B	3-3/8	4	.160	0.715 +0.015/0	3.375 +0/-0.004	3.998 +0/-0.002	4.000 +0.003/0
PRC312-04.375	P312-04.375-562B	4-3/8	5	.160	0.756 +0.015/0	4.375 +0/-0.002	4.998 +0/-0.001	4.375 +0.002/0

STYLE 855 PRC RINGS

PRC PART NUMBER	ACCOMPANYING STYLE 850 PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH W/ STYLE 850	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
3/8" C/S								
PRC375-02.750	P375-02.750-625B	2-3/4	3-1/2	.207	0.895 +0.015/0	2.750 +0/-0.005	3.498 +0/-0.002	3.500 +0.004/0
PRC375-03.250	P375-03.250-625B	3-1/4	4	.207	0.895 +0.015/0	3.250 +0/-0.005	3.998 +0/-0.002	4.000 +0.004/0
PRC375-03.500	P375-03.500-625B	3-1/2	4-1/4	.207	0.895 +0.015/0	3.500 +0/-0.005	4.248 +0/-0.002	4.250 +0.004/0
	P375-03.750-625B	3-3/4	4-1/2	.207	0.895 +0.015/0	3.750 +0/-0.005	4.498 +0/-0.002	4.500 +0.004/0
PRC375-04.250	P375-04.250-375B	4-1/4	5	.207	0.620 +0.015/0	4.250 +0/-0.005	4.998 +0/-0.002	5.000 +0.004/0
	P375-04.250-625B	4-1/4	5	.207	0.895 +0.015/0	4.250 +0/-0.005	4.998 +0/-0.002	5.000 +0.004/0
PRC375-05.250	P375-05.250-625B	5-1/4	6	.207	0.895 +0.015/0	5.250 +0/-0.005	5.998 +0/-0.002	6.000 +0.004/0
PRC375-05.500	P375-05.500-625B	5-1/2	6-1/4	.207	0.895 +0.015/0	5.500 +0/-0.005	6.248 +0/-0.002	6.250 +0.004/0
PRC375-06.250	P375-06.250-625B	6-1/4	7	.207	0.895 +0.015/0	6.250 +0/-0.005	6.998 +0/-0.002	7.000 +0.004/0
PRC375-07.250	P375-07.250-625B	7-1/4	8	.207	0.895 +0.015/0	7.250 +0/-0.005	7.998 +0/-0.002	8.000 +0.004/0
1/2" C/S								
PRC500-08.000	P500-08.000-750B	8	9	.275	1.100 +0.015/0	8.000 +0/-0.007	8.998 +0/-0.003	9.000 +0.005/0
PRC500-09.000	P500-09.000-750B	9	10	.275	1.100 +0.015/0	9.000 +0/-0.007	9.998 +0/-0.003	10.000 +0.005/0

STYLE UFN-P SYMMETRICAL PLAIN SEALS

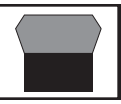
Incorporating a rubber seal lip and a rubberized fabric heel, this seal provides excellent sealability and high strength.



SEAL INFORMATION	
MATERIAL	RUBBER & FABRIC
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 2,900 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)

Part Number	I.D.	O.D.	H.
1/8" C/S			
UFN12-0.50-18P	1/2	3/4	3/16
UFN12-0.62-18P	5/8	7/8	3/16
UFN12-0.75-18P	3/4	1	3/16
UFN12-0.87-15P	7/8	1-1/8	5/32
UFN12-1.00-18P	1	1-1/4	3/16
UFN12-1.12-18P	1-1/8	1-3/8	3/16
UFN12-1.25-18P	1-1/4	1-1/2	3/16
UFN12-1.25-25P	1-1/4	1-1/2	1/4
UFN12-1.50-18P	1-1/2	1-3/4	3/16
5/32" C/S			
UFN15-0.25-25P	1/4	9/16	1/4
UFN15-0.31-25P	5/16	5/8	1/4
0.16" C/S			
UFN16-0.18-25P	3/16	1/2	1/4
3/16" C/S			
UFN18-0.50-28P	1/2	7/8	9/32
UFN18-0.62-28P	5/8	1	9/32
UFN18-0.75-31P	3/4	1-1/8	5/16
UFN18-0.87-37P	7/8	1-1/4	3/8
UFN18-1.00-25P	1	1-3/8	1/4
UFN18-1.12-21P	1-1/8	1-1/2	7/32
UFN18-1.25-25P	1-1/4	1-5/8	1/4
UFN18-1.25-28P	1-1/4	1-5/8	.9/32
UFN18-1.37-28P	1-3/8	1-3/4	9/32
UFN18-1.50-17P	1-1/2	1-7/8	0.170
UFN18-1.50-25P	1-1/2	1-7/8	1/4
UFN18-1.75-17P	1-3/4	2-1/8	0.170
UFN18-1.75-28P	1-3/4	2-1/8	9/32

Part Number	I.D.	O.D.	H.
3/16" C/S			
UFN18-2.25-17P	2-1/4	2-5/8	0.170
UFN18-2.25-25P	2-1/4	2-5/8	1/4
UFN18-3.00-31P	3	3-3/8	5/16
0.22" C/S			
UFN22-0.56-28P	9/16	1	9/32
1/4" C/S			
UFN25-0.62-37P	5/8	1-1/8	3/8
UFN25-0.75-31P	3/4	1-1/4	5/16
UFN25-0.75-37P	3/4	1-1/4	3/8
UFN25-0.87-37P	7/8	1-3/8	3/8
UFN25-1.00-25P	1	1-1/2	1/4
UFN25-1.12-37P	1-1/8	1-5/8	3/8
UFN25-1.25-28P	1-1/4	1-3/4	9/32
UFN25-1.25-37P	1-1/4	1-3/4	3/8
UFN25-1.50-28P	1-1/2	2	9/32
UFN25-1.50-37P	1-1/2	2	3/8
UFN25-1.75-37P	1-3/4	2-1/4	3/8
UFN25-2.00-31P	2	2-1/2	5/16
UFN25-2.00-37P	2	2-1/2	3/8
UFN25-2.25-37P	2-1/4	2-3/4	3/8
UFN25-2.50-31P	2-1/2	3	5/16
UFN25-3.00-37P	3	3-1/2	3/8
5/16" C/S			
UFN31-0.87-37P	7/8	1-1/2	3/8
UFN31-1.00-43P	1	1-5/8	7/16
UFN31-1.12-43P	1-1/8	1-3/4	7/16
UFN31-1.25-31P	1-1/4	1-7/8	5/16



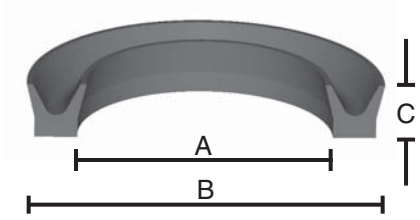
STYLE UFN-P SYMMETRICAL PLAIN SEALS

Part Number	I.D.	O.D.	H.
5/16" C/S			
UFN31-1.25-43P	1-1/4	1-7/8	7/16
UFN31-1.37-37P	1-3/8	2	3/8
UFN31-1.37-43P	1-3/8	2	7/16
UFN31-1.50-31P	1-1/2	2-1/8	5/16
UFN31-1.50-46P	1-1/2	2-1/8	0.460
UFN31-1.62-43P	1-5/8	2-1/4	7/16
UFN31-1.75-43P	1-3/4	2-3/8	7/16
UFN31-1.87-43P	1-7/8	2-1/2	7/16
UFN31-1.87-37P	1-7/8	2-1/2	3/8
UFN31-2.00-43P	2	2-5/8	7/16
UFN31-2.12-37P	2-1/8	2-3/4	3/8
UFN31-2.37-46P	2-3/8	3	0.460
3/8" C/S			
UFN37-1.50-47P	1-1/2	2-1/4	0.470
UFN37-1.75-50P	1-3/4	2-1/2	1/2
UFN37-2.00-43P	2	2-3/4	7/16
UFN37-2.00-56P	2	2-3/4	9/16
UFN37-2.12-56P	2-1/8	2-7/8	9/16
UFN37-2.25-37P	2-1/4	3	3/8

Part Number	I.D.	O.D.	H.
3/8" C/S			
UFN37-2.25-50P	2-1/4	3	1/2
UFN37-2.25-56P	2-1/4	3	9/16
UFN37-2.50-37P	2-1/2	3-1/4	3/8
UFN37-2.50-56P	2-1/2	3-1/4	9/16
UFN37-2.75-37P	2-3/4	3-1/2	3/8
UFN37-2.75-56P	2-3/4	3-1/2	9/16
UFN37-3.00-50P	3	3-3/4	1/2
UFN37-3.00-56P	3	3-3/4	9/16
UFN37-3.25-50P	3-1/4	4	1/2
UFN37-3.25-56P	3-1/4	4	9/16
UFN37-3.50-56P	3-1/2	4-1/4	9/16
1/2" C/S			
UFN50-3.00-62P	3	4	5/8
UFN50-4.00-75P	4	5	3/4
UFN50-4.50-75P	4-1/2	5-1/2	3/4
UFN50-6.00-75P	6	7	3/4
0.59" C/S			
UFN59-1.81-100P	1.81	3	1

STYLE 870 HOMOGENEOUS U-SEALS

Style 870 u-seals are precision molded from Buna-N synthetic rubber. Style 870 u-seal numbers conform in size to Army-Navy specification AN6226.

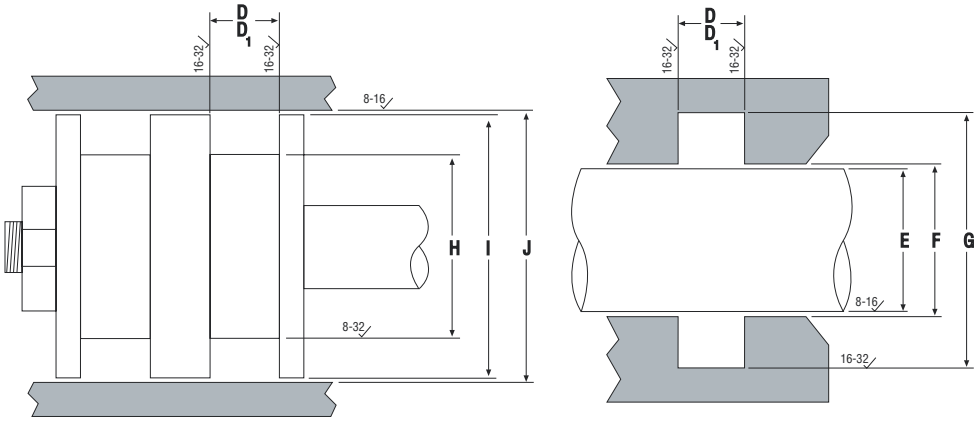


PART NUMBERS

870 - 006

Type of Seal — AN Dash Number

SEAL INFORMATION	
MATERIAL	70A BUNA-N RUBBER
TEMPERATURE RANGE	-40° TO +240° F
PRESSURE RANGE	0 TO 500 PSI
PART NUMBER	(Prefix) - (A-N Dash Number)



Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE W/O BU	D1 GROOVE W/ BU	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
870-006	0.125	0.250	0.063	0.094 ±0.010	0.156 ±0.010	0.125 +0/-0.001	0.126 +0.001/0	0.250 +0.002/0	0.125 +0/-0.001	0.249 +0/-0.001	0.250 +0.002/0
870-01	0.125	0.500	0.188	0.218 ±0.010	0.280 ±0.010	0.125 +0/-0.001	0.126 +0.002/0	0.500 +0.002/0	0.125 +0/-0.002	0.498 +0/-0.001	0.500 +0.003/0
870-02	0.188	0.563	0.188	0.218 ±0.010	0.280 ±0.010	0.187 +0/-0.001	0.188 +0.002/0	0.562 +0.002/0	0.187 +0/-0.002	0.560 +0/-0.001	0.562 +0.003/0
870-03	0.250	0.625	0.188	0.218 ±0.010	0.280 ±0.010	0.250 +0/-0.001	0.251 +0.002/0	0.625 +0.002/0	0.250 +0/-0.002	0.623 +0/-0.001	0.625 +0.003/0
870-04	0.312	0.688	0.188	0.218 ±0.010	0.280 ±0.010	0.312 +0/-0.001	0.312 +0.002/0	0.687 +0.002/0	0.312 +0/-0.002	0.685 +0/-0.001	0.687 +0.003/0
870-05	0.375	0.750	0.188	0.218 ±0.010	0.280 ±0.010	0.375 +0/-0.001	0.376 +0.002/0	0.750 +0.002/0	0.375 +0/-0.002	0.748 +0/-0.001	0.750 +0.003/0
870-06	0.438	0.813	0.188	0.218 ±0.010	0.280 ±0.010	0.437 +0/-0.001	0.438 +0.002/0	0.812 +0.002/0	0.437 +0/-0.002	0.810 +0/-0.001	0.812 +0.003/0
870-07	0.500	0.875	0.188	0.218 ±0.010	0.280 ±0.010	0.500 +0/-0.001	0.501 +0.002/0	0.875 +0.002/0	0.500 +0/-0.002	0.873 +0/-0.001	0.875 +0.003/0
870-08	0.250	0.750	0.250	0.281 ±0.010	0.343 ±0.010	0.250 +0/-0.002	0.251 +0.003/0	0.750 +0.003/0	0.250 +0/-0.003	0.748 +0/-0.001	0.750 +0.003/0
870-09	0.312	0.813	0.250	0.281 ±0.010	0.343 ±0.010	0.312 +0/-0.002	0.312 +0.003/0	0.812 +0.003/0	0.312 +0/-0.003	0.810 +0/-0.001	0.812 +0.003/0
870-10	0.375	0.875	0.250	0.281 ±0.010	0.343 ±0.010	0.375 +0/-0.002	0.376 +0.003/0	0.875 +0.003/0	0.375 +0/-0.003	0.873 +0/-0.001	0.875 +0.003/0
870-11	0.438	0.938	0.250	0.281 ±0.010	0.343 ±0.010	0.437 +0/-0.002	0.438 +0.003/0	0.937 +0.003/0	0.437 +0/-0.003	0.935 +0/-0.001	0.937 +0.003/0
870-12	0.500	1.000	0.250	0.281 ±0.010	0.343 ±0.010	0.500 +0/-0.002	0.501 +0.003/0	1.000 +0.003/0	0.500 +0/-0.003	0.998 +0/-0.001	1.000 +0.003/0
870-13	0.563	1.062	0.250	0.281 ±0.010	0.343 ±0.010	0.562 +0/-0.002	0.563 +0.003/0	1.062 +0.003/0	0.562 +0/-0.003	1.060 +0/-0.001	1.062 +0.003/0
870-134	2.500	3.000	0.250	0.281 ±0.010	0.343 ±0.010	2.500 +0/-0.002	2.502 +0.003/0	3.000 +0.003/0	2.500 +0/-0.003	2.998 +0/-0.002	3.000 +0.003/0
870-14	0.625	1.125	0.250	0.281 ±0.010	0.343 ±0.010	0.625 +0/-0.002	0.626 +0.003/0	1.125 +0.003/0	0.625 +0/-0.003	1.123 +0/-0.001	1.125 +0.003/0
870-15	0.688	1.188	0.250	0.281 ±0.010	0.343 ±0.010	0.687 +0/-0.002	0.688 +0.003/0	1.187 +0.003/0	0.687 +0/-0.003	1.185 +0/-0.001	1.187 +0.003/0
870-16	0.750	1.250	0.250	0.281 ±0.010	0.343 ±0.010	0.750 +0/-0.002	0.751 +0.003/0	1.250 +0.003/0	0.750 +0/-0.003	1.248 +0/-0.001	1.250 +0.003/0
870-17	0.813	1.312	0.250	0.281 ±0.010	0.343 ±0.010	0.812 +0/-0.002	0.813 +0.003/0	1.312 +0.003/0	0.812 +0/-0.003	1.310 +0/-0.001	1.312 +0.003/0
870-18	0.875	1.375	0.250	0.281 ±0.010	0.343 ±0.010	0.875 +0/-0.002	0.876 +0.003/0	1.375 +0.003/0	0.875 +0/-0.003	1.373 +0/-0.001	1.375 +0.003/0

STYLE 870 HOMOGENEOUS U-SEALS

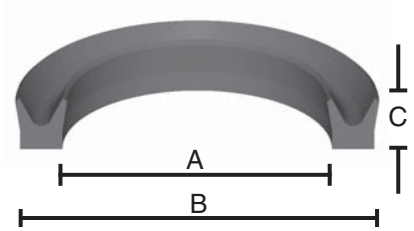
Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE W/O BU	D1 GROOVE W/ BU	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
870-19	0.938	1.438	0.250	0.281 ±0.010	0.343 ±0.010	0.937 +0/-0.002	0.938 +0.003/0	1.437 +0.003/0	0.937 +0/-0.003	1.435 +0/-0.001	1.437 +0.003/0
870-20	1.000	1.500	0.250	0.281 ±0.010	0.343 ±0.010	1.000 +0/-0.002	1.001 +0.003/0	1.500 +0.003/0	1.000 +0/-0.003	1.498 +0/-0.001	1.500 +0.003/0
870-21	1.062	1.563	0.250	0.281 ±0.010	0.343 ±0.010	1.062 +0/-0.002	1.063 +0.003/0	1.562 +0.003/0	1.062 +0/-0.003	1.560 +0/-0.001	1.562 +0.003/0
870-22	1.125	1.625	0.250	0.281 ±0.010	0.343 ±0.010	1.125 +0/-0.002	1.126 +0.003/0	1.625 +0.003/0	1.125 +0/-0.003	1.623 +0/-0.001	1.625 +0.003/0
870-23	1.188	1.688	0.250	0.281 ±0.010	0.343 ±0.010	1.187 +0/-0.002	1.188 +0.003/0	1.687 +0.003/0	1.187 +0/-0.003	1.685 +0/-0.001	1.687 +0.003/0
870-24	1.250	1.750	0.250	0.281 ±0.010	0.343 ±0.010	1.250 +0/-0.002	1.251 +0.003/0	1.750 +0.003/0	1.250 +0/-0.003	1.748 +0/-0.001	1.750 +0.003/0
870-25	1.250	1.875	0.312	0.344 ±0.010	0.406 ±0.010	1.250 +0/-0.001	1.252 +0.003/0	1.875 +0.004/0	1.250 +0/-0.004	1.873 +0/-0.002	1.875 +0.003/0
870-26	1.375	2.000	0.312	0.344 ±0.010	0.406 ±0.010	1.375 +0/-0.002	1.377 +0.003/0	2.000 +0.004/0	1.375 +0/-0.004	1.998 +0/-0.001	2.000 +0.003/0
870-27	1.500	2.125	0.312	0.344 ±0.010	0.406 ±0.010	1.500 +0/-0.002	1.502 +0.003/0	2.125 +0.004/0	1.500 +0/-0.004	2.123 +0/-0.001	2.125 +0.003/0
870-28	1.625	2.250	0.312	0.344 ±0.010	0.406 ±0.010	1.625 +0/-0.002	1.627 +0.003/0	2.250 +0.004/0	1.625 +0/-0.004	2.248 +0/-0.001	2.250 +0.003/0
870-29	1.750	2.375	0.312	0.344 ±0.010	0.406 ±0.010	1.750 +0/-0.002	1.752 +0.003/0	2.375 +0.004/0	1.750 +0/-0.004	2.373 +0/-0.001	2.375 +0.003/0
870-30	1.875	2.500	0.312	0.344 ±0.010	0.406 ±0.010	1.875 +0/-0.002	1.877 +0.003/0	2.500 +0.004/0	1.875 +0/-0.004	2.498 +0/-0.001	2.500 +0.003/0
870-31	2.000	2.625	0.312	0.344 ±0.010	0.406 ±0.010	2.000 +0/-0.002	2.002 +0.003/0	2.625 +0.004/0	2.000 +0/-0.004	2.623 +0/-0.001	2.625 +0.003/0
870-32	2.125	2.750	0.312	0.344 ±0.010	0.406 ±0.010	2.125 +0/-0.002	2.127 +0.003/0	2.750 +0.004/0	2.125 +0/-0.004	2.748 +0/-0.001	2.75 +0.003/0
870-33	2.250	2.875	0.312	0.344 ±0.010	0.406 ±0.010	2.250 +0/-0.002	2.252 +0.003/0	2.875 +0.004/0	2.250 +0/-0.004	2.873 +0/-0.001	2.875 +0.003/0
870-34	2.375	3.000	0.312	0.344 ±0.010	0.406 ±0.010	2.375 +0/-0.002	2.377 +0.003/0	3.000 +0.004/0	2.375 +0/-0.004	2.998 +0/-0.001	3.000 +0.003/0
870-35	2.500	3.125	0.312	0.344 ±0.010	0.406 ±0.010	2.500 +0/-0.002	2.502 +0.003/0	3.125 +0.004/0	2.500 +0/-0.005	3.123 +0/-0.001	3.125 +0.003/0
870-36	2.500	3.250	0.375	0.406 ±0.010	0.468 ±0.010	2.500 +0/-0.002	2.502 +0.004/0	3.250 +0.005/0	2.500 +0/-0.005	3.248 +0/-0.001	3.250 +0.004/0
870-37	2.625	3.375	0.375	0.406 ±0.010	0.468 ±0.010	2.625 +0/-0.002	2.627 +0.004/0	3.375 +0.005/0	2.625 +0/-0.005	3.373 +0/-0.001	3.375 +0.004/0
870-38	2.750	3.500	0.375	0.406 ±0.010	0.468 ±0.010	2.750 +0/-0.002	2.752 +0.004/0	3.500 +0.005/0	2.750 +0/-0.005	3.498 +0/-0.001	3.500 +0.004/0
870-39	2.875	3.625	0.375	0.406 ±0.010	0.468 ±0.010	2.875 +0/-0.002	2.877 +0.004/0	3.625 +0.005/0	2.875 +0/-0.005	3.623 +0/-0.001	3.625 +0.004/0
870-40	3.000	3.750	0.375	0.406 ±0.010	0.468 ±0.010	3.000 +0/-0.002	3.002 +0.004/0	3.750 +0.005/0	3.000 +0/-0.005	3.748 +0/-0.001	3.750 +0.004/0
870-41	0.125	0.375	0.125	0.156 ±0.010	0.218 ±0.010	0.125 +0/-0.001	0.127 +0.002/0	0.375 +0.002/0	0.125 +0/-0.001	0.373 +0/-0.002	0.375 +0.003/0
870-42	0.188	0.438	0.125	0.156 ±0.010	0.218 ±0.010	0.187 +0/-0.001	0.189 +0.002/0	0.437 +0.002/0	0.187 +0/-0.001	0.435 +0/-0.002	0.437 +0.003/0
870-43	0.250	0.500	0.125	0.156 ±0.010	0.218 ±0.010	0.250 +0/-0.001	0.252 +0.002/0	0.500 +0.002/0	0.250 +0/-0.001	0.498 +0/-0.002	0.500 +0.003/0
870-44	0.312	0.563	0.125	0.156 ±0.010	0.218 ±0.010	0.312 +0/-0.001	0.314 +0.002/0	0.562 +0.002/0	0.312 +0/-0.001	0.560 +0/-0.002	0.562 +0.003/0
870-45	0.375	0.625	0.125	0.156 ±0.010	0.218 ±0.010	0.375 +0/-0.001	0.377 +0.002/0	0.625 +0.002/0	0.375 +0/-0.001	0.623 +0/-0.002	0.625 +0.003/0
870-46	0.438	0.688	0.125	0.156 ±0.010	0.218 ±0.010	0.437 +0/-0.001	0.439 +0.002/0	0.687 +0.002/0	0.437 +0/-0.001	0.685 +0/-0.002	0.687 +0.003/0
870-47	0.500	0.750	0.125	0.156 ±0.010	0.218 ±0.010	0.500 +0/-0.001	0.502 +0.002/0	0.750 +0.002/0	0.500 +0/-0.001	0.748 +0/-0.002	0.750 +0.003/0
870-48	0.625	1.000	0.188	0.218 ±0.010	0.280 ±0.010	0.625 +0/-0.002	0.627 +0.002/0	1.000 +0.002/0	0.625 +0/-0.001	0.998 +0/-0.002	1.000 +0.003/0
870-49	0.750	1.125	0.188	0.218 ±0.010	0.280 ±0.010	0.750 +0/-0.002	0.752 +0.002/0	1.125 +0.002/0	0.750 +0/-0.001	1.123 +0/-0.002	1.125 +0.003/0
870-50	0.875	1.250	0.188	0.218 ±0.010	0.280 ±0.010	0.875 +0/-0.002	0.877 +0.002/0	1.250 +0.002/0	0.875 +0/-0.001	1.248 +0/-0.002	1.250 +0.003/0
870-51	1.000	1.375	0.188	0.218 ±0.010	0.280 ±0.010	1.000 +0/-0.001	1.002 +0.002/0	1.375 +0.002/0	1.000 +0/-0.002	1.373 +0/-0.001	1.375 +0.004/0
870-52	1.125	1.500	0.188	0.218 ±0.010	0.280 ±0.010	1.125 +0/-0.001	1.127 +0.002/0	1.500 +0.002/0	1.125 +0/-0.002	1.498 +0/-0.001	1.500 +0.004/0
870-53	1.250	1.625	0.188	0.218 ±0.010	0.280 ±0.010	1.250 +0/-0.001	1.252 +0.002/0	1.625 +0.002/0	1.250 +0/-0.002	1.623 +0/-0.001	1.625 +0.004/0
870-60	3.250	4.000	0.375	0.406 ±0.010	0.468 ±0.010	3.250 +0/-0.002	3.252 +0.004/0	4.000 +0.004/0	3.250 +0/-0.005	3.998 +0/-0.002	4.000 +0.003/0
870-65	4.250	5.000	0.375	0.406 ±0.010	0.468 ±0.010	4.250 +0/-0.002	4.252 +0.004/0	5.000 +0.004/0	4.250 +0/-0.005	4.998 +0/-0.002	5.000 +0.003/0
870-80	7.000	8.000	0.500	0.531 ±0.010	0.593 ±0.010	7.000 +0/-0.003	7.002 +0.005/0	8.000 +0.007/0	7.000 +0/-0.007	7.998 +0/-0.003	8.000 +0.005/0
870-90	11.000	12.000	0.500	0.531 ±0.010	0.593 ±0.010	11.000 +0/-0.003	11.002 +0.005/0	12.000 +0.007/0	11.000 +0/-0.007	11.998 +0/-0.003	12.000 +0.005/0
870-95	13.000	14.000	0.500	0.531 ±0.010	0.593 ±0.010	13.000 +0/-0.003	13.002 +0.005/0	14.000 +0.007/0	13.000 +0/-0.007	13.998 +0/-0.003	14.000 +0.005/0

STYLE 870 HOMOGENEOUS U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE W/O BU	D1 GROOVE W/ BU	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
SPECIAL SIZES											
870-2.62X3.12	2.625	3.125	0.250	0.281 ±0.010	0.343 ±0.010	2.625 +0/-0.002	2.626 +0.003/0	2.625 +0.002/0	2.625 +0/-0.003	3.124 +0/-0.002	3.125 +0.003/0
870-2X2-3/8	2.000	2.375	0.188	0.218 ±0.010	0.280 ±0.010	2.000 +0/-0.002	2.002 +0.002/0	2.375 +0.002/0	2.000 +0/-0.002	2.373 +0/-0.002	2.375 +0.002/0
870-3.12X3.62	3.125	3.625	0.250	0.281 ±0.010	0.343 ±0.010	3.125 +0/-0.002	3.125 +0.003/0	3.625 +0.002/0	3.125 +0/-0.003	3.264 +0/-0.002	3.625 +0.003/0
870-3.62X4.12	3.625	4.125	0.250	0.281 ±0.010	0.343 ±0.010	3.625 +0/-0.002	3.626 +0.003/0	4.125 +0.002/0	3.625 +0/-0.003	4.124 +0/-0.002	4.125 +0.003/0
870-4.12X4.62	4.125	4.625	0.250	0.281 ±0.010	0.343 ±0.010	4.125 +0/-0.002	4.126 +0.003/0	4.625 +0.002/0	4.125 +0/-0.003	4.624 +0/-0.002	4.625 +0.003/0
870-5.12X6	5.125	6.000	0.438	0.469 ±0.010	0.531 ±0.010	5.125 +0/-0.003	5.127 +0.004/0	6.000 +0.006/0	5.125 +0/-0.006	5.998 +0/-0.002	6.000 +0.005/0
870-5.2X6	5.250	6.000	0.375	0.406 ±0.010	0.468 ±0.010	5.250 +0/-0.002	5.252 +0.004/0	6.000 +0.004/0	5.250 +0/-0.005	5.998 +0/-0.002	6.000 +0.003/0
870-5.2X6X.50	5.250	6.000	0.500	0.531 ±0.010	0.593 ±0.010	5.250 +0/-0.003	5.252 +0.005/0	6.000 +0.007/0	5.250 +0/-0.007	5.998 +0/-0.003	6.000 +0.005/0
870-6.12X7	6.125	7.000	0.438	0.469 ±0.010	0.531 ±0.010	6.125 +0/-0.003	6.127 +0.004/0	7.000 +0.006/0	6.125 +0/-0.006	6.998 +0/-0.002	7.000 +0.005/0
870-6.2X7X.50	6.250	7.000	0.500	0.531 ±0.010	0.593 ±0.010	6.250 +0/-0.003	6.252 +0.005/0	7.000 +0.007/0	6.250 +0/-0.007	6.998 +0/-0.003	7.000 +0.005/0
870-6X7X.5	6.000	7.000	0.500	0.531 ±0.010	0.593 ±0.010	6.000 +0/-0.003	6.002 +0.005/0	7.000 +0.007/0	6.000 +0/-0.007	6.998 +0/-0.003	7.000 +0.005/0
870-9X10	9.000	10.000	0.500	0.531 ±0.010	0.593 ±0.010	9.000 +0/-0.003	9.002 +0.005/0	10.000 +0.007/0	9.000 +0/-0.007	9.998 +0/-0.003	10.000 +0.005/0

STYLE HRU HOMOGENEOUS U-SEALS

Style HRU u-seals are precision molded from 80 Durometer Buna-N rubber. Sizes include those found in Army-Navy spec. AN6226 and narrow cross-section sizes found in J.I.C. cylinders and the popularly termed "Huva Cup".



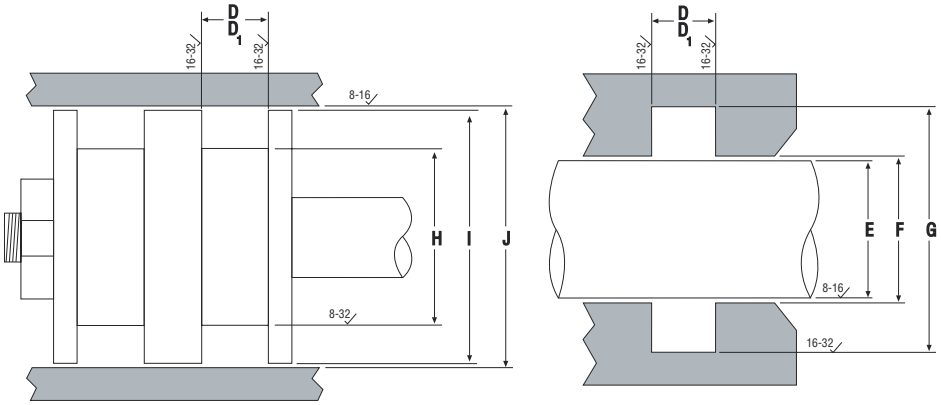
V= VITON (FLUOROCARBON)

PART NUMBERS

U 12 - 0.18 - 25B

Type of Seal | Cross Section | Inside Diameter | Height

SEAL INFORMATION	
MATERIAL	80A BUNA-N RUBBER 90A FLUOROCARBON
TEMPERATURE RANGE	BUNA-N: -40° TO +250° F FC: -20° TO +400° F
PRESSURE RANGE	BUNA-N: 0 TO 1,250 PSI FC: 0 TO 2,000 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) - (Height)



Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE W/O BU	D1 GROOVE W/ BU	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
3/32" C/S											
HRU09-0.12-09	1/8	5/16	3/32	0.125 ±0.010	0.188 ±0.010	0.125 +0/-0.001	0.126 +0.002/0	0.312 +0.002/0	0.125 +0/-0.001	0.310 +0/-0.001	0.312 +0.003/0
HRU09-0.18-09	3/16	3/8	3/32	0.125 ±0.010	0.188 ±0.010	0.187 +0/-0.001	0.188 +0.002/0	0.375 +0.002/0	0.187 +0/-0.001	0.373 +0/-0.001	0.375 +0.003/0
HRU09-0.25-09	1/4	7/16	3/32	0.125 ±0.010	0.188 ±0.010	0.250 +0/-0.001	0.251 +0.002/0	0.437 +0.002/0	0.250 +0/-0.001	0.435 +0/-0.001	0.437 +0.003/0
HRU09-0.31-09	5/16	1/2	3/32	0.125 ±0.010	0.188 ±0.010	0.312 +0/-0.001	0.313 +0.002/0	0.500 +0.002/0	0.312 +0/-0.001	0.498 +0/-0.001	0.500 +0.003/0
HRU09-0.43-09	7/16	5/8	3/32	0.125 ±0.010	0.188 ±0.010	0.437 +0/-0.001	0.438 +0.002/0	0.625 +0.002/0	0.437 +0/-0.001	0.623 +0/-0.001	0.625 +0.003/0
HRU09-0.50-09	1/2	11/16	3/32	0.125 ±0.010	0.188 ±0.010	0.500 +0/-0.001	0.501 +0.002/0	0.687 +0.002/0	0.500 +0/-0.001	0.685 +0/-0.001	0.687 +0.003/0
HRU09-0.56-09	9/16	3/4	3/32	0.125 ±0.010	0.188 ±0.010	0.562 +0/-0.001	0.563 +0.002/0	0.750 +0.002/0	0.562 +0/-0.001	0.748 +0/-0.001	0.750 +0.003/0
HRU09-0.62-09	5/8	13/16	3/32	0.125 ±0.010	0.188 ±0.010	0.625 +0/-0.001	0.626 +0.002/0	0.812 +0.002/0	0.625 +0/-0.001	0.810 +0/-0.001	0.812 +0.003/0
HRU09-0.68-09	11/16	7/8	3/32	0.125 ±0.010	0.188 ±0.010	0.687 +0/-0.001	0.686 +0.002/0	0.875 +0.002/0	0.687 +0/-0.001	0.873 +0/-0.001	0.875 +0.003/0
HRU09-0.75-09	3/4	15/16	3/32	0.125 ±0.010	0.188 ±0.010	0.750 +0/-0.001	0.751 +0.002/0	0.937+0.002/0	0.750 +0/-0.001	0.935 +0/-0.001	0.937 +0.003/0
1/8" C/S											
HRU12-0.18-12	3/16	7/16	1/8	0.156 ±0.010	0.219 ±0.010	0.187 +0/-0.001	0.188 +0.002/0	0.437 +0.002/0	0.187 +0/-0.001	0.435 +0/-0.001	0.437 +0.003/0
HRU12-0.25-12	1/4	1/2	1/8	0.156 ±0.010	0.219 ±0.010	0.250 +0/-0.001	0.251 +0.002/0	0.500 +0.002/0	0.250 +0/-0.001	0.498 +0/-0.001	0.500 +0.003/0
HRU12-0.37-12	3/8	5/8	1/8	0.156 ±0.010	0.219 ±0.010	0.375 +0/-0.001	0.376 +0.002/0	0.625 +0.002/0	0.375 +0/-0.001	0.623 +0/-0.001	0.625 +0.003/0
HRU12-0.43-12	7/16	11/16	1/8	0.156 ±0.010	0.219 ±0.010	0.437 +0/-0.001	0.438 +0.002/0	0.687 +0.002/0	0.437 +0/-0.001	0.685 +0/-0.001	0.687 +0.003/0
HRU12-0.50-12	1/2	3/4	1/8	0.156 ±0.010	0.219 ±0.010	0.500 +0/-0.001	0.501 +0.002/0	0.750 +0.002/0	0.500 +0/-0.001	0.748 +0/-0.001	0.750 +0.003/0
HRU12-0.50-12V	1/2	3/4	1/8	0.156 ±0.010	0.219 ±0.010	0.500 +0/-0.001	0.501 +0.002/0	0.750 +0.002/0	0.500 +0/-0.001	0.748 +0/-0.001	0.750 +0.003/0

STYLE HRU HOMOGENEOUS U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE W/O BU	D1 GROOVE W/ BU	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/8" C/S											
HRU12-0.56-12	9/16	13/16	1/8	0.156 ±0.010	0.219 ±0.010	0.562 +0/-0.001	0.563 +0.002/0	0.812 +0.002/0	0.562 +0/-0.001	0.810 +0/-0.001	0.812 +0.003/0
HRU12-0.62-12	5/8	7/8	1/8	0.156 ±0.010	0.219 ±0.010	0.625 +0/-0.001	0.626 +0.002/0	0.875 +0.002/0	0.625 +0/-0.001	0.873 +0/-0.001	0.875 +0.003/0
HRU12-0.62-12V	5/8	7/8	1/8	0.156 ±0.010	0.219 ±0.010	0.625 +0/-0.001	0.626 +0.002/0	0.875 +0.002/0	0.625 +0/-0.001	0.873 +0/-0.001	0.875 +0.003/0
HRU12-0.68-12	11/16	15/16	1/8	0.156 ±0.010	0.219 ±0.010	0.687 +0/-0.001	0.688 +0.002/0	0.937 +0.002/0	0.687 +0/-0.001	0.935 +0/-0.001	0.937 +0.003/0
HRU12-0.75-12	3/4	1	1/8	0.156 ±0.010	0.219 ±0.010	0.750 +0/-0.001	0.751 +0.002/0	1.000 +0.002/0	0.750 +0/-0.001	0.998 +0/-0.001	1.000 +0.003/0
HRU12-0.75-12V	3/4	1	1/8	0.156 ±0.010	0.219 ±0.010	0.750 +0/-0.001	0.751 +0.002/0	1.000 +0.002/0	0.750 +0/-0.001	0.998 +0/-0.001	1.000 +0.003/0
HRU12-0.81-12	13/16	1-1/16	1/8	0.156 ±0.010	0.219 ±0.010	0.812 +0/-0.001	0.813 +0.002/0	1.062 +0.002/0	0.812 +0/-0.001	1.060 +0/-0.001	1.062 +0.003/0
HRU12-0.87-12	7/8	1-1/8	1/8	0.156 ±0.010	0.219 ±0.010	0.875 +0/-0.001	0.876 +0.002/0	1.125 +0.002/0	0.875 +0/-0.001	1.123 +0/-0.001	1.125 +0.003/0
HRU12-0.87-12V	7/8	1-1/8	.1/8	0.156 ±0.010	0.219 ±0.010	0.875 +0/-0.001	0.876 +0.002/0	1.125 +0.002/0	0.875 +0/-0.001	1.123 +0/-0.001	1.125 +0.003/0
HRU12-1.00-12	1	1-1/4	1/8	0.156 ±0.010	0.219 ±0.010	1.000 +0/-0.001	1.001 +0.002/0	1.250 +0.002/0	1.000 +0/-0.001	1.248 +0/-0.001	1.250 +0.003/0
HRU12-1.00-12V	1	1-1/4	1/8	0.156 ±0.010	0.219 ±0.010	1.000 +0/-0.001	1.001 +0.002/0	1.250 +0.002/0	1.000 +0/-0.001	1.248 +0/-0.001	1.250 +0.003/0
HRU12-1.12-12	1-1/8	1-3/8	1/8	0.156 ±0.010	0.219 ±0.010	1.125 +0/-0.001	1.126 +0.002/0	1.375 +0.002/0	1.125 +0/-0.001	1.373 +0/-0.001	1.375 +0.003/0
HRU12-1.25-12	1-1/4	1-1/2	1/8	0.156 ±0.010	0.219 ±0.010	1.250 +0/-0.001	1.251 +0.002/0	1.500 +0.002/0	1.250 +0/-0.001	1.498 +0/-0.001	1.500 +0.003/0
HRU12-1.37-12	1-3/8	1-5/8	1/8	0.156 ±0.010	0.219 ±0.010	1.375 +0/-0.001	1.376 +0.002/0	1.625 +0.002/0	1.375 +0/-0.001	1.623 +0/-0.001	1.625 +0.003/0
HRU12-1.50-12	1-1/2	1-3/4	1/8	0.156 ±0.010	0.219 ±0.010	1.500 +0/-0.001	1.501 +0.002/0	1.750 +0.002/0	1.500 +0/-0.001	1.748 +0/-0.001	1.750 +0.003/0
HRU12-1.75-12	1-3/4	2	1/8	0.156 ±0.010	0.219 ±0.010	1.750 +0/-0.001	1.751 +0.002/0	2.000 +0.002/0	1.750 +0/-0.002	1.998 +0/-0.002	2.000 +0.003/0
HRU12-2.00-12	2	2-1/4	1/8	0.156 ±0.010	0.219 ±0.010	2.000 +0/-0.001	2.001 +0.002/0	2.250 +0.002/0	2.000 +0/-0.002	2.248 +0/-0.002	2.250 +0.003/0
5/32" C/S											
HRU15-0.50-15	1/2	13/16	5/32	0.188 ±0.010	0.250 ±0.010	0.500 +0/-0.001	0.501 +0.002/0	0.812 +0.002/0	0.500 +0/-0.001	0.810 +0/-0.001	0.812 +0.003/0
HRU15-0.68-15	11/16	1	5/32	0.188 ±0.010	0.250 ±0.010	0.687 +0/-0.001	0.688 +0.002/0	1.000 +0.002/0	0.687 +0/-0.001	0.998 +0/-0.001	1.000 +0.003/0
HRU15-0.75-15	3/4	1-1/16	5/32	0.188 ±0.010	0.250 ±0.010	0.750 +0/-0.001	0.751 +0.002/0	1.062 +0.002/0	0.750 +0/-0.001	1.060 +0/-0.001	1.062 +0.003/0
HRU15-0.93-15	15/16	1-1/4	5/32	0.188 ±0.010	0.250 ±0.010	0.937 +0/-0.001	0.938 +0.002/0	1.250 +0.002/0	0.937 +0/-0.001	1.248 +0/-0.001	1.250 +0.003/0
HRU15-1.00-15	1	1-5/16	5/32	0.188 ±0.010	0.250 ±0.010	1.000 +0/-0.001	1.001 +0.002/0	1.312 +0.002/0	1.000 +0/-0.001	1.310 +0/-0.001	1.312 +0.003/0
HRU15-1.00-15V	1	1-5/16	5/32	0.188 ±0.010	0.250 ±0.010	1.000 +0/-0.001	1.001 +0.002/0	1.312 +0.002/0	1.000 +0/-0.001	1.310 +0/-0.001	1.312 +0.003/0
HRU15-1.06-15	1-1/16	1-3/8	5/32	0.188 ±0.010	0.250 ±0.010	1.062 +0/-0.001	1.062 +0.002/0	1.375 +0.002/0	1.062 +0/-0.001	1.373 +0/-0.001	1.375 +0.003/0
HRU15-1.18-15	1-3/16	1-1/2	5/32	0.188 ±0.010	0.250 ±0.010	1.187 +0/-0.001	1.188 +0.002/0	1.500 +0.002/0	1.187 +0/-0.001	1.498 +0/-0.001	1.500 +0.003/0
HRU15-1.18-15V	1-3/16	1-1/2	5/32	0.188 ±0.010	0.250 ±0.010	1.187 +0/-0.001	1.188 +0.002/0	1.500 +0.002/0	1.187 +0/-0.001	1.498 +0/-0.001	1.500 +0.003/0
HRU15-1.25-15	1-1/4	1-9/16	5/32	0.188 ±0.010	0.250 ±0.010	1.250 +0/-0.001	1.251 +0.002/0	1.562 +0.002/0	1.250 +0/-0.001	1.56 +0/-0.001	1.562 +0.003/0
HRU15-1.31-15	1-5/16	1-5/8	5/32	0.188 ±0.010	0.250 ±0.010	1.312 +0/-0.001	1.313 +0.002/0	1.625 +0.002/0	1.312 +0/-0.001	1.623 +0/-0.001	1.625 +0.003/0
HRU15-1.37-15	1-3/8	1-11/16	5/32	0.188 ±0.010	0.250 ±0.010	1.375 +0/-0.001	1.376 +0.002/0	1.687 +0.002/0	1.375 +0/-0.001	1.685 +0/-0.001	1.687 +0.003/0
HRU15-1.37-15V	1-3/8	1-11/16	5/32	0.188 ±0.010	0.250 ±0.010	1.375 +0/-0.001	1.376 +0.002/0	1.687 +0.002/0	1.375 +0/-0.001	1.685 +0/-0.001	1.687 +0.003/0
HRU15-1.43-15	1-7/16	1-3/4	5/32	0.188 ±0.010	0.250 ±0.010	1.437 +0/-0.001	1.438 +0.002/0	1.750 +0.002/0	1.437 +0/-0.001	1.748 +0/-0.001	1.750 +0.003/0
HRU15-1.50-15	1-1/2	1-13/16	5/32	0.188 ±0.010	0.250 ±0.010	1.500 +0/-0.001	1.501 +0.002/0	1.812 +0.002/0	1.500 +0/-0.001	1.810 +0/-0.001	1.812 +0.003/0
3/16" C/S											
HRU18-0.62-18	5/8	1	3/16	0.219 ±0.010	0.281 ±0.010	0.625 +0/-0.001	0.626 +0.002/0	1.000 +0.002/0	0.625 +0/-0.001	0.998 +0/-0.001	1.000 +0.003/0
HRU18-0.75-18	3/4	1-1/8	3/16	0.219 ±0.010	0.281 ±0.010	0.750 +0/-0.001	0.751 +0.002/0	1.125 +0.002/0	0.750 +0/-0.001	1.123 +0/-0.001	1.125 +0.003/0
HRU18-1.00-18	1	1-3/8	3/16	0.219 ±0.010	0.281 ±0.010	1.000 +0/-0.001	1.001 +0.002/0	1.375 +0.002/0	1.000 +0/-0.001	1.373 +0/-0.001	1.375 +0.003/0
HRU18-1.25-18	1-1/4	1-5/8	3/16	0.219 ±0.010	0.281 ±0.010	1.250 +0/-0.001	1.251 +0.002/0	1.625 +0.002/0	1.250 +0/-0.001	1.623 +0/-0.001	1.625 +0.003/0
HRU18-1.37-18	1-3/8	1-3/4	3/16	0.219 ±0.010	0.281 ±0.010	1.375 +0/-0.001	1.376 +0.002/0	1.750 +0.002/0	1.375 +0/-0.001	1.748 +0/-0.001	1.750 +0.003/0
HRU18-1.37-18V	1-3/8	1-3/4	3/16	0.219 ±0.010	0.281 ±0.010	1.375 +0/-0.001	1.376 +0.002/0	1.750 +0.002/0	1.375 +0/-0.001	1.748 +0/-0.001	1.750 +0.003/0
HRU18-1.50-18	1-1/2	1-7/8	3/16	0.219 ±0.010	0.281 ±0.010	1.500 +0/-0.001	1.501 +0.002/0	1.875 +0.002/0	1.500 +0/-0.001	1.873 +0/-0.002	1.875 +0.003/0
HRU18-1.62-18	1-5/8	2	3/16	0.219 ±0.010	0.281 ±0.010	1.625 +0/-0.001	1.626 +0.002/0	2.000 +0.002/0	1.625 +0/-0.002	1.998 +0/-0.002	2.000 +0.003/0

STYLE HRU HOMOGENEOUS U-SEALS

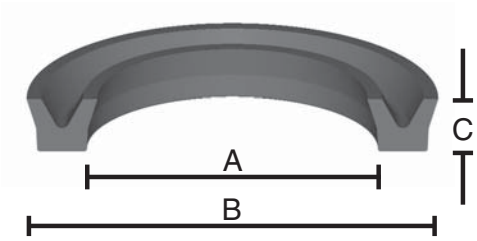
Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE W/O BU	D1 GROOVE W/ BU	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
3/16" C/S											
HRU18-1.62-18V	1-5/8	2	3/16	0.219 ±0.010	0.281 ±0.010	1.625 +0/-0.001	1.626 +0.002/0	2.000 +0.002/0	1.625 +0/-0.002	1.998 +0/-0.002	2.000 +0.003/0
HRU18-1.75-18	1-3/4	2-1/8	3/16	0.219 ±0.010	0.281 ±0.010	1.750 +0/-0.001	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.123 +0/-0.002	2.125 +0.003/0
HRU18-1.75-18V	1-3/4	2-1/8	3/16	0.219 ±0.010	0.281 ±0.010	1.750 +0/-0.001	1.751 +0.002/0	2.125 +0.002/0	1.750 +0/-0.002	2.123 +0/-0.002	2.125 +0.003/0
HRU18-1.87-18	1-7/8	2-1/4	3/16	0.219 ±0.010	0.281 ±0.010	1.875 +0/-0.001	1.876 +0.002/0	2.250 +0.002/0	1.875 +0/-0.002	2.248 +0/-0.002	2.250 +0.003/0
HRU18-2.00-18	2	2-3/8	3/16	0.219 ±0.010	0.281 ±0.010	2.000 +0/-0.001	2.001 +0.002/0	2.375 +0.002/0	2.000 +0/-0.002	2.373 +0/-0.002	2.375 +0.003/0
HRU18-2.00-18V	2	2-3/8	3/16	0.219 ±0.010	0.281 ±0.010	2.000 +0/-0.001	2.001 +0.002/0	2.375 +0.002/0	2.000 +0/-0.002	2.373 +0/-0.002	2.375 +0.003/0
HRU18-2.12-18	2-1/8	2-1/2	3/16	0.219 ±0.010	0.281 ±0.010	2.125 +0/-0.001	2.126 +0.002/0	2.500 +0.002/0	2.125 +0/-0.002	2.498 +0/-0.002	2.500 +0.004/0
HRU18-2.12-18V	2-1/8	2-1/2	3/16	0.219 ±0.010	0.281 ±0.010	2.125 +0/-0.001	2.126 +0.002/0	2.500 +0.002/0	2.125 +0/-0.002	2.498 +0/-0.002	2.500 +0.004/0
HRU18-2.25-18	2-1/4	2-5/8	3/16	0.219 ±0.010	0.281 ±0.010	2.250 +0/-0.001	2.251 +0.002/0	2.625 +0.002/0	2.250 +0/-0.002	2.624 +0/-0.002	2.625 +0.004/0
HRU18-2.37-18	2-3/8	2-3/4	3/16	0.219 ±0.010	0.281 ±0.010	2.375 +0/-0.001	2.376 +0.002/0	2.750 +0.002/0	2.375 +0/-0.002	2.748 +0/-0.002	2.750 +0.004/0
HRU18-2.50-18	2-1/2	2-7/8	3/16	0.219 ±0.010	0.281 ±0.010	2.500 +0/-0.001	2.501 +0.002/0	2.875 +0.002/0	2.500 +0/-0.002	2.874 +0/-0.002	2.875 +0.004/0
HRU18-2.62-18	2-5/8	3	3/16	0.219 ±0.010	0.281 ±0.010	2.625 +0/-0.002	2.626 +0.003/0	3.000 +0.003/0	2.625 +0/-0.003	1.998 +0/-0.002	3.000 +0.004/0
HRU18-2.87-18	2-7/8	3-1/4	3/16	0.219 ±0.010	0.281 ±0.010	2.875 +0/-0.002	2.876 +0.003/0	3.250 +0.003/0	2.875 +0/-0.003	2.248 +0/-0.002	3.250 +0.004/0
HRU18-3.00-18	3	3-3/8	3/18	0.219 ±0.010	0.281 ±0.010	3.000 +0/-0.002	3.001 +0.003/0	3.375 +0.003/0	3.000 +0/-0.003	3.373 +0/-0.002	3.375 +0.004/0
HRU18-3.25-18	3-1/4	3-5/8	3/16	0.219 ±0.010	0.281 ±0.010	3.250 +0/-0.002	3.251 +0.003/0	3.625 +0.003/0	3.250 +0/-0.003	3.623 +0/-0.002	3.625 +0.004/0
HRU18-3.37-18	3-3/8	3-3/4	3/16	0.219 ±0.010	0.281 ±0.010	3.375 +0/-0.002	3.376 +0.003/0	3.750 +0.003/0	3.375 +0/-0.003	3.748 +0/-0.002	3.750 +0.004/0
7/32" C/S											
HRU21-2.50-21	2-1/2	2-15/16	7/32	0.250 ±0.010	0.312 ±0.010	2.500 +0/-0.001	2.501 +0.002/0	2.937 +0.002/0	2.500 +0/-0.003	2.935 +0/-0.002	2.937 +0.004/0
HRU21-2.50-21V	2-1/2	2-15/16	7/32	0.250 ±0.010	0.312 ±0.010	2.500 +0/-0.001	2.501 +0.002/0	2.937 +0.002/0	2.500 +0/-0.003	2.935 +0/-0.002	2.937 +0.004/0
HRU21-2.56-21	2-9/16	3	7/32	0.250 ±0.010	0.312 ±0.010	2.562 +0/-0.002	2.563 +0.003/0	3.000 +0.003/0	2.562 +0/-0.003	2.998 +0/-0.002	3.000 +0.004/0
HRU21-2.75-21	2-3/4	3-3/16	7/32	0.250 ±0.010	0.312 ±0.010	2.750 +0/-0.002	2.751 +0.003/0	3.187 +0.003/0	2.750 +0/-0.003	3.185 +0/-0.002	3.187 +0.004/0
HRU21-2.81-21	2-13/16	3-1/4	7/32	0.250 ±0.010	0.312 ±0.010	2.812 +0/-0.002	2.813 +0.003/0	3.250 +0.003/0	2.812 +0/-0.003	3.248 +0/-0.002	3.250 +0.004/0
HRU21-2.81-21V	2-13/16	3-1/4	7/32	0.250 ±0.010	0.312 ±0.010	2.812 +0/-0.002	2.813 +0.003/0	3.250 +0.003/0	2.812 +0/-0.003	3.248 +0/-0.002	3.250 +0.004/0
HRU21-3.00-21	3	3-7/16	7/32	0.250 ±0.010	0.312 ±0.010	3.000 +0/-0.002	3.001 +0.003/0	3.437 +0.003/0	3.000 +0/-0.003	3.435 +0/-0.002	3.437 +0.004/0
HRU21-3.00-21V	3	3-7/16	7/32	0.250 ±0.010	0.312 ±0.010	3.000 +0/-0.002	3.001 +0.003/0	3.437 +0.003/0	3.000 +0/-0.003	3.435 +0/-0.002	3.437 +0.004/0
HRU21-3.06-21	3-1/16	3-1/2	7/32	0.250 ±0.010	0.312 ±0.010	3.062 +0/-0.002	3.063 +0.003/0	3.500 +0.003/0	3.062 +0/-0.003	3.498 +0/-0.002	3.500 +0.004/0
HRU21-3.31-21	3-5/16	3-3/4	7/32	0.250 ±0.010	0.312 ±0.010	3.312 +0/-0.002	3.313 +0.003/0	3.750 +0.003/0	3.312 +0/-0.003	3.748 +0/-0.002	3.750 +0.004/0
1/4" C/S											
HRU25-1.37-25	1-3/8	1-7/8	1/4	0.281 ±0.010	0.344 ±0.010	1.375 +0/-0.001	1.376 +0.002/0	1.875 +0.002/0	1.375 +0/-0.001	1.873 +0/-0.002	1.875 +0.003/0
HRU25-1.75-25	1-3/4	2-1/4	1/4	0.281 ±0.010	0.344 ±0.010	1.750 +0/-0.001	1.751 +0.002/0	2.250 +0.002/0	1.750 +0/-0.002	2.248 +0/-0.002	2.250 +0.003/0
HRU25-2.00-25	2	2-1/2	1/4	0.281 ±0.010	0.344 ±0.010	2.000 +0/-0.001	2.001 +0.002/0	2.500 +0.002/0	2.000 +0/-0.002	2.498 +0/-0.002	2.500 +0.004/0
HRU25-2.50-25	2-1/2	3	1/4	0.281 ±0.010	0.344 ±0.010	2.500 +0/-0.001	2.501 +0.002/0	3.000 +0.003/0	2.500 +0/-0.003	2.998 +0/-0.002	3.000 +0.004/0
HRU25-2.75-25	2-3/4	3-1/4	1/4	0.281 ±0.010	0.344 ±0.010	2.750 +0/-0.002	2.751 +0.003/0	3.250 +0.003/0	2.750 +0/-0.003	3.248 +0/-0.002	3.250 +0.004/0
HRU25-2.75-25V	2-3/4	3-1/4	1/4	0.281 ±0.010	0.344 ±0.010	2.750 +0/-0.002	2.751 +0.003/0	3.250 +0.003/0	2.750 +0/-0.003	3.248 +0/-0.002	3.250 +0.004/0
HRU25-3.50-25	3-1/2	4	1/4	0.281 ±0.010	0.344 ±0.010	3.500 +0/-0.002	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.003	3.998 +0/-0.002	4.000 +0.004/0
HRU25-3.50-25V	3-1/2	4	1/4	0.281 ±0.010	0.344 ±0.010	3.500 +0/-0.002	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.003	3.998 +0/-0.002	4.000 +0.004/0
HRU25-3.75-25	3-3/4	4-1/4	1/4	0.281 ±0.010	0.344 ±0.010	3.750 +0/-0.002	3.751 +0.003/0	4.250 +0.003/0	3.750 +0/-0.003	4.248 +0/-0.002	4.250 +0.004/0
HRU25-4.00-25	4	4-1/2	1/4	0.281 ±0.010	0.344 ±0.010	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.498 +0/-0.002	4.500 +0.004/0
HRU25-4.00-25-90D	4	4-1/2	1/4	0.281 ±0.010	0.344 ±0.010	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.498 +0/-0.002	4.500 +0.004/0
HRU25-4.00-25V	4	4-1/2	1/4	0.281 ±0.010	0.344 ±0.010	4.000 +0/-0.002	4.001 +0.003/0	4.500 +0.003/0	4.000 +0/-0.003	4.498 +0/-0.002	4.500 +0.004/0
HRU25-4.50-25	4-1/2	5	1/4	0.281 ±0.010	0.344 ±0.010	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.998 +0/-0.002	5.000 +0.004/0
HRU25-4.50-25V	4-1/2	5	1/4	0.281 ±0.010	0.344 ±0.010	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.998 +0/-0.002	5.000 +0.004/0

STYLE HRU HOMOGENEOUS U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE W/O BU	D1 GROOVE W/ BU	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/4" C/S											
HRU25-4.75-25	4-3/4	5-1/4	1/4	0.281 ±0.010	0.344 ±0.010	4.750 +0/-0.002	4.751 +0.003/0	5.250 +0.003/0	4.750 +0/-0.003	5.248 +0/-0.002	5.250 +0.004/0
HRU25-5.50-25	5-1/2	6	1/4	0.281 ±0.010	0.344 ±0.010	5.500 +0/-0.002	5.501 +0.003/0	6.000 +0.003/0	5.500 +0/-0.003	5.998 +0/-0.003	6.000 +0.004/0
HRU25-5.50-25V	5-1/2	6	1/4	0.281 ±0.010	0.344 ±0.010	5.500 +0/-0.002	5.501 +0.003/0	6.000 +0.003/0	5.500 +0/-0.003	5.998 +0/-0.003	6.000 +0.004/0
HRU25-5.50-37	5-1/2	6	3/8	0.406 ±0.010	0.469 ±0.010	5.500 +0/-0.002	5.501 +0.003/0	6.000 +0.003/0	5.500 +0/-0.003	5.998 +0/-0.003	6.000 +0.004/0
9/32" C/S											
HRU28-4.43-28	4-7/16	5	9/32	0.312 ±0.010	0.375 ±0.010	4.437 +0/-0.002	4.438 +0.003/0	5.000 +0.003/0	4.437 +0/-0.003	4.998 +0/-0.002	5.000 +0.004/0
HRU28-4.43-28V	4-7/16	5	9/32	0.312 ±0.010	0.375 ±0.010	4.437 +0/-0.002	4.438 +0.003/0	5.000 +0.003/0	4.437 +0/-0.003	4.998 +0/-0.002	5.000 +0.004/0
HRU28-4.56-28	4-9/16	5-1/8	9/32	0.312 ±0.010	0.375 ±0.010	4.562 +0/-0.002	4.563 +0.003/0	5.125 +0.003/0	4.562 +0/-0.003	5.123 +0/-0.002	5.125 +0.004/0
HRU28-5.00-28	5	5-9/16	9/32	0.312 ±0.010	0.375 ±0.010	5.000 +0/-0.002	5.001 +0.003/0	5.562 +0.003/0	5.000 +0/-0.003	5.560 +0/-0.003	5.562 +0.004/0
HRU28-5.00-28V	5	5-9/16	9/32	0.312 ±0.010	0.375 ±0.010	5.000 +0/-0.002	5.001 +0.003/0	5.562 +0.003/0	5.000 +0/-0.003	5.560 +0/-0.003	5.562 +0.004/0
HRU28-5.43-28	5-7/16	6	9/32	0.312 ±0.010	0.375 ±0.010	5.437 +0/-0.002	5.438 +0.003/0	6.000 +0.003/0	5.437 +0/-0.003	5.998 +0/-0.003	6.000 +0.004/0
HRU28-5.43-28V	5-7/16	6	9/32	0.312 ±0.010	0.375 ±0.010	5.437 +0/-0.002	5.438 +0.003/0	6.000 +0.003/0	5.437 +0/-0.003	5.998 +0/-0.003	6.000 +0.004/0
HRU28-6.43-28	6-7/16	7	9/32	0.312 ±0.010	0.375 ±0.010	6.437 +0/-0.002	6.438 +0.003/0	7.000 +0.003/0	6.437 +0/-0.003	6.998 +0/-0.003	7.000 +0.004/0
5/16" C/S											
HRU31-2.87-31	2-7/8	3-1/2	5/16	0.344 ±0.010	0.406 ±0.010	2.875 +0/-0.002	2.876 +0.003/0	3.500 +0.003/0	2.875 +0/-0.003	3.498 +0/-0.002	3.500 +0.004/0
HRU31-4.37-31	4-3/8	5	5/16	0.344 ±0.010	0.406 ±0.010	4.375 +0/-0.002	4.376 +0.003/0	5.000 +0.003/0	4.375 +0/-0.003	4.998 +0/-0.002	5.000 +0.004/0
HRU31-5.37-31	5-3/8	6	5/16	0.344 ±0.010	0.406 ±0.010	5.375 +0/-0.002	5.376 +0.003/0	6.000 +0.003/0	5.375 +0/-0.003	5.998 +0/-0.003	6.000 +0.004/0
HRU31-5.37-31V	5-3/8	6	5/16	0.344 ±0.010	0.406 ±0.010	5.375 +0/-0.002	5.376 +0.003/0	6.000 +0.003/0	5.375 +0/-0.003	5.998 +0/-0.003	6.000 +0.004/0
HRU31-5.50-31	5-1/2	6-1/8	5/16	0.344 ±0.010	0.406 ±0.010	5.500 +0/-0.002	5.501 +0.003/0	6.125 +0.003/0	5.500 +0/-0.003	6.123 +0/-0.003	6.125 +0.004/0
HRU31-5.50-31V	5-1/2	6-1/8	5/16	0.344 ±0.010	0.406 ±0.010	5.500 +0/-0.002	5.501 +0.003/0	6.125 +0.003/0	5.500 +0/-0.003	6.123 +0/-0.003	6.125 +0.004/0
HRU31-6.37-31	6-3/8	7	5/16	0.344 ±0.010	0.406 ±0.010	6.375 +0/-0.002	6.376 +0.003/0	7.000 +0.003/0	6.375 +0/-0.003	6.998 +0/-0.003	7.000 +0.004/0
HRU31-6.37-31V	6-3/8	7	5/16	0.344 ±0.010	0.406 ±0.010	6.375 +0/-0.002	6.376 +0.003/0	7.000 +0.003/0	6.375 +0/-0.003	6.998 +0/-0.003	7.000 +0.004/0
HRU31-7.37-31	7-3/8	8	5/16	0.344 ±0.010	0.406 ±0.010	7.375 +0/-0.002	7.376 +0.003/0	8.000 +0.003/0	7.375 +0/-0.003	7.998 +0/-0.004	8.000 +0.005/0
HRU31-7.37-31V	7-3/8	8	5/16	0.344 ±0.010	0.406 ±0.010	7.375 +0/-0.002	7.376 +0.003/0	8.000 +0.003/0	7.375 +0/-0.003	7.998 +0/-0.004	8.000 +0.005/0
11/32" C/S											
HRU34-9.31-34	9-5/16	10	11/32	0.375 ±0.010	0.438 ±0.010	9.312 +0/-0.003	9.314 +0.004/0	10.000 +0.004/0	9.312 +0/-0.004	9.998 +0/-0.004	10.000 +0.005/0
HRU34-9.31-34V	9-5/16	10	11/32	0.375 ±0.010	0.438 ±0.010	9.312 +0/-0.003	9.314 +0.004/0	10.000 +0.004/0	9.312 +0/-0.004	9.998 +0/-0.004	10.000 +0.005/0
3/8" C/S											
HRU37-2.50-37	2-1/2	3-1/4	3/8	0.406 ±0.010	0.469 ±0.010	2.500 +0/-0.001	2.501 +0.002/0	3.250 +0.003/0	2.500 +0/-0.003	3.248 +0/-0.002	3.250 +0.004/0
HRU37-2.75-37	2-3/4	3-1/2	3/8	0.406 ±0.010	0.469 ±0.010	2.750 +0/-0.002	2.751 +0.003/0	3.500 +0.003/0	2.750 +0/-0.003	3.498 +0/-0.002	3.500 +0.004/0
HRU37-9.25-37	9-1/4	10	3/8	0.406 ±0.010	0.469 ±0.010	9.250 +0/-0.003	9.252 +0.004/0	10.000 +0.004/0	9.250 +0/-0.004	9.998 +0/-0.004	10.000 +0.005/0
HRU37-11.25-37	11-1/4	12	3/8	0.406 ±0.010	0.469 ±0.010	11.250 +0/-0.003	11.252 +0.004/0	12.000 +0.004/0	11.250 +0/-0.004	11.998 +0/-0.004	12.000 +0.005/0
13/32" C/S											
HRU40-13.18-40	13-3/16	14	13/32	0.438 ±0.010	0.500 ±0.010	13.187 +0/-0.003	13.189 +0.004/0	14.000 +0.004/0	13.187 +0/-0.004	13.998 +0/-0.004	14.000 +0.005/0
1/2" C/S											
HRU50-9.00-50	9	10	1/2	0.531 ±0.010	0.594 ±0.010	9.000 +0/-0.003	9.002 +0.004/0	10.000 +0.004/0	9.000 +0/-0.004	9.998 +0/-0.004	10.000 +0.005/0
HRU50-11.00-50	11	12	1/2	0.531 ±0.010	0.594 ±0.010	11.000 +0/-0.003	11.002 +0.004/0	10.000 +0.004/0	11.000 +0/-0.004	11.998 +0/-0.004	12.000 +0.005/0

STYLE HSU HOMOGENEOUS U-SEALS

Style HSU u-seals are precision molded from 90 Durometer Buna-N rubber or 90A Fluorocarbon (suffix "V") -- 90 Duro Rubber for abrasion resistance and Fluorocarbon for heat resistance. These seals are commonly found in industrial cylinders as piston, rod and cushion seals.

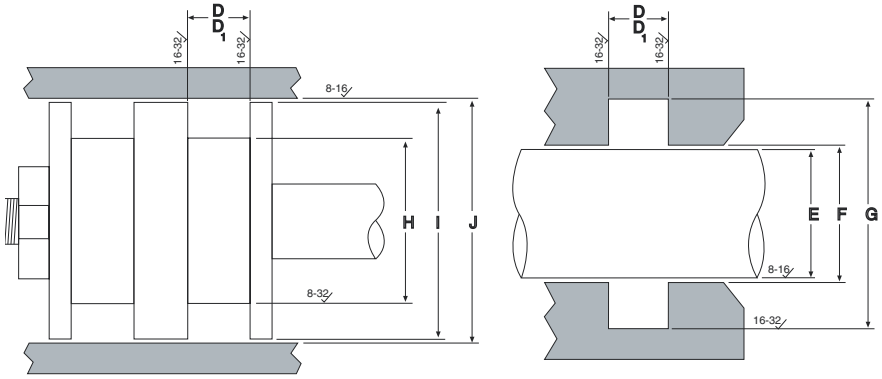


PART NUMBERS

HSU 12 - 0.75 - 90-D

Type of Seal	Cross Section	Inside Diameter	Height

SEAL INFORMATION	
MATERIAL	90A BUNA-N RUBBER 90A FLUOROCARBON
TEMPERATURE RANGE	BUNA-N: -40° TO +250° F FC: -20° TO +400° F
PRESSURE RANGE	0 TO 2,000 PSI
PART NUMBER	(Prefix)(CS)-(Inside Dia)-(Height)-(90 Duro)



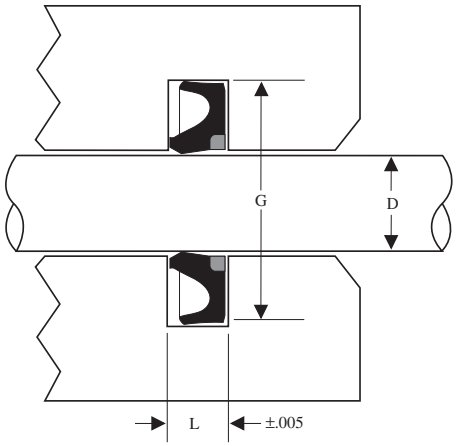
Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE W/O BU	D1 GROOVE W/ BU	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/8" C/S											
HSU12-0.75-12-90D	3/4	1	1/8	0.156 ±0.010	0.219 ±0.010	0.750 +0/-0.001	0.751 +0.002/0	1.000 +0.002/0	0.750 +0/-0.001	0.998 +0/-0.001	1.000 +0.003/0
HSU12-0.75-12-90DV	3/4	1	1/8	0.156 ±0.010	0.219 ±0.010	0.750 +0/-0.001	0.751 +0.002/0	1.000 +0.002/0	0.750 +0/-0.001	0.998 +0/-0.001	1.000 +0.003/0
5/32" C/S											
HSU15-1.18-15-90D	1-3/16	1-1/2	5/32	0.188 ±0.010	0.250 ±0.010	1.187 +0/-0.001	1.188 +0.002/0	1.500 +0.002/0	1.187 +0/-0.001	1.498 +0/-0.001	1.500 +0.003/0
HSU15-1.18-15-90DV	1-3/16	1-1/2	5/32	0.188 ±0.010	0.250 ±0.010	1.187 +0/-0.001	1.188 +0.002/0	1.500 +0.002/0	1.187 +0/-0.001	1.498 +0/-0.001	1.500 +0.003/0
HSU15-1.25-15-90D	1-1/4	1-9/16	5/32	0.188 ±0.010	0.250 ±0.010	1.250 +0/-0.001	1.251 +0.002/0	1.562 +0.002/0	1.250 +0/-0.001	1.560 +0/-0.001	1.562 +0.003/0
HSU15-1.25-15-90DV	1-1/4	1-9/16	5/32	0.188 ±0.010	0.250 ±0.010	1.250 +0/-0.001	1.251 +0.002/0	1.562 +0.002/0	1.250 +0/-0.001	1.560 +0/-0.001	1.562 +0.003/0
3/16" C/S											
HSU18-1.62-18-90D	1-5/8	2	3/16	0.219 ±0.010	0.281 ±0.010	1.625 +0/-0.001	1.626 +0.002/0	2.000 +0.002/0	1.625 +0/-0.002	1.998 +0/-0.002	2.000 +0.003/0
HSU18-1.62-18-90DV	1-5/8	2	3/16	0.219 ±0.010	0.281 ±0.010	1.625 +0/-0.001	1.626 +0.002/0	2.000 +0.002/0	1.625 +0/-0.002	1.998 +0/-0.002	2.000 +0.003/0
HSU18-2.12-18-90D	2-1/8	2-1/2	3/16	0.219 ±0.010	0.281 ±0.010	2.125 +0/-0.001	2.126 +0.002/0	2.500 +0.002/0	2.125 +0/-0.002	2.498 +0/-0.002	2.500 +0.004/0
HSU18-2.12-18-90DV	2-1/8	2-1/2	3/16	0.219 ±0.010	0.281 ±0.010	2.125 +0/-0.001	2.126 +0.002/0	2.500 +0.002/0	2.125 +0/-0.002	2.498 +0/-0.002	2.500 +0.004/0
7/32" C/S											
HSU21-2.81-21-90D	2-13/16	3-1/4	7/32	0.250 ±0.010	0.312 ±0.010	2.812 +0/-0.002	2.813 +0.003/0	3.250 +0.003/0	2.812 +0/-0.003	3.248 +0/-0.002	3.250 +0.004/0
HSU21-2.81-21-90DV	2-13/16	3-1/4	7/32	0.250 ±0.010	0.312 ±0.010	2.812 +0/-0.002	2.813 +0.003/0	3.250 +0.003/0	2.812 +0/-0.003	3.248 +0/-0.002	3.250 +0.004/0

STYLE HSU HOMOGENEOUS U-SEALS

Part Number	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE W/O BU	D1 GROOVE W/ BU	E ROD DIAMETER	F THROAT DIAMETER	G HOUSING DIAMETER	H GROOVE DIAMETER	I PISTON DIAMETER	J BORE DIAMETER
1/4" C/S											
HSU25-3.50-25-90D	3-1/2	4	1/4	0.281 ±0.010	0.344 ±0.010	3.500 +0/-0.002	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.003	3.998 +0/-0.002	4.000 +0.004/0
HSU25-3.50-25-90DV	3-1/2	4	1/4	0.281 ±0.010	0.344 ±0.010	3.500 +0/-0.002	3.501 +0.003/0	4.000 +0.003/0	3.500 +0/-0.003	3.998 +0/-0.002	4.000 +0.004/0
HSU25-4.50-25-90D	4-1/2	5	1/4	0.281 ±0.010	0.344 ±0.010	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.998 +0/-0.002	5.000 +0.004/0
HSU25-4.50-25-90DV	4-1/2	5	1/4	0.281 ±0.010	0.344 ±0.010	4.500 +0/-0.002	4.501 +0.003/0	5.000 +0.003/0	4.500 +0/-0.003	4.998 +0/-0.002	5.000 +0.004/0
9/32" C/S											
HSU28-4.43-28-90D	4-7/16	5	9/32	0.312 ±0.010	0.375 ±0.010	4.437 +0/-0.002	4.438 +0.003/0	5.000 +0.003/0	4.437 +0/-0.003	4.998 +0/-0.002	5.000 +0.004/0
HSU28-4.43-28-90DV	4-7/16	5	9/32	0.312 ±0.010	0.375 ±0.010	4.437 +0/-0.002	4.438 +0.003/0	5.000 +0.003/0	4.437 +0/-0.003	4.998 +0/-0.002	5.000 +0.004/0
HSU28-5.43-28-90D	5-7/16	6	9/32	0.312 ±0.010	0.375 ±0.010	5.437 +0/-0.002	5.438 +0.003/0	6.000 +0.003/0	5.437 +0/-0.003	5.998 +0/-0.003	6.000 +0.004/0
HSU28-5.43-28-90DV	5-7/16	6	9/32	0.312 ±0.010	0.375 ±0.010	5.437 +0/-0.002	5.438 +0.003/0	6.000 +0.003/0	5.437 +0/-0.003	5.998 +0/-0.003	6.000 +0.004/0
HSU28-6.43-28-90D	6-7/16	7	9/32	0.312 ±0.010	0.375 ±0.010	6.437 +0/-0.002	6.438 +0.003/0	7.000 +0.003/0	6.437 +0/-0.003	6.998 +0/-0.003	7.000 +0.004/0
HSU28-6.43-28-90DV	6-7/16	7	9/32	0.312 ±0.010	0.375 ±0.010	6.437 +0/-0.002	6.438 +0.003/0	7.000 +0.003/0	6.437 +0/-0.003	6.998 +0/-0.003	7.000 +0.004/0
5/16" C/S											
HSU31-5.37-31-90D	5-3/8	6	5/16	0.344 ±0.010	0.406 ±0.010	5.375 +0/-0.002	5.376 +0.003/0	6.000 +0.003/0	5.375 +0/-0.003	5.998 +0/-0.003	6.000 +0.004/0
HSU31-5.37-31-90DV	5-3/8	6	5/16	0.344 ±0.010	0.406 ±0.010	5.375 +0/-0.002	5.376 +0.003/0	6.000 +0.003/0	5.375 +0/-0.003	5.998 +0/-0.003	6.000 +0.004/0
HSU31-6.37-31-90D	6-3/8	7	5/16	0.344 ±0.010	0.406 ±0.010	6.375 +0/-0.002	6.376 +0.003/0	7.000 +0.003/0	6.375 +0/-0.003	6.998 +0/-0.003	7.000 +0.004/0
HSU31-6.37-31-90DV	6-3/8	7	5/16	0.344 ±0.010	0.406 ±0.010	6.375 +0/-0.002	6.376 +0.003/0	7.000 +0.003/0	6.375 +0/-0.003	6.998 +0/-0.003	7.000 +0.004/0
HSU31-7.37-31-90D	7-3/8	8	5/16	0.344 ±0.010	0.406 ±0.010	7.375 +0/-0.002	7.376 +0.003/0	8.000 +0.003/0	7.375 +0/-0.003	7.998 +0/-0.004	8.000 +0.004/0
HSU31-7.37-31-90DV	7-3/8	8	5/16	0.344 ±0.010	0.406 ±0.010	7.375 +0/-0.002	7.376 +0.003/0	8.000 +0.003/0	7.375 +0/-0.003	7.998 +0/-0.004	8.000 +0.004/0
11/32" C/S											
HSU34-9.31-34-90D	9-5/16	10	11/32	0.375 ±0.010	0.438 ±0.010	9.312 +0/-0.003	9.314 +0.003/0	10.000 +0.003/0	9.312 +0/-0.004	9.998 +0/-0.004	10.000 +0.004/0
HSU34-9.31-34-90DV	9-5/16	10	11/32	0.375 ±0.010	0.438 ±0.010	9.312 +0/-0.003	9.314 +0.003/0	10.000 +0.003/0	9.312 +0/-0.004	9.998 +0/-0.004	10.000 +0.004/0
3/8" C/S											
HSU37-11.25-37-90D	11-1/4	12	3/8	0.406 ±0.010	0.469 ±0.010	11.25 +0/-0.003	11.252 11.252	12.000 +0.004/0	11.250 +0/-0.004	11.998+0/-0.004	12.000 +0.005/0
HSU37-11.25-37-90DV	11-1/4	12	3/8	0.406 ±0.010	0.469 ±0.010	11.25 +0/-0.003	11.252 11.252	12.000 +0.004/0	11.250 +0/-0.004	11.998+0/-0.004	12.000 +0.005/0
13/32" C/S											
HSU40-13.18-40-90D	13-3/16	14	13/32	0.438 ±0.010	0.500 ±0.010	13.187 +0/-0.003	13.189 +0.004/0	14.000 +0.004/0	13.187 +0/-0.004	13.998 +0/-0.004	14.000 +0.005/0
HSU40-13.18-40-90DV	13-3/16	14	13/32	0.438 ±0.010	0.500 ±0.010	13.187 +0/-0.003	13.189 +0.004/0	14.000 +0.004/0	13.187 +0/-0.004	13.998 +0/-0.004	14.000 +0.005/0
1/2" C/S											
HSU50-11.00-50-90D	11	12	1/2	0.531 ±0.010	0.594 ±0.010	11.000 +0/-0.003	11.002 +0.004/0	12.000 +0.004/0	11.000 +0/-0.004	11.998 +0/-0.004	12.000 +0.005/0
HSU50-11.00-50-90DV	11	12	1/2	0.531 ±0.010	0.594 ±0.010	11.000 +0/-0.003	11.002 +0.004/0	12.000 +0.004/0	11.000 +0/-0.004	11.998 +0/-0.004	12.000 +0.005/0
HSU50-13.00-50-90D	13	14	1/2	0.531 ±0.010	0.594 ±0.010	13.000 +0/-0.003	13.002 +0.004/0	14.000 +0.004/0	13.000 +0/-0.004	13.998 +0/-0.004	14.000 +0.005/0

STYLE DYR ROD BUFFER SEALS

This U-cup style buffer ring offers an asymmetric sealing lip profile, chamfered sealing edges, and pressure relieving capabilities to prevent inner pressure entrapment when employed in a tandem sealing system. This rod buffer seal is designed to absorb impact pressure fluctuations under high-load conditions thus increasing the life of the primary seal.



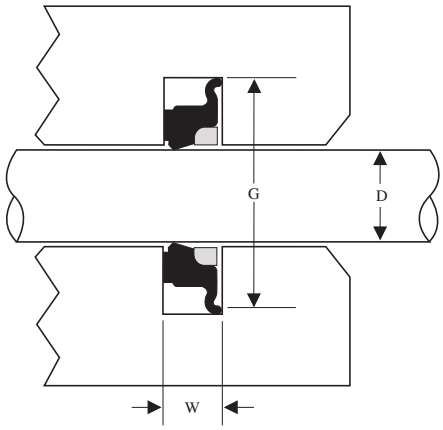
SEAL INFORMATION	
MATERIAL	URETHANE U-STYLE POLYACETAL BACK-UP
TEMPERATURE RANGE	-40° TO +230° F
PRESSURE RANGE	0 TO 8,000 PSI
PART NUMBER	(Prefix)(CS) - (Inside Dia) (O-Ring CS)

Part Number	D Nominal Rod Dia. Seal ID	G Groove Diameter	W Seal Width	L Groove Width	Diametrical Clearance Gap 1000 PSI	3000 PSI	5000 PSI
DYR28-1.25-12	1-1/4	1.819 ±0.004	1/8	0.140 ±0.005	0.012	0.008	0.005
DYR28-1.50-12	1-1/2	2.067 ±0.004	1/8	0.140 ±0.005	0.012	0.008	0.005
DYR28-1.75-12	1-3/4	2.319 ±0.004	1/8	0.140 ±0.005	0.012	0.008	0.005
DYR28-2.00-12	2	2.567 ±0.004	1/8	0.140 ±0.005	0.012	0.008	0.005
DYR31-2.75-22BU	2-3/4	3.402 ±0.004	3/16	0.234 ±0.005	0.030	0.022	0.018
DYR31-3.00-22BU	3	3.649 ±0.004	3/16	0.234 ±0.005	0.030	0.022	0.018
DYR31-4.00-22BU	4	4.669 ±0.004	3/16	0.234 ±0.005	0.030	0.022	0.018
DYR32-1.75-20BU	1-3/4	2.395 ±0.005	0.22	0.220 ±0.005	0.030	0.022	0.018
DYR34-2.25-22BU	2-1/4	2.929 ±0.004	3/16	0.234 ±0.005	0.030	0.022	0.018
DYR34-2.50-22BU	2-1/2	3.177 ±0.004	3/16	0.234 ±0.005	0.030	0.022	0.018
DYR34-3.50-22BU	3-1/2	4.169 ±0.004	3/16	0.234 ±0.005	0.030	0.022	0.018

Part Number	D Nominal Rod Dia. Seal ID	G Groove Diameter	W Seal Width	L Groove Width	Diametrical Clearance Gap 1000 PSI	3000 PSI	5000 PSI
DYR-25003	2-1/2	3.116 +0.005/-0	0.235	0.247 +0.010/-0	0.030	0.022	0.018
DYR-27503	2-3/4	3.366 +0.005/-0	0.235	0.247 +0.010/-0	0.030	0.022	0.018
DYR-30003	3	3.616 +0.005/-0	0.235	0.247 +0.010/-0	0.030	0.022	0.018
DYR-35003	3-1/2	4.116 +0.005/-0	0.235	0.247 +0.010/-0	0.030	0.022	0.018
DYR-40003	4	4.616 +0.005/-0	0.235	0.247 +0.010/-0	0.030	0.022	0.018
DYR-45003	4-1/2	5.116 +0.005/-0	0.235	0.247 +0.010/-0	0.030	0.022	0.018
DYR-47503	4-3/4	5.366 +0.005/-0	0.235	0.247 +0.010/-0	0.030	0.022	0.018
DYR-50003	5	5.616 +0.005/-0	0.235	0.247 +0.010/-0	0.030	0.022	0.018
DYR-55003	5-1/2	6.116 +0.005/-0	0.235	0.247 +0.010/-0	0.030	0.022	0.018
DYR-60003	6	6.616 +0.005/-0	0.235	0.247 +0.010/-0	0.030	0.022	0.018
DYR-65003	6-1/2	7.116 +0.005/-0	0.235	0.247 +0.010/-0	0.030	0.022	0.018
DYR-70003	7	7.616 +0.005/-0	0.235	0.247 +0.010/-0	0.030	0.022	0.018
DYR-75003	7-1/2	8.116 +0.005/-0	0.235	0.247 +0.010/-0	0.030	0.022	0.018
DYR-80003	8	8.616 +0.005/-0	0.235	0.247 +0.010/-0	0.030	0.022	0.018

STYLE DYM ROD BUFFER SEALS

Buffer seals have an asymmetric sealing profile that offers improved performance in small diameter applications and pressure relieving capabilities to prevent pressure entrapment in tandem sealing systems. DYM Style Rod Buffer Seals can also be used to retrofit DYR and KR applications when properly sized.

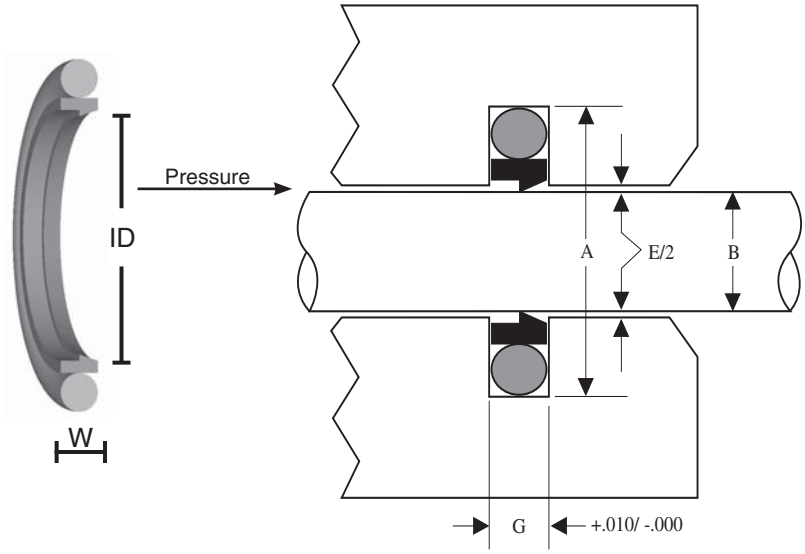


SEAL INFORMATION	
MATERIAL	URETHANE SEAL NYLON BACK-UP
TEMPERATURE RANGE	-40° TO +225° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (Inside Dia) (O-Ring CS)

Part Number	D Nominal Rod Dia. Seal ID	G Groove Diameter	H Seal Width	W Groove Width	Diametrical Clearance Gap		
					1000 PSI	3000 PSI	5000 PSI
DYM-10002	1	1.424 +0.004/-0	0.155 ±0.005	0.166 +0.010/-0	0.030	0.022	0.018
DYM-12502	1-1/4	1.674 +0.004/-0	0.155 ±0.005	0.166 +0.010/-0	0.030	0.022	0.018
DYM-15002	1-1/2	1.924 +0.004/-0	0.155 ±0.005	0.166 +0.010/-0	0.030	0.022	0.018
DYM-17502	1-3/4	2.174 +0.004/-0	0.155 ±0.005	0.166 +0.010/-0	0.030	0.022	0.018
DYM-17503	1-3/4	2.366 +0.005/-0	0.235 ±0.005	0.247 +0.010/-0	0.030	0.022	0.018
DYM-20002	2	2.424 +0.004/-0	0.155 ±0.005	0.166 +0.010/-0	0.030	0.022	0.018
DYM-20003	2	2.616 +0.005/-0	0.235 ±0.005	0.247 +0.010/-0	0.030	0.022	0.018
DYM-22502	2-1/4	2.674 +0.004/-0	0.155 ±0.005	0.166 +0.010/-0	0.030	0.022	0.018
DYM-25002	2-1/2	2.924 +0.004/-0	0.155 ±0.005	0.166 +0.010/-0	0.030	0.022	0.018
DYM-25003	2-1/2	3.116 +0.005/-0	0.235 ±0.005	0.247 +0.010/-0	0.030	0.022	0.018
DYM-27502	2-3/4	3.174 +0.005/-0	0.155 ±0.005	0.166 +0.010/-0	0.030	0.022	0.018
DYM-27503	2-3/4	3.366 +0.005/-0	0.235 ±0.005	0.247 +0.010/-0	0.030	0.022	0.018
DYM-30002	3	3.424 +0.004/-0	0.155 ±0.005	0.166 +0.010/-0	0.030	0.022	0.018
DYM-30003	3	3.616 +0.005/-0	0.235 ±0.005	0.247 +0.010/-0	0.030	0.022	0.018

STYLE KR ROD BUFFER SEALS

Molded in PTFE with a rubber energizer, this seal absorbs the shock of pressure spikes to protect the rod seal.



SEAL INFORMATION	
MATERIAL	BRONZE FILLED PTFE SEAL RUBBER ENERGIZER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (Inside Dia) (O-Ring CS)

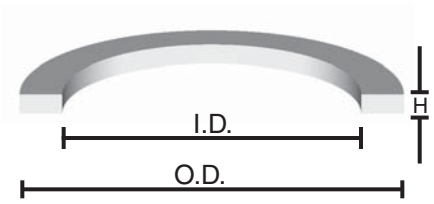
Part Number	B Nominal Rod Dia. Seal ID	A Groove Diameter	W Seal Width	G Groove Width	E - Maximum Diametrical Clearance		
					1000 PSI	3000 PSI	5000 PSI
KR-05001	1/2	0.798 +0.003/-0	.122±.005	0.126 +0.010/-0	0.012	0.006	0.004
KR-10001	1	1.298 +0.004/-0	.122±.005	0.126 +0.010/-0	0.012	0.006	0.004
KR-10002	1	1.433 +0.004/-0	.155±.005	0.165 +0.008/-0	0.016	0.008	0.006
KR-11201	1-1/8	1.423 +0.003/-0	.122±.005	0.126 +0.010/-0	0.012	0.006	0.004
KR-12501	1-1/4	1.548 +0.003/-0	.122±.005	0.126 +0.010/-0	0.012	0.006	0.004
KR-12502	1-1/4	1.674 +0.004/-0	.155±.005	0.166 +0.010/-0	0.016	0.008	0.006
KR-13702	1-3/8	1.799 +0.004/-0	.155±.005	0.166 +0.010/-0	0.016	0.008	0.006
KR-15001	1-1/2	1.798 +0.003/-0	.122±.005	0.126 +0.010/-0	0.012	0.006	0.004
KR-15002	1-1/2	1.924 +0.004/-0	.155±.005	0.166 +0.010/-0	0.016	0.008	0.006
KR-15003	1-1/2	2.116 +0.004/-0	.235±.005	0.247 +0.010/-0	0.020	0.010	0.008
KR-17501	1-3/4	2.048 +0.003/-0	.122±.005	0.126 +0.010/-0	0.012	0.006	0.004
KR-17502	1-3/4	2.174 +0.004/-0	.155±.005	0.166 +0.010/-0	0.016	0.008	0.006
KR-17503	1-3/4	2.366 +0.005/-0	.235±.005	0.247 +0.010/-0	0.020	0.010	0.008
KR-18702	1-7/8	2.299 +0.004/-0	.155±.005	0.166 +0.010/-0	0.016	0.008	0.006
KR-20002	2	2.424 +0.004/-0	.155±.005	0.166 +0.010/-0	0.016	0.008	0.006
KR-20003	2	2.616 +0.005/-0	.235±.005	0.247 +0.010/-0	0.020	0.010	0.008
KR-21202	2-1/8	2.549 +0.004/-0	.155±.005	0.166 +0.010/-0	0.016	0.008	0.006
KR-22502	2-1/4	2.674 +0.004/-0	.155±.005	0.166 +0.010/-0	0.016	0.008	0.006
KR-25002	2-1/2	2.924 +0.004/-0	.155±.005	0.166 +0.010/-0	0.016	0.008	0.006
KR-25003	2-1/2	3.116 +0.005/-0	.235±.005	0.247 +0.010/-0	0.020	0.010	0.008

STYLE KR ROD BUFFER SEALS

Part Number	B Nominal Rod Dia. Seal ID	A Groove Diameter	W Seal Width	G Groove Width	E - Maximum Diametrical Clearance		
					1000 PSI	3000 PSI	5000 PSI
KR-26203	2-5/8	3.241 +0.005/-0	.235±.005	0.247 +0.010/-0	0.020	0.010	0.008
KR-27503	2-3/4	3.366 +0.005/-0	.235±.005	0.247 +0.010/-0	0.020	0.010	0.008
KR-30002	3	3.424 +0.004/-0	.155±.005	0.166 +0.010/-0	0.016	0.008	0.006
KR-30003	3	3.616 +0.005/-0	.235±.005	0.247 +0.010/-0	0.020	0.010	0.008
KR-32503	3-1/4	3.866 +0.005/-0	.235±.005	0.247 +0.010/-0	0.020	0.010	0.008
KR-35003	3-1/2	4.116 +0.005/-0	.235±.005	0.247 +0.010/-0	0.020	0.010	0.008
KR-37503	3-3/4	4.366 +0.005/-0	.235±.005	0.247 +0.010/-0	0.020	0.010	0.008
KR-40002	4	4.424 +0.004/-0	.155±.005	0.166 +0.010/-0	0.016	0.008	0.006
KR-40003	4	4.616 +0.005/-0	.235±.005	0.247 +0.010/-0	0.020	0.010	0.008
KR-40004	4	4.830 +0.006/-0	.305±.005	0.320 +0.010/-0	0.024	0.012	0.009
KR-45003	4-1/2	5.116 +0.005/-0	.235±.005	0.247 +0.010/-0	0.020	0.010	0.008
KR-45004	4-1/2	5.330 +0.006/-0	.305±.005	0.320 +0.010/-0	0.024	0.012	0.009
KR-47503	4-3/4	5.366 +0.005/-0	.235±.005	0.247 +0.010/-0	0.020	0.010	0.008
KR-50003	5	5.616 +0.005/-0	.235±.005	0.247 +0.010/-0	0.020	0.010	0.008
KR-50004	5	5.830 +0.006/-0	.305±.005	0.320 +0.010/-0	0.024	0.012	0.009
KR-55004	5-1/2	6.330 +0.006/-0	.305±.005	0.320 +0.010/-0	0.024	0.012	0.009
KR-57504	5-3/4	6.580 +0.006/-0	.305±.005	0.320 +0.010/-0	0.024	0.012	0.009
KR-60003	6	6.616 +0.005/-0	.235±.005	0.247 +0.010/-0	0.020	0.010	0.008
KR-60004	6	6.830 +0.006/-0	.305±.005	0.320 +0.010/-0	0.024	0.012	0.009
KR-65003	6-1/2	7.116 +0.005/-0	.235±.005	0.247 +0.010/-0	0.020	0.010	0.008
KR-67504	6-3/4	7.580 +0.006/-0	.305±.005	0.320 +0.010/-0	0.024	0.012	0.009
KR-70003	7	7.616 +0.005/-0	.235±.005	0.247 +0.010/-0	0.020	0.010	0.008
KR-70004	7	7.830 +0.006/-0	.305±.005	0.320 +0.010/-0	0.024	0.012	0.009
KR-82504	8-1/4	9.080 +0.006/-0	.305±.005	0.320 +0.010/-0	0.024	0.012	0.009
KR-90004	9	9.830 +0.006/-0	.305±.005	0.320 +0.010/-0	0.024	0.012	0.009

STYLE RBS ROD BUFFER SEALS

The RBS style rod buffer seals are a rectangular urethane buffer ring designed to absorb pressure fluctuations to protect the primary rod seal. Some sizes include a radial and axial slot, which faces the pressure, to relieve back pressure between the primary and buffer seal. This simple design is commonly found on older construction equipment.

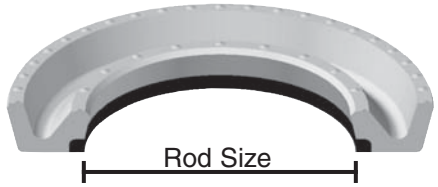


SEAL INFORMATION	
MATERIAL	92A URETHANE
TEMPERATURE RANGE	-40° TO +200° F
PRESSURE RANGE	0 TO 5,000 PSI

Part Number	ID	OD	H.
RBS-1.2X1.6	1.250	1.620	0.118
RBS-1.50X2.00SL	1.500	2.000	0.118
RBS-1.75X2.25SL	1.750	2.250	0.118
RBS-2.00X2.50SL	2.000	2.500	0.118
RBS-2.25X2.87SL	2.250	2.870	0.190
RBS-2.50X3.12SL	2.500	3.120	0.190
RBS-3.00X3.62SL	3.000	3.620	0.190
RBS-4.0X4.4X.19	4.000	4.380	0.190
RBS-4.5X5.2X.17	4.500	5.220	0.170
RBS-6X6.7X.17	6.000	6.720	0.170
RBS-7.5X8.2X.17	7.500	8.220	0.170

CATERPILLAR® SPECIFIC BUFFER SEALS - DYR STYLE

These lip-type buffer seals are designed for replacement in Caterpillar® cylinders. The hinged-lip design reduces friction, heat, and wear under low-pressure conditions and acts as a check valve allowing back-pressure relief. Seals for rod sizes 2-1/8" and under do not have a back-up ring.



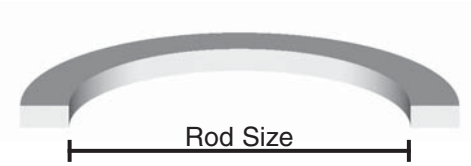
SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-22° TO +230° F
PRESSURE RANGE	0 TO 6,000 PSI

Part Number	Rod Size
CTC-1672186	1 1/2
CTC-1672190	1 3/4
CTC-1672192	1 7/8
CTC-1672195	2
CTC-1672198	2 1/8
CTC-1672200	2 1/4
CTC-1672201	2 1/2

Part Number	Rod Size
CTC-1672202	2 3/8
CTC-1672207	2 3/4
CTC-1672208	3
CTC-1672209	3 1/4
CTC-1672211	3 1/2
CTC-1672214	3 3/4
CTC-1672216	4

CATERPILLAR® SPECIFIC BUFFER SEALS - 1 PIECE

See Caterpillar® heading in kit catalog for more Caterpillar® replacement parts.



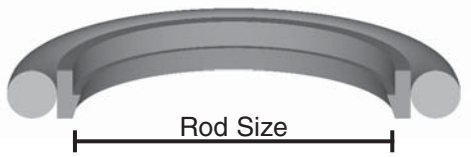
SEAL INFORMATION	
MATERIAL	92A URETHANE
TEMPERATURE RANGE	-40° TO +200° F
PRESSURE RANGE	0 TO 5,000 PSI

Part Number	Rod Size
CTC-5P4673	7/8
CTC-6J9733	1-1/2
CTC-9J3497	1-1/4
CTC-6J9178	1-3/4
CTC-4T6778	1-7/8
CTC-6J6917	2
CTC-5J3620	2-1/2
CTC-5J3616	2-1/4
CTC-4T6127	2-1/8
CTC-6J6553	2-3/4
CTC-6J6916	2-3/8
CTC-1U4020	2-5/8

Part Number	Rod Size
CTC-6J6915	3
CTC-6J6736	3-1/2
CTC-6J7167	3-1/4
CTC-8J6070	3-3/4
CTC-8J4627	4
CTC-7J8943	4-1/4
CTC-7J9257	4-3/4
CTC-3G5055	4-3/8
CTC-8J4509	5
CTC-6J8631	6-1/2
CTC-9J2495	7

CATERPILLAR® SPECIFIC BUFFER SEALS - 2 PIECE

See Caterpillar® heading in kit catalog for more Caterpillar® replacement parts.



SEAL INFORMATION	
MATERIAL	BRONZE FILLED PTFE SEAL RUBBER ENERGIZER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI

Part Number	Rod Size
CTC-8C9122	1-1/2
CTC-8C9123	1-3/4
CTC-8C9124	2
CTC-8C3839	2-1/2
CTC-8C9125	2-1/4
CTC-8C3841	2-3/4
CTC-8C9138	2-3/8

Part Number	Rod Size
CTC-8C9126	3
CTC-8C9127	3-1/2
CTC-8C9121	3-1/4
CTC-8C9128	3-3/4
CTC-8C9129	4
CTC-8C9130	7

HYDROLOCK VEE PACKING SETS

These vee sets utilize hytrel & nylon vees to cover pressure from 0 to 6,000 psi and provide excellent extrusion resistance. Male & female bearings are molded from glass filled nylon. **NOTE:** These vee sets do not contain guidelock bearings. They are sold seperately as shown on the next page.

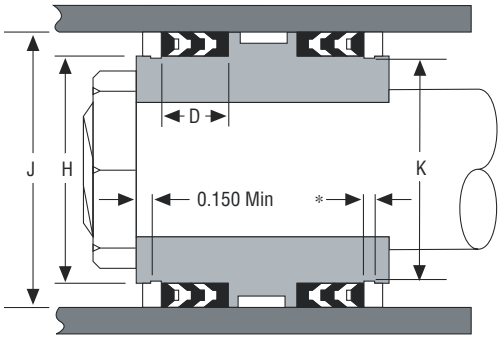
FB= FEMALE BEARING

1740 = 3 VEES
1741 = 4 VEES
1742 = 5 VEES

PART NUMBERS

HDLV 1741 - 275 - 100FB

- HDLV — Type of Seal
- 1741 — # of Vees
- 275 — Outside Diameter
- 100FB — Bearing Height



Standard Hydrolock Set w/ 1/4" female bearing

Hydrolock Set w/ 1/2" female bearing

Hydrolock Set w/ 1" female bearing

SEAL INFORMATION

MATERIAL	HYTREL & NYLON
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 6,000 PSI
PART NUMBER	(Prefix)-(# of vees)-(OD)-(Bearing Height)

PRC PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH		H GROOVE DIAMETER		J BORE DIAMETER		K GUIDE LOCK	*
HDLV-1740-350	3.000	3-1/2	3/4	0.75	±0.005	3.000	+0/-0.005	3.500	+0.01/0	2.750	0.252/0.257
HDLV-1740-400	3-1/2	4	3/4	0.750	±0.005	3.500	+0/-0.005	4.000	+0.01/0	3.250	0.377/0.382
HDLV-1740-500	4-1/2	5	3/4	0.750	±0.005	4.500	+0/-0.005	5.000	+0.01/0	4.125	0.377/0.382
HDLV-1740-600	5-1/2	6	3/4	0.750	±0.005	5.500	+0/-0.005	6.000	+0.01/0	5.125	0.377/0.382
HDLV-1740-627	5-3/4	6.265	3/4	0.750	±0.005	5.750	+0/-0.005	6.265	+0.01/0	N/A	N/A
HDLV-1741-175	1-1/4	1-3/4	0.82	0.820	±0.005	1.250	+0/-0.005	1.750	+0.01/0	N/A	N/A
HDLV-1741-275-100FB	2-1/4	2-3/4	1-5/8	1.625	±0.005	2.250	+0/-0.005	2.750	+0.01/0	2.000	0.252/0.257
HDLV-1741-300-050FB	2-1/2	3	1-1/8	1.125	±0.005	2.500	+0/-0.005	3.000	+0.01/0	2.250	0.252/0.257
HDLV-1741-350-050FB	3	3-1/2	1-1/8	1.125	±0.005	3.000	+0/-0.005	3.500	+0.01/0	2.750	0.252/0.257
HDLV-1741-400-050FB	3-1/2	4	1-1/8	1.125	±0.005	3.500	+0/-0.005	4.000	+0.01/0	3.250	0.377/0.382
HDLV-1741-425-100FB	3-3/4	4-1/4	1-5/8	1.625	±0.005	3.750	+0/-0.005	4.250	+0.01/0	3.500	0.377/0.382
HDLV-1741-450-050FB	4	4-1/2	1-1/8	1.125	±0.005	4.000	+0/-0.005	4.500	+0.01/0	3.750	0.377/0.382
HDLV-1741-500	4-1/2	5	7/8	0.875	±0.005	4.500	+0/-0.005	5.000	+0.01/0	4.125	0.377/0.382
HDLV-1741-500-050FB	4-1/2	5	1-1/8	1.125	±0.005	4.500	+0/-0.005	5.000	+0.01/0	4.125	0.377/0.382
HDLV-1741-500-075FB	4-1/2	5	1-3/8	1.375	±0.005	4.500	+0/-0.005	5.000	+0.01/0	4.125	0.377/0.382
HDLV-1741-600-050FB	5-1/2	6	1-1/8	1.125	±0.005	5.500	+0/-0.005	6.000	+0.01/0	5.125	0.377/0.382
HDLV-1741-725	6-3/4	7-1/4	7/8	0.875		6.750	+0/-0.005	7.250	+0.01/0	N/A	N/A
HDLV-1742-200	1-1/2	2	1	1.000	±0.005	1.500	+0/-0.005	2.000	+0.01/0	1.375	0.252/0.257
HDLV-1742-225	1-3/4	2-1/4	1	1.000	±0.005	1.750	+0/-0.005	2.250	+0.01/0	1.500	0.252/0.257
HDLV-1742-250	2	2-1/2	1	1.000	±0.005	2.000	+0/-0.005	2.500	+0.01/0	1.750	0.252/0.257
HDLV-1742-250-100FB	2	2-1/2	1-3/4	1.750	±0.005	2.000	+0/-0.005	2.500	+0.01/0	1.750	0.252/0.257
HDLV-1742-275	2-1/4	2-3/4	1	1.000	±0.005	2.250	+0/-0.005	2.750	+0.01/0	2.000	0.252/0.257
HDLV-1742-275-100FB	2-1/4	2-3/4	1-3/4	1.750	±0.005	2.250	+0/-0.005	2.750	+0.01/0	2.000	0.252/0.257
HDLV-1742-300	2-1/2	3	1	1.000	±0.005	2.500	+0/-0.005	3.000	+0.01/0	2.250	0.252/0.257
HDLV-1742-300-100FB	2-1/2	3	1-3/4	1.750	±0.005	2.500	+0/-0.005	3.000	+0.01/0	2.250	0.252/0.257

HYDROLOCK VEE PACKING SETS

PRC PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH		H GROOVE DIAMETER		J BORE DIAMETER		K GUIDE LOCK	*
HDLV-1742-312-100FB	2-1/2	3-1/8	1-11/16	1.687	±0.005	2.500	+0/-0.005	3.125	+0.01/0	N/A	N/A
HDLV-1742-325	2-3/4	3-1/4	1	1.000	±0.005	2.750	+0/-0.005	3.250	+0.01/0	2.500	0.252/0.257
HDLV-1742-325-100FB	2-3/4	3-1/4	1-3/4	1.750	±0.005	2.750	+0/-0.005	3.250	+0.01/0	2.500	0.252/0.257
HDLV-1742-350	3	3-1/2	1	1.000	±0.005	3.000	+0/-0.005	3.500	+0.01/0	2.750	0.252/0.257
HDLV-1742-350-100FB	3	3-1/2	1-3/4	1.750	±0.005	3.000	+0/-0.005	3.500	+0.01/0	2.750	0.252/0.257
HDLV-1742-375	3-1/4	3-3/4	1	1.000	±0.005	3.250	+0/-0.005	3.750	+0.01/0	3.000	0.252/0.257
HDLV-1742-375-050FB	3-1/4	3-3/4	1-3/4	1.750	±0.005	3.250	+0/-0.005	3.750	+0.01/0	3.000	0.252/0.257
HDLV-1742-400	3-1/2	4	1	1.000	±0.005	3.500	+0/-0.005	4.000	+0.01/0	3.250	0.377/0.382
HDLV-1742-400-100FB	3-1/2	4	1-3/4	1.750	±0.005	3.500	+0/-0.005	4.000	+0.01/0	3.250	0.377/0.382
HDLV-1742-450	4	4-1/2	1	1.000	±0.005	4.000	+0/-0.005	4.500	+0.01/0	3.750	0.377/0.382
HDLV-1742-450-100FB	4	4-1/2	1-3/4	1.750	±0.005	4.000	+0/-0.005	4.500	+0.01/0	3.750	0.377/0.382
HDLV-1742-500	4-1/2	5	1	1.000	±0.005	4.500	+0/-0.005	5.000	+0.01/0	4.125	0.377/0.382
HDLV-1742-500-100FB	4-1/2	5	1-3/4	1.750	±0.005	4.500	+0/-0.005	5.000	+0.01/0	4.125	0.377/0.382
HDLV-1742-550	5	5-1/2	1	1.000	±0.005	5.000	+0/-0.005	5.500	+0.01/0	4.625	0.377/0.382
HDLV-1742-550-050FB	5	5-1/2	1-1/4	1.250	±0.005	5.000	+0/-0.005	5.500	+0.01/0	4.625	0.377/0.382
HDLV-1742-600	5-1/2	6	1	1.000	±0.005	5.500	+0/-0.005	6.000	+0.01/0	5.125	0.377/0.382
HDLV-1742-600-100FB	5-1/2	6	1-3/4	1.750	±0.005	5.500	+0/-0.005	6.000	+0.01/0	5.125	0.377/0.382
HDLV-1742-650	6	6-1/2	1	1.000	±0.005	6.000	+0/-0.005	6.500	+0.01/0	5.625	0.377/0.382
HDLV-1742-650-050FB	6	6-1/2	1-1/4	1.250	±0.005	6.000	+0/-0.005	6.500	+0.01/0	5.625	0.377/0.382
HDLV-1742-650-100FB	6	6-1/2	1-3/4	1.750	±0.005	6.000	+0/-0.005	6.500	+0.01/0	5.625	0.377/0.382
HDLV-1742-700	6-1/2	7	1	1.000	±0.005	6.500	+0/-0.005	7.000	+0.01/0	6.125	0.377/0.382
HDLV-1742-700-100FB	6-1/2	7	1-3/4	1.750	±0.005	6.500	+0/-0.005	7.000	+0.01/0	6.125	0.377/0.382
HDLV-1742-750	7	7-1/2	1	1.000	±0.005	7.000	+0/-0.005	7.500	+0.01/0	6.625	0.377/0.382
HDLV-1742-750-100FB	7	7-1/2	1-3/4	1.750	±0.005	7.000	+0/-0.005	7.500	+0.01/0	6.625	0.377/0.382
HDLV-1742-800	7-1/2	8	1	1.000	±0.005	7.500	+0/-0.005	8.000	+0.01/0	7.125	0.377/0.382
HDLV-1742-800-100FB	7-1/2	8	1-3/4	1.750	±0.005	7.500	+0/-0.005	8.000	+0.01/0	7.125	0.377/0.382
HDLV-1742-850-100FB	8	8-1/2	1-3/4	1.750	±0.005	8.000	+0/-0.005	8.500	+0.01/0	7.625	0.377/0.382
HDLV-1742-900	8-1/2	9	1	1.000	±0.005	8.500	+0/-0.005	9.000	+0.01/0	8.125	0.377/0.382
HDLV-1742-900-100FB	8-1/2	9	1-3/4	1.750	±0.005	8.500	+0/-0.005	9.000	+0.01/0	8.125	0.377/0.382
HDLV-275-200-175	2	2-3/4	1-3/4	1.750	±0.005	2.000	+0/-0.005	2.750	+0.01/0	N/A	N/A
HDLV-300-250-082	2-1/2	3	13/16	0.813	±0.005	2.500	+0/-0.005	3.000	+0.01/0	N/A	N/A
HDLV-300-250-087	2-1/2	3	7/8	0.875	±0.005	2.500	+0/-0.005	3.000	+0.01/0	N/A	N/A
HDLV-350-300-082	3	3-1/2	13/16	0.813	±0.005	3.000	+0/-0.005	3.500	+0.01/0	N/A	N/A
HDLV-375-300-175	3	3-3/4	1-3/4	1.750	±0.005	3.000	+0/-0.005	3.750	+0.01/0	N/A	N/A
HDLV-425-350-087	3-1/2	4-1/4	7/8	0.875	±0.005	3.500	+0/-0.005	4.250	+0.01/0	N/A	N/A
HDLV-450-400-082	4	4-1/2	13/16	0.813	±0.005	4.000	+0/-0.005	4.500	+0.01/0	N/A	N/A
HDLV-503-402-152	4.02	5.03	1.527	1.527	±0.005	4.020	+0/-0.005	5.030	+0.01/0	N/A	N/A
HDLV-550-500-082	5	5-1/2	13/16	0.813	±0.005	5.000	+0/-0.005	5.500	+0.01/0	N/A	N/A
HDLV-603-503-150	5.03	6.03	1-1/2	1.500	±0.005	5.030	+0/-0.005	6.030	+0.01/0	N/A	N/A
HDLV-703-603-150	6.03	7.03	1-1/2	1.500	±0.005	6.030	+0/-0.005	7.030	+0.01/0	N/A	N/A
HDLV-800-080	7-1/2	8	0.8	0.800	±0.005	7.500	+0/-0.005	8.000	+0.01/0	7.125	0.377/0.382

GUIDELOCK PISTON BEARINGS

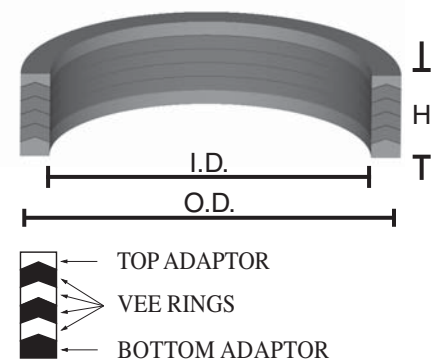
Molded from glass filled nylon, these step-cut bearings also act as retainers for Hydrolock vee sets. The following bore sizes are available.

Part Number	Bore Size
HDLG-200	2
HDLG-250	2-1/2
HDLG-300	3
HDLG-350	3-1/2
HDLG-400	4
HDLG-450	4-1/2
HDLG-500	5
HDLG-550	5-1/2

Part Number	Bore Size
HDLG-600	6
HDLG-627	6.265
HDLG-650	6-1/2
HDLG-700	7
HDLG-750	7-1/2
HDLG-800	8
HDLG-900	9

VEE PACKING SETS

Our vee sets are the finest quality available in the industry. While all sets incorporate fabric reinforced rubber pressure rings, one or two urethane rings are included to improve low pressure sealing, when it is feasible. Most sets use nylon adaptors. Properly installed the pressure limits are as follows:



U= SPECIAL URETHANE VEE
H= HYTREL

3,000 PSI = 4 VEES
5,000 PSI = 5 VEES
10,000 PSI = 6 VEES

CONSTRUCTION CODE
Example: 1-0-4-1

1 - 1 **T**OP ADAPTOR
0 - 0 **U**RETHANE VEE RINGS
4 - 4 **F**ABRIC VEE RINGS
1 - 1 **B**OTTOM ADAPTOR

SEAL INFORMATION	
MATERIAL	FABRIC REINFORCED RUBBER URETHANE RING/NYLON ADAPTORS
TEMPERATURE RANGE	-35° TO +220° F
PRESSURE RANGE	0 TO 10,000 PSI
PART NUMBER	(Prefix) (ID) (CS) X (Height)

Part Number	Construction T-U-F-B	I.D.	O.D.	H.
VS03703X075	1-0-4-1	3/8	3/4	3/4
VS03704X050	1-0-1-1	3/8	7/8	1/2
VS05003X062	1-0-3-1	1/2	7/8	5/8
VS05004X075	1-0-3-1	1/2	1	3/4
VS05004X087	1-0-4-1	1/2	1	7/8
VS06203X082	1-0-4-1	5/8	1	13/16
VS06204X100	1-0-5-1	5/8	1-1/8	1
VS06205X125	1-0-5-1	5/8	1-1/4	1-1/4
VS07503X075	1-0-3-1	3/4	1-1/8	3/4
VS07503X082	1-0-6-1	3/4	1-1/8	13/16
VS07504X068	1-0-2-1	3/4	1/1/4	11/16
VS07504X100	1-0-5-1	3/4	1-1/4	1
VS07505X103	1-0-4-1	3/4	1-3/8	1-1/32
VS07506X112	1-0-3-1	3/4	1-1/2	1-1/8
VS08104X087	1-0-4-1	13/16	1-5/16	7/8
VS08703X075	1-0-3-1	7/8	1-1/4	3/4
VS08704X075	1-0-3-1	7/8	1-3/8	3/4

Part Number	Construction T-U-F-B	I.D.	O.D.	H.
VS08704X100	1-0-4-1	7/8	1-3/8	1
VS08705X103	1-0-4-1	7/8	1-1/2	1-1/32
VS10003X095	1-2-3-1	1	1-3/8	61/64
VS10003X100	1-0-6-1	1	1-3/8	1
VS10004X075	1-0-3-1	1	1-1/2	3/4
VS10004X100	1-0-5-1	1	1-1/2	1
VS10004X112	1-0-6-1	1	1-1/2	1-1/8
VS10005X103	1-0-4-1	1	1-5/8	1-1/32
VS10006X100	1-0-3-1	1	1-3/4	1
VS10604X100	1-0-5-1	1-1/16	1-9/16	1
VS11204X087	1-0-4-1	1-1/8	1-5/8	7/8
VS11205X103	1-0-4-1	1-1/8	1-3/4	1-1/32
VS11803X125	1-0-6-1	1-3/16	1-9/16	1-1/4
VS11804X087	1-0-4-1	1-3/16	1-11/16	7/8
VS12504X075	1-0-3-1	1-1/4	1-3/4	3/4
VS12504X082	1-2-2-1	1-1/4	1-3/4	.820
VS12504X100	1-0-5-1	1-1/4	1-3/4	1

VEE PACKING SETS

Part Number	Construction T-U-F-B	I.D.	O.D.	H.
VS12504X112	1-0-6-1	1-1/4	1-3/4	1-1/8
VS12505X103	1-0-4-1	1-1/4	1-7/8	1-1/32
VS12506X100	1-1-2-1	1-1/4	2	1
VS12508X100	1-0-2-1	1-1/4	2-1/4	1
VS12508X150	1-0-4-1	1-1/4	2-1/4	1-1/2
VS13703X106	1-0-6-1	1-3/8	1-3/4	1-1/16
VS13704X075	1-0-3-1	1-3/8	1-7/8	3/4
VS13704X100	1-2-3-1	1-3/8	1-7/8	1
VS13705X103	1-0-4-1	1-3/8	2	1-1/32
VS13706X125	1-0-4-1	1-3/8	2-1/8	1-1/4
VS15003X082	1-2-3-1	1-1/2	1-7/8	.820
VS15004X082	1-0-4-1	1-1/2	2	.820
VS15004X087	1-1-3-1	1-1/2	2	7/8
VS15004X100	1-2-3-1	1-1/2	2	1
VS15004X112	1-2-4-1	1-1/2	2	1-1/8
VS15004X125	1-0-7-1	1-1/2	2	1-1/4
VS15005X103	1-2-2-1	1-1/2	2-1/8	1.031
VS15005X118	1-0-5-1	1-1/2	2-1/8	1-3/16
VS15006X100	1-0-3-1	1-1/2	2-1/4	1
VS15007X175	1-0-5-1	1-1/2	2-3/8	1-3/4
VS15008X125	1-1-2-1	1-1/2	2-1/2	1-1/4
VS15008X150	1-2-2-1	1-1/2	2-1/2	1-1/2
VS16204X075	1-3-0-1	1-5/8	2-1/8	3/4
VS16204X100	1-0-5-1	1-5/8	2-1/8	1
VS16204X112	1-0-6-1	1-5/8	2-1/8	1-1/8
VS16205X087	1-0-3-1	1-5/8	2-1/4	7/8
VS16205X103	1-0-4-1	1-5/8	2-1/4	1-1/32
VS17503X087	1-2-3-1	1-3/4	2-1/8	7/8
VS17504X082	1-1-3-1	1-3/4	2-1/4	.820
VS17504X087	1-1-3-1	1-3/4	2-1/4	7/8
VS17504X100	1-0-5-1	1-3/4	2-1/4	1
VS17504X112	1-2-4-1	1-3/4	2-1/4	1-1/8
VS17505X089	1-1-2-1	1-3/4	2-3/8	0.894
VS17505X103	1-2-2-1	1-3/4	2-3/8	1-1/32
VS17505X112	1-0-5-1	1-3/4	2-3/8	1-1/8
VS17506X100	1-0-3-1	1-3/4	2-1/2	1
VS17506X111H	1-4H-1	1-3/4	2-1/2	1.11
VS17506X156	1-0-6-1	1-3/4	2-1/2	1-9/16
VS18704X112	1-0-6-1	1-7/8	2-3/8	1-1/8
VS18705X103	1-0-4-1	1-7/8	2-1/2	1-1/32
VS18706X112	1-0-4-1	1-7/8	2-5/8	1-1/8
VS20003X075	1-2-2-1	2	2-3/8	3/4
VS20004X082	1-0-4-1	2	2-1/2	.820
VS20004X087	1-2-2-1	2	2-1/2	7/8
VS20004X100	1-2-3-1	2	2-1/2	1

Part Number	Construction T-U-F-B	I.D.	O.D.	H.
VS20004X112	1-2-4-1	2	2-1/2	1-1/8
VS20005X087	1-0-3-1	2	2-5/8	7/8
VS20005X103	1-0-4-1	2	2-5/8	1-1/32
VS20006X100	1-1-2-1	2	2-3/4	1
VS20006X118	1-2-2-1	2	2-3/4	1-3/16
VS20006X137	1-2-3-1	2	2-3/4	1-3/8
VS20008X150	1-0-4-1	2	3	1-1/2
VS21204X087F	1-0-4-1	2-1/8	2-5/8	7/8
VS21205X103	1-0-4-1	2-1/8	2-3/4	1-1/32
VS21206X118	1-0-4-1	2-1/8	2-7/8	1-3/16
VS21206X137	1-0-5-1	2-1/8	2-7/8	1-3/8
VS21806X156	1-0-6-1	2-3/16	2-15/16	1-9/16
VS21806X3V	0-0-3-0	2-3/16	2-15/16	3 Vees
VS22504X082	1-1-3-1	2-1/4	2-3/4	.820
VS22504X100	1-2-3-1	2-1/4	2-3/4	1
VS22505X103	1-0-4-1	2-1/4	2-7/8	1-1/32
VS22505X118	1-0-5-1	2-1/4	2-7/8	1-3/16
VS22506X100	1-0-3-1	2-1/4	3	1
VS22506X111H	1-4H-1	2-1/4	3	1.13
VS22508X150	1-0-4-1	2-1/4	3-1/4	1-1/2
VS23704X100	1-0-5-1	2-3/8	2-7/8	1
VS23705X103	1-0-4-1	2-3/8	3	1-1/32
VS23705X118	1-0-5-1	2-3/8	3	1-3/16
VS23706X125	1-0-4-1	2-3/8	3-1/8	1-1/4
VS25004X075	1-1-2-1	2-1/2	3	3/4
VS25004X082	1-0-4-1	2-1/2	3	.820
VS25004X087	1-1-3-1	2-1/2	3	7/8
VS25004X100	1-2-3-1	2-1/2	3	1
VS25004X112	1-2-4-1	2-1/2	3	1-1/8
VS25005X087	1-0-3-1	2-1/2	3-1/8	7/8
VS25005X118	1-2-3-1	2-1/2	3-1/8	1-3/16
VS25005X118U	1-1-3-1	2-1/2	3-1/8	1-3/16
VS25006X100	1-1-2-1	2-1/2	3-1/4	1
VS25006X102	1-1-2-1	2-1/2	3-1/4	1.02
VS25006X137	1-2-3-1	2-1/2	3-1/4	1-3/8
VS25008X125	1-0-3-1	2-1/2	3-1/2	1-1/4
VS26204X087	1-2-2-1	2-5/8	3-1/8	7/8
VS26204X137	1-0-7-1	2-5/8	3-1/8	1-3/8
VS26205X100	1-0-4-1	2-5/8	3-1/4	1.11
VS26206X118	1-0-3-1	2-5/8	3-3/8	1-3/16
VS27504X087	1-0-4-1	2-3/4	3-1/4	7/8
VS27504X100	1-1-4-1	2-3/4	3-1/4	1
VS27505X103	1-2-2-1	2-3/4	3-3/8	1-1/32
VS27506X100.	1-0-3-1	2-3/4	3-1/2	1
VS27506X111H	1-4H-1	2-3/4	3-1/2	1.15

VEE PACKING SETS

Part Number	Construction T-U-F-B	I.D.	O.D.	H.
VS27506X118	1-2-2-1	2-3/4	3-1/2	1-3/16
VS27506X150	1-3-3-1	2-3/4	3-1/2	1-1/2
VS27508X200	1-0-6-1	2-3/4	3-3/4	2
VS27706X100	1-0-3-1	2.775	3.525	1
VS27706X125	1-1-3-1	2.775	3.525	1-1/4
VS28704X100	1-0-4-1	2-7/8	3-3/8	1
VS30004X062	1-0-2-1	3	3-1/2	5/8
VS30004X087	1-0-4-1	3	3-1/2	7/8
VS30004X087U	1-1-3-1	3	3-1/2	7/8
VS30004X100	1-2-3-1	3	3-1/2	1
VS30004X112	1-2-4-1	3	3-1/2	1-1/8
VS30005X089	1-1-2-1	3	3-5/8	0.894
VS30005X103	1-0-4-1	3	3-5/8	1-1/32
VS30006X100	1-1-2-1	3	3-3/4	1
VS30006X118	1-2-2-1	3	3-3/4	1-3/16
VS30006X137	1-2-3-1	3	3-3/4	1-3/8
VS30006X137U	1-1-3-1	3	3-3/4	1-3/8
VS30008X150	1-2-2-1	3	4	1-1/2
VS32504X082	1-0-4-1	3-1/4	3-3/4	.820
VS32504X100	1-0-5-1	3-1/4	3-3/4	1
VS32504X125	1-2-3-1	3-1/4	3-3/4	1-1/4
VS32505X100	1-0-4-1	3-1/4	3-7/8	1
VS32506X118	1-0-4-1	3-1/4	4	1-3/16
VS32506X137	1-0-5-1	3-1/4	4	1-3/8
VS32506X156	1-0-6-1	3-1/4	4	1-9/16
VS32508X150	1-2-2-1	3-1/4	4-1/4	1-1/2
VS32706X118	1-0-4-1	3.275	4.025	1.187
VS33704X100	1-0-5-1	3-3/8	3-7/8	1
VS33704X112	1-0-6-1	3-3/8	3-7/8	1-1/8
VS33705X087	1-0-3-1	3-3/8	4	7/8
VS33705X103	1-0-4-1	3-3/8	4	1-1/32
VS33706X100	1-0-3-1	3-3/8	4-1/8	1
VS33706X118	1-0-4-1	3-3/8	4-1/8	1-3/16
VS35004X075	1-1-2-1	3-1/2	4	3/4
VS35004X082	1-0-4-1	3-1/2	4	.820
VS35004X100	1-2-3-1	3-1/2	4	1
VS35004X150	1-3-6-1	3-1/2	4	1-1/2
VS35006X100	1-0-3-1	3-1/2	4-1/4	1
VS35006X118	1-2-2-1	3-1/2	4-1/4	1-3/16
VS35006X150	1-0-5-1	3-1/2	4-1/4	1-1/2
VS35008X125	1-0-3-1	3-1/2	4-1/2	1-1/4
VS35012X225	1-0-4-1	3-1/2	5	2-1/4
VS37504X082	1-0-4-1	3-3/4	4-1/4	.820
VS37504X100	1-2-3-1	3-3/4	4-1/4	1
VS37505X087	1-0-3-1	3-3/4	4-3/8	7/8

Part Number	Construction T-U-F-B	I.D.	O.D.	H.
VS37505X106	1-2-2-1	3-3/4	4-3/8	1-1/16
VS37506X118	1-2-2-1	3-3/4	4-1/2	1-3/16
VS37506X137	1-2-3-1	3-3/4	4-1/2	1-3/8
VS38704X075	0-0-4-1	3-7/8	4-3/8	3/4
VS40004X100	1-2-3-1	4	4-1/2	1
VS40004X112	1-2-4-1	4	4-1/2	1-1/8
VS40006X118	1-2-2-1	4	4-3/4	1-3/16
VS40007X112	1-0-3-1	4	4-7/8	1-1/8
VS40007X131	1-0-4-1	4	4-7/8	1-5/16
VS40007X175	1-0-6-1	4	4-7/8	1-3/4
VS40008X131	1-1-2-1	4	5	1-5/16
VS40008X137	0-3-2-0	4	5	1-3/8
VS40008X156	1-2-2-1	4	5	1-9/16
VS40606X100	1-0-3-1	4-1/16	4-13/16	1
VS42504X100	1-0-5-1	4-1/4	4-3/4	1
VS42504X125	1-3-4-1	4-1/4	4-3/4	1-1/4
VS42506X100	1-0-3-1	4-1/4	5	1
VS42506X150	1-0-5-1	4-1/4	5	1-1/2
VS42506X162	1-0-6-1	4-1/4	5	1-5/8
VS42507X150	1-0-5-1	4-1/4	5-1/8	1-1/2
VS42508X162	1-0-4-1	4-1/4	5-1/4	1-5/8
VS43704X100	1-0-5-1	4-3/8	4-7/8	1
VS45004X100	1-0-5-1	4-1/2	5	1
VS45005X137	1-0-6-1	4-1/2	5-1/8	1-3/8
VS45006X100	1-1-2-1	4-1/2	5-1/4	1
VS45006X150	1-0-6-1	4-1/2	5-1/4	1-1/2
VS45007X137	1-0-4-1	4-1/2	5-3/8	1-3/8
VS45008X125	1-0-3-1	4-1/2	5-1/2	1-1/4
VS46205X112	1-0-4-1	4-5/8	5-1/4	1
VS47504X087	1-0-4-1	4-3/4	5-1/4	7/8
VS47504X100	1-0-5-1	4-3/4	5-1/4	1
VS47506X118	1-2-2-1	4-3/4	5-1/2	1-3/16
VS47506X137	1-0-5-1	4-3/4	5-1/2	1-3/8
VS47506	0-0-7-0	4-3/4	5-1/2	1-3/4
VS47507X150	1-0-5-1	4-3/4	5-5/8	1-1/2
VS50004X087	1-2-2-1	5	5-1/2	7/8
VS50004X100	1-2-3-1	5	5-1/2	1
VS50004X112	1-2-4-1	5	5-1/2	1-1/8
VS50005X103	1-0-4-1	5	5-5/8	1-1/32
VS50006X150	1-0-6-1	5	5-3/4	1-1/2
VS50007X131	1-0-4-1	5	5-7/8	1-5/16
VS50008X125	1-1-2-1	5	6	1-1/4
VS50008X175	1-2-3-1	5	6	1-3/4
VS51204X100	1-0-5-1	5-1/8	5-5/8	1
VS51204X112	1-0-6-1	5-1/8	5-5/8	1-1/8

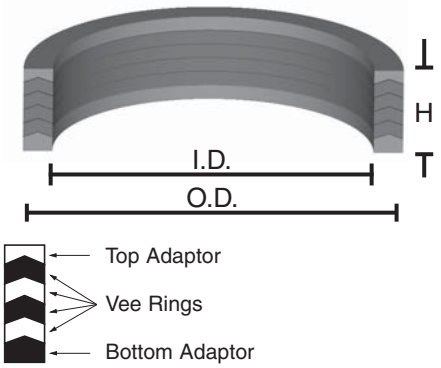
VEE PACKING SETS

Part Number	Construction T-U-F-B	I.D.	O.D.	H.
VS52504X125	1-2-3-1	5-1/4	5-3/4	1-1/4
VS52506X118	1-0-4-1	5-1/4	6	1-3/16
VS52508X122	1-0-3-1	5-1/4	6-1/4	1.22
VS53707X150	1-0-5-1	5-3/8	6-1/4	1-1/2
VS55004X075	1-0-3-1	5-1/2	6	3/4
VS55004X100	1-0-5-1	5-1/2	6	1
VS55006X175	1-0-7-1	5-1/2	6-1/4	1-3/4
VS55008X125	1-0-3-1	5-1/2	6-1/2	1-1/4
VS55008X175	1-0-5-1	5-1/2	6-1/2	1-3/4
VS57504X100	1-0-5-1	5-3/4	6-1/4	1
VS57504X112	1-0-6-1	5-3/4	6-1/4	1-1/8
VS57506X100	1-0-3-1	5-3/4	6-1/2	1
VS57506X137	1-0-5-1	5-3/4	6-1/2	1-3/8
VS57508X175	1-0-5-1	5-3/4	6-3/4	1-3/4
VS60004X100	1-2-3-1	6	6-1/2	1
VS60004X112	1-2-4-1	6	6-1/2	1-1/8
VS60006X100	1-1-2-1	6	6-3/4	1
VS60008X150	1-0-4-1	6	7	1-1/2
VS60010X175	1-0-4-1	6	7-1/4	1-3/4
VS62505X125	1-2-3-1	6-1/4	6-7/8	1-1/4
VS62506X118	1-0-4-1	6-1/4	7	1-3/16
VS65004X100	1-1-4-1	6-1/2	7	1
VS65006X137	1-0-5-1	6-1/2	7-1/4	1-3/8
VS65008X150	1-0-4-1	6-1/2	7-1/2	1-1/2
VS67504X100	1-0-5-1	6-3/4	7-1/4	1
VS67505X125	1-2-3-1	6-3/4	7-3/8	1-1/4
VS67506X118	1-0-4-1	6-3/4	7-1/2	1-3/16
VS70004X100	1-2-3-1	7	7-1/2	1

Part Number	Construction T-U-F-B	I.D.	O.D.	H.
VS70004X112	1-2-4-1	7	7-1/2	1-1/8
VS70008X125	1-0-3-1	7	8	1-1/4
VS70008X200	1-3-3-1	7	8	2
VS72504X087	1-0-4-1	7-1/4	7-3/4	7/8
VS75004X100	1-2-3-1	7-1/2	8	1
VS75005X125	1-2-3-1	7-1/2	8-1/8	1-1/4
VS75006X109	0-3-2-1	7-1/2	8-1/4	1-3/32
VS80004X075	1-1-2-1	8	8-1/2	3/4
VS80004X100	1-2-3-1	8	8-1/2	1
VS80006X118	1-0-4-1	8	8-3/4	1-3/16
VS80008X200	1-0-6-1	8	9	2
VS81204X112	1-1-5-1	8-1/8	8-5/8	1-1/8
VS82504X112	1-0-6-1	8-1/4	8-3/4	1-1/8
VS85004X100	1-2-3-1	8-1/2	9	1
VS85008X187	1-0-5-1	8-1/2	9-1/2	1-7/8
VS87505X125	1-0-6-1	8-3/4	9-3/8	1-1/4
VS90004X125	1-0-7-1	9	9-1/2	1-1/4
VS90008X187	1-0-5-1	9	10	1-7/8
VS95004X100	1-0-5-1	9-1/2	10	1
VS95006X118	1-0-4-1	9-1/2	10-1/4	1-3/16
VS95008X187	1-0-5-1	9-1/2	10-1/2	1-7/8
VS100008X187	1-0-5-1	10	11	1-7/8
VS105004X100	1-0-5-1	10-1/2	11	1
VS105008X187	1-0-5-1	10-1/2	11-1/2	1-7/8
VS110008X187	1-0-5-1	11	12	1-7/8
VS120008X187	1-0-5-1	12	13	1-7/8
VS140008X187	1-0-5-1	14	15	1-7/8

FLUOROCARBON VEE PACKING SETS

Not different in application from standard vee sets, these sets are made entirely of cotton duck and fluorocarbon. Excellent heat resistance.



3,000 PSI = 4 VEES
5,000 PSI = 5 VEES

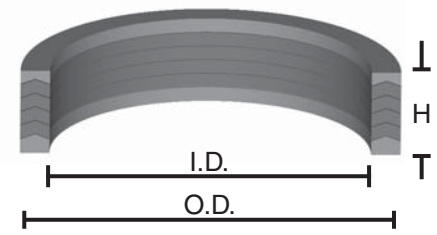
SEAL INFORMATION	
MATERIAL	FLUOROCARBON / DUCK
TEMPERATURE RANGE	-20° TO +350° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) (ID) (CS) X (Height)

Part Number	I.D.	O.D.	H.
VS10004X100V	1	1-1/2	1
VS15005X100V	1-1/2	2-1/8	1
VS17505X100V	1-3/4	2-3/8	1
VS17506X100V	1-3/4	2-1/2	1
VS18705X100V	1-7/8	2-1/2	1
VS20004X100V	2	2-1/2	1
VS20005X100V	2	2-5/8	1
VS20006X100V	2	2-3/4	1
VS21206X100V	2-1/8	2-7/8	1
VS22504X100V	2-1/4	2-3/4	1
VS22505X100V	2-1/4	2-7/8	1
VS22506X100V	2-1/4	3	1
VS25004X100V	2-1/2	3	1
VS25005X100V	2-1/2	3-1/8	1
VS25006X100V	2-1/2	3-1/4	1
VS27506X100V	2-3/4	3-1/2	1
VS30004X100V	3	3-1/2	1
VS30005X100V	3	3-5/8	1
VS30006X100V	3	3-3/4	1
VS32506X100V	3-1/4	4	1

Part Number	I.D.	O.D.	H.
VS35004X100V	3-1/2	4	1
VS35006X100V	3-1/2	4-1/4	1
VS35008X112V	3-1/2	4-1/2	1-1/8
VS37506X100V	3-3/4	4-1/2	1
VS40004X100V	4	4-1/2	1
VS40006X100V	4	4-3/4	1
VS40008X094V	4	5	0.94
VS42507X106V	4-1/4	5-1/8	1-1/16
VS42508X112V	4-1/4	5-1/4	1-1/8
VS45008X112V	4-1/2	5-1/2	1-1/8
VS50004X100V	5	5-1/2	1
VS50006X100V	5	5-3/4	1
VS50007X109V	5	5-7/8	1.09
VS55004X100V	5-1/2	6	1
VS57506X100V	5-3/4	6-1/2	1
VS60004X100V	6	6-1/2	1
VS60008X101V	6	7	1-1/64

SPECIAL VEE PACKING SETS

Most of the following vee sets, by virtue of their size and/or construction, are for single application usage in specially designed cylinders and pumps. **NOTE:** Packing sets with a "W" suffix include a wiper. Please be sure of the vee set material construction before ordering one of these sets. If you have any questions, please ask one of our product specialists for clarification.



CONSTRUCTION CODE
EXAMPLE: 1-2F-1

1 - 1 TOP ADAPTOR
2F - 2 FABRIC VEE RINGS
1 - 1 BOTTOM ADAPTOR

SEAL INFORMATION	
MATERIAL	F = FABRIC & RUBBER, U = URETHANE, N = NYLON, T = PTFE, R = RUBBER
TEMPERATURE RANGE	-35° TO +220° F
PRESSURE RANGE	0 TO 10,000 PSI
PART NUMBER	(Prefix) (ID) (CS) X (Height)

Part Number	Const. T-V-B	I.D.	O.D.	H.
VS07504X068	1-2F-1	3/4	1-1/4	11/16
VS08104X071	0-4F-1	13/16	1-5/16	.710
VS12504X087	1-3R-2T-1	1-1/4	1-3/4	7/8
VS15005X106	1-3R-2T-1	1-1/2	2-1/8	1-1/16
VS17503X043	0-4F-0	1-3/4	2-1/8	7-16
VS17504X068	1-2R-2T-0	1-3/4	2-1/4	11/16
VS17505X100S	1-3R-2T-0	1-3/4	2-3/8	1
VS20004X062	1-1U-1F-1	2	2-1/2	5/8
VS20004X087W	0-2U-2F-0	2	2-1/2	7/8
VS20008X125	1-3F-1	2	3	1-1/4
VS22004X100	1-3F-2U-1	2.200	2.700	1
VS25003X043	0-4F-0	2-1/2	2-7/8	7/16
VS26205X075	1-2U-2T-0	2-5/8	3-1/4	3/4
VS27006X106	1-2F-1U-1	2.700	3.450	1-1/16
VS27504X075	1-2N-1R-1	2-3/4	3-1/4	3/4
VS27506X112	1-3R-2T-0	2-3/4	3-1/2	1-1/8
VS29504.4X100W	1-2F-2U-1	2.950	3-1/2	1
VS29504X100	1-3F-2U-1	2.950	3.450	1
VS29704.4X112W	0-3F-2U-1	2.970	3.520	1-1/8
VS30004X087W	0-4F-0	3	3-1/2	7/8
VS31203X087W	0-2F-2U-0	3-1/8	3-1/2	7/8
VS31206X100	1-2R-2T-0	3-1/8	3-7/8	1
VS32503X043	0-4F-0	3-1/4	3-5/8	7/16
VS32504X125W	1-3F-2U-1	3-1/4	3-3/4	1-1/4
VS34506.4X150	1-3F-2U-1	3.450	4-1/4	1-1/2
VS35012X150	1-3F-1	3-1/2	5	1-1/2
VS35804.2X100W	1-3F-2U-1	3.580	4.110	1
VS37505X118W	1-2F-2U-1	3-3/4	4-3/8	1-3/16
VS37506X106	1-2R-2T-0	3-3/4	4-1/2	1-1/16
VS39504.4X125W	1-2F-2U-1	3.950	4-1/2	1-1/4

Part Number	Const. T-V-B	I.D.	O.D.	H.
VS39704.4X100W	0-3F-2U-1	3.970	4.520	1
VS40004X087W	0-2R-2U-0	4	4-1/2	7/8
VS40004X100W	1-3F-2U-1	4	4-1/2	1
VS42504X125W	1-3F-2U-1	4-1/4	4-3/4	1-1/4
VS44704.4X093	0-2F-3U-0	4.475	5.025	15/16
VS45004X087	1-4F-1	4-1/2	5	7/8
VS45004X087A	1-2F-2U-1	4-1/2	5	7/8
VS45007X118	1-2R-2T-0	4-1/2	5-3/8	1-3/16
VS47505X125W	1-2F-2U-1	4-3/4	5-3/8	1-1/4
VS47506X087	0-2N-1N-1	4-3/4	5-1/2	7/8
VS49504.4x125W	1-2F-2U-1	4.950	5-1/2	1
VS49704.4X112W	0-3F-2U-1	4.970	5.520	1-1/8
VS50004X100W	1-3F-2U-1	5	5-1/2	1
VS50004X112W	1-3F-2U-1	5	5-1/2	1
VS52506X087	0-2N-1R-1	5-1/4	6	7/8
VS54404X112W	1-3F-2U-1	5.445	5.945	1-1/8
VS54704.4X093	0-2F-3U-0	5.475	6.025	15/16
VS57006X106	1-2F-1U-1	5.700	6.450	1-1/16
VS57505X087	1-2R-2T-0	5-3/4	6-3/8	7/8
VS57505X125W	1-2F-2U-1	5-3/4	6-3/8	1-1/4
VS58704X100W	1-4F-1	5-7/8	6-3/8	1
VS59504.4X125W	1-2F-2U-1	5.950	6-1/2	1-1/4
VS59704.4X112W	0-3F-2U-1	5.970	6.520	1-1/8
VS60004X087W	0-2F-2U-0	6	6-1/2	7/8
VS60004X100W	1-3F-2U-1	6	6-1/2	1
VS60004X112W	1-3F-2U-1	6	6-1/2	1
VS62505X125W	1-3F-2U-1	6-1/4	6-7/8	1-1/4
VS64404X112W	1-3F-2U-1	6.445	6.945	1-1/8
VS64704.4X093	0-2F-3U-0	6.475	7.025	15/16
VS67505X125W	1-2F-2U-1	6-3/4	7-3/8	1-1/4

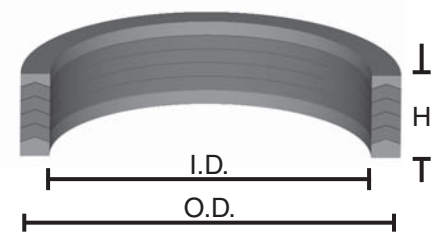
SPECIAL VEE PACKING SETS

Part Number	Const. T-V-B	I.D.	O.D.	H.
VS69504.4X125W	1-2F-2U-1	6.950	7-1/2	1-1/4
VS69704.4X112W	0-3F-2U-1	6.970	7.520	1-1/8
VS70004X100W	1-3F-2U-1	7	7-1/2	1
VS70004X112W	1-3F-2U-1	7	7-1/2	1
VS74404X112W	1-3F-2U-1	7.445	7.945	1-1/8
VS75005X125W	1-3F-2U-1	7-1/2	8-1/8	1-1/4
VS79005.1X125W	1-2F-2U-1	7.905	8.543	1-1/4
VS79504.4X125W	1-2F-2U-1	7.950	8-1/2	1-1/4
VS79704.4X112W	0-3F-2U-1	7.970	8.520	1-1/8
VS80004X100W	1-3F-2U	8	8-1/2	1

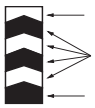
Part Number	Const. T-V-B	I.D.	O.D.	H.
VS80004X112W	1-3F-2U-1	8	8-1/2	1
VS82506X118W	1-3F-1U-1	8-1/4	9	1-3/16
VS87505X125W	1-3F-2U-1	8-3/4	9-3/8	1-1/4
VS89504.4X125W	1-2F-2U-1	8.950	9-1/2	1-1/4
VS90006X118W	1-4F-1	9	9-3/4	1-3/16
VS91204.5X112W	0-2F-2U-1	9-1/8	9-11/16	1-1/8
VS91205X125W	1-3F-2U-1	9-1/8	9-3/4	1-1/4
VS93705X121W	1-4F-1	9-3/8	10	1-7/32
VS97506X100W	0-3F-1U-1	9-3/4	10-1/2	1
VS112506X125	1-2N-2U-1	11-1/4	12	1-3/4

CASCADE VEE SETS

Employed mainly in cylinders made by Cascade Corp., these vee sets are often over-sized or are different from standard vee sets. They are often used with Follower bearings



3,000 PSI = 4 VEES
5,000 PSI = 5 VEES
10,000 PSI = 6 VEES



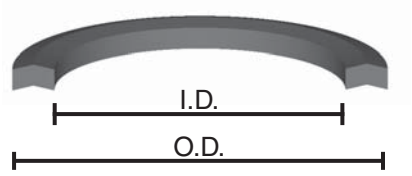
SEAL INFORMATION	
MATERIAL	FABRIC REINFORCED RUBBER & URETHANE RINGS/NYLON ADAPTORS
TEMPERATURE RANGE	-35° TO +220° F
PRESSURE RANGE	0 TO 10,000
PART NUMBER	(Prefix) (ID) (CS) X (Height)

Part Number	I.D.	O.D.	H.
CAS-C7501	.875	1.375	.750
CAS-7500	1.000	1.500	.781
CAS-C1809	1.250	1.750	.671
CAS-C7502	1.500	2.000	.781
CAS-C7606	1.750	2.265	.635
CAS-7505	1.750	2.265	.781
CAS-C7609	2.000	2.515	.625
CAS-C1861	2.000	2.760	1.218
CAS-1468	2.250	3.020	1.030
CAS-7542A	2.450	3.020	.671
CAS-7633	2.500	3.000	1.094
CAS-7547	2.750	3.270	.850
CAS-C1469	2.750	3.520	1.030
CAS-C7608	3.000	3.520	.671

Part Number	I.D.	O.D.	H.
CAS-7565	3.000	3.520	.890
CAS-7514A	3.200	3.770	.781
CAS-7576	3.200	3.770	.828
CAS-1470	3.250	4.020	1.000
CAS-C7538	3.500	4.020	.625
CAS-C7636	3.500	4.270	1.030
CAS-C7561	3.500	4.270	1.400
CAS-1471A	3.750	4.520	1.000
CAS-C827	3.750	4.520	1.218
CAS-C7554	4.000	4.770	.813
CAS-7525	4.250	5.030	1.200
CAS-7562	4.250	5.030	1.344
CAS-7651	6.000	6.530	.875

INDIVIDUAL VEE RINGS & ADAPTORS

The individual vee rings and adaptors listed here are the same high quality product found in our assembled vee packing sets. Stocking individual vee rings allows you to assemble sets to your specific requirements.



RING TYPES
T = TOP ADAPTOR - NYLON
B = BOTTOM ADAPTOR - NYLON
F = NEOFAB VEE RING
U = URETHANE VEE RING
R = RUBBER VEE RING.
(FOR MORE RUBBER VEE RINGS SEE OUR STYLE 835 RINGS)

SEAL INFORMATION	
MATERIAL	NYLON, NEO-FAB, URETHANE
TEMPERATURE RANGE	-35° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) (ID) (CS) (Type of Ring)

VEE RING STACK HEIGHTS WITH TOP & BOTTOM ADAPTORS									
# OF	VEE RING CROSS SECTIONS								
VEES	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8	3/4
1	.410	.500	.562	.625	.645	.750	.812	.875	1.00
2	.520	.625	.719	.812	.863	1.000	1.093	1.187	1.375
3	.630	.750	.875	1.000	1.081	1.250	1.375	1.500	1.750
4	.740	.875	1.031	1.187	1.300	1.500	1.656	1.812	2.125
5	.850	1.000	1.187	1.375	1.517	1.750	1.937	2.125	2.500

Part Number	I.D.	O.D.
VR05003F	1/2	7/8
VR05003T	1/2	7/8
VR06204B	5/8	1-1/8
VR06204F	5/8	1-1/8
VR06204R	5/8	1-1/8
VR06204T	5/8	1-1/8
VR07504B	3/4	1-1/4
VR07504F	3/4	1-1/4
VR07504T	3/4	1-1/4
VR07505F	3/4	1-3/8
VR08703B	7/8	1-1/4
VR08703F	7/8	1-1/4
VR08703T	7/8	1-1/4
VR08704F	7/8	1-3/8
VR08705F	7/8	1-1/2
VR10004B	1	1-1/2
VR10004F	1	1-1/2
VR10004T	1	1-1/2
VR10005B	1	1-5/8
VR10005F	1	1-5/8
VR10005T	1	1-5/8
VR10006F	1	1-3/4

Part Number	I.D.	O.D.
VR11204B	1-1/8	1-5/8
VR11204F	1-1/8	1-5/8
VR11204T	1-1/8	1-5/8
VR12504B	1-1/4	1-3/4
VR12504F	1-1/4	1-3/4
VR12504T	1-1/4	1-3/4
VR12504U	1-1/4	1-3/4
VR12505F	1-1/4	1-7/8
VR12505T	1-1/4	1-7/8
VR12506B	1-1/4	2
VR12506F	1-1/4	2
VR12506T	1-1/4	2
VR12506U	1-1/4	2
VR13704B	1-3/8	1-7/8
VR13704F	1-3/8	1-7/8
VR13704R	1-3/8	1-7/8
VR13704T	1-3/8	1-7/8
VR13704U	1-3/8	1-7/8
VR13705B	1-3/8	2
VR13705F	1-3/8	2
VR13705T	1-3/8	2
VR13706B	1-3/8	2-1/8

INDIVIDUAL VEE RINGS & ADAPTORS

Part Number	I.D.	O.D.
VR13706F	1-3/8	2-1/8
VR13706T	1-3/8	2-1/8
VR15004B	1-1/2	2
VR15004F	1-1/2	2
VR15004R	1-1/2	2
VR15004T	1-1/2	2
VR15004U	1-1/2	2
VR15005B	1-1/2	2-1/8
VR15005F	1-1/2	2-1/8
VR15005T	1-1/2	2-1/8
VR15006B	1-1/2	2-1/4
VR15006F	1-1/2	2-1/4
VR15006R	1-1/2	2-1/4
VR15006T	1-1/2	2-1/4
VR15008B	1-1/2	2-1/2
VR15008F	1-1/2	2-1/2
VR15008T	1-1/2	2-1/2
VR15008U	1-1/2	2-1/2
VR16204B	1-5/8	2-1/8
VR16204F	1-5/8	2-1/8
VR16204T	1-5/8	2-1/8
VR16204U	1-5/8	2-1/8
VR16205B	1-5/8	2-1/4
VR16205F	1-5/8	2-1/4
VR16205T	1-5/8	2-1/4
VR17504B	1-3/4	2-1/4
VR17504F	1-3/4	2-1/4
VR17504T	1-3/4	2-1/4
VR17504U	1-3/4	2-1/4
VR17505B	1-3/4	2-3/8
VR17505F	1-3/4	2-3/8
VR17505T	1-3/4	2-3/8
VR17505U	1-3/4	2-3/8
VR17506B	1-3/4	2-1/2
VR17506F	1-3/4	2-1/2
VR17506T	1-3/4	2-1/2
VR17508B	1-3/4	2-3/4
VR17508F	1-3/4	2-3/4
VR17508T	1-3/4	2-3/4
VR18704B	1-7/8	2-3/8
VR18704F	1-7/8	2-3/8
VR18704R	1-7/8	2-3/8
VR18704T	1-7/8	2-3/8
VR18705B	1-7/8	2-1/2
VR18705F	1-7/8	2-1/2

Part Number	I.D.	O.D.
VR18705T	1-7/8	2-1/2
VR20004B	2	2-1/2
VR20004F	2	2-1/2
VR20004R	2	2-1/2
VR20004T	2	2-1/2
VR20004U	2	2-1/2
VR20005B	2	2-5/8
VR20005F	2	2-5/8
VR20005T	2	2-5/8
VR20006B	2	2-3/4
VR20006F	2	2-3/4
VR20006T	2	2-3/4
VR20006U	2	2-3/4
VR22504B	2-1/4	2-3/4
VR22504F	2-1/4	2-3/4
VR22504T	2-1/4	2-3/4
VR22504U	2-1/4	2-3/4
VR22505B	2-1/4	2-7/8
VR22506B	2-1/4	3
VR22506F	2-1/4	3
VR22506R	2-1/4	3
VR22506T	2-1/4	3
VR25003B	2-1/2	2-7/8
VR25003F	2-1/2	2-7/8
VR25003T	2-1/2	2-7/8
VR25004B	2-1/2	3
VR25004F	2-1/2	3
VR25004R	2-1/2	3
VR25004T	2-1/2	3
VR25004U	2-1/2	3
VR25005B	2-1/2	3-1/8
VR25005F	2-1/2	3-1/8
VR25005T	2-1/2	3-1/8
VR25005U	2-1/2	3-1/8
VR25006B	2-1/2	3-1/4
VR25006F	2-1/2	3-1/4
VR25006T	2-1/2	3-1/4
VR25006U	2-1/2	3-1/4
VR25008B	2-1/2	3-1/2
VR25008F	2-1/2	3-1/2
VR25008T	2-1/2	3-1/2
VR26204F	2-5/8	3-1/8
VR26204T	2-5/8	3-1/8
VR26205U	2-5/8	3-1/4
VR27504B	2-3/4	3-1/4

INDIVIDUAL VEE RINGS & ADAPTORS

Part Number	I.D.	O.D.
VR27504F	2-3/4	3-1/4
VR27504T	2-3/4	3-1/4
VR27504U	2-3/4	3-1/4
VR27505B	2-3/4	3-3/8
VR27505F	2-3/4	3-3/8
VR27505T	2-3/4	3-3/8
VR27506B	2-3/4	3-1/2
VR27506F	2-3/4	3-1/2
VR27506T	2-3/4	3-1/2
VR27506U	2-3/4	3-1/2
VR27508F	2-3/4	3-3/4
VR30004B	3	3-1/2
VR30004F	3	3-1/2
VR30004R	3	3-1/2
VR30004T	3	3-1/2
VR30004U	3	3-1/2
VR30006B	3	3-3/4
VR30006F	3	3-3/4
VR30006T	3	3-3/4
VR30006U	3	3-3/4
VR32503B	3-1/4	3-5/8
VR32503F	3-1/4	3-5/8
VR32503T	3-1/4	3-5/8
VR32504B	3-1/4	3-3/4
VR32504F	3-1/4	3-3/4
VR32504T	3-1/4	3-3/4
VR32506B	3-1/4	4
VR32506F	3-1/4	4
VR32506T	3-1/4	4
VR34504F	3.45	4
VR34504T	3.45	4
VR35004B	3-1/2	4
VR35004F	3-1/2	4
VR35004T	3-1/2	4
VR35004U	3-1/2	4
VR35005B	3-1/2	4-1/8
VR35005F	3-1/2	4-1/8
VR35005T	3-1/2	4-1/8
VR35006B	3-1/2	4-1/4
VR35006F	3-1/2	4-1/4
VR35006T	3-1/2	4-1/4
VR35006U	3-1/2	4-1/4
VR35008B	3-1/2	4-1/2
VR35008F	3-1/2	4-1/2
VR35008T	3-1/2	4-1/2

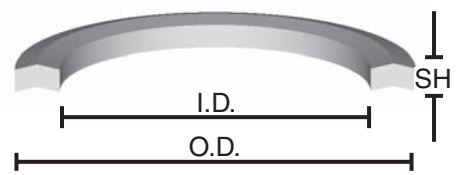
Part Number	I.D.	O.D.
VR37504B	3-3/4	4-1/4
VR37504F	3-3/4	4-1/4
VR37504T	3-3/4	4-1/4
VR37505B	3-3/4	4-3/8
VR37505F	3-3/4	4-3/8
VR37505T	3-3/4	4-3/8
VR37506B	3-3/4	4-1/2
VR37506F	3-3/4	4-1/2
VR37506T	3-3/4	4-1/2
VR37506U	3-3/4	4-1/2
VR38707T	3-7/8	4-3/4
VR40004B	4	4-1/2
VR40004B-25	4	4-1/2
VR40004F	4	4-1/2
VR40004R	4	4-1/2
VR40004T	4	4-1/2
VR40004U	4	4-1/2
VR40006B	4	4-3/4
VR40006F	4	4-3/4
VR40006T	4	4-3/4
VR40006U	4	4-3/4
VR40007F	4	4-7/8
VR40007T	4	4-7/8
VR40008B	4	5
VR40008F	4	5
VR40008T	4	5
VR40008U	4	5
VR42504B	4-1/4	4-3/4
VR42504F	4-1/4	4-3/4
VR42506B	4-1/4	5
VR42506F	4-1/4	5
VR42506T	4-1/4	5
VR42506U	4-1/4	5
VR42508B	4-1/4	5-1/4
VR42508F	4-1/4	5-1/4
VR42508T	4-1/4	5-1/4
VR45004B	4-1/2	5
VR45004F	4-1/2	5
VR45004T	4-1/2	5
VR45006F	4-1/2	5-1/4
VR47506B	4-3/4	5-1/2
VR47506F	4-3/4	5-1/2
VR47506T	4-3/4	5-1/2
VR50004B	5	5-1/2
VR50004F	5	5-1/2

INDIVIDUAL VEE RINGS & ADAPTORS

Part Number	I.D.	O.D.
VR50004R	5	5-1/2
VR50004T	5	5-1/2
VR50004U	5	5-1/2
VR50008B	5	6
VR50008F	5	6
VR50008T	5	6
VR52504B	5-1/4	5-3/4
VR52504F	5-1/4	5-3/4
VR52504U	5-1/4	5-3/4
VR52506B	5-1/4	6
VR52506F	5-1/4	6
VR52506T	5-1/4	6
VR52508F	5-1/4	6-1/4
VR55004B	5-1/2	6
VR55004F	5-1/2	6
VR55004T	5-1/2	6
VR55004U	5-1/2	6
VR55006F	5-1/2	6-1/4
VR55008B	5-1/2	6-1/2
VR55008F	5-1/2	6-1/2
VR55008R	5-1/2	6-1/2
VR55008T	5-1/2	6-1/2
VR57505T	5-3/4	6-3/8
VR57506F	5-3/4	6-1/2
VR57508F	5-3/4	6-3/4
VR60004B	6	6-1/2
VR60004F	6	6-1/2
VR60004T	6	6-1/2

Part Number	I.D.	O.D.
VR60004U	6	6-1/2
VR60008B	6	7
VR60008F	6	7
VR60008T	6	7
VR62506B	6-1/4	7
VR62506F	6-1/4	7
VR62506T	6-1/4	7
VR65008B	6-1/2	7-1/2
VR65008F	6-1/2	7-1/2
VR67506F	6-3/4	7-1/2
VR70004B	7	7-1/2
VR70004F	7	7-1/2
VR70004T	7	7-1/2
VR70004U	7	7-1/2
VR70008B	7	8
VR70008F	7	8
VR70008T	7	8
VR75006B	7-1/2	8-1/4
VR75006F	7-1/2	8-1/4
VR75006T	7-1/2	8-1/4
VR75006U	7-1/2	8-1/4
VR75008F	7-1/2	8-1/2
VR79209.9F	7.925	9.170
VR79209.9R	7.925	9.170
VR80004B	8	8-1/2
VR80004F	8	8-1/2
VR80004T	8	8-1/2
VR80008F	8	9

STYLE 935 PTFE VEE RINGS

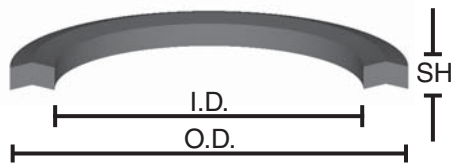


SEAL INFORMATION	
MATERIAL	PTFE
TEMPERATURE RANGE	-100° TO +400° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (Size)

Part Number	ID	OD	S.H.
935-05	3/8	3/4	.083
935-16	3/4	1-1/4	.083
935-20	1	1-1/2	.083
935-24	1-1/4	1-3/4	.083
935-26	1-3/8	2	.140
935-27	1-1/2	2-1/8	.140
935-29	1-3/4	2-3/8	.140
935-2X2-3/4	2	2-3/4	.140
935-31	2	2-5/8	.140
935-32	2-1/8	2-3/4	.140
935-33	2-1/4	2-7/8	.140
935-35	2-1/2	3-1/8	.140

Part Number	ID	OD	S.H.
935-38	2-3/4	3-1/2	.156
935-41	3-1/8	3-7/8	.156
935-42	3-1/4	4	.156
935-44	3-1/2	4-1/4	.156
935-46	3-3/4	4-1/2	.156
935-48	3-7/8	4-3/4	5/32
935-50	4-1/4	5-1/8	.197
935-51	4-1/2	5-3/8	.197
935-128	1-3/4	2-1/4	.083
935-135	2-5/8	3-1/4	.140
935-156	5-3/4	6-3/8	.140

STYLE 835 HOMOGENEOUS RUBBER VEE RINGS



SEAL INFORMATION	
MATERIAL	70A DURO BUNA-N
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 1,250 PSI
PART NUMBER	(Prefix) - (Size)

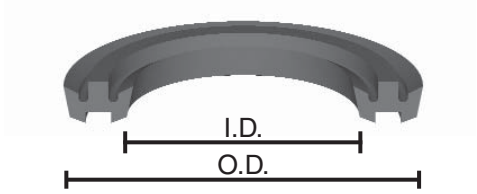
Part Number	ID	OD	S.H.
835-05	3/8	3/4	.083
835-07	1/2	7/8	.083
835-12	1/2	1	.083
835-14	5/8	1-1/8	.083
835-16	3/4	1-1/4	.083
835-20	1	1-1/2	.083
835-22	1-1/8	1-5/8	.083
835-24	1-1/4	1-3/4	.083
835-25	1-1/4	1-7/8	.140
835-26	1-3/8	2	.140
835-27	1-1/2	2-1/8	.140
835-28	1-5/8	2-1/4	.140
835-29	1-3/4	2-3/8	.140
835-2X2-3/4	2	2-3/4	.140
835-31	2	2-5/8	.140
835-32	2-1/8	2-3/4	.140
835-33	2-1/4	2-7/8	.140

Part Number	ID	OD	S.H.
835-35	2-1/2	3-1/8	.140
835-38	2-3/4	3-1/2	.156
835-40	3	3-3/4	.156
835-41	3-1/8	3-7/8	.156
835-42	3-1/4	4	.156
835-44	3-1/2	4-1/4	.156
835-46	3-3/4	4-1/2	.156
835-48	3-7/8	4-3/4	.156
835-49	4	4-7/8	.197
835-50	4-1/4	5-1/8	.197
835-51	4-1/2	5-3/8	.197
835-55	5-1/2	6-3/8	.197
835-57	5-3/4	6-3/4	.197
835-128	1-3/4	2-1/4	.140
835-133	2-7/16	3-3/16	.140
835-156	5-3/4	6-3/8	.140

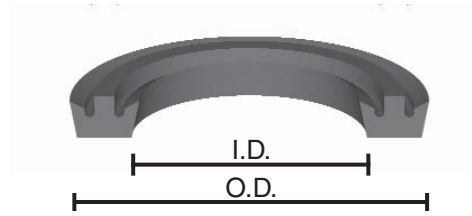
WV PACKING

Similiar to Vee Packing, WV Packing is stacked in a pedestal fashion. Stacked rings do not require axial force to obtain proper lip interference. Also, stacked WV's have the advantage of redundancy - if one ring fails, the next ring will back it up.

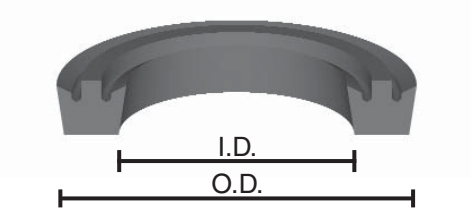
WV Packing is available as a Center Ring, Style 850 (Neo-Fab) and Style 851 (Buna-N); Flat Back, Style 852 (Neo Fab) and Style 853 (Buna-n); and Deep Base, Style 855 (Buna-N). Flat backs and center rings are usually used in sets, whenas deep base rings are used as single elements.



CENTER RING
STYLE 850 & 851



FLAT BACK
STYLE 852 & 853



DEEP BASE
STYLE 855

A: NOMINAL RING STACK HEIGHT
B: GLAND DEPTH ±0.002"

SEAL INFORMATION	
MATERIAL	FABRIC REINFORCED RUBBER AND BUNA-N
TEMPERATURE RANGE	-40° TO +250° F
PRESSURE RANGE	SEE CHART BELOW
PART NUMBER	(Prefix) - (ID) - (OD)

If your design is of medium to high pressure it is recommended that you utilize fabric reinforced rings. The following is a guide to pressure rating of multiple rings, including flat bottom rings.

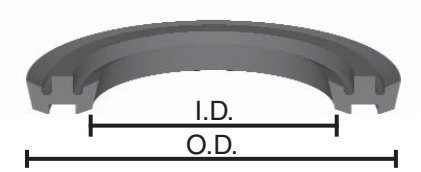
PRESSURE RATING OF MULTIPLE RINGS	
PRESSURE P.S.I.	NUMBER OF RINGS
250 - 500	3
500 - 2,000	4
2,000 - 5,000	5
5,000 - 8,000	6

A homogeneous ring may be also used for sealing at low pressure. Do not include the homogeneous ring in calculating pressure rating. Due to the different material, it is difficult to rate this type of ring. If you wish to use all homogeneous rings, tests should be conducted to verify design stability.

A = Stack Height; B = Groove Depth ±.002

Cross Section	2 Rings		3 Rings		4 Rings		5 Rings		6 Rings		7 Rings	
	A	B	A	B	A	B	A	B	A	B	A	B
1/4”	.266	.280	.375	.392	.484	.504	.594	.616	.704	.728	.814	.840
5/16”	.332	.346	.469	.486	.605	.625	.742	.764	.879	.903	1.020	1.042
3/8”	.398	.412	.562	.579	.726	.746	.890	.912	1.054	1.078	1.218	1.244
7/16”	.468	.482	.656	.673	.848	.868	1.039	1.061	1.230	1.254	1.421	1.447
1/2”	.531	.545	.750	.767	.969	.989	1.187	1.209	1.405	1.429	1.623	1.649
5/8”	.667	.695	.943	.978	1.220	1.260	1.496	1.541	1.772	1.821	2.048	2.101
3/4”	.800	.828	1.132	1.167	1.464	1.504	1.795	1.840	2.126	2.175	2.475	2.528

STYLE 850 & 851 WV PACKING



STYLE 850 - NEO FAB

Part Number	I.D.	O.D.
850-0.62X1.12	5/8	1-1/8
850-0.75X1.25	3/4	1-1/4
850-1.00X1.50	1	1-1/2
850-1.12X1.75	1-1/8	1-3/4
850-1.25X1.75	1-1/4	1-3/4
850-1.25X2.00	1-1/4	2
850-1.50X2.00	1-1/2	2
850-1.75X2.25	1-3/4	2-1/4
850-1.87X2.37	1-7/8	2-3/8
850-2.00X2.50	2	2-1/2
850-2.00X3.00	2	3

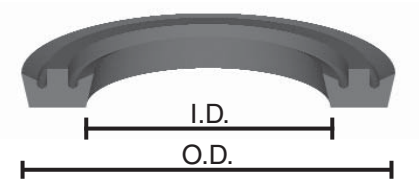
Part Number	I.D.	O.D.
850-2.25X2.75	2-1/4	2-3/4
850-2.45X3.002	2.450	3.002
850-2.50X3.00	2-1/2	3
850-2.75X3.50	2-3/4	3-1/2
850-3.43X4.00	3-7/16	4
850-3.50X4.50	3-1/2	4-1/2
850-3.68X4.25	3-11/16	4-1/4
850-3.95X4.50	3.95	4-1/2
850-4.25X5.00	4-1/4	5

STYLE 851 - BUNA-N

Part Number	I.D.	O.D.
851-0.62X1.12	5/8	1-1/8
851-0.75X1.25	3/4	1-1/4
851-0.87X1.37	7/8	1-3/8
851-1.00X1.50	1	1-1/2
851-1.05X1.63	1-1/16	1-5/8
851-1.12X1.75	1-1/8	1-3/4
851-1.12X1.87	1-1/8	1-7/8
851-1.25X1.75	1-1/4	1-3/4
851-1.25X1.87	1-1/4	1-7/8
851-1.37X1.87	1-3/8	1-7/8
851-1.37X2.12	1-3/8	2-1/8
851-1.50X2.00	1-1/2	2
851-1.50X2.12	1-1/2	2-1/8
851-1.75X2.25	1-3/4	2-1/4
851-1.87X2.37	1-7/8	2-3/8
851-2.00X2.50	2	2-1/2
851-2.12X2.75	2-1/8	2-3/4

Part Number	I.D.	O.D.
851-2.25X2.75	2-1/4	2-3/4
851-2.37X3.00	2-3/8	3
851-2.50X3.00	2-1/2	3
851-2.75X3.50	2-3/4	3-1/2
851-2.95X3.45	2.950	3.450
851-3.00X3.62	3	3-5/8
851-3.00X4.00	3	4
851-3.18X3.81	3-3/16	3-13/16
851-3.43X4.00	3-7/16	4
851-3.45X4.00	3.450	4
851-3.68X4.25	3-11/16	4-1/4
851-3.95X4.50	3.950	4-1/2
851-4.43X5.00	4-7/16	5
851-4.50X5.00	4-1/2	5
851-4.93X5.68	4-15/16	5-11/16

STYLE 852 & 853 WV PACKING



STYLE 852 - NEO FAB

Part Number	I.D.	O.D.
852-0.62X1.12	5/8	1-1/8
852-0.75X1.25	3/4	1-1/4
852-1.00X1.50	1	1-1/2
852-1.12X1.75	1-1/8	1-3/4
852-1.25X1.75	1-1/4	1-3/4
852-1.25X2.00	1-1/4	2
852-1.37X2.12	1-3/8	2-1/8
852-1.50X2.00	1-1/2	2
852-1.50X2.12	1-1/2	2-1/8
852-1.75X2.25	1-3/4	2-1/4
852-1.87X2.37	1-7/8	2-3/8
852-2.00X2.50	2	2-1/2
852-2.45X3.002	2.450	3.002

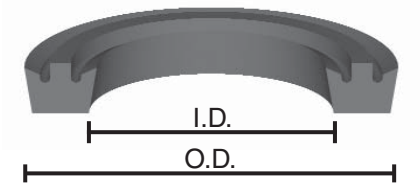
Part Number	I.D.	O.D.
852-2.50X3.00	2-1/2	3
852-2.75X3.50	2-3/4	3-1/2
852-2.95X3.45	2.950	3.450
852-3.00X4.00	3	4
852-3.43X4.00	3-7/16	4
852-3.45X4.00	3.450	4
852-3.50X4.50	3-1/2	4-1/2
852-3.68X4.25	3-11/16	4-1/4
852-3.95X4.50	3.950	4-1/2
852-4.25X5.00	4-1/4	5
852-4.43X5.00	4-7/16	5
852-4.50X5.00	4-1/2	5

STYLE 853 - BUNA-N

Part Number	I.D.	O.D.
853-0.62X1.12	5/8	1-1/8
853-0.87X1.37	7/8	1-3/8
853-1.00X1.50	1	1-1/2
853-1.25X1.87	1-1/4	1-7/8

Part Number	I.D.	O.D.
853-1.50X2.12	1-1/2	2-1/8
853-2.00X2.50	2	2-1/2
853-2.12X2.75	2-1/8	2-3/4
853-3.00X3.62	3	3-5/8

STYLE 855 WV PACKING



STYLE 855 - BUNA-N

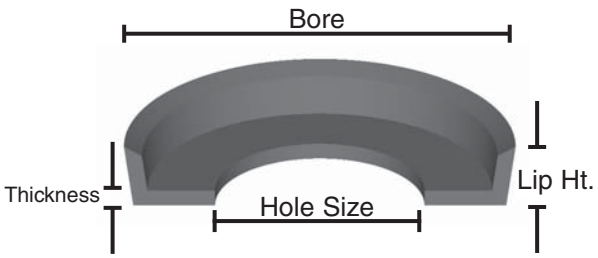
Part Number	I.D.	O.D.
855-0.75X1.25	3/4	1-1/4
855-1.00X1.50	1	1-1/2
855-1.25X1.87	1-1/4	1-7/8
855-1.37X2.00	1-3/8	2
855-1.50X2.12	1-1/2	2-1/8
855-2.00X3.00	2	3
855-2.37X3.00	2-3/8	3

Part Number	I.D.	O.D.
855-2.37X3.00-C	2-3/8	3
855-2.75X3.50	2-3/4	3-1/2
855-3.25X4.00	3-1/4	4
855-4.25X5.00	4-1/4	5

C = Carboxilated Nitrile

STYLE 6000 RUBBER PISTON CUPS

NOTE: The 6000 piston cups are center punched if there is no hole size indicated.



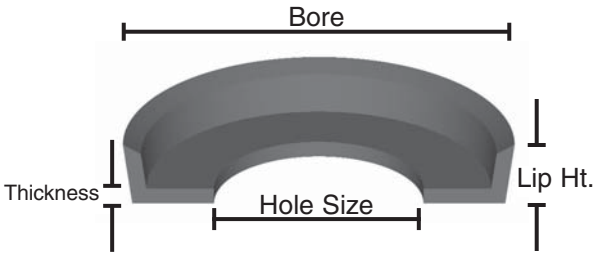
SEAL INFORMATION	
MATERIAL	BUNA-N RUBBER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 150 PSI
PART NUMBER	(Piston Cup Type)(Bore) - (Hole Size)

Part Number	Bore	Lip Ht.	Thick-ness	Hole Size
6062	5/8	0.305	0.115	blank
6075	3/4	5/16	3/32	blank
6100	1	7/16	3/32	blank
6100-037	1	7/16	3/32	3/8
6125	1-1/4	1/2	1/8	blank
6137	1-3/8	1/2	1/8	blank
6150	1-1/2	1/2	1/8	blank
6150-062	1-1/2	1/2	1/8	5/8
6162	1-5/8	1/2	1/8	blank
6175	1-3/4	1/2	1/8	blank
6187	1-7/8	1/2	1/8	blank
6200	2	1/2	1/8	blank
6225	2-1/4	1/2	1/8	blank
6237-050	2-3/8	1/2	1/8	1/2
6237-100	2-3/8	1/2	1/8	1
6250	2-1/2	1/2	1/8	blank
6250-062	2-1/2	1/2	1/8	5/8
6262	2-5/8	1/2	1/8	blank
6275	2-3/4	1/2	1/8	blank
6275-068	2-3/4	1/2	1/8	11/16
6287	2-7/8	1/2	1/8	blank
6300	3	5/8	5/32	blank
6312	3-1/8	5/8	5/32	blank
6325	3-1/4	5/8	5/32	blank
6350	3-1/2	5/8	5/32	blank

Part Number	Bore	Lip Ht.	Thick-ness	Hole Size
6375	3-3/4	5/8	5/32	blank
6400	4	5/8	5/32	blank
6400-275-90D	4	5/8	5/32	2-3/4
6425	4-1/4	5/8	5/32	blank
6450	4-1/2	5/8	5/32	blank
6475	4-3/4	5/8	5/32	blank
6500	5	3/4	3/16	blank
6500-075	5	3/4	3/16	3/4
6550	5-1/2	3/4	3/16	blank
6575	5-3/4	3/4	3/16	blank
6600	6	3/4	3/16	blank
6600-100	6	3/4	3/16	1
6600-400-90D	6	3/4	3/16	4
6610	6	1	3/16	blank
6625	6-1/4	3/4	3/16	blank
6650	6-1/2	3/4	3/16	blank
6700	7	3/4	3/16	blank
6800	8	1	3/16	blank
6800-525A-90D	8	3/4	3/16	5-1/4
6900	9	1	3/16	blank
61000	10	1	3/16	blank
61200	12	1	3/16	blank
61400	14	1	3/16	blank

STYLE 8000 URETHANE PISTON CUPS

NOTE: The 8000 piston cups are center punched



SEAL INFORMATION	
MATERIAL	90A URETHANE
TEMPERATURE RANGE	-65° TO +220° F
PRESSURE RANGE	0 TO 1,200 PSI
PART NUMBER	(Piston Cup Type)(Bore) - (Hole Size)

Part Number	Bore	Lip Ht.	Thick-ness	Hole Size
8050-000	1/2	1/4	3/32	blank
8100-000	1	1/2	1/8	blank
8150-000	1-1/2	1/2	1/8	blank
8175-000	1-3/4	1/2	1/8	blank
8275-000	2-3/4	5/8	3/16	blank
8300-000	3	5/8	3/16	blank
8325-000	3-1/4	5/8	3/16	blank
8337-000	3-3/8	5/8	3/16	blank

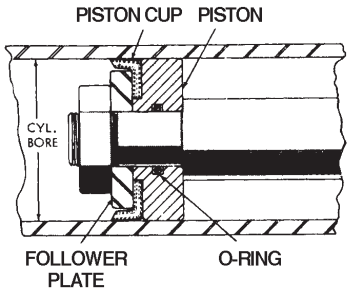
Part Number	Bore	Lip Ht.	Thick-ness	Hole Size
8350-000	3-1/2	5/8	3/16	blank
8400-000	4	5/8	3/16	blank
8450-000	4-1/2	5/8	3/16	blank
8500-000	5	5/8	3/16	blank
8550-000	5-1/2	3/4	3/16	blank
8600-000	6	3/4	3/16	blank
8650-000	6-1/2	3/4	3/16	blank

To obtain best results from any style of piston cup, it is recommended that the piston properly support the heel of the cup. Recommended diametral clearance between the piston and cylinder wall are as follows:

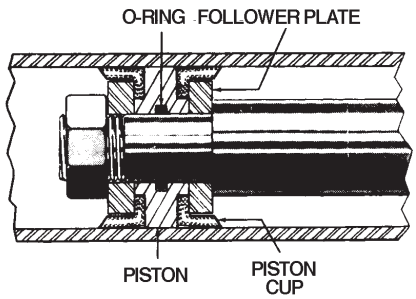
1" to 2-1/4"	.005"
2-1/2" to 4-3/4"	.008"
5" to 10"	.010"

The following piston designs meet standard industry practices:

SINGLE ACTING PISTON



DOUBLE ACTING PISTON



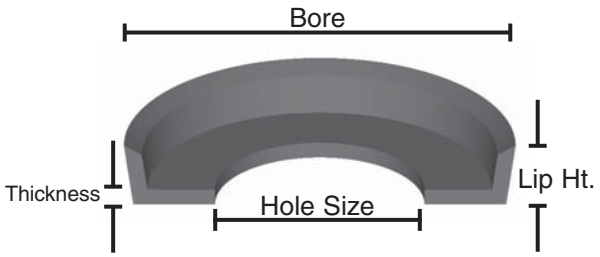
The height of the machined shoulder most frequently used to control squeeze on the heel of the cup is as follows:

Cups 1/8" thick	.116/.119"
Cups 5/32" thick	.146/.149"
Cups 3/16" thick	.178/.181"

The follower plate should be approximately .110" smaller than the I.D. of the cup. To reduce any tendency of the cup to extrude under pressure a phonograph finish may be machined on the surface of the follower plate.

STYLE 9000 NEO-FAB PISTON CUPS

Piston cups are constructed of rubberized fabric. Cups with no hole are center punched.



SEAL INFORMATION	
MATERIAL	COTTON FABRIC & RUBBER
TEMPERATURE RANGE	-35° TO +220° F
PRESSURE RANGE	0 TO 2,500 PSI
PART NUMBER	(Piston Cup Type)(Bore) - (Hole Size)

Part Number	Bore	Lip Ht.	Thick-ness	Hole Size
9062-000F	5/8	5/16	3/32	blank
9075-000F	3/4	7/16	3/32	blank
9087-000F	7/8	3/8	3/32	blank
9100-000F	1	7/16	3/32	blank
9100-025F	1	7/16	3/32	1/4
9100-037F	1	7/16	3/32	3/8
9100-050F	1	7/16	3/32	1/2
9112-000F	1-1/8	7/16	3/32	blank
9125-000F	1-1/4	7/16	3/32	blank
9125-037F	1-1/4	7/16	3/32	3/8
9137-000F	1-3/8	7/16	3/32	blank
9137-062F	1-3/8	7/16	3/32	5/8
9150-000F	1-1/2	1/2	1/8	blank
9150-037F	1-1/2	1/2	1/8	3/8
9150-062F	1-1/2	1/2	1/8	5/8
9162-000F	1-5/8	1/2	1/8	blank
9175-000F	1-3/4	1/2	1/8	blank
9175-062F	1-3/4	1/2	1/8	5/8
9175-069F	1-3/4	1/2	1/8	11/16
9187-000F	1-7/8	1/2	1/8	blank
9187-062F	1-7/8	1/2	1/8	5/8
9200-000F	2	1/2	1/8	blank
9200-037F	2	1/2	1/8	3/8
9200-050F	2	1/2	1/8	1/2
9200-062F	2	1/2	1/8	5/8
9200-100F	2	1/2	1/8	1
9212-000F	2-1/8	1/2	1/8	blank
9225-000F	2-1/4	1/2	1/8	blank
9225-075F	2-1/4	1/2	1/8	3/4
9225-100F	2-1/4	1/2	1/8	1

Part Number	Bore	Lip Ht.	Thick-ness	Hole Size
9237-000F	2-3/8	1/2	1/8	blank
9237-050F	2-3/8	1/2	1/8	1/2
9237-100F	2-3/8	1/2	1/8	1
9250-000F	2-1/2	1/2	1/8	blank
9250-037F	2-1/2	1/2	1/8	3/8
9250-062F	2-1/2	1/2	1/8	5/8
9250-075F	2-1/2	1/2	1/8	3/4
9250-100F	2-1/2	1/2	1/8	1
9250-125F	2-1/2	1/2	1/8	1-1/4
9250-137F	2-1/2	1/2	1/8	1-3/8
9262-000F	2-5/8	1/2	1/8	blank
9275-000F	2-3/4	1/2	1/8	blank
9275-075F	2-3/4	1/2	1/8	3/4
9275-100F	2-3/4	1/2	1/8	1
9275-150F	2-3/4	1/2	1/8	1-1/2
9287-000F	2-7/8	1/2	1/8	blank
9300-000F	3	5/8	5/32	blank
9300-050F	3	5/8	5/32	1/2
9300-100F	3	5/8	5/32	1
9300-125F	3	5/8	5/32	1-1/4
9300-137F	3	5/8	5/32	1-3/8
9300-150F	3	5/8	5/32	1-1/2
9300-162F	3	5/8	5/32	1-5/8
9300-175F	3	5/8	5/32	1-3/4
9300-187F	3	5/8	5/32	1-7/8
9312-100F	3-1/8	5/8	5/32	1
9325-000F	3-1/4	5/8	5/32	blank
9325-037F	3-1/4	5/8	5/32	3/8
9325-050F	3-1/4	5/8	5/32	1/2
9325-100F	3-1/4	5/8	5/32	1

STYLE 9000 NEO-FAB PISTON CUPS

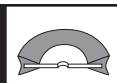
Part Number	Bore	Lip Ht.	Thick-ness	Hole Size
9337-037F	3-3/8	5/8	5/32	3/8
9350-000F	3-1/2	5/8	5/32	blank
9350-025F	3-1/2	5/8	5/32	1/4
9350-050F	3-1/2	5/8	5/32	1/2
9350-100F	3-1/2	5/8	5/32	1
9350-125F	3-1/2	5/8	5/32	1-1/4
9350-150F	3-1/2	5/8	5/32	1-1/2
9350-187F	3-1/2	5/8	5/32	1-7/8
9350-200F	3-1/2	5/8	5/32	2
9350-237F	3-1/2	5/8	5/32	2-3/8
9362-000F	3-5/8	5/8	5/32	blank
9375-000F	3-3/4	5/8	5/32	blank
9375-050F	3-3/4	5/8	5/32	1/2
9375-075F	3-3/4	5/8	5/32	3/4
9387-000F	3-7/8	5/8	5/32	blank
9400-000F	4	5/8	5/32	blank
9400-050F	4	5/8	5/32	1/2
9400-150F	4	5/8	5/32	1-1/2
9400-162F	4	5/8	5/32	1-5/8
9400-175F	4	5/8	5/32	1-3/4
9400-187F	4	5/8	5/32	1-7/8
9400-200F	4	5/8	5/32	2
9400-225F	4	5/8	5/32	2-1/4
9400-250F	4	5/8	5/32	2-1/2
9425-000F	4-1/4	5/8	5/32	blank
9425-137F	4-1/4	5/8	5/32	1-3/8
9450-000F	4-1/2	5/8	5/32	blank
9450-075F	4-1/2	5/8	5/32	3/4
9450-187F	4-1/2	5/8	5/32	1-7/8
9450-225F	4-1/2	5/8	5/32	2-1/4
9450-250F	4-1/2	5/8	5/32	2-1/2
9475-000F	4-3/4	5/8	5/32	blank
9475-050F	4-3/4	5/8	5/32	1/2
9500-000F	5	3/4	3/16	blank
9500-100F	5	3/4	3/16	1

Part Number	Bore	Lip Ht.	Thick-ness	Hole Size
9500-125F	5	3/4	3/16	1-1/4
9500-250F	5	3/4	3/16	2-1/2
9525-050F	5-1/4	3/4	3/16	1/2
9550-000F	5-1/2	3/4	3/16	blank
9550-125F	5-1/2	3/4	3/16	1-1/4
9550-200F	5-1/2	3/4	3/16	2
9575-000F	5-3/4	3/4	3/16	blank
9600-000F	6	3/4	3/16	blank
9600-050F	6	3/4	3/16	1/2
9600-200F	6	3/4	3/16	2
9600-250F	6	3/4	3/16	2-1/2
9600-350F	6	3/4	3/16	3-1/2
9650-000F	6-1/2	3/4	3/16	blank
9675-000F	6-3/4	3/4	3/16	blank
9700-000F	7	3/4	3/16	blank
9700-125F	7	3/4	3/16	1-1/4
9700-200F	7	3/4	3/16	2
9700-400F	7	3/4	3/16	4
9725-162F	7-1/4	3/4	3/16	1-5/8
9800-000F	8	1	3/16	blank
9800-100F	8	1	3/16	1
9800-125F	8	1	3/16	1-1/4
9900-000F	9	1	3/16	blank
91000-100F	10	1	3/16	1
91200-000F	12	1	3/16	blank

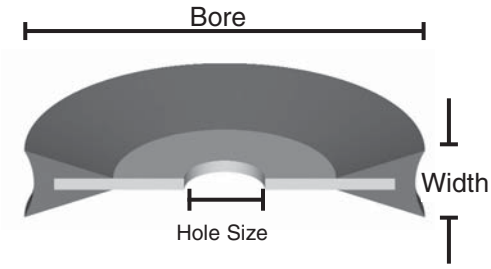
NOTE:
These piston cups are specially sized for use in EDBRO Cylinders.

9200-062ED	2	7/8	7/32	5/8
9262-087ED	2-5/8	7/8	7/32	7/8
9325-100ED	3-1/4	7/8	7/32	1
9387-112ED	3-7/8	7/8	7/32	1-1/8
9475-125ED	4-3/4	7/8	7/32	1-1/4
9575-150ED	5-3/4	7/8	7/32	1-1/2

ONE PIECE DOUBLE ACTING PISTON CUPS



This complete piston cup with a simple, one-piece construction serves the same purpose as a multi-assembly unit and is more economical with easy maintenance, dependability and long life. The unique piston cup consists of homogeneous rubber bonded to a zinc-coated steel plate. The center hole may be enlarged to accommodate larger piston rods. Recommended for pneumatic and low-pressure hydraulic applications.

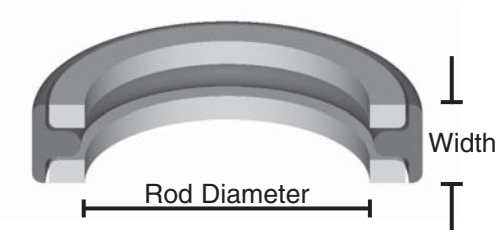


SEAL INFORMATION	
MATERIAL	RUBBER LIP, ZINC COATED STEEL PLATE
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 800 PSI
PART NUMBER	(Prefix) - (Bore Size)

Part Number	Bore	Hole Size	Width
DAPC-100	1	1/4	3/8
DAPC-125	1-1/4	1/4	1/2
DAPC-137	1-3/8	1/4	1/2
DAPC-150	1-1/2	1/4	1/2
DAPC-175	1-3/4	1/4	1/2
DAPC-200	2	3/8	9/16
DAPC-225	2-1/4	3/8	9/16
DAPC-250	2-1/2	3/8	9/16
DAPC-300	3	1/2	9/16
DAPC-325	3-1/4	1/2	9/16
DAPC-350	3-1/2	1/2	3/4
DAPC-400	4	1/2	3/4
DAPC-500	5	3/4	15/16
DAPC-600	6	3/4	15/16

STYLE TR ROD T-SEALS

T-Seals combine a resilient sealing ring with a hard, split back-up ring on each side of the sealing element. The assembly installs in a standard o-ring groove. T-Seals are non-spiraling and extrusion resistant to 5,000 psi with improved tolerances.



SEAL INFORMATION	
MATERIAL	BUNA-N RUBBER SEAL- HARD PLASTIC BACK-UPS
TEMPERATURE RANGE	-35° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (Size)

Part Number	Rod Diameter	O-Ring Groove Dash Number
TR-001	3/16	-106
TR-004	3/8	-204
TR-006	1/2	-206
TR-008	5/8	-208
TR-009	11/16	-209
TR-010	3/4	-210
TR-012	7/8	-212
TR-014	1	-214
TR-015	1-1/16	-215
TR-016	1-1/8	-216
TR-017	1-3/16	-217
TR-018	1-1/4	-218
TR-020	1-3/8	-220
TR-022	1-1/2	-222
TR-023	1-1/2	-325
TR-024	1-5/8	-326
TR-025	1-3/4	-327
TR-026	1-7/8	-328
TR-027	2	-329
TR-028	2-1/8	-330
TR-029	2-1/4	-331
TR-030	2-3/8	-332
TR-031	2-1/2	-333
TR-032	2-5/8	-334
TR-033	2-3/4	-335

Part Number	Rod Diameter	O-Ring Groove Dash Number
TR-034	2-7/8	-336
TR-035	3	-337
TR-036	3-1/8	-338
TR-037	3-1/4	-339
TR-038	3-3/8	-340
TR-039	3-1/2	-341
TR-040	3-5/8	-342
TR-041	3-3/4	-343
TR-042	3-7/8	-344
TR-043	4	-345
TR-045	4-1/4	-347
TR-046	4-3/8	-348
TR-047	4-1/2	-349
TR-048	5	-429
TR-049	5-1/4	-431
TR-050	5-1/2	-433
TR-052	6	-437
TR-058	7-1/2	-443
TR-059	8	-445
TR-060	9	-447

Intermediate and Wide Base T-Seals are designed to fit MIL-5514F o-ring glands only and interchange with 1 o-ring / 1 back-up ring and 1 o-ring / 2 back-up ring grooves, respectively.

TR-027WB	2	.405

STYLE TP PISTON T-SEALS

T-Seals combine a resilient sealing ring with a hard, split back-up ring on each side of the sealing element. The assembly installs in a standard o-ring groove. T-Seals are non-spiraling and extrusion resistant to 5,000 psi with improved tolerances.

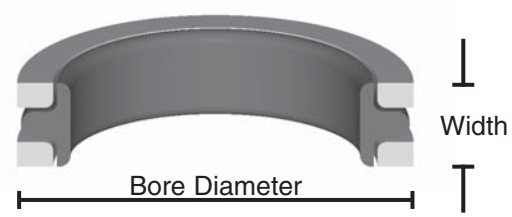
SEAL INFORMATION	
MATERIAL	BUNA-N RUBBER SEAL- HARD PLASTIC BACK-UPS
TEMPERATURE RANGE	-35° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (Size)

Part Number	Bore Diameter	O-Ring Groove Dash Number
TP-009	7/8	-208
TP-011	1	-210
TP-012	1-1/16	-211
TP-013	1-1/8	-212
TP-014	1-3/16	-213
TP-015	1-1/4	-214
TP-016	1-5/16	-215
TP-017	1-3/8	-216
TP-018	1-7/16	-217
TP-019	1-1/2	-218
TP-021	1-5/8	-220
TP-022	1-3/4	-222
TP-023	1-7/8	-325
TP-024	2	-326
TP-025	2-1/8	-327
TP-026	2-1/4	-328
TP-027	2-3/8	-329
TP-028	2-1/2	-330
TP-029	2-5/8	-331
TP-030	2-3/4	-332
TP-031	2-7/8	-333
TP-032	3	-334
TP-033	3-1/8	-335
TP-034	3-1/4	-336
TP-035	3-1/2	-338
TP-036	3-5/8	-339
TP-037	3-3/4	-340
TP-038	3-7/8	-341

Part Number	Bore Diameter	O-Ring Groove Dash Number
TP-039	4	-342
TP-040	4-1/8	-343
TP-041	4-1/4	-344
TP-042	4-3/8	-345
TP-043	4-1/2	-346
TP-045	4-3/4	-348
TP-046	4-7/8	-349
TP-047	5	-350
TP-048	5-1/8	-426
TP-049	5-1/4	-427
TP-051	5-1/2	-429
TP-053	5-3/4	-431
TP-054	5-7/8	-432
TP-055	6	-433
TP-057	6-1/4	-435
TP-058	6-1/2	-437
TP-060	7	-439
TP-062	7-1/2	-441
TP-064	8	-443
TP-065	8-1/4	-444
TP-066	8-1/2	-445
TP-067	9	-446
TP-068	9-1/2	-447
TP-069	10	-448
TP-070	10-1/2	-449
TP-071	11	-450
TP-072	11-1/2	-451
TP-073	12	-452

INTERMEDIATE & WIDE BASE PISTON T-SEALS

Intermediate and Wide Base T-Seals are designed to fit MIL-5514F o-ring glands only and interchange with 1 o-ring / 1 back-up ring and 1 o-ring / 2 back-up ring grooves, respectively.



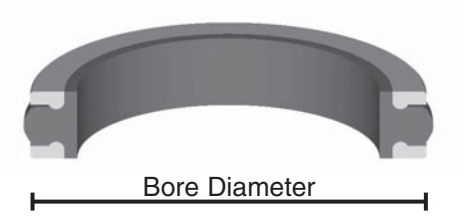
SEAL INFORMATION	
MATERIAL	BUNA-N RUBBER SEAL- HARD PLASTIC BACK-UPS
TEMPERATURE RANGE	-35° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (Size) - (IB or WB)

Part Number	Bore Diameter	Seal Base Width	Groove Width
TP-218-WB	1-1/2	.270	.304
TP-221	1-11/16	.170	.185
TP-222-IB	1-3/4	.215	.235
TP-326-IB	2	.312	.334
TP-328-IB	2-1/4	.312	.334
TP-328-WB	2-1/4	.405	.424
TP-330-IB	2-1/2	.312	.334
TP-330-WB	2-1/2	.405	.424
TP-333-WB	2-7/8	.405	.424
TP-334-IB	3	.312	.334
TP-334-WB	3	.405	.424
TP-338-IB	3-1/2	.312	.334
TP-338-WB	3-1/2	.405	.424
TP-342-WB	4	.405	.424
TP-346-IB	4-1/2	.312	.334
TP-346-WB	4-1/2	.405	.424

Part Number	Bore Diameter	Seal Base Width	Groove Width
TP-347-IB	4-5/8	.312	.334
TP-350-WB	5	.405	.424
TP-425-IB	5	.450	.475
TP-425-WB	5	.550	.579
TP-427-WB	5-1/4	.550	.579
TP-429-IB	5-1/2	.450	.475
TP-433-IB	6	.450	.475
TP-433-WB	6	.550	. 579
TP-435-IB	6-1/4	.450	.475
TP-439-IB	7	.450	. 475
TP-439-WB	7	.550	.579
TP-443-WB	8	.550	.579
TP-444-IB	8-1/4	.450	.475
TP-446-IB	9	.450	.475
TP-448-IB	10	.450	.475
TP-450-IB	11	.450	.475

STYLE TP-L LOCKING PISTON T-SEALS

The Style TP-L seal is a zero drift piston seal for bi-directional pressure applications. The locking anti-extrusion rings provide for an easier installation. It is designed to retrofit O-Ring and standard T-seal grooves. The 70 Shore A NBR is designed specifically for performance in compression type dynamic seals. Other features include a net molded dynamic sealing surface and backup chamfers.



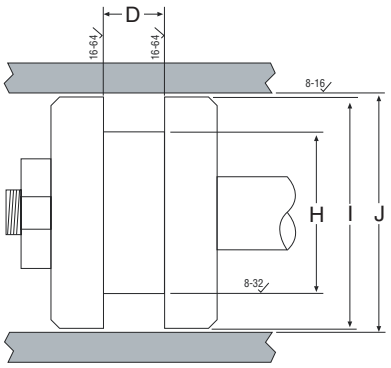
SEAL INFORMATION	
MATERIAL	BUNA-N RUBBER SEAL- HARD PLASTIC BACK-UPS
TEMPERATURE RANGE	-35° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (Size)

Part Number	Bore Diameter	O-Ring Groove Dash Number
TP-009-L	7/8	-208
TP-011-L	1	-210
TP-013-L	1-1/8	-212
TP-015-L	1-1/4	-214
TP-017-L	1-3/8	-216
TP-019-L	1-1/2	-218
TP-021-L	1-5/8	-220
TP-022-L	1-3/4	-222
TP-023-L	1-7/8	-325
TP-024-L	2	-326
TP-025-L	2-1/8	-327
TP-026-L	2-1/4	-328
TP-027-L	2-3/8	-329
TP-028-L	2-1/2	-330
TP-029-L	2-5/8	-331
TP-030-L	2-3/4	-332

Part Number	Bore Diameter	O-Ring Groove Dash Number
TP-031-L	2-7/8	-333
TP-032-L	3	-334
TP-033-L	3-1/8	-335
TP-034-L	3-1/4	-336
TP-035-L	3-1/2	-338
TP-037-L	3-3/4	-340
TP-039-L	4	-342
TP-041-L	4-1/4	-344
TP-043-L	4-1/2	-346
TP-045-L	4-3/4	-348
TP-047-L	5	-350
TP-049-L	5-1/4	-427
TP-051-L	5-1/2	-429
TP-053-L	5-3/4	-431
TP-055-L	6	-433
TP-058-L	6-1/2	-437

STYLE CPS CAPPED PISTON T-SEALS

A heavy duty double-acting assembly, the capped piston T-seal exhibits excellent sealability, extrusion resistance, and wearability. T-seals with "BR" suffix utilize a Bronze Filled PTFE cap instead of the standard Glass Filled PTFE cap.



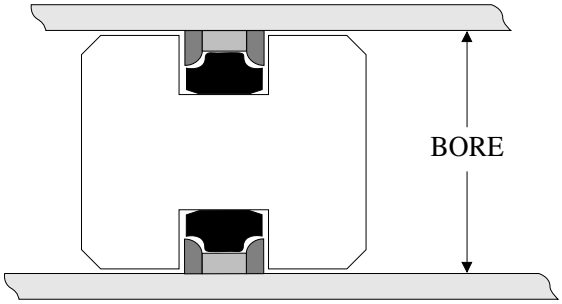
SEAL INFORMATION	
MATERIAL	PTFE CAP NYLON BACK-UP RUBBER ENERGIZER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 6,000 psi
PART NUMBER	(Prefix) - (Bore Size)

Part Number	B Nom O.D.	D Groove Width	H Groove Diameter	I Piston Diameter		J Bore Diameter
				W/O WR	W/ WR	
CPS-1750BR	1 3/4	0.424 +0.010 -0.000	1.376 +0.000 -0.002	1.749 +0.000 -0.006	1.749 +0.000 -0.024	1.750 +0.002 -0.000
CPS-2000	2	0.424 +0.010 -0.000	1.626 +0.000 -0.002	1.999 +0.000 -0.006	1.999 +0.000 -0.024	2.000 +0.002 -0.000
CPS-2500	2 1/2	0.424 +0.010 -0.000	2.126 +0.000 -0.002	2.499 +0.000 -0.006	2.499 +0.000 -0.024	2.500 +0.002 -0.000
CPS-2750BR	2 3/4	0.424 +0.010 -0.000	2.376 +0.000 -0.002	2.749 +0.000 -0.006	2.749 +0.000 -0.024	2.750 +0.002 -0.000
CPS-3000	3	0.579 +0.010 -0.000	2.520 +0.000 -0.003	2.999 +0.000 -0.006	2.999 +0.000 -0.029	3.000 +0.003 -0.000
CPS-3000A	3	0.420 +0.010 -0.000	2.442 +0.000 -0.002	2.999 +0.000 -0.006	2.999 +0.000 -0.029	3.000 +0.003 -0.000
CPS-3000BR	3	0.579 +0.010 -0.000	2.520 +0.000 -0.003	2.999 +0.000 -0.006	2.999 +0.000 -0.029	3.000 +0.003 -0.000
CPS-3250	3 1/4	0.579 +0.010 -0.000	2.770 +0.000 -0.003	3.249 +0.000 -0.006	3.249 +0.000 -0.029	3.250 +0.003 -0.000
CPS-3500	3 1/2	0.579 +0.010 -0.000	3.020 +0.000 -0.003	3.499 +0.000 -0.006	3.499 +0.000 -0.029	3.500 +0.003 -0.000
CPS-3500BR	3 1/2	0.579 +0.010 -0.000	3.020 +0.000 -0.003	3.499 +0.000 -0.006	3.499 +0.000 -0.029	3.500 +0.003 -0.000
CPS-3750	3 3/4	0.579 +0.010 -0.000	3.270 +0.000 -0.003	3.749 +0.000 -0.006	3.749 +0.000 -0.029	3.750 +0.003 -0.000
CPS-4000	4	0.579 +0.010 -0.000	3.520 +0.000 -0.003	3.999 +0.000 -0.006	3.999 +0.000 -0.029	4.000 +0.003 -0.000
CPS-4000BR	4	0.579 +0.010 -0.000	3.520 +0.000 -0.003	3.999 +0.000 -0.006	3.999 +0.000 -0.029	4.000 +0.003 -0.000
CPS-4250	4 1/4	0.579 +0.010 -0.000	3.770 +0.000 -0.003	4.249 +0.000 -0.006	4.249 +0.000 -0.029	4.250 +0.003 -0.000
CPS-4500	4 1/2	0.579 +0.010 -0.000	4.020 +0.000 -0.003	4.499 +0.000 -0.007	4.499 +0.000 -0.029	4.500 +0.003 -0.000
CPS-4500BR	4 1/2	0.579 +0.010 -0.000	4.020 +0.000 -0.003	4.499 +0.000 -0.007	4.499 +0.000 -0.029	4.500 +0.003 -0.000
CPS-5000	5	0.750 +0.010 -0.000	4.270 +0.000 -0.004	4.999 +0.000 -0.008	4.999 +0.000 -0.029	5.000 +0.004 -0.000
CPS-5000BR	5	0.750 +0.010 -0.000	4.270 +0.000 -0.004	4.999 +0.000 -0.008	4.999 +0.000 -0.029	5.000 +0.004 -0.000
CPS-5250	5 1/4	0.750 +0.010 -0.000	4.520 +0.000 -0.004	5.249 +0.000 -0.008	5.249 +0.000 -0.029	5.250 +0.004 -0.000
CPS-5500	5 1/2	0.750 +0.010 -0.000	4.770 +0.000 -0.004	5.499 +0.000 -0.008	5.499 +0.000 -0.029	5.500 +0.004 -0.000
CPS-5500BR	5 1/2	0.750 +0.010 -0.000	4.770 +0.000 -0.004	5.499 +0.000 -0.008	5.499 +0.000 -0.029	5.500 +0.004 -0.000
CPS-5504BR	5 1/2	0.579 +0.010 -0.000	5.020 +0.000 -0.004	5.499 +0.000 -0.008	5.499 +0.000 -0.029	5.500 +0.004 -0.000

STYLE CPS CAPPED PISTON T-SEALS

Part Number	B Nom O.D.	D Groove Width	H Groove Diameter	I Piston Diameter		J Bore Diameter
				W/O WR	W/ WR	
CPS-6000	6	0.750 +0.010 -0.000	5.270 +0.000 -0.004	5.999 +0.000 -0.008	5.999 +0.000 -0.029	6.000 +0.004 -0.000
CPS-6000A	6	0.579 +0.010 -0.000	5.520 +0.000 -0.003	5.999 +0.000 -0.008	5.999 +0.000 -0.029	6.000 +0.003 -0.000
CPS-6015	6.015	0.750 +0.010 -0.000	5.285 +0.000 -0.004	6.014 +0.000 -0.008	6.014 +0.000 -0.029	6.015 +0.004 -0.000
CPS-6250	6 1/4	0.750 +0.010 -0.000	5.520 +0.000 -0.004	6.249 +0.000 -0.008	6.249 +0.000 -0.029	6.250 +0.004 -0.000
CPS-6250BR	6 1/4	0.750 +0.010 -0.000	5.520 +0.000 -0.004	6.249 +0.000 -0.008	6.249 +0.000 -0.029	6.250 +0.004 -0.000
CPS-6500	6 1/2	0.750 +0.010 -0.000	5.770 +0.000 -0.004	6.499 +0.000 -0.008	6.499 +0.000 -0.029	6.500 +0.004 -0.000
CPS-6504BR	6 1/2	0.579 +0.010 -0.000	6.020 +0.000 -0.004	6.499 +0.000 -0.008	6.499 +0.000 -0.029	6.500 +0.004 -0.000
CPS-7000	7	0.750 +0.010 -0.000	6.270 +0.000 -0.004	6.999 +0.000 -0.008	6.999 +0.000 -0.029	7.000 +0.004 -0.000
CPS-7000BR	7	0.750 +0.010 -0.000	6.270 +0.000 -0.004	6.999 +0.000 -0.008	6.999 +0.000 -0.029	7.000 +0.004 -0.000
CPS-7250BR	7 1/4	0.750 +0.010 -0.000	6.520 +0.000 -0.004	7.249 +0.000 -0.008	7.249 +0.000 -0.029	7.250 +0.004 -0.000
CPS-7500	7 1/2	0.750 +0.010 -0.000	6.770 +0.000 -0.004	7.499 +0.000 -0.008	7.499 +0.000 -0.029	7.500 +0.004 -0.000
CPS-8000	8	0.750 +0.010 -0.000	7.270 +0.000 -0.004	7.999 +0.000 -0.008	7.999 +0.000 -0.029	8.000 +0.004 -0.000
CPS-9000	9	0.750 +0.010 -0.000	8.270 +0.000 -0.004	8.999 +0.000 -0.008	8.999 +0.000 -0.029	9.000 +0.004 -0.000
CPS-10000	10	0.750 +0.010 -0.000	9.270 +0.000 -0.004	9.999 +0.000 -0.008	9.999 +0.000 -0.029	10.000 +0.004 -0.000

REPLACEMENT CAPPED PISTON T-SEALS
FOR CATERPILLAR EQUIPMENT*



SEAL INFORMATION	
MATERIAL	BUNA-N RUBBER SEAL- HARD PLASTIC BACK-UPS
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 6,000 PSI

Part Number	Bore Diameter
CTC-3G4762	8-1/2
CTC-3G4765	10-1/2
CTC-8J3747	4-1/2
CTC-8J3749	7
CTC-8J4390	8-1/4
CTC-8J4510	7-1/4
CTC-8J5644	7-3/4
CTC-8J8703	6-1/2

Part Number	Bore Diameter
CTC-8J8767	5-1/2
CTC-9J1242	6
CTC-9J2987	11-1/2
CTC-9J3406	10
CTC-9J5558	6-1/4
CTC-9J5567	7-1/2
CTC-9J7868	5

INSTALLATION OF PTFE PISTON SEALS

Installing PTFE piston seals is not always an easy task. The use of installation tools is recommended but often not convenient when working with a wide variety of sizes and applications. Finger installations are practical with rings of smaller cross-sections. Using fingers or a rounded plastic stick, knead the ring over the piston into the groove. With rings of larger cross-sections it may be necessary to heat the ring. Warming the ring in water or oil at 130° F or 140° F for about 5 minutes will soften the material for easier installation. Always avoid inconsistent stretching or overstretching of the PTFE seal.

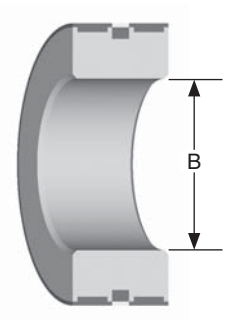
To prevent the PTFE ring from snapping into the wrong groove, cover wear ring grooves with plastic tape.

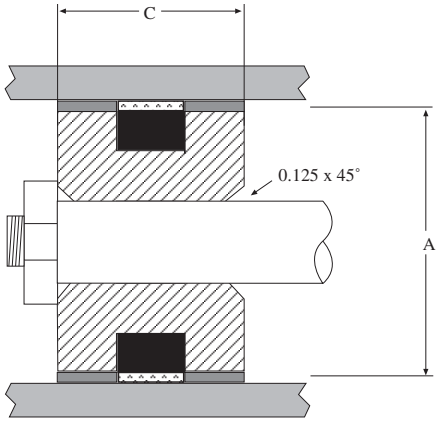
After seal installation, assembly of the cylinder may be difficult if the piston seal is loose on the piston or the cylinder has an inadequate leading edge chamfer. In such cases, compress the piston seal with belting or a suitable hose clamp. If the piston seal must pass threads or any other sharp edges during the cylinder assembly, cover the edges with plastic tape or wrap.

NOTE: Caterpillar® part numbers are used as a reference only. We do not imply that these parts are original equipment parts.

STYLE PA UNITIZED PISTONS

The PA Unitized Pistons are designed to handle a broad range of application parameters. The piston body is machined to exact dimensions and is constructed using four components: A high strength steel body, a non-metallic bearing, a rubber loading ring and a filled PTFE seal ring. The non-metallic bearing is molded to the piston using a special proprietary process.



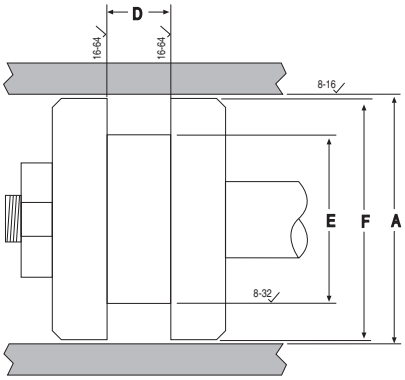


PISTON INFORMATION	
TEMPERATURE RANGE	-40° TO +275° F
MAX PRESSURE	5,000 PSI
MAX VELOCITY	3 ft / second

Part Number	A Bore Diameter Tol. +0.002/-0	B Hole Diameter Tol. +0.002/-0	C Piston Width Tol. +0.002/-0
PA-2.00X0.75X1.00	2.00	.75	1.00
PA-2.50X1.00X1.00	2.50	1.00	1.00
PA-3.50X1.00X1.50	3.50	1.00	1.50
PA-4.00X1.25X1.50	4.00	1.25	1.50

STYLE PS1400 GLASS FILLED PTFE PISTON SEALS

The PS1400 seals offer low friction and high strength in a compact double-acting piston seal design. The PTFE seal ring, combined with a rubber energizer, assures positive contact with the dynamic surace. The PS1400 is designed to fit ANSI/B93.32-1973 groove standards. Piston diameter "F" dimensions are given for pistons without wear rings.



SEAL INFORMATION	
MATERIAL	15% GLASS FILLED PTFE SEAL RUBBER ENERGIZER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	O TO 5,000 PSI
PART NUMBER	(Piston Seal) (Type of Seal)-(Size)

Part Number	A Bore Diameter Tol. +0.002-0.000	B & C Seal Height & Cross Section	D Groove Width Tol. ±0.002	E Groove Dia. Tol. ±0.002	F Piston Dia. Tol. ±0.001
PS1400-16	1.000	0.070 ±0.005	0.083	0.740	0.997
PS1400-18	1.125	0.070 ±0.005	0.083	0.865	1.122
PS1400-20	1.250	0.070 ±0.005	0.083	0.990	1.247
PS1400-22	1.375	0.070 ±0.005	0.083	1.115	1.372
PS1400-24	1.500	0.070 ±0.005	0.083	1.240	1.497
PS1400-26	1.625	0.109 ±0.010	0.122	1.233	1.622
PS1400-28	1.750	0.109 ±0.010	0.122	1.358	1.747
PS1400-30	1.875	0.109 ±0.010	0.122	1.483	1.872
PS1400-32	2.000	0.115 ±0.010	0.129	1.608	1.996
PS1400-34	2.125	0.115 ±0.010	0.129	1.733	2.121
PS1400-36	2.250	0.115 ±0.010	0.129	1.858	2.246
PS1400-38	2.375	0.115 ±0.010	0.129	1.983	2.371
PS1400-40	2.500	0.115 ±0.010	0.129	2.108	2.496
PS1400-44	2.750	0.115 ±0.010	0.129	2.358	2.746
PS1400-48	3.000	0.115 ±0.010	0.129	2.608	2.996
PS1400-50	3.125	0.115 ±0.010	0.129	2.733	3.121
PS1400-52	3.250	0.115 ±0.010	0.129	2.858	3.246
PS1400-54	3.375	0.115 ±0.010	0.129	2.983	3.371
PS1400-56	3.500	0.115 ±0.010	0.129	3.108	3.496
PS1400-58	3.625	0.115 ±0.010	0.129	3.233	3.621
PS1400-60	3.750	0.115 ±0.010	0.129	3.358	3.746
PS1400-64	4.000	0.115 ±0.010	0.129	3.608	3.996
PS1400-68	4.250	0.115 ±0.010	0.129	3.858	4.246
PS1400-70.4	4.400	0.115 ±0.010	0.129	4.008	4.396
PS1400-72	4.500	0.115 ±0.010	0.129	4.108	4.496
PS1400-76	4.750	0.115 ±0.010	0.129	4.358	4.746
PS1400-78	4.875	0.115 ±0.010	0.129	4.483	4.871
PS1400-80	5.000	0.115 ±0.010	0.129	4.608	4.996
PS1400-84	5.250	0.115 ±0.010	0.129	4.858	5.246
PS1400-88	5.500	0.115 ±0.010	0.129	5.108	5.496

STYLE PS1400 GLASS FILLED PTFE PISTON SEALS

Part Number	A Bore Diameter Tol. +0.002-0.000	B & C Seal Height & Cross Section	D Groove Width Tol. ±0.002	E Groove Dia. Tol. ±0.002	F Piston Dia. Tol. ±0.001
PS1400-92	5.750	0.143 ±0.010	0.159	5.232	5.746
PS1400-94	5.875	0.143 ±0.010	0.159	5.357	5.871
PS1400-96	6.000	0.143 ±0.010	0.159	5.482	5.996
PS1400-98	6.125	0.143 ±0.010	0.159	5.607	6.121
PS1400-100	6.250	0.143 ±0.010	0.159	5.732	6.246
PS1400-104	6.500	0.143 ±0.010	0.159	5.982	6.496
PS1400-112	7.000	0.143 ±0.010	0.159	6.482	6.996
PS1400-116	7.250	0.143 ±0.010	0.159	6.732	7.246
PS1400-120	7.500	0.143 ±0.010	0.159	6.982	7.496
PS1400-128	8.000	0.143 ±0.010	0.159	7.482	7.996
PS1400-130	8.125	0.143 ±0.010	0.159	7.607	8.121
PS1400-132	8.250	0.143 ±0.010	0.159	7.732	8.246
PS1400-136	8.500	0.143 ±0.010	0.159	7.982	8.496
PS1400-144	9.000	0.143 ±0.010	0.159	8.482	8.996
PS1400-152	9.500	0.143 ±0.010	0.159	8.982	9.496
PS1400-160	10.000	0.143 ±0.010	0.159	9.482	9.996
PS1400-168	10.500	0.143 ±0.010	0.159	9.982	10.496
PS1400-176	11.000	0.143 ±0.010	0.159	10.482	10.996
PS1400-184	11.500	0.143 ±0.010	0.159	10.982	11.496
PS1400-192	12.000	0.143 ±0.010	0.159	11.482	11.996
PS1400-200	12.500	0.143 ±0.010	0.159	11.982	12.496
PS1400-208	13.000	0.143 ±0.010	0.159	12.482	12.996
PS1400-224	14.000	0.143 ±0.010	0.159	13.482	13.996

INSTALLATION OF PTFE PISTON SEALS

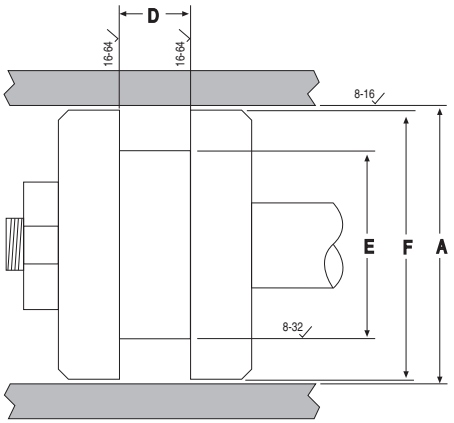
Installing PTFE piston seals is not always an easy task. The use of installation tools is recommended but often not convenient when working with a wide variety of sizes and applications. Finger installations are practical with rings of smaller cross-sections. Using fingers or a rounded plastic stick, knead the ring over the piston into the groove. With rings of larger cross-sections it may be necessary to heat the ring. Warming the ring in water or oil at 130° F or 140° F for about 5 minutes will soften the material for easier installation. Always avoid inconsistent stretching or overstretching of the PTFE seal.

To prevent the PTFE ring from snapping into the wrong groove, cover wear ring grooves with plastic tape.

After seal installation, assembly of the cylinder may be difficult if the piston seal is loose on the piston or the cylinder has an inadequate leading edge chamfer. In such cases, compress the piston seal with belting or a suitable hose clamp. If the piston seal must pass threads or any other sharp edges during the cylinder assembly, cover the edges with plastic tape or wrap.

STYLE PS1500 POLYURETHANE PISTON SEALS

Totally interchangeable with Style PS1400 PTFE piston seals, Style PS1500 piston seals are molded from tough 60 Shore D durometer polyurethane. During the molding process, a .002" thick band of molybdenum disulfide is molded into the outside diameter of the seal ring for reduced friction. PS1500 piston seals are easily stretched over the piston and recover rapidly with the elimination of the "cold flow" characteristics found in PTFE seals. Piston diameter "F" dimensions are given for pistons without wear rings.

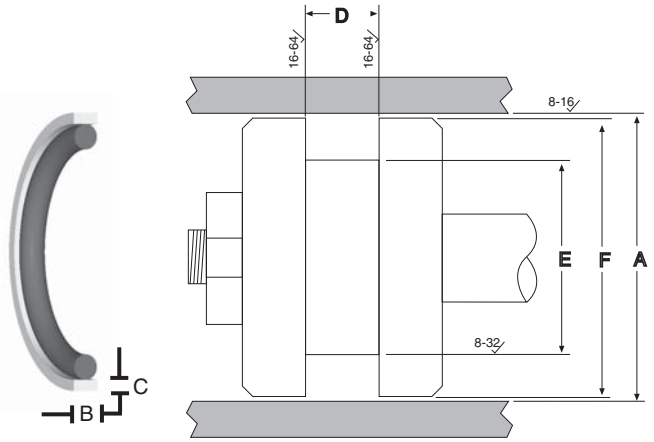


SEAL INFORMATION	
MATERIAL	POLYURETHANE SEAL RUBBER ENERGIZER
TEMPERATURE RANGE	-40° TO +200° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Piston Seal) (Type of Seal) - (Size)

Part Number	A Bore Diameter Tol. +0.002 -0.000	B & C Seal Height & Cross Section	D Groove Width Tol. ±0.002	E Groove Dia. Tol. ±0.002	F Piston Dia. Tol. ±0.001
PS1500-24	1.500	0.070 ±0.005	0.083	1.240	1.497
PS1500-28	1.750	0.109 ±0.005	0.122	1.358	1.747
PS1500-32	2.000	0.115 ±0.006	0.129	1.608	1.996
PS1500-36	2.250	0.115 ±0.006	0.129	1.858	2.246
PS1500-38	2.375	0.115 ±0.006	0.129	1.983	2.371
PS1500-40	2.500	0.115 ±0.006	0.129	2.108	2.496
PS1500-44	2.750	0.115 ±0.006	0.129	2.358	2.746
PS1500-48	3.000	0.115 ±0.006	0.129	2.608	2.996
PS1500-52	3.250	0.115 ±0.006	0.129	2.858	3.246
PS1500-54	3.375	0.115 ±0.006	0.129	2.981	3.371
PS1500-56	3.500	0.115 ±0.006	0.129	3.108	3.496
PS1500-60	3.750	0.115 ±0.006	0.129	3.358	3.746
PS1500-64	4.000	0.115 ±0.006	0.129	3.608	3.996
PS1500-68	4.250	0.115 ±0.006	0.129	3.858	4.246
PS1500-72	4.500	0.115 ±0.006	0.129	4.108	4.496
PS1500-76	4.750	0.115 ±0.006	0.129	4.358	4.746
PS1500-80	5.000	0.115 ±0.006	0.129	4.608	4.996
PS1500-84	5.250	0.115 ±0.006	0.129	4.858	5.246
PS1500-88	5.500	0.115 ±0.006	0.129	5.108	5.496
PS1500-92	5.750	0.143 ±0.007	0.159	5.232	5.746
PS1500-96	6.000	0.143 ±0.007	0.159	5.482	5.996
PS1500-104	6.500	0.143 ±0.007	0.159	5.982	6.496
PS1500-112	7.000	0.143 ±0.007	0.159	6.482	6.996
PS1500-136	8.500	0.143 ±0.007	0.159	7.982	8.494

STYLE PS1600 GLASS FILLED PTFE PISTON SEALS

NOTE: Piston diameter "F" dimensions are given for pistons without wear rings.

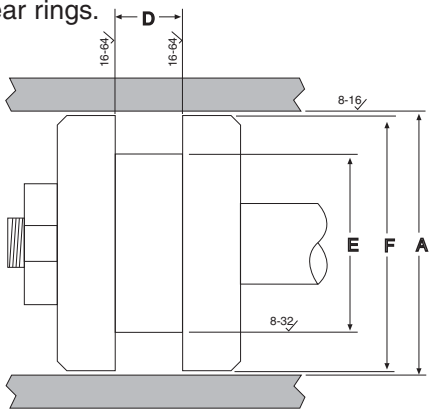


SEAL INFORMATION	
MATERIAL	15% GLASS FILLED PTFE SEAL RUBBER ENERGIZER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Piston Seal) (Type of Seal)-(Size)

Part Number	A Bore Dia.Tol. +0.002 -0.000	B Seal Height Tol. ±0.005	C Cross Section Tol. ±0.005	D Groove Width Tol. ±0.003	E Groove Dia. Tol. ±0.002	F Piston Dia.
PS1600-16	1.000	0.088	0.055	0.094	0.787	0.999+0/-0.003
PS1600-18	1.125	0.088	0.055	0.094	0.912	1.124+0/-0.003
PS1600-20	1.250	0.088	0.055	0.094	1.037	1.249+0/-0.003
PS1600-22	1.375	0.088	0.055	0.094	1.162	1.374+0/-0.003
PS1600-24	1.500	0.088	0.055	0.094	1.287	1.499+0/-0.003
PS1600-26	1.625	0.088	0.055	0.094	1.412	1.624+0/-0.003
PS1600-28	1.750	0.088	0.055	0.094	1.537	1.749+0/-0.003
PS1600-30	1.875	0.120	0.060	0.126	1.598	1.874+0/-0.003
PS1600-32	2.000	0.120	0.060	0.126	1.723	1.999+0/-0.003
PS1600-36	2.250	0.120	0.060	0.126	1.973	2.249+0/-0.003
PS1600-38	2.375	0.120	0.060	0.126	2.098	2.374+0/-0.003
PS1600-40	2.500	0.120	0.060	0.126	2.223	2.499+0/-0.003
PS1600-44	2.750	0.150	0.090	0.157	2.348	2.749+0/-0.004
PS1600-48	3.000	0.150	0.090	0.157	2.603	2.999+0/-0.004
PS1600-52	3.250	0.150	0.090	0.157	2.853	3.249+0/-0.004
PS1600-56	3.500	0.150	0.090	0.157	3.103	3.499+0/-0.004
PS1600-60	3.750	0.150	0.090	0.157	3.353	3.749+0/-0.004
PS1600-64	4.000	0.150	0.090	0.157	3.603	3.999+0/-0.004
PS1600-68	4.250	0.150	0.090	0.157	3.853	4.249+0/-0.004
PS1600-72	4.500	0.150	0.090	0.157	4.103	4.499+0/-0.004
PS1600-76	4.750	0.150	0.090	0.157	4.353	4.749+0/-0.004
PS1600-80	5.000	0.150	0.090	0.157	4.603	4.999+0/-0.004
PS1600-84	5.250	0.150	0.090	0.157	4.853	5.249+0/-0.004
PS1600-88	5.500	0.150	0.090	0.157	5.103	5.499+0/-0.004
PS1600-92	5.750	0.150	0.090	0.157	5.353	5.749+0/-0.004
PS1600-96	6.000	0.287	0.120	0.293	5.305	5.999+0/-0.005
PS1600-112	7.000	0.287	0.120	0.293	6.305	6.999+0/-0.005

STYLE PS1800 GLASS FILLED PTFE PISTON SEALS

The PS1800 provides low friction, high strength piston sealing. The PS1800 also provides double-acting piston sealing in a compact design that meets the requirements of ANSI/B93-32-1973. **NOTE:** Piston diameter "F" dimensions are given for pistons without wear rings.



SEAL INFORMATION	
MATERIAL	15% GLASS FILLED PTFE SEAL RUBBER ENERGIZER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Piston Seal) (Type of Seal) - (Size)

Part Number	A Bore Dia. Tol. +0.002 -0.000	B Seal Height	C Cross Section	D Groove Width Tol. ±0.002	E Groove Dia. Tol. ±0.002	F Piston Dia.
PS1800-16	1.000	0.116-0.121	0.067-0.073	0.129	0.690	0.999+0/-0.005
PS1800-20	1.250	0.116-0.121	0.067-0.073	0.129	0.940	1.249+0/-0.005
PS1800-24	1.500	0.116-0.121	0.067-0.073	0.129	1.190	1.499+0/-0.005
PS1800-28	1.750	0.116-0.121	0.067-0.073	0.129	1.440	1.749+0/-0.005
PS1800-32	2.000	0.116-0.121	0.067-0.073	0.129	1.690	1.999+0/-0.005
PS1800-36	2.250	0.116-0.121	0.067-0.073	0.129	1.940	2.249+0/-0.005
PS1800-40	2.500	0.116-0.121	0.067-0.073	0.129	2.190	2.499+0/-0.005
PS1800-44	2.750	0.116-0.121	0.067-0.073	0.129	2.440	2.749+0/-0.005
PS1800-44A	2.750	0.269-0.274	0.087-0.093	0.284	2.190	2.749+0/-0.005
PS1800-48	3.000	0.269-0.274	0.087-0.093	0.284	2.440	2.999+0/-0.006
PS1800-52	3.250	0.269-0.274	0.087-0.093	0.284	2.690	3.249+0/-0.006
PS1800-56	3.500	0.269-0.274	0.087-0.093	0.284	2.940	3.499+0/-0.006
PS1800-60	3.750	0.269-0.274	0.087-0.093	0.284	3.190	3.749+0/-0.006
PS1800-64	4.000	0.269-0.274	0.087-0.093	0.284	3.440	3.999+0/-0.006
PS1800-68	4.250	0.269-0.274	0.087-0.093	0.284	3.690	4.249+0/-0.006
PS1800-72	4.500	0.269-0.274	0.087-0.093	0.284	3.940	4.499+0/-0.006
PS1800-74	4.625	0.269-0.274	0.087-0.093	0.284	4.078	4.624+0/-0.007
PS1800-76	4.750	0.269-0.274	0.087-0.093	0.284	4.190	4.749+0/-0.006
PS1800-80	5.000	0.269-0.274	0.087-0.093	0.284	4.440	4.999+0/-0.006
PS1800-84	5.250	0.362-0.367	0.137-0.147	0.379	4.488	5.249+0/-0.007
PS1800-88	5.500	0.362-0.367	0.137-0.147	0.379	4.738	5.499+0/-0.007
PS1800-90	5.625	0.362-0.367	0.137-0.147	0.379	4.863	5.624+0/-0.007
PS1800-92	5.750	0.362-0.367	0.137-0.147	0.379	4.988	5.749+0/-0.007
PS1800-96	6.000	0.362-0.367	0.137-0.147	0.379	5.238	5.999+0/-0.007
PS1800-100	6.250	0.362-0.367	0.137-0.147	0.379	5.488	6.249+0/-0.007
PS1800-104	6.500	0.362-0.367	0.137-0.147	0.379	5.738	6.499+0/-0.007
PS1800-112	7.000	0.362-0.367	0.137-0.147	0.379	6.238	6.999+0/-0.007
PS1800-116	7.250	0.362-0.367	0.137-0.147	0.379	6.488	7.249+0/-0.007
PS1800-120	7.500	0.362-0.367	0.137-0.147	0.379	6.738	7.499+0/-0.007
PS1800-128	8.000	0.362-0.367	0.137-0.147	0.379	7.238	7.999+0/-0.007
PS1800-132	8.250	0.362-0.367	0.137-0.147	0.379	7.488	8.249+0/-0.007
PS1800-136	8.500	0.362-0.367	0.137-0.147	0.379	7.738	8.499+0/-0.007
PS1800-144	9.000	0.362-0.367	0.195-0.210	0.379	8.122	8.999+0/-0.008
PS1800-152	9.500	0.362-0.367	0.195-0.210	0.379	8.622	9.499+0/-0.008
PS1800-160	10.000	0.362-0.367	0.195-0.210	0.379	9.122	9.999+0/-0.008
PS1800-168	10.500	0.362-0.367	0.195-0.210	0.379	9.622	10.499+0/-0.008

STYLE PS1800 GLASS FILLED PTFE PISTON SEALS

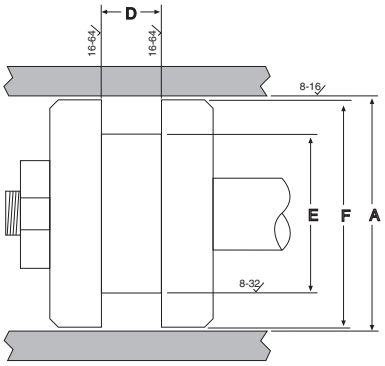
Part Number	A Bore Dia. Tol. +0.002 -0.000	B Seal Height	C Cross Section	D Groove Width Tol. ±0.002	E Groove Dia. Tol. ±0.002	F Piston Dia.
PS1800-176	11.000	0.362-0.367	0.195-0.210	0.379	10.122	10.999+0/-0.008
PS1800-192	12.000	0.362-0.367	0.195-0.210	0.379	11.122	11.999+0/-0.008
PS1800-208	13.000	0.362-0.367	0.195-0.210	0.379	12.122	12.999+0/-0.008
PS1800-224	14.000	0.362-0.367	0.195-0.210	0.379	13.122	13.999+0/-0.008

INSTALLATION OF PTFE PISTON SEALS

Installing PTFE piston seals is not always an easy task. The use of installation tools is recommended but often not convenient when working with a wide variety of sizes and applications. Finger installations are practical with rings of smaller cross-sections. Using fingers or a rounded plastic stick, knead the ring over the piston into the groove. With rings of larger cross-sections it may be necessary to heat the ring. Warming the ring in water or oil at 130° F or 140° F for about 5 minutes will soften the material for easier installation. Always avoid inconsistent stretching or overstretching of the PTFE seal. To prevent the PTFE ring from snapping into the wrong groove, cover wear ring grooves with plastic tape. After seal installation, assembly of the cylinder may be difficult if the piston seal is loose on the piston or the cylinder has an inadequate leading edge chamfer. In such cases, compress the piston seal with belting or a suitable hose clamp. If the piston seal must pass threads or any other sharp edges during the cylinder assembly, cover the edges with plastic tape or wrap.

STYLE PS1850 BRONZE FILLED PISTON SEALS

The PS1850 piston seal can be used interchangeably with the PS1800 style piston seal. This seal provides improved heat resistance for demanding applications. **NOTE:** Piston diameter "F" dimensions are given for pistons without wear rings.



SEAL INFORMATION	
MATERIAL	BRONZE FILLED PTFE SEALS RUBBER ENERGIZER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Piston Seal) (Type of Seal) - (Size)

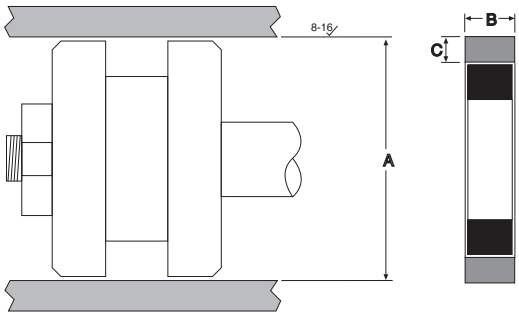
Part Number	A - Bore Diameter Tol. +0.002 -0.000	B Seal Height	C Seal Cross Section	D - Groove Width Tol. ±.002	E - Groove Diameter Tol. ±.002	F Piston Diameter
PS1850-16	1.000	0.116-0.121	0.067-0.073	0.129	0.690	0.999+0/-0.005
PS1850-20	1.250	0.116-0.121	0.067-0.073	0.129	0.940	1.249+0/-0.005
PS1850-24	1.500	0.116-0.121	0.067-0.073	0.129	1.190	1.499+0/-0.005
PS1850-28	1.750	0.116-0.121	0.067-0.073	0.129	1.440	1.749+0/-0.005
PS1850-32	2.000	0.116-0.121	0.067-0.073	0.129	1.690	1.999+0/-0.005
PS1850-36	2.250	0.116-0.121	0.067-0.073	0.129	1.940	2.249+0/-0.005
PS1850-40	2.500	0.116-0.121	0.067-0.073	0.129	2.190	2.499+0/-0.005
PS1850-44	2.750	0.116-0.121	0.067-0.073	0.129	2.440	2.749+0/-0.005
PS1850-48	3.000	0.269-0.274	0.087-0.093	0.284	2.440	2.999+0/-0.006
PS1850-52	3.250	0.269-0.274	0.087-0.093	0.284	2.690	3.249+0/-0.006
PS1850-56	3.500	0.269-0.274	0.087-0.093	0.284	2.940	3.499+0/-0.006
PS1850-60	3.750	0.269-0.274	0.087-0.093	0.284	3.190	3.749+0/-0.006
PS1850-64	4.000	0.269-0.274	0.087-0.093	0.284	3.440	3.999+0/-0.006
PS1850-68	4.250	0.269-0.274	0.087-0.093	0.284	3.690	4.249+0/-0.006
PS1850-72	4.500	0.269-0.274	0.087-0.093	0.284	3.940	4.499+0/-0.006

STYLE PS1850 BRONZE FILLED PISTON SEALS

Part Number	A - Bore Diameter Tol. +0.002 -0.000	B Seal Height	C Seal Cross Section	D - Groove Width Tol. ±.002	E - Groove Diameter Tol. ±.002	F Piston Diameter
PS1850-76	4.750	0.269-0.274	0.087-0.093	0.284	4.190	4.749+0/-0.006
PS1850-80	5.000	0.269-0.274	0.087-0.093	0.284	4.440	4.999+0/-0.006
PS1850-84	5.250	0.362-0.367	0.137-0.147	0.379	4.488	5.249+0/-0.007
PS1850-88	5.500	0.362-0.367	0.137-0.147	0.379	4.738	5.499+0/-0.007
PS1850-92	5.750	0.362-0.367	0.137-0.147	0.379	4.988	5.749+0/-0.007
PS1850-96	6.000	0.362-0.367	0.137-0.147	0.379	5.238	5.999+0/-0.007
PS1850-104	6.500	0.362-0.367	0.137-0.147	0.379	5.738	6.499+0/-0.007
PS1850-112	7.000	0.362-0.367	0.137-0.147	0.379	6.238	6.999+0/-0.007
PS1850-116	7.250	0.362-0.367	0.137-0.147	0.379	6.488	7.249+0/-0.007
PS1850-120	7.500	0.362-0.367	0.137-0.147	0.379	6.738	7.499+0/-0.007
PS1850-124	7.750	0.362-0.367	0.137-0.147	0.379	6.988	7.499+0/-0.007
PS1850-128	8.000	0.362-0.367	0.137-0.147	0.379	7.238	7.999+0/-0.007
PS1850-132	8.250	0.362-0.367	0.137-0.147	0.379	7.488	8.249+0/-0.007
PS1850-136	8.500	0.362-0.367	0.137-0.147	0.379	7.738	8.499+0/-0.007
PS1850-144	9.000	0.362-0.367	0.195-0.210	0.379	8.122	8.999+0/-0.008
PS1850-152	9.500	0.362-0.367	0.195-0.210	0.379	8.622	9.499+0/-0.008
PS1850-160	10.000	0.362-0.367	0.195-0.210	0.379	9.122	9.999+0/-0.008
PS1850-176	11.000	0.362-0.367	0.195-0.210	0.379	10.122	10.999+0/-0.008
PS1850-192	12.000	0.362-0.367	0.195-0.210	0.379	11.122	11.999+0/-0.008
PS1850-208	13.000	0.362-0.367	0.195-0.210	0.379	12.122	12.999+0/-0.008
PS1850-224	14.000	0.362-0.367	0.195-0.210	0.379	13.122	13.999+0/-0.008

STYLE PS1900 NON-STANDARD PTFE PISTON SEALS

These specifically sized seals are for certain OEM cylinders (primarily Heil & Timberjack). Their use is intended for existing housings where the old seals are dimensionally comparable to the table below. Please call your sales representative if you need additional assistance.

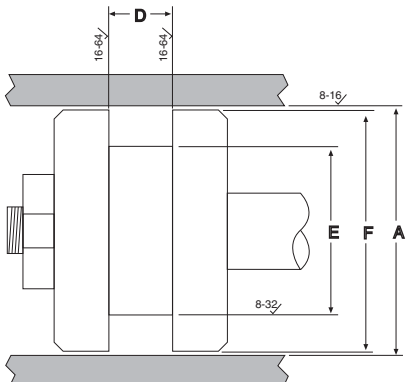


SEAL INFORMATION	
MATERIAL	GLASS FILLED PTFE SEAL RUBBER ENERGIZER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Piston Seal) (Type of Seal) - (Size)

Part Number	A - Bore Diameter	B - Seal Height	C - Seal Cross-Section	Energizer Ring
PS1900-32	2	0.150	0.085	568-130
PS1900-40	2-1/2	0.245	0.092	580-329
PS1900-56	3-1/2	0.370	0.145	580-410-1/2
PS1900-64	4	0.370	0.145	580-414
PS1900-64A	4	0.310	0.092	580-341
PS1900-72	4-1/2	0.370	0.142	568-419
PS1900-72A	4-1/2	0.310	0.092	580-345
PS1900-76	4-3/4	0.225	0.160	568-345
PS1900-80A	5	0.360	0.145	4-11/16 OD X 0.265 C/S

STYLE PS2700 POLYURETHANE PISTON SEALS

This seal, molded from high grade polyester with 5% glass fiber and 5% PTFE, may retrofit the PS1800 seals, considering all dimensions are comparable. This seal material, with a high degree of memory, stretches over the piston and snaps in the groove for immediate assembly. These seals also feature low friction and high abrasion and extrusion resistance which helps to eliminate assembly damage. Piston diameter "F" dimensions are given for pistons without wear rings.

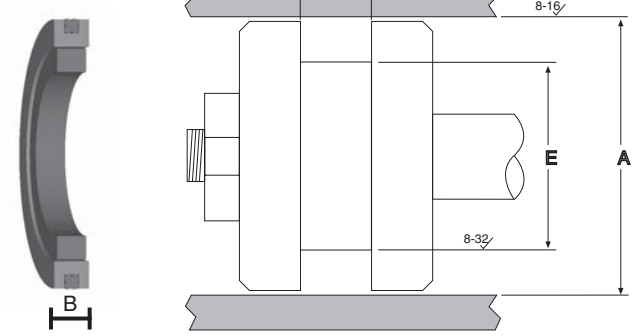


SEAL INFORMATION	
MATERIAL	GLASS/PTFE FILLED POLYESTER SEAL, RUBBER ENERGIZER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Piston Seal) (Type of Seal) - (Size)

Part Number	A - Bore Diameter Tol. +0.002 -0.000	B Seal Height	C Seal Cross Section	D - Groove Width Tol. ±.002	E - Groove Diameter Tol. ±.002	F Piston Diameter
PS2700-16	1.000	0.116-0.121	0.067-0.073	0.129	0.691	0.999+0/-0.009
PS2700-20	1.250	0.116-0.121	0.067-0.073	0.129	0.941	1.249+0/-0.009
PS2700-24	1.500	0.116-0.121	0.067-0.073	0.129	1.191	1.499+0/-0.009
PS2700-28	1.750	0.116-0.121	0.067-0.073	0.129	1.441	1.749+0/-0.009
PS2700-32	2.000	0.116-0.121	0.067-0.073	0.129	1.691	1.999+0/-0.009
PS2700-36	2.250	0.116-0.121	0.067-0.073	0.129	1.941	2.249+0/-0.009
PS2700-40	2.500	0.116-0.121	0.067-0.073	0.129	2.191	2.499+0/-0.009
PS2700-40A	2.500	0.269-0.274	0.087-0.093	0.284	1.962	2.499+0/-0.009
PS2700-44	2.750	0.116-0.121	0.067-0.073	0.129	2.441	2.749+0/-0.009
PS2700-48	3.000	0.269-0.274	0.087-0.093	0.284	2.462	2.999+0/-0.014
PS2700-52	3.250	0.269-0.274	0.087-0.093	0.284	2.712	3.249+0/-0.014
PS2700-56	3.500	0.269-0.274	0.087-0.093	0.284	2.962	3.499+0/-0.014
PS2700-60	3.750	0.269-0.274	0.087-0.093	0.284	3.212	3.749+0/-0.014
PS2700-64	4.000	0.269-0.274	0.087-0.093	0.284	3.462	3.999+0/-0.014
PS2700-68	4.250	0.269-0.274	0.087-0.093	0.284	3.712	4.249+0/-0.014
PS2700-72	4.500	0.269-0.274	0.087-0.093	0.284	3.962	4.499+0/-0.014
PS2700-76	4.750	0.269-0.274	0.087-0.093	0.284	4.212	4.749+0/-0.014
PS2700-80	5.000	0.269-0.274	0.087-0.093	0.284	4.462	4.999+0/-0.014
PS2700-84	5.250	0.362-0.367	0.137-0.147	0.379	4.504	5.249+0/-0.014
PS2700-88	5.500	0.362-0.367	0.137-0.147	0.379	4.754	5.499+0/-0.014
PS2700-96	6.000	0.362-0.367	0.137-0.147	0.379	5.254	5.999+0/-0.014
PS2700-100	6.250	0.362-0.367	0.137-0.147	0.379	5.504	6.249+0/-0.014
PS2700-104	6.500	0.362-0.367	0.137-0.147	0.379	5.754	6.499+0/-0.014
PS2700-112	7.000	0.362-0.367	0.137-0.147	0.379	6.250	6.999+0/-0.014
PS2700-116	7.250	0.362-0.367	0.137-0.147	0.379	6.504	7.249+0/-0.014
PS2700-128	8.000	0.362-0.367	0.137-0.147	0.379	7.254	7.999+0/-0.014
PS2700-136	8.500	0.362-0.367	0.137-0.147	0.379	7.754	8.499+0/-0.014
PS2700-144	9.000	0.362-0.367	0.195-0.210	0.379	8.137	8.999+0/-0.014
PS2700-160	10.000	0.362-0.367	0.195-0.210	0.379	9.137	9.999+0/-0.014

STYLE PSQ BRONZE FILLED PISTON SEALS

These piston seals provide bi-directional, low friction sealing with increased stability and superior leakage control. The square cut energizer provides low pressure sealing and eliminates backside leakage. This seal also effectively seals between different fluids on each side of the piston seal, making gas/liquid sealing combinations possible.
NOTE: Piston diameter "F" dimensions are given for pistons without wear rings.



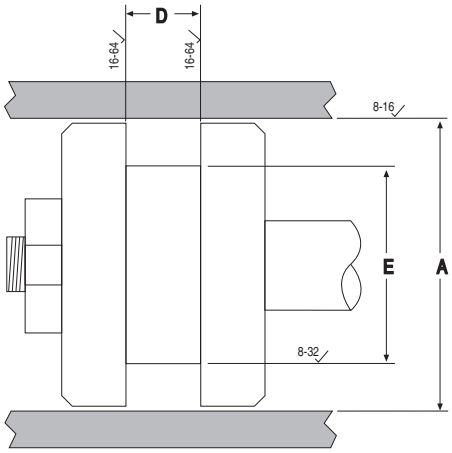
SEAL INFORMATION	
MATERIAL	40% BRONZE FILLED PTFE SEAL RUBBER ENERGIZER AND QUAD® RING
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(PISTON SEAL) - (SIZE)

MAXIMUM EXTRUSION GAP			
PRESSURE	1000 PSI	3000 PSI	5000 PSI
MAX DIAM. GAP BORE 1-1/2" - 5"	0.024"	0.008"	0.005"
MAX DIAM. GAP BORE 6" - 10"	0.030"	0.010"	0.006"

Part Number	A Bore Diameter	B Seal Height	D Groove Width	E Groove Diameter
PSQ-24	1.500 +0.003/-0	0.271	0.288/0.293	.884 +0/-0.003
PSQ-32	2.000 +0.003/-0	0.271	0.288/0.293	1.384 +0/-0.003
PSQ-36	2.225 +0.004/-0	0.271	0.288/0.293	1.630 +0/-0.003
PSQ-40	2.500 +0.004/-0	0.271	0.288/0.293	1.634 +0/-0.004
PSQ-48	3.000 +0.004/-0	0.271	0.288/0.293	2.384 +0/-0.004
PSQ-52	3.250 +0.004/-0	0.271	0.288/0.293	2.634 +0/-0.004
PSQ-56	3.500 +0.004/-0	0.271	0.288/0.293	2.884 +0/-0.004
PSQ-64	4.000 +0.004/-0	0.271	0.288/0.293	3.384 +0/-0.004
PSQ-72	4.500 +0.004/-0	0.271	0.288/0.293	3.884 +0/-0.004
PSQ-80	5.000 +0.004/-0	0.271	0.288/0.293	4.384 +0/-0.004
PSQ-88	5.500 +0.005/-0	0.362	0.375/0.380	4.660 +0/-0.005
PSQ-96	6.000 +0.005/-0	0.362	0.375/0.380	5.160 +0/-0.005
PSQ-104	6.500 +0.005/-0	0.362	0.375/0.380	5.660 +0/-0.005
PSQ-112	7.000 +0.005/-0	0.362	0.375/0.380	6.160 +0/-0.006
PSQ-128	8.000 +0.006/-0	0.362	0.375/0.380	7.160 +0/-0.006
PSQ-160	10.000 +0.006/-0	0.362	0.375/0.380	9.160 +0/-0.006

STYLE PS2470 BRONZE FILLED PTFE PISTON SEALS

Molded from a PTFE base material with 40% bronze and machined to exacting tolerances, this seal exhibits low friction and high strength. Corners are chamfered for cold flow resistance.

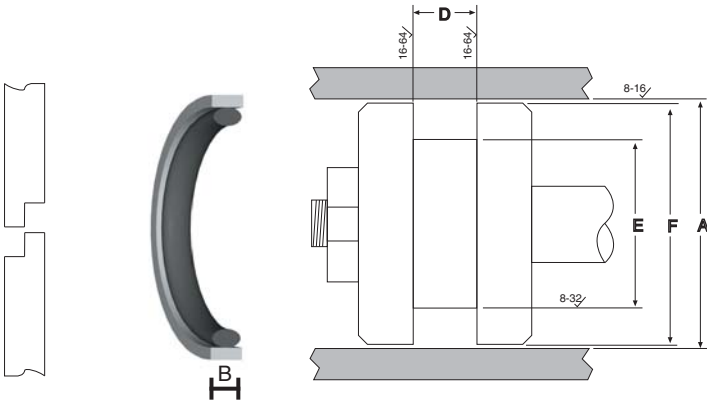


SEAL INFORMATION	
MATERIAL	40% BRONZE FILLE PTFE RUBBER ENERGIZER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 5,000
PART NUMBER	(Piston Seal) (Type of Seal)-(Size)

Part Number	A Bore Diameter	B Seal Height	C Seal Cross Section	D Groove Width	E Groove Diameter
PS2472-32	2.000	0.150	0.100	0.168 ±0.002	1.576 ±0.002
PS2472-40	2.500	0.150	0.100	0.168 ±0.002	2.076 ±0.002
PS2472-44	2.750	0.150	0.100	0.168 ±0.002	2.326 ±0.002
PS2472-48	3.000	0.150	0.100	0.168 ±0.002	2.576 ±0.002
PS2473-52	3.250	0.225	0.140	0.249 ±0.002	2.634 ±0.003
PS2473-56	3.500	0.225	0.140	0.249 ±0.002	2.884 ±0.003
PS2473-64	4.000	0.225	0.140	0.249 ±0.002	3.384 ±0.003
PS2473-68	4.250	0.225	0.145	0.249 ±0.002	3.634 ±0.003
PS2473-72	4.500	0.225	0.140	0.249 ±0.002	3.884 ±0.003
PS2473-80	5.000	0.225	0.140	0.249 ±0.002	4.384 ±0.003
PS2474-88	5.500	0.290	0.195	0.322 ±0.002	4.670 ±0.004
PS2473-96	6.000	0.225	0.140	0.249 ±0.002	5.384 ±0.004
PS2474-96	6.000	0.290	0.195	0.322 ±0.002	5.170 ±0.004
PS2474-104	6.500	0.290	0.195	0.322 ±0.002	5.670 ±0.004
PS2474-112	7.000	0.290	0.195	0.322 ±0.002	6.170 ±0.004
PS2474-120	7.500	0.290	0.195	0.322 ±0.002	6.670 ±0.004
PS2474-128	8.000	0.290	0.195	0.322 ±0.002	7.170 ±0.004
PS2474-152	9.500	0.290	0.195	0.322 ±0.002	8.670 ±0.004
PS2474-160	10.000	0.290	0.195	0.322 ±0.002	9.170 ±0.004

STYLE PS914 NYLON STEP CUT PISTON SEALS

NOTE: Piston diameter "F" dimensions are given for pistons without wear rings.

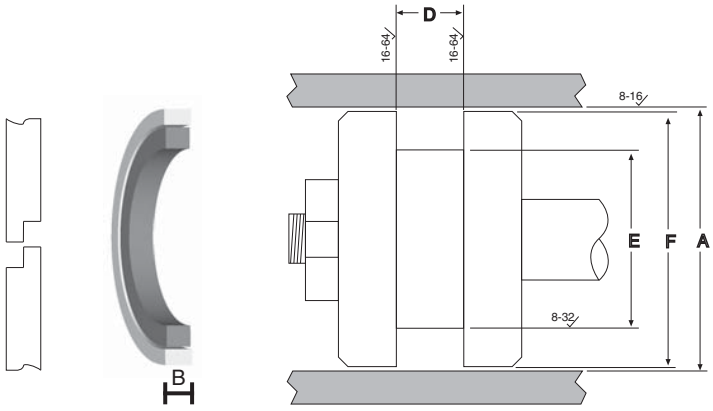


SEAL INFORMATION	
MATERIAL	GLASS FILLED NYLON SEAL RUBBER ENERGIZER
TEMPERATURE RANGE	-40° TO +220°
PRESSURE RANGE	0 TO 6,000 PSI
PART NUMBER	(Piston Seal) (Type of Seal)-(Size)-(Groove Width)

Part Number	A - Bore Diameter Tol. +0.005/-.0	B Seal Height	D - Groove Width Tol +0.005/-.0	E - Groove Diameter Tol. +.0/-0.005	F Piston Diameter
PS914-2000-282	2.000	0.274	0.282	1.462	1.999+0/-0.065
PS914-2250-282	2.250	0.274	0.282	1.712	2.249+0/-0.065
PS914-2500-282	2.500	0.274	0.282	1.962	2.499+0/-0.065
PS914-2500-312	2.500	0.306	0.312	1.908	2.499+0/-0.065
PS914-2750-282	2.750	0.274	0.282	2.212	2.749+0/-0.065
PS914-3000-282	3.000	0.274	0.282	2.442	2.999+0/-0.080
PS914-3000-312	3.000	0.306	0.312	2.408	2.999+0/-0.080
PS914-3500-282	3.500	0.274	0.282	2.942	3.499+0/-0.080
PS914-3500-312	3.500	0.306	0.312	2.908	3.499+0/-0.080
PS914-4000-282	4.000	0.274	0.282	3.442	3.999+0/-0.080
PS914-4000-312	4.000	0.306	0.312	3.408	3.999+0/-0.080
PS914-4250-282	4.250	0.274	0.282	3.692	4.249+0/-0.080
PS914-4265-282	4.265	0.274	0.282	3.707	4.264+0/-0.080
PS914-4500-282	4.500	0.274	0.282	3.942	4.499+0/-0.080
PS914-4500-312	4.500	0.306	0.312	3.908	4.499+0/-0.080
PS914-4750-282	4.750	0.274	0.282	4.192	4.749+0/-0.080
PS914-5000-282	5.000	0.274	0.282	4.442	4.999+0/-0.080
PS914-5000-375	5.000	0.370	0.377	4.240	4.999+0/-0.080
PS914-5250-375	5.250	0.370	0.377	4.490	5.249+0/-0.100
PS914-5500-375	5.500	0.370	0.377	4.740	5.499+0/-0.100
PS914-6000-375	6.000	0.370	0.377	5.240	5.999+0/-0.100
PS914-6500-375	6.500	0.370	0.377	5.740	6.499+0/-0.100
PS914-7000-375	7.000	0.370	0.377	6.240	6.999+0/-0.100
PS914-7500-375	7.500	0.370	0.377	6.740	7.499+0/-0.100
PS914-8000-375	8.000	0.370	0.377	7.240	7.999+0/-0.100
PS914-8500-375	8.500	0.370	0.377	7.740	8.499+0/-0.100
PS914-9000-375	9.000	0.370	0.377	8.124	8.999+0/-0.110
PS914-9500-375	9.500	0.370	0.377	8.624	9.499+0/-0.110
PS914-10000-375	10.000	0.370	0.377	9.124	9.999+0/-0.110

STYLE PS2000 NYLON STEP CUT PISTON SEALS

Some PS2000 piston seals utilize a round instead of a square energizer. Also, piston diameter "F" dimensions are given for pistons without wear rings. Many sizes shown are completely interchangeable with style PS914 piston seals.

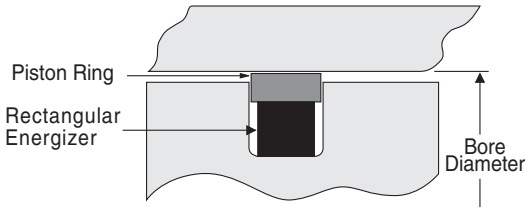


SEAL INFORMATION	
MATERIAL	GLASS FILLED NYLON SEAL RUBBER ENERGIZER
TEMPERATURE RANGE	-40° TO +220°
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Piston Seal) (Type of Seal)-(Size)-(Groove Width)

Part Number	A - Bore Diameter Tol. +.005/-.0	B Seal Height	D - Groove Width Tol. +.005/-.0	E - Groove Diameter Tol. +.0/-.005	F Piston Diameter
PS2027-28	1.750	0.274	0.282	1.155	1.749 +.0/-0.052
PS2027-32	2.000	0.274	0.282	1.462	1.999 +.0/-0.065
PS2027-36	2.250	0.274	0.282	1.712	2.249 +.0/-0.065
PS2027-40	2.500	0.274	0.282	1.962	2.499 +.0/-0.065
PS2031-48	3.000	0.305	0.312	2.408	2.999 +.0/-0.080
PS2027-48	3.040	0.274	0.282	2.462	3.039 +.0/-0.080
PS2027-52	3.250	0.274	0.282	2.712	3.249 +.0/-0.080
PS2031-56	3.500	0.305	0.312	2.908	3.499 +.0/-0.080
PS2037-56	3.500	0.368	0.375	2.740	3.499 +.0/-0.080
PS2027-56	3.500	0.274	0.282	2.942	3.499 +.0/-0.080
PS2031-64	4.000	0.305	0.312	3.408	3.999 +.0/-0.080
PS2027-64	4.000	0.274	0.282	3.442	3.999 +.0/-0.080
PS2031-72	4.500	0.305	0.312	3.908	4.499 +.0/-0.080
PS2027-72	4.500	0.274	0.282	3.942	4.499 +.0/-0.080
PS2031-80	5.000	0.305	0.312	4.408	4.999 +.0/-0.080
PS2037-80	5.000	0.368	0.375	4.240	4.999 +.0/-0.080
PS2031-88	5.500	0.305	0.312	4.908	5.499 +.0/-0.100
PS2037-88	5.500	0.368	0.375	4.740	5.499 +.0/-0.100
PS2037-96	6.000	0.368	0.375	5.240	5.999 +.0/-0.100
PS2037-100	6.250	0.368	0.375	5.490	6.249 +.0/-0.100
PS2037-104	6.500	0.368	0.375	5.740	6.499 +.0/-0.100
PS2037-112	7.000	0.368	0.375	6.240	6.999 +.0/-0.100

CATERPILLAR® 2 PIECE PISTON SEALS

NOTE: Caterpillar® part numbers are used as a reference only. We do not imply that these parts are original equipment parts.

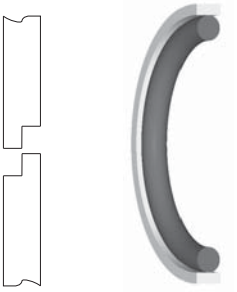


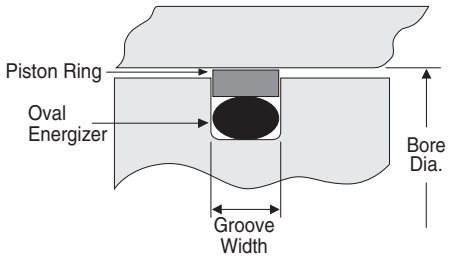
Part Number	Bore Diameter
CTC-5J7004A	2
CTC-8J6213A	2-1/2
CTC-5J7010A	2-3/4
CTC-6J1972A	3
CTC-6J0793A	3-1/4
CTC-5J7013A	3-1/2
CTC-5J8011A	3-3/4
CTC-5J5402A	4

Part Number	Bore Diameter
CTC-5J7854A	4-1/4
CTC-5J4986A	4-1/2
CTC-5J4987A	4-3/4
CTC-5J5020A	5
CTC-5J7234A	5-1/4
CTC-5J4988A	5-1/2
CTC-5J4989A	6
CTC-5J4990A	6-1/4

Part Number	Bore Diameter
CTC-5J4991A	6-1/2
CTC-5J4997A	7
CTC-5J4993A	7-1/4
CTC-5J5559A	8-1/4
CTC-6J9385A	8-1/2
CTC-5J7019A	9-1/4

CATERPILLAR® 2 PIECE STEP-CUT PISTON SEALS



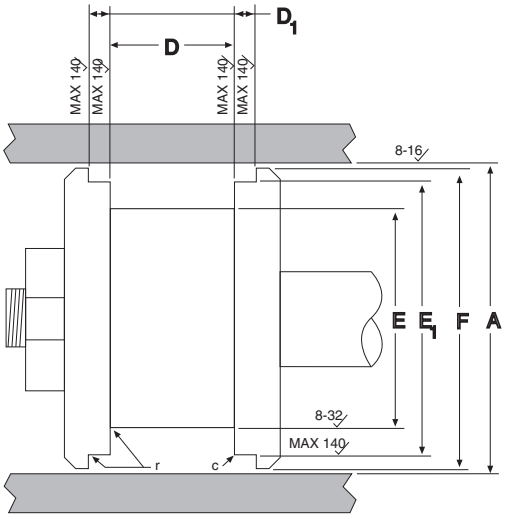


Part Number	Bore Diameter	Groove Width
CTC-9X7337	3	0.192
CTC-4T8054	3-1/2	0.192
CTC-9X7274	3-3/4	0.192
CTC-8C9160	4	0.252
CTC-8C9164	4-1/4	0.252
CTC-4T5172	4-1/2	0.500
CTC-9X7269	4-1/2	0.252
CTC-9X7264	5	0.379
CTC-8T1787	5	0.630
CTC-8T0763	5-1/4	0.379
CTC-4T5173	5-1/2	0.629
CTC-6E0465	5-1/2	0.379

Part Number	Bore Diameter	Groove Width
CTC-4T4144	6	0.629
CTC-4T8695	6-1/2	0.629
CTC-8T1789	7	0.629
CTC-8T1790	7-1/4	0.629
CTC-8T1792	7-3/4	0.629
CTC-8T1793	8-1/4	0.629
CTC-9T0119	8-1/2	0.629
CTC-8T1794	10	0.690
CTC-8T1795	10-1/4	.0690
CTC-8T1796	10-1/2	0.690
CTC-8T1797	11-1/2	0.690

STYLE PSA PISTON SEALS

Designed to fit on one or two piece pistons, this piston seal employs a nitrile seal for high sealability, nylon split back-ups for extrusion resistance, and two split bearing rings. No further support bearings are required.

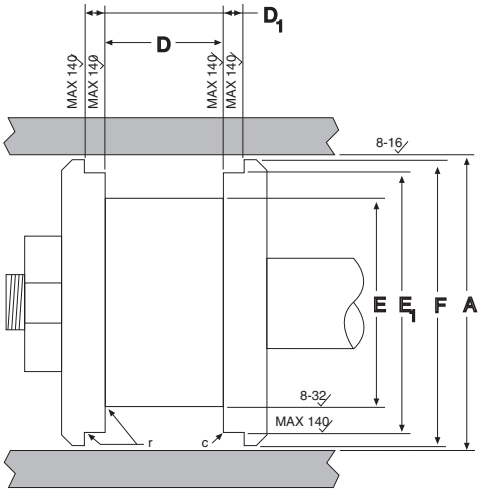


SEAL INFORMATION	
MATERIAL	90A NITRILE SEAL NYLON BACK-UP NYLON BEARING
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 6,000 PSI
MAXIMUM SPEED	1.5 Ft/Sec.
PART NUMBER	(Prefix) - (Size)

Part Number	A Bore Diameter	D Seal Groove Width Tol. +0.035/+0.025	D1 Bearing Groove Width Tol. +0/-0.005	E Seal Groove Diameter	E1 Bearing Groove Diameter	F Piston Diameter
PSA-1750	1.750+0.006/-0	0.750	0.250	1.125±0.003	1.569+0/-0.002	1.698±0.003
PSA-2000	2.000+0.007/-0	0.750	0.250	1.375±0.003	1.820+0/-0.002	1.948±0.004
PSA-2250	2.250+0.007/-0	0.750	0.250	1.625±0.003	2.069+0/-0.003	2.197±0.004
PSA-2375	2.375+0.007/-0	0.750	0.250	1.750±0.003	2.194+0/-0.003	2.322±0.004
PSA-2500	2.500+0.007/-0	0.750	0.250	1.875±0.003	2.318+0/-0.003	2.446±0.004
PSA-2750	2.750+0.007/-0	0.943	0.250	2.000±0.004	2.522+0/-0.003	2.685±0.004
PSA-3000	3.000+0.007/-0	0.943	0.250	2.250±0.004	2.771+0/-0.003	2.935±0.004
PSA-3250	3.250+0.009/-0	0.943	0.250	2.500±0.004	3.021+0/-0.003	3.184±0.004
PSA-3250A	3.250+0.009/-0	0.772	0.245	2.625±0.004	3.021+0/-0.003	3.184±0.004
PSA-3500	3.500+0.009/-0	0.943	0.250	2.750±0.004	3.270+0/-0.003	3.434±0.004
PSA-3500A	3.500+0.009/-0	0.772	0.295	2.850±0.004	3.272+0/-0.003	3.460±0.004
PSA-3750	3.750+0.009/-0	0.943	0.250	3.000±0.004	3.520+0/-0.003	3.683±0.004
PSA-4000	4.000+0.009/-0	0.943	0.250	3.250±0.004	3.770+0/-0.003	3.933±0.004
PSA-4000A	4.000+0.009/-0	1.375	0.425	3.250±0.004	3.709+0/-0.003	3.933±0.004
PSA-4000B	4.000+0.009/-0	0.772	0.245	3.375±0.004	3.772+0/-0.003	3.960±0.004
PSA-4500	4.500+0.009/-0	1.250	0.250	3.500±0.004	4.229+0/-0.003	4.422±0.005
PSA-4500A	4.500+0.009/-0	1.750	0.550	3.500±0.004	4.229+0/-0.003	4.422±0.005
PSA-5000	5.000+0.010/-0	1.250	0.400	4.000±0.004	4.709+0/-0.004	4.902±0.005
PSA-5000A	5.000+0.010/-0	0.960	0.245	4.250±0.004	4.772+0/-0.004	4.960±0.005
PSA-6000	6.000+0.010/-0	1.250	0.375	5.000±0.004	5.709+0/-0.004	5.902±0.005
PSA-6000A	6.000+0.010/-0	1.750	0.500	5.000±0.004	5.675+0/-0.004	5.900±0.005

STYLE PSA-58 PISTON SEALS

Style PSA-58 piston seals combine a heavy duty, fabric reinforced seal with two polyacetal "L" bearings. This construction allows the seal to withstand pressures up to 5,000 PSI. "L" bearings also react to pressure to prevent extrusion and support the piston. For 2-piece pistons.



SEAL INFORMATION	
MATERIAL	FABRIC REINFORCED NITRILE SEAL POLYACETAL ANTI-EXTRUSION RING
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 5,000 PSI
MAXIMUM SPEED	1.5 Ft/Sec.
PART NUMBER	(Prefix) (Type of Seal) - (Size)

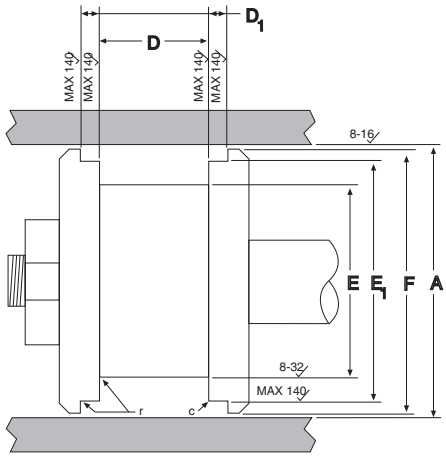
Part Number	A Bore Diameter	D Seal Groove Width Tol. +0.035/+0.025	D1 Bearing Groove Width Tol. +0/+0.005	E Seal Groove Diameter	E1 Bearing Groove Diameter	F Piston Diameter
PSA-58-1000	1.000	0.596	0.182	0.625	0.865	0.865
PSA-58-1250	1.250	0.750	0.250	0.750	1.115	1.218
PSA-58-1375	1.375	0.750	0.250	0.875	1.241	1.343
PSA-58-1500	1.500	0.750	0.250	1.000	1.371	1.468
PSA-58-1625	1.625	0.937	0.250	1.000	1.428	1.562
PSA-58-1750	1.750	0.937	0.250	1.125	1.555	1.687
PSA-58-1875	1.875	0.937	0.250	1.250	1.679	1.812
PSA-58-2000	2.000	0.937	0.250	1.375	1.805	1.937
PSA-58-2000B	2.000	0.750	0.250	1.375	1.802	1.937
PSA-58-2250	2.250	0.937	0.250	1.625	2.055	2.187
PSA-58-2375	2.375	0.937	0.250	1.750	2.180	2.312
PSA-58-2500	2.500	0.937	0.250	1.875	2.305	2.437
PSA-58-2625	2.625	0.937	0.250	2.000	2.428	2.562
PSA-58-2750	2.750	1.187	0.250	2.000	2.485	2.687
PSA-58-3000	3.000	1.187	0.250	2.250	2.735	2.937
PSA-58-3000A	3.000	0.937	0.250	2.250	2.774	2.937
PSA-58-3000B	3.000	0.843	0.250	2.250	2.732	2.937
PSA-58-3250	3.250	1.187	0.250	2.500	2.985	3.187
PSA-58-3500	3.500	1.187	0.250	2.750	3.235	3.437
PSA-58-3750	3.750	1.187	0.250	3.000	3.485	3.687
PSA-58-4000	4.000	1.187	0.250	3.250	3.735	3.937
PSA-58-4250	4.250	1.187	0.250	3.500	3.982	4.187
PSA-58-4500	4.500	1.500	0.375	3.500	4.234	4.437
PSA-58-4750	4.750	1.500	0.375	3.750	4.485	4.687
PSA-58-5000	5.000	1.500	0.375	4.000	4.735	4.937

STYLE PSA-58 PISTON SEALS

Part Number	A Bore Diameter	D Seal Groove Width Tol. +0.035/+0.025	D1 Bearing Groove Width Tol. +0/+0.005	E Seal Groove Diameter	E1 Bearing Groove Diameter	F Piston Diameter
PSA-58-5250	5.250	1.500	0.375	4.250	4.982	5.187
PSA-58-5500	5.500	1.500	0.375	4.500	5.236	5.437
PSA-58-5750	5.750	1.500	0.375	4.750	5.484	5.687
PSA-58-6000	6.000	1.500	0.375	5.000	5.736	5.937
PSA-58-6500	6.500	1.500	0.375	5.500	6.236	6.437
PSA-58-7000	7.000	1.500	0.375	6.000	6.736	6.937
PSA-58-8000	8.000	1.250	0.375	7.000	7.740	7.937
PSA-58-10000	10.00	1.250	0.375	9.000	9.740	9.937

STYLE PSA-59 PISTON SEALS

This style is designed for 2 piece piston. The seal is a molded Nitrile rubber element with bonded rubberized fabric reinforcement and two anti-extrusion polyacetal bearings.

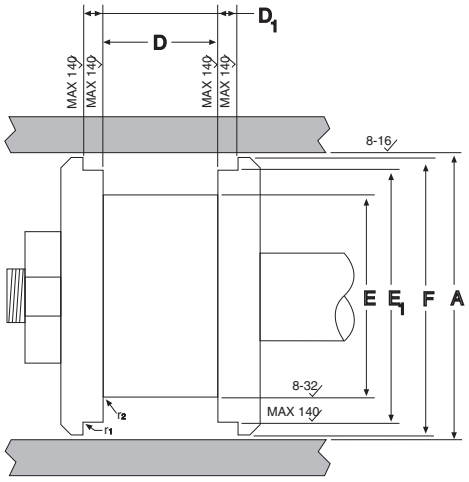


SEAL INFORMATION	
MATERIAL	FABRIC REINFORCED NITRILE SEAL POLYACETAL ANTI-EXTRUSION RING
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 5,000 PSI
MAXIMUM SPEED	1.5 Ft/Sec.
PART NUMBER	(Prefix) (Type of Seal) - (Size)

Part Number	A Bore Diameter	D Seal Groove Width Tol. +0.035/+0.025	D1 Bearing Groove Width Tol. +0/-0.005	E Seal Groove Diameter	E1 Bearing Groove Diameter	F Piston Diameter
PSA-59-1000A	1.000+0.006/-0	0.468	0.250	0.625±0.003	0.883+0/-0.002	0.964±0.003
PSA-59-1500	1.500+0.006/-0	0.625	0.250	1.000±0.003	1.360+0/-0.002	1.458±0.003
PSA-59-1625	1.625+0.006/-0	0.625	0.250	1.125±0.003	1.485+0/-0.002	1.583±0.003
PSA-59-1750	1.750+0.006/-0	0.750	0.250	1.125±0.003	1.570+0/-0.002	1.698±0.003
PSA-59-2125	2.125+0.007/-0	0.750	0.250	1.500±0.003	1.944+0/-0.003	2.074±0.004
PSA-59-2250	2.250+0.007/-0	0.750	0.250	1.625±0.003	2.069+0/-0.003	2.197±0.004
PSA-59-2375	2.375+0.007/-0	0.750	0.250	1.750±0.003	2.194+0/-0.003	2.322±0.004
PSA-59-2500A	2.500+0.007/-0	0.750	0.250	1.875±0.003	2.321+0/-0.003	2.437±0.004
PSA-59-2750	2.750+0.007/-0	0.750	0.250	2.000±0.004	2.522+0/-0.003	2.685±0.004
PSA-59-2750A	2.750+0.007/-0	0.937	0.250	2.000±0.004	2.522+0/-0.003	2.685±0.004
PSA-59-3000	3.000+0.007/-0	0.937	0.250	2.250±0.004	2.772+0/-0.003	2.935±0.004
PSA-59-3000A	3.000+0.007/-0	1.125	0.250	2.250±0.004	2.772+0/-0.003	2.935±0.004
PSA-59-3250	3.250+0.009/-0	0.937	0.250	2.500±0.004	3.021+0/-0.003	3.184±0.004
PSA-59-3500	3.500+0.009/-0	0.937	0.250	2.750±0.004	3.271+0/-0.003	3.434±0.004
PSA-59-4000	4.000+0.009/-0	0.937	0.250	3.250±0.004	3.770+0/-0.003	3.933±0.004
PSA-59-4500	4.500+0.009/-0	1.250	0.250	3.500±0.004	4.229+0/-0.003	4.422±0.005
PSA-59-5000	5.000+0.010/-0	1.250	0.250	4.000±0.004	4.728+0/-0.004	4.921±0.005
PSA-59-5500	5.500+0.010/-0	1.250	0.250	4.500±0.004	5.227+0/-0.004	5.420±0.005
PSA-59-6000	6.000+0.010/-0	1.250	0.250	5.000±0.005	5.726+0/-0.004	5.919±0.005
PSA-59-6500	6.500+0.010/-0	1.250	0.250	5.500±0.005	6.226+0/-0.004	6.419±0.005
PSA-59-7000	7.000+0.010/-0	1.250	0.250	6.000±0.005	6.724+0/-0.004	6.917±0.005
PSA-59-8000	8.000+0.011/-0	1.250	0.250	7.000±0.005	7.723+0/-0.005	7.915±0.006

STYLE PSA-65 PISTON SEALS

Compact and easy to install, the Style PSA-65 piston seal is a simple and economical design for pressures up to 3,000 PSI. The assembly consists of a nitrile rubber seal and two polyacetal bearings to support the piston. For 1-piece pistons.

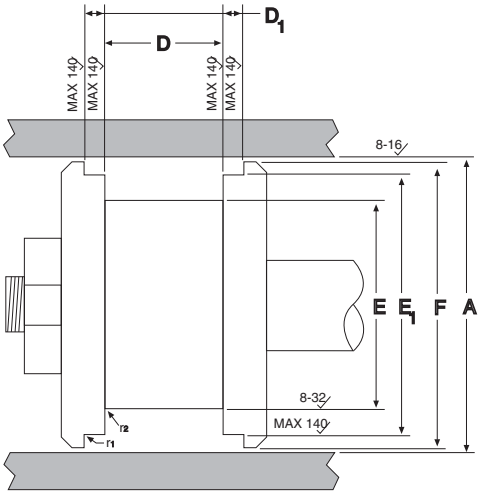


SEAL INFORMATION	
MATERIAL	NITRILE SEAL POLYACETAL ANTI-EXTRUSION RING
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 3,000 PSI
MAXIMUM SPEED	1.5 Ft/Sec.
PART NUMBER	(Prefix) (Type of Seal) - (Size)

Part Number	A Bore Diameter	D Seal Groove Width Tol. +0.015/+0.005	D1 Bearing Groove Width Tol. +0/-0.005	E Seal Groove Diameter	E1 Bearing Groove Diameter	F Piston Diameter
PSA-65-1000	1.000 +0.004/-0	0.343	0.125	0.687 +0/-0.002	0.829 +0/-0.002	0.937 +0/-0.006
PSA-65-1250	1.250 +0.004/-0	0.343	0.125	0.943 +0/-0.002	1.079 +0/-0.002	1.187 +0/-0.006
PSA-65-1500	1.500 +0.004/-0	0.437	0.150	1.125 +0/-0.002	1.324 +0/-0.002	1.437 +0/-0.006
PSA-65-1750	1.750 +0.004/-0	0.437	0.150	1.375 +0/-0.002	1.574 +0/-0.002	1.687 +0/-0.006
PSA-65-2000	2.000 +0.005/-0	0.437	0.150	1.625 +0/-0.002	1.824 +0/-0.002	1.937 +0/-0.006
PSA-65-2250	2.250 +0.005/-0	0.437	0.150	1.875 +0/-0.002	2.075 +0/-0.003	2.187 +0/-0.006
PSA-65-2375	2.375 +0.005/-0	0.437	0.150	2.000 +0/-0.002	2.195 +0/-0.003	2.312 +0/-0.007
PSA-65-2500	2.500 +0.005/-0	0.437	0.150	2.125 +0/-0.003	2.325 +0/-0.003	2.437 +0/-0.007
PSA-65-2500A	2.500 +0.005/-0	0.625	0.255	2.000 +0/-0.003	2.325 +0/-0.003	2.437 +0/-0.007
PSA-65-2750	2.750 +0.005/-0	0.437	0.150	2.375 +0/-0.003	2.575 +0/-0.002	2.687 +0/-0.007
PSA-65-3000	3.000 +0.005/-0	0.437	0.150	2.625 +0/-0.003	2.825 +0/-0.003	2.937 +0/-0.007
PSA-65-3500	3.500 +0.006/-0	0.562	0.210	3.000 +0/-0.003	3.270 +0/-0.003	3.437 +0/-0.009
PSA-65-4000	4.000 +0.006/-0	0.562	0.210	3.500 +0/-0.003	3.770 +0/-0.003	3.937 +0/-0.009
PSA-65-5000	5.000 +0.006/-0	0.687	0.344	4.375 +0/-0.003	4.689 +0/-0.003	4.937 +0/-0.010
PSA-65-5500	5.500 +0.006/-0	0.687	0.344	4.875 +0/-0.004	5.188 +0/-0.004	5.437 +0/-0.010
PSA-65-6000	6.000 +0.006/-0	1.000	0.500	5.250 +0/-0.004	5.712 +0/-0.004	5.937 +0/-0.010
PSA-65-7000	7.000 +0.006/-0	1.000	0.500	6.250 +0/-0.004	6.712 +0/-0.004	6.937 +0/-0.010

STYLE PSF PISTON SEALS

Designed to fit on one or two piece pistons, this seal employs a nitrile seal element, PTFE split back-up rings and polyacetal split bearing rings.



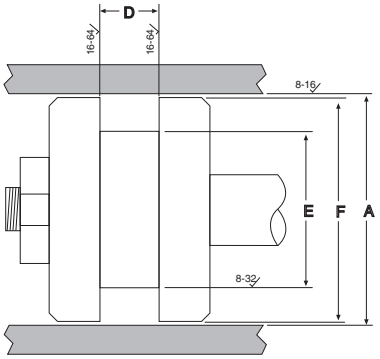
SEAL INFORMATION	
MATERIAL	NITRILE SEAL POLYACETAL ANTI-EXTRUSION RING
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 3,000 PSI
PART NUMBER	(Prefix) - (O-Ring Size)

Part Number	A Bore Diameter	D Seal Groove Width Tol +0.015/+0.005	D1 Bearing Groove Width Tol. +0/-0.005	E Seal Groove Diameter	E1 Bearing Groove Diameter	F Piston Diameter
PSF-2000	2.000 +0.005/-0	0.496	0.245	1.625 +0/-0.002	1.888 +0/-0.002	1.960 +0/-0.006
PSF-2500	2.500 +0.005/-0	0.650	0.245	2.000 +0/-0.003	2.320 +0/-0.003	2.460 +0/-0.007
PSF-2750	2.750 +0.005/-0	0.650	0.250	2.250 +0/-0.003	2.570 +0/-0.003	2.710 +0/-0.007
PSF-3000	3.000 +0.005/-0	0.775	0.245	2.375 +0/-0.003	2.772 +0/-0.003	2.960 +0/-0.007
PSF-4000	4.000 +0.006/-0	0.562	0.210	3.500 +0/-0.003	3.770 +0/-0.003	3.937 +0/-0.009

STYLE PSC PISTON SEALS

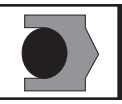
The Style PSC is a double acting piston seal designed to replace o-rings, quad-rings, and T-seals with the same groove dimensions (O-ring dash number). Style 575 urethane back-up rings may be added to either or both sides of the "PSC" to accommodate wider groove widths. The PSC is made of 95A Durometer polyurethane, giving it high extrusion and abrasion resistance. The crowned sealing surface produces a positive seal from vacuum to high pressure.

Our company also offers a wide base (WB) Style PSC piston seal. These wide base seals have the same characteristics of the standard PCS seals but offer a wider base, eliminating the need to use back-up rings to accommodate wider grooves.
NOTE: Piston diameter "F" dimensions are given for piston without wear rings.



SEAL INFORMATION	
MATERIAL	95A POLYURETHANE SEAL 70A NITRILE ENERGIZER
TEMPERATURE RANGE	-40° TO +200° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (O-Ring Size) - (Wide Base)

Part Number	A Bore Diameter	B Seal Height	D Groove Width	E Groove Diameter	F Piston Diameter
PSC-203	0.561	0.150	0.185	0.315	0.559
PSC-204	0.625	0.150	0.185	0.378	0.623
PSC-205	0.686	0.150	0.185	0.440	0.684
PSC-207	0.811	0.150	0.185	0.565	0.809
PSC-208	0.875	0.150	0.185	0.628	0.873
PSC-211	1.062	0.150	0.185	0.816	1.060
PSC-212	1.125	0.150	0.185	0.879	1.123
PSC-213	1.187	0.150	0.185	0.941	1.185
PSC-214	1.250	0.150	0.185	1.004	1.248
PSC-216	1.375	0.150	0.185	1.129	1.373
PSC-218	1.500	0.150	0.185	1.254	1.498
PSC-218-WB	1.500	0.265	0.304	1.254	1.498
PSC-220	1.625	0.150	0.185	1.374	1.623
PSC-222	1.750	0.150	0.185	1.504	1.748
PSC-222-WB	1.750	0.265	0.304	1.504	1.748
PSC-325	1.875	0.255	0.280	1.500	1.873
PSC-326	2.000	0.255	0.280	1.625	1.998
PSC-326-WB	2.000	0.370	0.424	1.625	1.998
PSC-328	2.250	0.255	0.280	1.875	2.248
PSC-329	2.375	0.255	0.280	2.000	2.373
PSC-330	2.500	0.255	0.280	2.125	2.498
PSC-330-WB	2.500	0.370	0.424	2.125	2.498
PSC-332	2.750	0.255	0.280	2.374	2.747
PSC-332-WB	2.749	0.370	0.424	2.374	2.747
PSC-334	3.000	0.255	0.280	2.624	2.997
PSC-334-WB	3.000	0.370	0.424	2.624	2.997
PSC-336	3.250	0.255	0.280	2.874	3.247
PSC-337	3.375	0.255	0.280	3.000	3.373
PSC-338	3.500	0.255	0.280	3.125	3.498
PSC-338-WB	3.500	0.370	0.424	3.125	3.498
PSC-339	3.625	0.255	0.280	3.250	3.623
PSC-340	3.750	0.255	0.280	3.375	3.748
PSC-341	3.875	0.255	0.280	3.500	3.873
PSC-342	4.000	0.255	0.280	3.625	3.998
PSC-342-WB	4.000	0.370	0.424	3.625	3.998
PSC-344	4.250	0.255	0.280	3.875	4.248

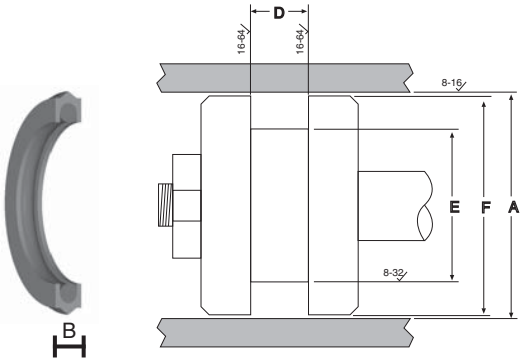


STYLE PSC PISTON SEALS

Part Number	A Bore Diameter	B Seal Height	D Groove Width	E Groove Diameter	F Piston Diameter
PSC-346	4.500	0.255	0.280	4.125	4.498
PSC-347	4.625	0.255	0.280	4.250	4.623
PSC-350	5.000	0.255	0.280	4.626	4.999
PSC-429	5.500	0.320	0.365	5.021	4.499
PSC-433	6.000	0.320	0.365	5.521	5.999
PSC-433-WB	6.000	0.500	0.579	5.521	5.999
PSC-437	6.500	0.320	0.365	6.020	6.498
PSC-439	7.000	0.320	0.365	6.520	6.998
PSC-441	7.500	0.320	0.365	7.020	7.498
PSC-442	7.750	0.320	0.365	7.270	7.748
PSC-443	8.000	0.320	0.365	7.520	7.998
PSC-444	8.250	0.320	0.365	7.770	8.248
PSC-445	8.500	0.320	0.365	8.020	8.498
PSC-446	9.000	0.320	0.365	8.520	8.998
PSC-447	9.500	0.320	0.365	9.020	9.498
PSC-448	10.000	0.320	0.365	9.520	9.998
PSC-449	10.500	0.320	0.365	10.020	10.498
PSC-450	11.000	0.320	0.365	10.520	10.998
PSC-451	11.500	0.320	0.365	11.020	11.498
PSC-452	12.000	0.320	0.365	11.520	11.998
PSC-456	14.000	0.320	0.365	13.520	13.998

STYLE PSC PISTON SEALS - FLUOROTREL COMPOUND

These Style PSC are molded from Fluorotrel which is a tough, wear-resistant material able to run at temperatures up to 275° F. Fluorotrel is also resistant to fluids that are incompatible with polyurethane such as water, glycol, water in oil, mineral oil and petroleum. Consult our Engineering Department for other fluids compatible with Fluorotrel.
NOTE: Piston diameter "F" dimensions are given for pistons without wear rings.

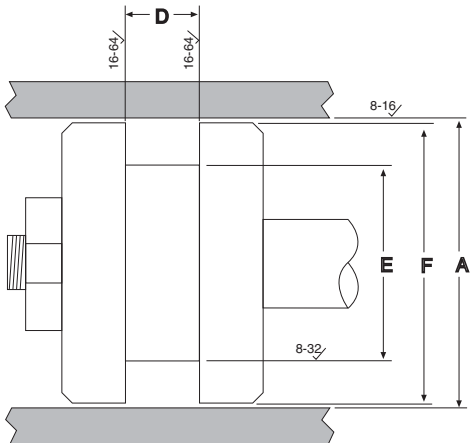


SEAL INFORMATION	
MATERIAL	55D FLUOROTREL SEAL 70A NITRILE ENERGIZER
TEMPERATURE RANGE	-40° TO +235° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (O-Ring Size) - (Fluorotrel)

Part Number	A Bore Diameter	B Seal Height	D Groove Width	E Groove Diameter	F Piston Diameter
PSC-222F	1.750	0.150	0.185	1.504	1.748
PSC-326F	2.000	0.255	0.280	1.625	1.998
PSC-328F	2.250	0.255	0.280	1.875	2.248
PSC-330F	2.500	0.255	0.280	2.125	2.498
PSC-332F	2.749	0.255	0.280	2.374	2.747
PSC-333F	2.875	0.255	0.280	2.499	2.872
PSC-334F	3.000	0.255	0.280	2.624	2.997
PSC-335F	3.125	0.255	0.280	2.749	3.122
PSC-338F	3.500	0.255	0.280	3.125	3.498
PSC-340F	3.750	0.255	0.280	3.375	3.748
PSC-342F	4.000	0.255	0.280	3.625	3.998
PSC-343F	4.125	0.255	0.280	3.750	4.123
PSC-350F	5.000	0.255	0.280	4.625	4.999
PSC-433F	6.000	0.320	0.365	5.520	5.999

STYLE PSM URETHANE PISTON SEALS

Molded from 93 Shore A polyurethane with a 70 Shore A energizer, this seal utilizes the same groove dimensions as a standard o-ring or T-seal. One or two Style 575 back-up rings may be used for wider grooves. Extrusion resistant by design, this seal is also resistant to rolling and twisting. Installation is an easy two step snap-in procedure with no need to re-size before insertion into the bore. **NOTE:** Piston diameter "F" dimensions are given for pistons without wear rings.

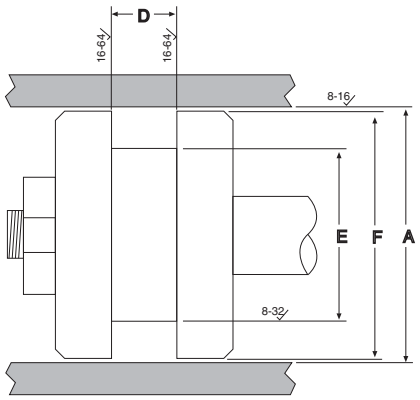


SEAL INFORMATION	
MATERIAL	93A URETHANE SEAL 70A NITRILE ENERGIZER
TEMPERATURE RANGE	-65° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (Size)

Part Number	A Bore Diameter Tol. +0.002 -0.000	B Seal Height	D Groove Width Tol. ±.002	E Groove Diameter Tol. ±.002	F Piston Diameter
PSM-218F	1.500	0.160	0.188	1.258	1.499 +0/-0.005
PSM-218-WB	1.500	0.265	0.275	1.258	1.499 +0/-0.005
PSM-222	1.750	0.165	0.185	1.500	1.749 +0/-0.005
PSM-326	2.000	0.265	0.280	1.625	1.999 +0/-0.005
PSM-326-WB	2.000	0.375	0.394	1.625	1.999 +0/-0.005
PSM-328	2.250	0.265	0.280	1.875	2.249 +0/-0.005
PSM-329	2.375	0.265	0.280	2.000	2.374 +0/-0.005
PSM-330	2.500	0.265	0.280	2.125	2.499 +0/-0.005
PSM-330-WB	2.500	0.395	0.410	2.125	2.499 +0/-0.005
PSM-332	2.750	0.265	0.280	2.375	2.749 +0/-0.005
PSM-48A	3.000	0.235	0.250	2.380	2.999 +0/-0.005
PSM-334	3.000	0.265	0.280	2.625	2.999 +0/-0.005
PSM-334-WB	3.000	0.395	0.410	2.625	2.999 +0/-0.005
PSM-336	3.250	0.265	0.280	2.875	3.249 +0/-0.005
PSM-338	3.500	0.265	0.280	3.125	3.499 +0/-0.005
PSM-338-WB	3.500	0.395	0.410	3.125	3.499 +0/-0.005
PSM-340	3.750	0.265	0.280	3.375	3.749 +0/-0.005
PSM-342	4.000	0.265	0.280	3.625	3.999 +0/-0.005
PSM-342-WB	4.000	0.395	0.410	3.625	3.999 +0/-0.005
PSM-344	4.250	0.265	0.280	3.875	4.249 +0/-0.005
PSM-346	4.500	0.265	0.280	4.125	4.499 +0/-0.005
PSM-347	4.625	0.265	0.280	4.250	4.624 +0/-0.005
PSM-350	5.000	0.265	0.280	4.625	4.999 +0/-0.005
PSM-425-WB	5.000	0.518	0.538	4.528	4.999 +0/-0.005
PSM-429	5.500	0.350	0.365	5.020	5.499 +0/-0.005
PSM-433	6.000	0.350	0.365	5.520	5.999 +0/-0.005
PSM-433-WB	6.000	0.518	0.538	5.520	5.999 +0/-0.005
PSM-437	6.500	0.350	0.365	6.020	6.499 +0/-0.005
PSM-439	7.000	0.350	0.365	6.520	6.999 +0/-0.005
PSM-441	7.500	0.350	0.365	7.020	7.499 +0/-0.005
PSM-443	8.000	0.350	0.365	7.520	7.999 +0/-0.005
PSM-445	8.500	0.350	0.365	8.020	8.499 +0/-0.005
PSM-446	9.000	0.350	0.365	8.520	8.999 +0/-0.005

STYLE PSU PISTON SEALS

Our Style PSU piston seal, or uniring, is a laminated one piece double acting seal made of cast polyurethane. The tough outer layer is highly resistant to abrasion and is impregnated with molybdenum disulfide to reduce friction. The softer inner layer acts as a static seal and also energizes the OD to make full contact with the bore. This seal may be used to replace an existing Uniring or other seals of the same dimensions -- O-rings, O-rings with back-ups, T-seals, U-seals, etc. **NOTE:** Piston diameter "F" dimensions are given for pistons without wear rings.



SEAL INFORMATION	
MATERIAL	60D & 57A URETHANE COMPOSITE
TEMPERATURE RANGE	-65° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (OD) X (ID) X (Groove Width)

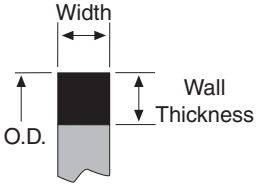
Part Number	A Bore Diameter	B Seal Height	D Groove Width Tol. +0.015/-0	E Groove Diameter	F Piston Diameter Tol. +0/-0.004
PSU-1.50X1.00X.375	1.500 +0.006/-0	0.375	0.394	1.000 +0.006/-0	1.499
PSU-1.50X1.12X.250	1.500 +0.004/-0	0.250	0.263	1.125 +0.004/-0	1.499
PSU-1.50X1.25X.187	1.500 +0.003/-0	0.187	0.196	1.250 +0.003/-0	1.499
PSU-1.75X1.25X.375	1.750 +0.006/-0	0.375	0.394	1.250 +0.006/-0	1.749
PSU-1.75X1.37X.250	1.750 +0.004/-0	0.250	0.263	1.375 +0.004/-0	1.749
PSU-1.75X1.37X.500	1.750 +0.004/-0	0.500	0.526	1.375 +0.004/-0	1.749
PSU-2.00X1.50X.375	2.000 +0.006/-0	0.375	0.394	1.500 +0.006/-0	1.999
PSU-2.00X1.62X.312	2.000 +0.004/-0	0.312	0.328	1.625 +0.004/-0	1.999
PSU-2.00X1.62X.375	2.000 +0.004/-0	0.375	0.394	1.625 +0.004/-0	1.999
PSU-2.25X1.87X.312	2.250 +0.004/-0	0.312	0.328	1.875 +0.004/-0	2.249
PSU-2.50X2.00X.375	2.500 +0.004/-0	0.375	0.394	2.000 +0.004/-0	2.499
PSU-2.50X2.12X.312	2.500 +0.004/-0	0.312	0.328	2.125 +0.004/-0	2.499
PSU-2.50X2.12X.375	2.500 +0.004/-0	0.375	0.394	2.125 +0.004/-0	2.499
PSU-2.75X2.37X.312	2.7500+0.004/-0	0.312	0.328	2.375+0.004/-0	2.749
PSU-3.00X2.50X.375	3.000 +0.006/-0	0.375	0.394	2.500 +0.006/-0	2.999
PSU-3.00X2.50X.500	3.000 +0.006/-0	0.500	0.550	2.500 +0.006/-0	2.999
PSU-3.00X2.62X.312	3.000 +0.004/-0	0.312	0.328	2.625 +0.004/-0	2.999
PSU-3.00X2.62X.375	3.000 +0.004/-0	0.375	0.394	2.625 +0.004/-0	2.999
PSU-3.25X2.75X.550	3.250 +0.004/-0	0.550	0.577	2.750 +0.004/-0	3.249
PSU-3.25X2.87X.312	3.250 +0.004/-0	0.312	0.328	2.875 +0.004/-0	3.249
PSU-3.50X3.00X.375	3.500 +0.006/-0	0.375	0.394	3.000 +0.006/-0	3.499
PSU-3.50X3.12X.312	3.500 +0.004/-0	0.312	0.328	3.125 +0.004/-0	3.499
PSU-3.50X3.12X.375	3.500 +0.004/-0	0.375	0.394	3.125 +0.004/-0	3.499
PSU-3.75X3.37X.312	3.750 +0.004/-0	0.312	0.328	3.375 +0.004/-0	3.749
PSU-4.00X3.50X.375	4.000 +0.006/-0	0.375	0.394	3.500 +0.006/-0	3.999

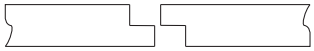
STYLE PSU PISTON SEALS

Part Number	A Bore Diameter	B Seal Height	D Groove Width Tol. +0.015/-0	E Groove Diameter	F Piston Diameter Tol. +0/-0.004
PSU-4.00X3.62X.375	4.000 +0.004/-0	0.375	0.394	3.625 +0.004/-0	3.999
PSU-4.50X4.00X.375	4.500 +0.006/-0	0.375	0.394	4.000 +0.006/-0	4.499
PSU-4.50X4.00X.562	4.500 +0.004/-0	0.562	0.591	4.000 +0.004/-0	4.499
PSU-5.00X4.37X.500	5.000 +0.006/-0	0.500	0.526	4.375 +0.006/-0	4.999
PSU-5.00X4.50X.375	5.000 +0.006/-0	0.375	0.394	4.500 +0.006/-0	4.999
PSU-5.00X4.50X.500	5.000 +0.006/-0	0.500	0.526	4.500 +0.006/-0	4.999
PSU-5.00X4.50X.562	5.000 +0.006/-0	0.562	0.591	4.500 +0.006/-0	4.999
PSU-5.25X4.75X.562	5.250 +0.006/-0	0.562	0.591	4.750 +0.006/-0	5.249
PSU-5.50X5.00X.375	5.500 +0.006/-0	0.375	0.394	5.000 +0.006/-0	5.499
PSU-6.00X5.50X.375	6.000 +0.006/-0	0.375	0.394	5.500 +0.006/-0	5.999
PSU-6.00X5.50X.562	6.000 +0.006/-0	0.562	0.591	5.500 +0.006/-0	5.999
PSU-6.50X6.00X.562	6.500 +0.006/-0	0.562	0.591	6.000 +0.006/-0	6.499

NOTE: Larger sizes are available. Please contact a Sales Representative for more information.

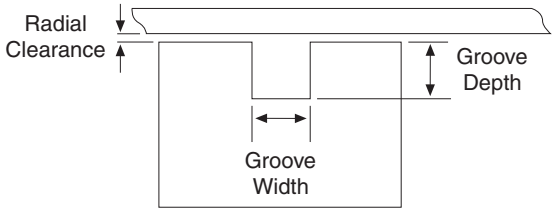
STYLE SPR IRON PISTON RINGS





BC = Butt Cut
H = Hook Joint

SEAL INFORMATION	
MATERIAL	IRON
PART NUMBER	(Prefix) - (OD)



END CLEARANCE
End clearance on piston rings depends on ring design, material and application. The following end clearances are provided as a standard for hydraulic cylinder applications.

DIAMETER	BUTT & ANGLE CUT END CLEARANCE	OVERLAPPING JOINT & STEP CUT END CLEARANCE
.500-4.561	.003/.010	.005/.015
4.562-19.970	.005/.015	.010/.020
19.971-30.500	.010/.025	.015/.030

When using iron piston rings, it is crucial to use the correct groove design for proper performance of the cylinder. Please use the following guidelines when cutting an iron piston ring groove.

GROOVE WIDTH: To permit the ring to slide freely into the groove, the groove must be at least 0.001" wider than the maximum piston ring width with a tolerance of +0.003"/-0.000".

GROOVE DEPTH: Grooves must be at least 0.015" deeper than the maximum radial wall thickness of the piston ring with a tolerance of +0.003"/-0.000". This is to avoid any possibility of the ring bottoming in the groove when the ring is compressed to its working diameter.

RADIAL CLEARANCE: The radial clearance between the cylinder bore and piston should be less than 1/3 of the radial wall thickness of the piston ring to ensure sealing effectiveness.

Part Number	OD	Width	Wall Thickness
SPR-1000	1.000	.123/.124	.045/.055
SPR-1001	1.000	.093/.094	.045/.055
SPR-1375-H	1.375	.097/.096	.050/.060
SPR-1500	1.500	.124	.055/.060
SPR-1501	1.500	.092/.093	.060/.075
SPR-1530	1.530	.123/.124	.050/.060
SPR-1750	1.750	.123/.124	.060/.075
SPR-1751	1.750	.092/.093	.060/.075
SPR-1875	1.875	.123/.124	.060/.075
SPR-2000	2.000	.123/.124	.060/.075
SPR-2001	2.000	.186/.187	.065/.075
SPR-2002	2.000	.248/.249	.060/.075
SPR-2003	2.000	.092/.093	.082/.097
SPR-2006	2.000	.123/.124	.077/.087
SPR-2030	2.030	.123/.124	.065/.090

Part Number	OD	Width	Wall Thickness
SPR-2125	2.125	.186/.187	.060/.075
SPR-2126	2.125	.123/.124	.060/.070
SPR-2250	2.250	.186/.187	.070/.085
SPR-2251	2.250	.123/.124	.077/.085
SPR-2254	2.250	.248/.249	.085/.070
SPR-2376	2.375	.185/.186	.076/.091
SPR-2500	2.500	.123/.124	.082/.097
SPR-2501	2.500	.186/.187	.082/.097
SPR-2502	2.500	.248/.249	.103/.118
SPR-2503	2.500	.123/.124	.103/.118
SPR-2530	2.530	.123/.124	.087/.107
SPR-2625	2.625	.185/.186	.087/.102
SPR-2750	2.750	.186/.187	.091/.106
SPR-2752	2.750	.155/.156	.100/.125
SPR-2754	2.750	.186/.187	.103/.118

STYLE SPR IRON PISTON RINGS

Part Number	OD	Width	Wall Thickness
SPR-2755	2.755	.118/.119	.109/.124
SPR-2875	2.875	.186/.187	.100/.105
SPR-3000	3.000	.186/.187	.100/.125
SPR-3001	3.000	.248/.249	.103/.118
SPR-3003	3.000	.310/.311	.095/.110
SPR-3120	3.125	.185/.186	.100/.115
SPR-3250	3.250	.186/.187	.103/.118
SPR-3251	3.250	.123/.124	.103/.118
SPR-3252	3.250	.248/.249	.103/.118
SPR-3253	3.250	.154/.155	.121/.134
SPR-3260	3.260	.248/.249	.115/.130
SPR-3280	3.280	.185/.186	.109/.130
SPR-3375	3.375	.185/.186	.106/.121
SPR-3497	3.497	.186/.187	.109/.124
SPR-3500	3.500	.123/.124	.109/.124
SPR-3502	3.500	.248/.249	.109/.124
SPR-3503	3.500	.372/.374	.109/.124
SPR-3505	3.500	.186/.187	.109/.124
SPR-3520-BC	3.520	.185	.130/.140
SPR-3625	3.625	.248/.249	.155/.160
SPR-3626	3.625	.248/.249	.170/.185
SPR-3750	3.750	.186/.187	.115/.130
SPR-3751	3.750	.248/.249	.109/.124
SPR-3752	3.750	.185/.186	.190/.175
SPR-3875	3.875	.249/.250	.132/.137
SPR-3990	3.990	.248/.249	.127/.142
SPR-4000	4.000	.248/.249	.127/.142
SPR-4002	4.000	.186/.187	.127/.142
SPR-4003	4.000	.310/.311	.135/.145
SPR-4007	4.000	.186/.185	.199/.184
SPR-4020	4.020	.310/.311	.127/.142
SPR-4030	4.030	.248/.249	.127/.142
SPR-4250	4.250	.248/.249	.135/.150
SPR-4251	4.250	.249/.248	.181/.166
SPR-4252-BC	4.250	.248/.249	.167/.177
SPR-4260	4.260	.248/.249	.152/.167
SPR-4496	4.496	.248/.249	.140/.160
SPR-4500	4.500	.310/.311	.145/.160
SPR-4501	4.500	185/.186	.145/.160
SPR-4502	4.500	.248/.249	.145/.160
SPR-4503	4.500	.372/.373	.145/.160
SPR-4504	4.500	.249/.248	.199/.184

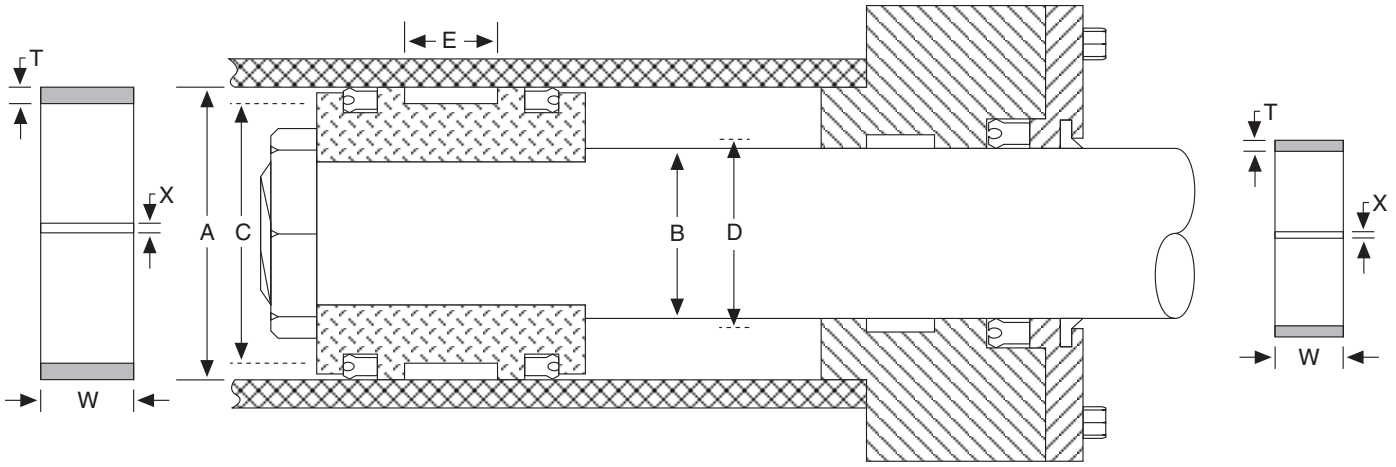
Part Number	OD	Width	Wall Thickness
SPR-4520-BC	4.520	.184/.186	.150/.180
SPR-4540	4.540	.184/.187	.155/.170
SPR-4751	4.750	.248/.249	.152/.167
SPR-4876-BC	4.875	.372/.373	.109/.124
SPR-5000	5.000	.248/.249	.140/.150
SPR-5001	5.000	.186/.187	.160/.175
SPR-5002	5.000	.248/.249	.165/.180
SPR-5003	5.000	.372/.373	.155/.165
SPR-5004	5.000	.310/.311	.165/.180
SPR-5005	5.000	.123/.124	.165/.175
SPR-5030	5.030	.248/.249	.165/.185
SPR-5120	5.125	.248/.249	.166/.172
SPR-5121	5.125	.248/.249	.145/.160
SPR-5251	5.250	.248/.249	.166/.181
SPR-5260	5.260	.248/.249	.180/.195
SPR-5496	5.496	.248/.249	.140/.160
SPR-5500	5.500	.310/.311	.175/.190
SPR-5501	5.500	.186/.187	.168/.187
SPR-5502	5.500	.248/.249	.175/.190
SPR-5503	5.500	.372/.373	.165/.177
SPR-5520-BC	5.520	.184/.186	.180/.210
SPR-5540	5.540	.184/.186	.180/.210
SPR-5750	5.750	.185/.186	.184/.199
SPR-5751	5.750	.248/.249	.184/.199
SPR-5752	5.750	.310/.311	.175/.195
SPR-6000	6.000	.248/.249	.140/.160
SPR-6001	6.000	.122/.124	.191/.206
SPR-6002	6.000	.248/.249	.191/.206
SPR-6004	6.000	.310/.311	.191/.206
SPR-6005	6.000	.371/.373	.191/.206
SPR-6006	6.000	.184/.185	.195/.205
SPR-6030	6.030	.247/.249	.191/.206
SPR-6040	6.040	.185/.186	.190/.205
SPR-6120	6.125	.248/.249	.190/.205
SPR-6250	6.250	.185/.186	.202/.217
SPR-6251	6.250	.310/.311	.205/.220
SPR-6252	6.250	.248/.249	.202/.217
SPR-6260	6.260	.248/.249	.191/.206
SPR-6496	6.496	.248/.249	.140/.160
SPR-6500	6.500	.310/.311	.210/.225
SPR-6501	6.501	.185/.186	.211/.226
SPR-6502	6.500	.248/.249	.210/.225

STYLE SPR IRON PISTON RINGS

Part Number	OD	Width	Wall Thickness
SPR-6503	6.500	.186/.187	.211/.226
SPR-6505	6.500	.497/.499	.210/.225
SPR-6520-BC	6.520	.185	.225
SPR-6540	6.540	.248/.249	.230/.240
SPR-6750	6.750	.248/.249	.175/.190
SPR-6751	6.750	.305/.311	.219/.234
SPR-6752	6.750	.248/.249	.219/.234
SPR-7000	7.000	.248/.249	.140/.160
SPR-7002	7.000	.248/.249	.228/.243
SPR-7003	7.000	.371/.373	.228/.243
SPR-7004	7.000	.240	.237/.252
SPR-7005	7.000	.311/.312	.228/.243
SPR-7006	7.000	.497/.498	.228/.243
SPR-7030	7.030	.309/.311	.233/.263
SPR-7125	7.125	.247/.249	.237/.252
SPR-7250	7.250	.248/.249	.160/.175
SPR-7255	7.250	.310/.311	.230/.240
SPR-7260	7.260	.248/.249	.253/.268
SPR-7375	7.375	.371/.373	.191/.206
SPR-7496	7.496	.248/.249	.140/.160
SPR-7500	7.500	.310/.311	.210/.225
SPR-7501	7.500	.247/.249	.245/.260
SPR-7505	7.500	.311/.312	.244/.259
SPR-7520-BC	7.520	.184/.186	.249/.279
SPR-7750	7.750	.310/.311	.252/.267
SPR-8000	8.000	.310/.311	.210/.225
SPR-8001	8.000	.434/.435	.255/.270
SPR-8005	8.000	.310/.311	.260/.275
SPR-8006	8.000	.373/.374	.260/.275
SPR-8030	8.030	.309/.311	.265/.295
SPR-8125	8.125	.434/.435	.255/.270
SPR-8250	8.250	.373/.374	.268/.283

Part Number	OD	Width	Wall Thickness
SPR-8370	8.375	.247/.249	.268/.283
SPR-8420	8.420	.248/.249	.291/.306
SPR-8496	8.496	.248/.249	.140/.160
SPR-8500	8.500	.310/.311	.210/.225
SPR-8502	8.500	.373/.374	.270/.285
SPR-8503	8.500	.310/.311	.294/.309
SPR-8520-BC	8.520	.185/.186	.280/.310
SPR-8751	8.750	.374/.376	.300/.305
SPR-9000	9.000	.373/.374	.294/.309
SPR-9001	9.000	.310/.311	.294/.309
SPR-9004	9.000	.433/.435	.244/.259
SPR-9005	9.000	.496/.498	.175/.190
SPR-9025	9.025	.247/.248	.313.328
SPR-9170	9.170	.310/.311	.298/308
SPR-9250	9.250	.248/.249	.160/.175
SPR-9251	9.250	.309/.311	.300/.315
SPR-9500	9.500	.310/.311	.305/.320
SPR-9501	9.500	.248/.249	.317/.318
SPR-9502	9.500	.371/.373	.305/.320
SPR-9746	9.746	.248/.249	.140/.160
SPR-9885	9.885	.248/.249	.325/.340
SPR-10000	10.000	.310/.311	.320/.330
SPR-10001	10.000	.371/.373	.317/.332
SPR-10030	10.030	.310/.311	.335/.345
SPR-10501	10.500	.371/.373	.317/.332
SPR-10502	10.500	.623/.624	.235/.248
SPR-10503	10-1/2	.248/.249	.365/.380
SPR-11000	11.000	.472/.474	.302/.317
SPR-11001	11.000	.496/.498	.175/.190
SPR-12001	12.000	.434/.435	.358/.373
SPR-12030	12.030	.371/.373	.386/.401

NYLON WEAR RING TECHNICAL INFORMATION



A	-	CYLINDER BORE
B	-	ROD DIAMETER
C	-	MINIMUM BORE “A” MINUS .253/.256
D	-	MAXIMUM ROD DIAMETER “B” PLUS .253/.256
E	-	GROOVE WIDTH
T	-	THICKNESS OF WEAR RING
W	-	WIDTH OF WEAR RING
X	-	MINIMUM RING GAP

Groove Dimensions For Standard Wear Ring Widths

1/2" Width			5/8" Width			3/4" Width			1" Width		
E	T	X	E	T	X	E	T	X	E	T	X
.510"	.122"	1/16"	.635"	.122"	1/16"	.760"	.122"	1/16"	1.010"	.122"	1/16"
.515"	.125"		.640"	.125"		.765"	.125"		1.015"	.125"	

Cut Down Factors For Standard Wear Rings

In many cases an oversized nylon wear ring can be cut down to fit a smaller groove without a loss of concentricity. Use the following guide when cutting down wear rings.

Wear Ring O.D.	Maximum amount to be Cut Down
4” OD	3/8” of circumference
4-1/2” - 6-1/2” OD	1/2”
7” -9” OD	1”
9-1/2” - 14” OD	1-1/2”

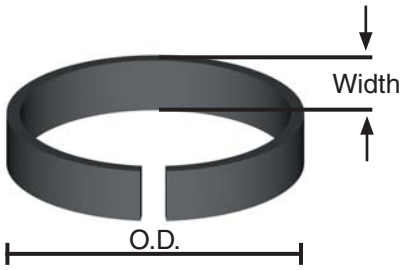
Flexible Guide Bearing Cut To Fit Formula

Use the following formula when cutting flexible guide bearing to fit a specific application.

For Piston Bearings	For Rod Bearings
Bearing Length = (Bore - C.S.) x 3.14 - Gap	Bearing Length = (Rod + C.S.) x 3.14 - Gap

STYLE 606 NYLON WEAR RINGS 1/16" THICK

NOTE: "SC" suffix designates a Scarf Cut wear ring.

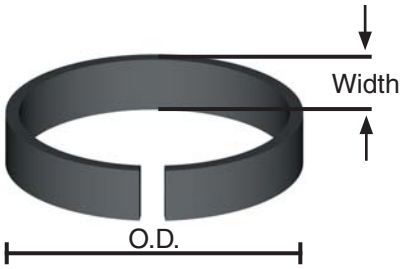


SEAL INFORMATION	
TEMPERATURE RANGE	-40° TO +275° F
TENSILE STRENGTH	27,000 PSI
COMPRESSIVE STRENGTH	26,000 PSI
PART NUMBER	(Prefix) - (OD) - (Width)

Part Number	O.D.	Width
606-087-050	7/8	1/2
606-112-050	1-1/8	1/2
606-125-050-SC	1-1/4	1/2
606-125-075-SC	1 1/4	3/4
606-137-050	1-3/8	1/2
606-150-031-SC	1-1/2	5/16
606-150-037-SC	1-1/2	3/8
606-162-082	1-5/8	13/16
606-162-098-SC	1-5/8	.980
606-162-125	1-5/8	1-1/4
606-187-098-SC	1-7/8	.980
606-200-025-SC	2	1/4
606-200-031-SC	2	5/16
606-200-072-SC	2	.720
606-200-098-SC	2	.980
606-212-072-SC	2-1/8	.720
606-212-098-SC	2-1/8	63/64
606-212-125	2-1/8	1-1/4
606-225-036	2-1/4	.360
606-225-072-SC	2-1/4	.720
606-225-098-SC	2-1/4	.980
606-225-100	2-1/4	1
606-237-098-SC	2-3/8	.980
606-237-100	2-3/8	1
606-237-118	2-3/8	1-3/16
606-250-031-SC	2-1/2	5/16
606-250-050	2-1/2	1/2
606-250-126-SC	2-1/2	1.260

Part Number	O.D.	Width
606-262-072-SC	2-5/8	.720
606-262-098-SC	2-5/8	.980
606-262-124-SC	2-5/8	1.240
606-262-168	2-5/8	1-11/16
606-275-050	2-3/4	1/2
606-275-098-SC	2-3/4	.980
606-275-100	2-3/4	1
606-287-100-SC	2-7/8	1
606-287-126-SC	2-7/8	1.260
606-287-157-SC	2-7/8	1-9/16
606-287-181	2-7/8	1-13/16
606-312-098-SC	3-1/8	.980
606-312-124	3-1/8	1.240
606-312-156	3-1/8	1-9/16
606-312-165-SC	3-1/8	1.650
606-325-031-SC	3-1/4	5/16
606-325-050	3-1/4	1/2
606-337-174	3-3/8	1.740
606-337-187	3-3/8	1-7/8
606-362-105	3-5/8	1.050
606-362-188-SC	3-5/8	1-7/8
606-387-157	3-7/8	1.570
606-400-031-SC	4	5/16
606-500-043-SC	5	7/16
606-600-043-SC	6	7/16
606-800-050-SC	8	1/2

STYLE 608 NYLON WEAR RINGS .078" THICK

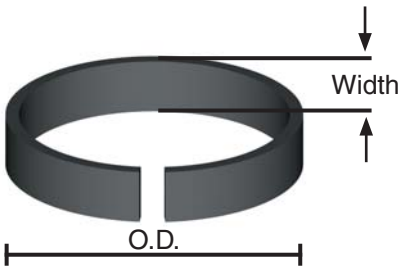


SEAL INFORMATION	
TEMPERATURE RANGE	-40° TO +275° F
TENSILE STRENGTH	25,000 PSI
COMPRESSIVE STRENGTH	26,000 PSI
PART NUMBER	(Prefix) - (OD) - (Width)

Part Number	O.D.	Width
608-125-050	1-1/4	1/2
608-152-075	1.520	3/4

Part Number	O.D.	Width
608-154-075	1.540	.078
608-166-062	1.66	.625

STYLE 609 NYLON WEAR RINGS 3/32" THICK

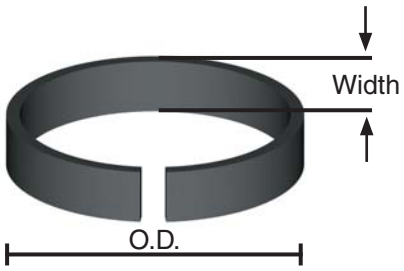


SEAL INFORMATION	
TEMPERATURE RANGE	-40° TO +275° F
TENSILE STRENGTH	25,000 PSI
COMPRESSIVE STRENGTH	26,000 PSI
PART NUMBER	(Prefix) - (OD) - (Width)

Part Number	O.D.	Width
609-125-018	1-1/4	3/16
609-125-037	1-1/4	3/8
609-150-018	1-1/2	3/16
609-150-037	1-1/2	3/8
609-200-019	2	3/16
609-200-037	2	3/8
609-218-037	2-3/16	3/8
609-250-037	2-1/2	3/8
609-255-150	2.55	1-1/2
609-285-100	2.85	1

Part Number	O.D.	Width
609-300-022	3	7/32
609-325-037	3-1/4	3/8
609-331-062	3-5/16	5/8
609-350-050	3-1/2	1/2
609-362-022	3-5/8	7/32
609-393-022	3-15/16	7/32
609-400-037	4	3/8
609-500-050	5	1/2
609-600-050	6	1/2

STYLE 610 NYLON WEAR RINGS .100" THICK



SEAL INFORMATION	
TEMPERATURE RANGE	-40° TO +275° F
TENSILE STRENGTH	25,000 PSI
COMPRESSIVE STRENGTH	26,000 PSI
PART NUMBER	(Prefix) - (OD) - (Width)

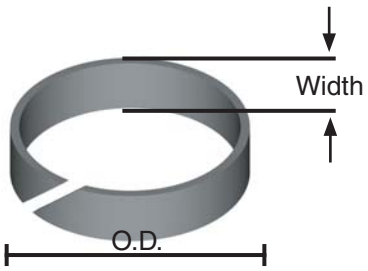
Part Number	O.D.	Width
610-270-228	2.70	2.28
610-295-196	2.95	1.96
610-300-099-SC	3.00	.99
610-320-117-SC	3.20	1.17
610-325-112	3.25	1-1/8
610-345-162-SC	3.45	1-5/8
610-345-196	3.45	1.96
610-345-274-SC	3.45	2.74
610-370-176	3.70	1.76
610-370-188-SC	3.70	1.88

Part Number	O.D.	Width
610-370-236-SC	3.70	2.36
610-395-243	3.95	2-7/16
610-420-156-SC	4.20	1-9/16
610-420-255	4.20	2.55
610-445-237	4.45	2-3/8
610-470-196-SC	4.70	1.96
610-495-196-SC	4.95	1.96
610-520-250	5.20	2-1/2
610-595-361	5.95	3.61
610-720-314	7.20	3.14

STYLE PB POWERBANDS™ 1/8" THICK

Our Company is pleased to introduce our new line of Powerband™ tight tolerance premium wear-rings. Manufactured from a highly engineered blend of premium nylon, glass fiber, and PTFE, Powerbands™ offer a high strength wear-ring for all cylinder applications, including those with minimal lubrication. And, with a Coefficient of Friction nearly 50% lower than our standard product, your cylinders will run smoother and more efficiently than ever.

All Powerbands™ are fully machined with cross-section tolerances of only ±0.001", chamfered corners, and scarf or angle-cut end gaps. Compared to standard tolerances of ±0.0025", this tightened tolerance improves the alignment and concentric operation of cylinder rods and pistons. The fully machined chamfered corners will better accommodate cylinder housing grooves, further improving piston and rod alignment. Lastly, the scarf-cut end gap reduces the loss of bearing support that may occur during cylinder side-loading. When combined, these features reduce the tolerance stack-up within the components of the cylinder. As a result, your cylinders will operate more consistently and be capable of operating at higher pressures and higher side loads than with standard wear-ring products. Furthermore, with this improved cylinder operation, your seals will last longer and the life of your cylinder will be extended. Powerbands™ are currently available in our most popular wear-ring dimensions, as shown here. If you do not see your size or would like more information on this innovative product, please contact your Sales Representative.



SEAL INFORMATION	
TEMPERATURE RANGE	-40° TO +275° F
TENSILE STRENGTH	20,000 PSI
FLEXURAL STRENGTH	34,000 PSI
COMPRESSIVE STRENGTH	20,000 PSI
PART NUMBER	(Prefix) - (OD) - (Width)

Part Number	O.D.
1/4" WIDE	
PB12-150-025-SC	1-1/2
PB12-175-025-SC	1-3/4
PB12-200-025-SC	2
PB12-225-025-SC	2-1/4
PB12-250-025-SC	2-1/2
PB12-300-025-SC	3
PB12-325-025-SC	3-1/4
PB12-350-025-SC	3-1/2
PB12-387-025-SC	3-7/8
PB12-400-025-SC	4
PB12-425-025-SC	4-1/4
5/16" WIDE	
PB12-250-031-SC	2-1/2
PB12-400-031-SC	4
3/8" WIDE	
PB12-100-037-SC	1
PB12-112-037-SC	1-1/8
PB12-125-037-SC	1-1/4
PB12-150-037-SC	1-1/2
PB12-162-037-SC	1-5/8
PB12-175-037-SC	1-3/4
PB12-200-037-SC	2
PB12-225-037-SC	2-1/4
PB12-250-037-SC	2-1/2

Part Number	O.D.
3/8" WIDE	
PB12-275-037-SC	2-3/4
PB12-300-037-SC	3
PB12-325-037-SC	3-1/4
PB12-350-037-SC	3-1/2
PB12-375-037-SC	3-3/4
PB12-400-037-SC	4
PB12-425-037-SC	4-1/4
PB12-450-037-SC	4-1/2
PB12-500-037-SC	5
PB12-550-037-SC	5-1/2
PB12-600-037-SC	6
1/2" WIDE	
PB12-125-050-SC	1-1/4
PB12-137-050-SC	1-3/8
PB12-150-050-SC	1-1/2
PB12-162-050-SC	1-5/8
PB12-175-050-SC	1-3/4
PB12-187-050-SC	1-7/8
PB12-200-050-SC	2
PB12-212-050-SC	2-1/8
PB12-225-050-SC	2-1/4
PB12-250-050-SC	2-1/2
PB12-275-050-SC	2-3/4
PB12-287-050-SC	2-7/8

Part Number	O.D.
1/2" WIDE	
PB12-300-050-SC	3
PB12-325-050-SC	3-1/4
PB12-350-050-SC	3-1/2
PB12-375-050-SC	3-3/4
PB12-400-050-SC	4
PB12-425-050-SC	4-1/4
PB12-450-050-SC	4-1/2
PB12-475-050-SC	4-3/4
PB12-500-050-SC	5
PB12-525-050-SC	5-1/4
PB12-550-050-SC	5-1/2
PB12-575-050-SC	5-3/4
PB12-600-050-SC	6
PB12-625-050-SC	6-1/4
PB12-650-050-SC	6-1/2
PB12-700-050-SC	7
PB12-750-050-SC	7-1/2
PB12-800-050-SC	8
PB12-850-050-SC	8-1/2
PB12-1000-050-SC	10
5/8" WIDE	
PB12-200-062-SC	2
PB12-225-062-SC	2-1/4
PB12-250-062-SC	2-1/2

STYLE PB POWERBANDS™ 1/8" THICK

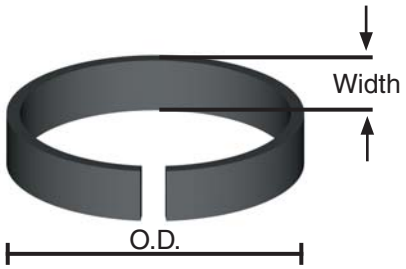
Part Number	O.D.
5/8" WIDE	
PB12-275-062-SC	2-3/4
PB12-300-062-SC	3
PB12-325-062-SC	3-1/4
PB12-350-062-SC	3-1/2
PB12-375-062-SC	3-3/4
PB12-400-062-SC	4
PB12-425-062-SC	4-1/4
PB12-450-062-SC	4-1/2
PB12-475-062-SC	4-3/4
PB12-500-062-SC	5
PB12-525-062-SC	5-1/4
PB12-550-062-SC	5-1/2
PB12-575-062-SC	5-3/4
PB12-600-062-SC	6
PB12-650-062-SC	6-1/2
PB12-625-062-SC	6-1/4
PB12-700-062-SC	7
PB12-750-062-SC	7-1/2
PB12-800-062-SC	8
3/4" WIDE	
PB12-175-075-SC	1-3/4
PB12-200-075-SC	2
PB12-212-075-SC	2-1/8
PB12-225-075-SC	2-1/4
PB12-237-075-SC	2-3/8
PB12-250-075-SC	2-1/2
PB12-262-075-SC	2-5/8
PB12-275-075-SC	2-3/4
PB12-300-075-SC	3
PB12-325-075-SC	3-1/4
PB12-350-075-SC	3-1/2
PB12-362-075-SC	3-5/8
PB12-375-075-SC	3-3/4
PB12-400-075-SC	4
PB12-425-075-SC	4-1/4
PB12-450-075-SC	4-1/2

Part Number	O.D.
3/4" WIDE	
PB12-475-075-SC	4-3/4
PB12-500-075-SC	5
PB12-525-075-SC	5-1/4
PB12-550-075-SC	5-1/2
PB12-575-075-SC	5-3/4
PB12-600-075-SC	6
PB12-625-075-SC	6-1/4
PB12-650-075-SC	6-1/2
PB12-700-075-SC	7
PB12-750-075-SC	7-1/2
PB12-800-075-SC	8
PB12-900-075-SC	9
PB12-1000-075-SC	10
7/8" WIDE	
PB12-400-087-SC	4
1" WIDE	
PB12-175-100-SC	1-3/4
PB12-200-100-SC	2
PB12-225-100-SC	2-1/4
PB12-250-100-SC	2-1/2
PB12-275-100-SC	2-3/4
PB12-300-100-SC	3
PB12-325-100-SC	3-1/4
PB12-350-100-SC	3-1/2
PB12-375-100-SC	3-3/4
PB12-387-100-SC	3-7/8
PB12-400-100-SC	4
PB12-425-100-SC	4-1/4
PB12-450-100-SC	4-1/2
PB12-475-100-SC	4-3/4
PB12-500-100-SC	5
PB12-525-100-SC	5-1/4
PB12-550-100-SC	5-1/2
PB12-575-100-SC	5-3/4
PB12-600-100-SC	6
PB12-625-100-SC	6-1/4

Part Number	O.D.
1" WIDE	
PB12-650-100-SC	6-1/2
PB12-675-100-SC	6-3/4
PB12-700-100-SC	7
PB12-725-100-SC	7-1/4
PB12-750-100-SC	7-1/2
PB12-800-100-SC	8
PB12-825-100-SC	8-1/4
PB12-850-100-SC	8-1/2
PB12-875-100-SC	8-3/4
PB12-900-100-SC	9
PB12-925-100-SC	9-1/4
PB12-950-100-SC	9-1/2
PB12-1000-100-SC	10
PB12-1050-100-SC	10-1/2
PB12-1100-100-SC	11
PB12-1200-100-SC	12
1-1/8" WIDE	
PB12-350-112-SC	3-1/2
1-1/4" WIDE	
PB12-325-125-SC	3-1/4
PB12-375-125-SC	3-3/4
PB12-400-125-SC	4
PB12-425-125-SC	4-1/4
PB12-550-125-SC	5-1/2
PB12-600-125-SC	6
1-1/2" WIDE	
PB12-275-150-SC	2-3/4
PB12-325-150-SC	3-1/4
PB12-350-150-SC	3-1/2
PB12-425-150-SC	4-1/4
PB12-450-150-SC	4-1/2
PB12-475-150-SC	4-3/4
PB12-600-150-SC	6
PB12-625-150-SC	6-1/4
PB12-650-150-SC	6-1/2
PB12-700-150-SC	7

STYLE 612 NYLON WEAR RINGS 1/8" THICK

Style 612 wear rings are made of glass reinforced nylon. With physical properties equivalent to bronze, they are highly recommended because of their wear rate and non-scoring properties and their ability to ingest metal chips.
NOTE: "SC" suffix designates a Scarf Cut wear ring, "ST" a Step Cut wear ring, and "SL" Slots on the O.D.



P= PRECISION OR TIGHT TOLERANCE RADIAL WALL

SEAL INFORMATION	
TEMPERATURE RANGE	-40° TO +275° F
TENSILE STRENGTH	25,000 PSI
COMPRESSIVE STRENGTH	26,000 PSI
PART NUMBER	(Prefix) - (OD) - (Width)

Part Number	O.D.
0.16" WIDE	
612-200-016	2
612-250-016P	2-1/2
612-300-016P	3
612-350-016P	3-1/2
3/16" WIDE	
612-250-018	2-1/2
1/4" WIDE	
612-150-025	1-1/2
612-175-025	1-3/4
612-200-025	2
612-225-025	2-1/4
612-250-025	2-1/2
612-275-025	2-3/4
612-300-025	3
612-306-025	3-1/16
612-350-025	3-1/2
612-325-025	3-1/4
612-387-025	3-7/8
612-425-025	4-1/4
612-1000-025	10
17/64" WIDE	
612-218-026	2-3/16
5/16" WIDE	
612-225-031	2-1/4
612-250-031	2-1/2
612-275-031	2-3/4
612-275-031P	2-3/4
612-300-031	3
612-325-031	3-1/4
612-400-031	4
3/8" WIDE	
612-100-037	1
612-112-037	1-1/8

Part Number	O.D.
3/8" WIDE	
612-125-037	1-1/4
612-150-037	1-1/2
612-162-037	1-5/8
612-175-037	1-3/4
612-200-037	2
612-212-037	2-1/8
612-250-037	2-1/2
612-225-037	2-1/4
612-275-037	2-3/4
612P-300-037P	3
612-300-037-SC	3
612-325-037	3-1/4
612-350-037	3-1/2
612-375-037	3-3/4
612-400-037	4
612-425-037	4-1/4
612-450-037	4-1/2
612-500-037	5
612-550-037	5-1/2
612-600-037	6
612-650-037	6-1/2
0.42" WIDE	
612-412-042	4-1/8
7/16" WIDE	
612-350-043	3-1/2
1/2" WIDE	
612-125-050	1-1/4
612-150-050	1-1/2
612-137-050	1-3/8
612-162-050	1-5/8
612-175-050	1-3/4
612-187-050	1-7/8
612R-200-050P	2

Part Number	O.D.
1/2" WIDE	
612-200-050	2
612-200-050-ST	2
612-212-050	2-1/8
612-218-050	2-3/16
612-225-050	2-1/4
612-225-050-SC	2-1/4
612-250-050	2-1/2
612-250-050-ST	2-1/2
612-237-050	2-3/8
612-262-050	2-5/8
612-275-050	2-3/4
612-287-050	2-7/8
612-300-050-ST	3
612-300-050P	3
612-300-050P-SC	3
612-300-050	3
612-312-050	3-1/8
612-325-050	3-1/4
612-350-050	3-1/2
612-362-050	3-5/8
612-375-050	3-3/4
612-375-050-ST	3-3/4
612-375-050P-SC	3-3/4
612-400-050	4
612-425-050	4-1/4
612-426-050	4.26
612-437-050-SC	4-3/8
612-450-050	4-1/2
612-450-050P	4-1/2
612-475-050	4-3/4
612-500-050	5
612-525-050	5-1/4
612-550-050P	5-1/2
612-550-050-ST	5-1/2

STYLE 612 NYLON WEAR RINGS 1/8" THICK

Part Number	O.D.
1/2" WIDE	
612-550-050	5-1/2
612-575-050	5-3/4
612-600-050P-SC	6
612-600-050	6
612-625-050	6-1/4
612-650-050	6-1/2
612-700-050	7
612-700-149-ST	7
612-725-050	7-1/4
612-750-050	7-1/2
612-775-050	7-3/4
612-800-050	8
612-850-050	8-1/2
612-862-050	8-5/8
612-900-050	9
612-950-050	9-1/2
612-975-050	9-3/4
612-987-050	9-7/8
612-1000-050	10
612-1050-050	10-1/2
612-1100-050	11
612-1200-050	12
612-1400-050	14
612-1600-050	16
5/8" WIDE	
612-150-062	1-1/2
612-200-062	2
612-225-062	2-1/4
612-250-062	2-1/2
612-262-062	2-5/8
612-275-062	2-3/4
612-275-062-SC	2-3/4
612-300-062	3
612-325-062	3-1/4
612-350-062-ST	3-1/2
612-350-062	3-1/2
612-362-062	3-5/8
612-375-062	3-3/4
612-400-062	4
612-400-062-ST	4
612-425-062	4-1/4
612-440-062	4.4
612-450-062	4-1/2
612-500-062	5
612-525-062	5-1/4
612-550-062	5-1/2
612-575-062	5-3/4

Part Number	O.D.
5/8" WIDE	
612-600-062	6
612-600-062-SC	6
612-625-062	6-1/4
612-650-062	6-1/2
612-700-062	7
612-700-062-SC	7
612-725-062	7-1/4
612-750-062	7-1/2
612-800-062	8
612-850-062	8-1/2
612-900-062	9
612-950-062	9-1/2
612-1000-062	10
11/16" WIDE	
612-700-068	7
0.74" WIDE	
612-250-074-SC	2-1/2
3/4" WIDE	
612-175-075	1-3/4
612-187-075	1-7/8
612-200-075	2
612-212-075	2-1/8
612-225-075	2-1/4
612-225-075-SC	2-1/4
612-237-075	2-3/8
612-250-075	2-1/2
612-262-075	2-5/8
612-275-075	2-3/4
612-287-075	2-7/8
612-300-075	3
612-325-075	3-1/4
612-337-075	3-3/8
612-350-075	3-1/2
612-350-075P	3-1/2
612-362-075	3-5/8
612-375-075	3-3/4
612-400-075	4
612-425-075	4-1/4
612-450-075	4-1/2
612-450-075-SC	4-1/2
612-475-075	4-3/4
612-487-075	4-7/8
612-500-075	5
612-525-075	5-1/4
612-550-075	5-1/2
612-575-075	5-3/4

Part Number	O.D.
3/4" WIDE	
612-600-075	6
612-625-075	6-1/4
612-650-075	6-1/2
612-675-075	6-3/4
612-700-075	7
612-725-075	7-1/4
612-750-075	7-1/2
612-800-075	8
612-825-075	8-1/4
612-850-075	8-1/2
612-900-075	9
612-900-075-SC	9
612-950-075	9-1/2
612-975-075	9-3/4
612-1000-075	10
612-1025-075	10-1/4
612-1150-075	11-1/2
612-1250-075	12-1/2
612-1350-075	13-1/2
7/8" WIDE	
612-100-087-SC	1
612-225-087-SC	2-1/4
612-250-087	2-1/2
612-287-087	2-7/8
612-350-087	3-1/2
612-400-087	4
612-425-087P	4-1/4
612-450-087	4-1/2
612-600-087	6
612-800-087	8
15/16" WIDE	
612-275-093-SC	2-3/4
612-450-093-SC	4-1/2
0.99" WIDE	
612-300-099-SC	3
612-400-099-SC	4
612-425-099-SC	4-1/4
612-450-099-SC	4-1/2
612-475-099-SC	4-3/4
1" WIDE	
612-150-100	1-1/2
612-175-100	1-3/4
612-200-100	2
612-200-100P-SC	2
612-250-100P	2-1/4
612-225-100	2-1/4

STYLE 612 NYLON WEAR RINGS 1/8" THICK

Part Number	O.D.
1" WIDE	
612-225-100-SC	2-1/4
612-250-100	2-1/2
612-250-100-ST	2-1/2
612-262-100	2-5/8
612-275-100	2-3/4
612-275-100-ST	2-3/4
612-275-100P-SC	2-3/4
612-287-100	2-7/8
612-300-100	3
612-300-100-ST	3
612-312-100	2-1/8
612-325-100-SC	3-1/4
612-325-100	3-1/4
612-350-100	3-1/2
612-350-100-ST	3-1/2
612-350-100-SL	3-1/2
612-362-100	3-5/8
612-375-100	3-3/4
612-375-100P-SC	3-3/4
612-387-100	3-7/8
612-387-100-SC	3-7/8
612-400-100	4
612-400-100-SL	4
612-400-100P-SC	4
612-412-100	4-1/8
612-425-100	4-1/4
612-425-100P	4-1/4
612-537-100-SC	5-3/8
612-450-100	4-1/2
612-475-100	4-3/4
612-500-100	5
612-525-100	5-1/4
612-550-100	5-1/2
612-575-100	5-3/4
612-600-100	6
612-625-100	6-1/4
612-650-100	6-1/2
612-675-100	6-3/4
612-700-100	7
612-725-100	7-1/4
612-750-100	7-1/2
612-775-100	7-3/4
612-787-100	7-7/8
612-800-100	8
612-825-100	8-1/4
612-850-100	8-1/2
612-862-100	8-5/8

Part Number	O.D.
1" WIDE	
612-875-100	8-3/4
612-900-100	9
612-912-100	9-1/8
612-925-100	9-1/4
612-950-100	9-1/2
612-1000-100	10
612-1025-100	10-1/4
612-1050-100	10-1/2
612-1100-100	11
612-1200-100P	12
612-1225-100	12-1/4
612-1325-100	13-1/4
612-1400-100	14
612-1600-100	16
1.02" WIDE	
612-525-102-SC	5-1/4
1-1/16" WIDE	
612-600-107	6
1.11" WIDE	
612-325-111	3-1/4
612-500-111-SC	5
1-1/8" WIDE	
612-350-112-SC	3-1/2
612-500-112	5
1.24" WIDE	
612-300-124-SC	3
612-375-124-SC	3-3/4
612-425-124-SC	4-1/4
612-475-124-SC	4-3/4
612-500-124	5
612-600-124-SC	6
1-1/4" WIDE	
612-225-125P	2-1/4
612-325-125	3-1/4
612-375-125	3-3/4
612-400-125	4
612-425-125-SC	4-1/4
612-425-125	4-1/4
612-475-125-SC	4-3/4
612-525-125	5-1/4
612-525-125-SC	5-1/4
612-550-125	5-1/2
612-600-125	6
612-676-125P-SC	6.756
612-650-125	6-1/2
612-825-125	8-1/4

Part Number	O.D.
1-1/4" WIDE	
612-950-125	9-1/2
612-1000-125	10
612-1025-125-SC	10-1/4
612-1050-125	10-1/2
612-1100-125	11
612-1125-125	11-1/4
612-1150-125	11-1/2
612-1200-125	12
612-1225-125	12-1/4
612-1400-125	14
1-5/16" WIDE	
612-600-131-SC	6
1-3/8" WIDE	
612-550-137	5-1/2
612-650-137	6-1/2
612-725-138	7-1/4
1.46" WIDE	
612-800-146-ST	8
1.49" WIDE	
612-375-149	3-3/4
612-425-149-SC	4-1/4
612-450-149-SC	4-1/2
612-525-149	5-1/4
612-625-149-SC	6-1/4
612-650-149-SC	6-1/2
612-750-149-SC	7-1/2
1-1/2" WIDE	
612-200-150	2
612-275-150	2-3/4
612-275-150P	2-3/4
612-325-150-ST	3-1/4
612-325-150P	3-1/4
612-350-150	3-1/2
612-400-150	4
612-425-150P	4-1/4
612-450-150	4-1/2
612-475-150	4-3/4
612-575-150	5-3/4
612-600-150	6
612-600-150-ST	6
612-625-150	6-1/4
612-650-150-ST	6-1/2
612-675-150P	6-3/4
612-700-150	7
612-850-150-ST	8-1/2
612-900-150	9

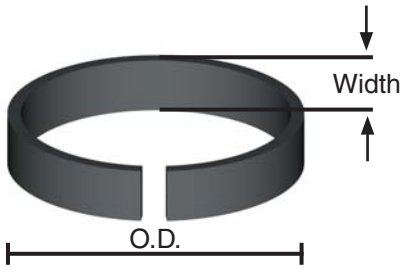
STYLE 612 NYLON WEAR RINGS 1/8" THICK

Part Number	O.D.
1-1/2" WIDE	
612-925-150-SC	9-1/4
612-962-150P-SC	9-5/8
612-1000-150	10
612-1050-150-ST	10-1/2
612-1200-150	12
612-1300-150	13
1-1/2" WIDE	
612-1400-150	14
612-1600-150	16
1.55" WIDE	
612-325-155	3-1/4
612-500-155-SC	5
1-9/16" WIDE	
612-475-156	4-3/4
612-512-156	5-1/8
612-512-156-SC	5-1/8
1.61" WIDE	
612-550-161	5-1/2
612-575-161-SC	5-3/4
1-5/8" WIDE	
612-325-162-SC	3-1/4
612-1100-162	11
1.64" WIDE	
612-475-164-SC	4-3/4
1.74" WIDE	
612-550-175-SC	5-1/2
612-600-174-SC	6
612-625-174-SC	6-1/4
612-650-174	6-1/2
612-700-174	7
612-825-174-SC	8-1/4
1-3/4" WIDE	
612-500-175	5
612-575-175	5-3/4
612-1000-175	10
1.86" WIDE	
612-450-186	4-1/2
1-7/8" WIDE	
612-1100-187	11
1.88" WIDE	
612-425-188	4-1/4
1.99" WIDE	
612-375-199	3-3/4
612-475-199	4-3/4
612-550-199	5-1/2

Part Number	O.D.
1.99" WIDE	
612-575-199	5-3/4
612-650-199-SC	6-1/2
612-700-199-SC	7
612-725-199-SC	7-1/4
612-775-199	7-3/4
2" WIDE	
612-275-200P-SC	2-3/4
612-325-200	3-1/4
612-325-200P-SC	3-1/4
612-475-200	4-3/4
612-525-200P-SC	5-1/4
612-600-200	6
612-625-200	6-1/4
612-625-200P-SC	6-1/4
612-650-200	6-1/2
612-700-200	7
612-725-200	7-1/4
612-725-200P-SC	7-1/4
612-750-200	7-1/2
612-800-200	8
612-850-200	8-1/2
612-900-200	9
612-1200-200	12
2-1/8" WIDE	
612-325-212-SC	3-1/4
612-825-212-SC	8-1/4
2.24" WIDE	
612-550-224-SC	5-1/2
612-825-224-SC	8-1/4
2-1/4" WIDE	
612-925-225	9-1/4
2.36" WIDE	
612-450-236	4-1/2
612-575-236	5-3/4
612-700-236-SC	7
612-750-236	7-1/2
612-850-236	8-1/2
2-3/8" WIDE	
612-850-237	8-1/2
2.49" WIDE	
612-426-249-SC	4.26
612-750-249-SC	7-1/2
612-825-249	8-1/4
2-1/2" WIDE	
612-750-249-SC	7-1/2

Part Number	O.D.
2.74" WIDE	
612-625-274-SC	6-1/4
612-650-274-SC	6-1/2
612-825-274	8-1/4
612-1050-274	10-1/2
2.86" WIDE	
612-600-286	6
612-650-286	6-1/2
2-15/16" WIDE	
612-900-293-SC	9
2.95" WIDE	
612-750-295	7-1/2
3" WIDE	
612-700-300	7
612-850-300	8-1/2
3-1/8" WIDE	
612-700-312	7
3.24" WIDE	
612-1000-324-SC	10
3.48" WIDE	
612-650-348-SC	6-1/2
3-1/2" WIDE	
612-475-350	4-3/4
612-775-350	7-3/4
3.61" WIDE	
612-525-361-SC	5-1/4
3.74" WIDE	
612-1050-374-SC	10-1/2
3-3/4" WIDE	
612-1050-375	10-1/2
3-7/8" WIDE	
612-1150-387	11-1/2
3.99" WIDE	
612-1250-399-SC	12-1/2
612-1275-399-SC	12-3/4
612-1375-399-SC	13-3/4
612-1425-399-SC	14-1/4
4" WIDE	
612-1050-400	10-1/2
4.11" WIDE	
612-825-411-SC	8-1/4
5" WIDE	
612-800-500	8
7.1" WIDE	
612-725-710	7-1/4

STYLE 616 NYLON WEAR RINGS 3/16" THICK



SEAL INFORMATION	
TEMPERATURE RANGE	-40° TO +275° F
TENSILE STRENGTH	25,000 PSI
COMPRESSIVE STRENGTH	26,000 PSI
PART NUMBER	(Prefix) - (OD) - (Width)

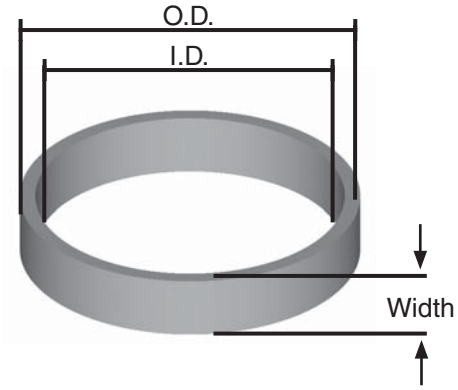
Part Number	O.D.
1/2" WIDE	
616-3003-050	3
616-3503-050	3-1/2
616-4003-050	4
616-4503-050	4-1/2
616-5503-050-SC	5-1/2
616-8003-050	8
616-9875-050	9-7/8
5/8" WIDE	
616-2203-062	2.200
616-2623-062	2-5/8
616-2873-062	2-7/8
616-3063-062	3-1/16
616-3253-062	3-1/4
616-6003-062	6
3/4" WIDE	
616-3003-075	3
616-3503-075	3-1/2
616-4253-075	4-1/4
616-5123-075	5-1/8
616-6123-075	6-1/8
616-6503-075	6-1/2
7/8" WIDE	
616-3003-087	3
616-4003-087	4
616-5003-087	5
616-5503-087	5-1/2
616-6003-087	6
616-7123-087	7-1/8
61/64" WIDE	
616-6123-095	6-1/8
1" WIDE	
616-3123-100	3-1/8
616-3503-100	3-1/2
616-3753-100	3-3/4
616-4003-100	4
616-4123-100	4-1/8

Part Number	O.D.
1" WIDE	
616-4503-100	4-1/2
616-5003-100	5
616-5503-100	5-1/2
616-5753-100	5-3/4
616-6003-100	6
616-6753-100	6-3/4
616-7123-100	7-1/8
616-7253-100	7-1/4
616-8503-100	8-1/2
616-14003-100	14
1-1/4" WIDE	
616-3123-125	3-1/8
616-3373-125	3-3/8
616-3623-125	3-5/8
616-3873-125	3-7/8
616-5503-125-SC	5-1/2
616-6003-125	6
616-7003-125	7
616-10003-125	10
1-1/2" WIDE	
616-4373-150	4-3/8
616-4875-150	4-7/8
616-5003-150	5
616-5503-150	5-1/2
616-6503-150	6-1/2
616-8003-150	8
616-10003-150	10
1.61" WIDE	
616-7373-161	7-3/8
1.74" WIDE	
616-5503-174	5-1/2
1-3/4" WIDE	
616-3873-175	3-7/8
616-4373-175	4-3/8
1.93" WIDE	
616-9503-193	9-1/2

Part Number	O.D.
1.99" WIDE	
616-8253-199	8-1/4
2-1/4" WIDE	
616-4875-225	4-7/8
2.36" WIDE	
616-13875-236-SC	13.882
2-1/2" WIDE	
616-12003-250	12
2.61" WIDE	
616-11375-261-SC	11.382
2.62" WIDE	
616-3873-262	3-7/8
2.74" WIDE	
616-6003-274	6
616-8253-274	8-1/4
2.89" WIDE	
616-12873-289	12-7/8
3-1/16" WIDE	
616-7253-306	7-1/4
4" WIDE	
616-12253-400	12-1/4
7.69" WIDE	
616-15125-769-SC	15.127
616-16125-769-SC	16.118
7.85" WIDE	
616-13125-785-SC	13.118
9.99" WIDE	
616-13875-999-SC	13.882
10.97" WIDE	
616-11375-1097-SC	11.382
12.18" WIDE	
616-12875-1218-SC	12-7/8

STYLE 614 NYLON ROD BEARINGS

Style 614 rod bearings are available in nylon material. These products are used extensively in hydraulic cylinders due to their low rate of wear and non-scoring properties. Excellent for those heavy duty applications that require a sturdy bearing. Most of these bearings are solid, although some may be split.



SEAL INFORMATION	
TEMPERATURE RANGE	-40° TO +275° F
TENSILE STRENGTH	25,000 PSI
COMPRESSIVE STRENGTH	26,000 PSI
PART NUMBER	(Prefix) - (ID) - (Width)

Part Number	ID	OD	Width
614-1253-100	1-1/4	1-1/2	1
614-1254-084	1-1/4	1-3/4	27/32
614-1254-100	1-1/4	1-3/4	1
614-1255-150	1-1/4	1-7/8	1-1/2
614-1502-100	1-1/2	1-5/8	.975
614-1503-100	1-1/2	1-3/4	1
614-1504-058	1-1/2	2	.580
614-1504-075	1-1/2	2	3/4
614-1505-150	1-1/2	2-1/8	1-1/2
614-1752-100	1-3/4	1-7/8	.975
614-1753-100	1-3/4	2	1
614-1754-040	1-3/4	2-1/4	7/16
614-1754-058	1-3/4	2-1/4	.580
614-1754-075	1-3/4	2-1/4	3/4
614-1754-087	1-3/4	2-1/4	7/8
614-2002-100	2	2-1/8	.975
614-2003-099	2	2-1/4	1
614-2004-050	2	2-1/2	1/2
614-2004-058	2	2-1/2	.580
614-2004-070	2	2-1/2	.700
614-2004-075	2	2-1/2	3/4
614-2004-100	2	2-1/2	1
614-2252-150	2-1/4	2-3/8	1.475
614-2253-125	2-1/4	2-1/2	1-1/4
614-2253-155	2-1/4	2-1/2	1-35/64
614-2253-225	2-1/4	2-1/2	2-1/4
614-2254-058	2-1/4	2-3/4	.580
614-2254-075	2-1/4	2-3/4	3/4
614-2502-150	2-1/2	2-5/8	1.475
614-2503-125	2-1/2	2-3/4	1-1/4
614-2503-155	2-1/2	2-3/4	1-35/64
614-2504-025	2-1/2	3	1/4
614-2504-040	2-1/2	3	13/32

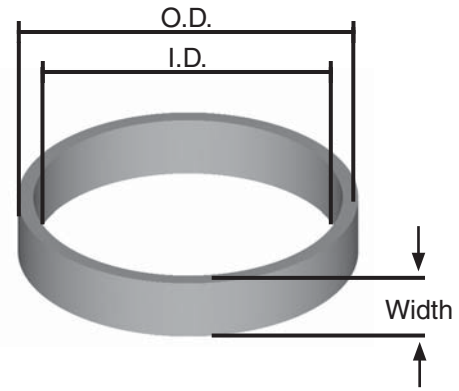
Part Number	ID	OD	Width
614-2504-058	2-1/2	3	.580
614-2504-075	2-1/2	3	3/4
614-2504-100	2-1/2	3	1
614-2753-155	2-3/4	3	1-35/64
614-2754-100	2-3/4	3-1/4	1
614-2755-100	2-3/4	3-3/8	1
614-3002-150	3	3-1/8	1.475
614-3004-046	3	3-1/2	15/32
614-3004-050	3	3-1/2	1/2
614-3004-075	3	3-1/2	3/4
614-3004-100	3	3-1/2	1
614-3004-150	3	3-1/2	1-1/2
614-3123-075	3-1/8	3-1/2	3/4
614-3123-084	3-1/8	3-1/2	.845
614-3253-037	3-1/4	3-5/8	3/8
614-3253-100	3-1/4	3-5/8	1
614-3253-155	3-1/4	3-1/2	1-35/64
614-3504-025	3-1/2	4	1/4
614-3504-046	3-1/2	4	15/32
614-3504-100	3-1/2	4	1
614-3754-075	3-3/4	4-1/4	3/4
614-3754-100	3-3/4	4-1/4	1
614-3755-100	3-3/4	4-3/8	1
614-4004-025	4	4-1/2	1/4
614-4004-037	4	4-1/2	3/8
614-4004-075	4	4-1/2	3/4
614-4004-084	4	4-1/2	.845
614-4004-093	4	4-1/2	15/16
614-4004-100	4	4-1/2	1
614-4004-150	4	4-1/2	1-1/2
614-4005-100	4	4-5/8	1
614-4504-025	4-1/2	5	1/4
614-4754-100	4-3/4	5-1/4	1

STYLE 614 NYLON ROD BEARINGS

Part Number	ID	OD	Width
614-4754-200	4-3/4	5-1/4	2
614-4755-100	4-3/4	5-3/8	1
614-5004-075	5	5-1/2	3/4
614-5004-084	5	5-1/2	.845
614-5004-093	5	5-1/2	15/16
614-5004-100	5	5-1/2	1
614-5754-100	5-3/4	6-1/4	1
614-5755-100	5-3/4	6-3/8	1
614-6004-037	6	6-1/2	3/8

Part Number	ID	OD	Width
614-6004-075	6	6-1/2	3/4
614-6004-084	6	6-1/2	.845
614-6004-093	6	6-1/2	15/16
614-6004-100	6	6-1/2	1
614-7004-075	7	7-1/2	3/4
614-8004-075	8	8-1/2	3/4
614-8256-075	8-1/4	9	3/4
614-9006-075	9	9-3/4	3/4
614-9375-100	9-3/8	10	1

STYLE 615 PHENOLIC BEARINGS

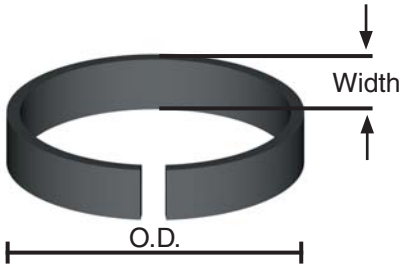


SEAL INFORMATION	
TEMPERATURE RANGE	-40° TO +250° F
TENSILE STRENGTH	10,600 PSI
COMPRESSIVE STRENGTH	34,000 PSI
PART NUMBER	(Prefix)-(OD) (CS)-(Width)

Part Number	ID	OD	Width
615-1254-075	1-1/4	1-3/4	3/4
615-2253-100	2-1/4	2-1/2	1
615-2504-150	2-1/2	2-3/4	1-1/2

Part Number	ID	OD	Width
615-2753-138	2-3/4	3	1.385
615-3753-175	3-3/4	4	1.74

STYLE 625 NYLON WEAR RING 1/4" THICK



SEAL INFORMATION	
TEMPERATURE RANGE	-40° TO +275° F
TENSILE STRENGTH	25,000 PSI
COMPRESSIVE STRENGTH	26,000 PSI
PART NUMBER	(Prefix)-(OD) (CS)-(Width)

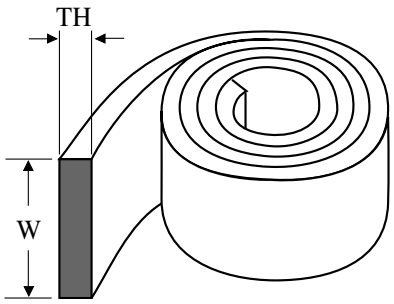
Part Number	OD	Width
625-650-349	6-1/2	3.49
625-650-350	6-1/2	3-1/2

Part Number	OD	Width
625-825-350	8-1/4	3-1/2

FLEXIBLE GUIDE BEARINGS - FILLED PTFE

Flexible Guide Bearings are strips of filled PTFE. The material can be cut to any length to fit any rod or bore size without losing its concentricity. The filler material is shown below. **NOTE:** Glass filled material has a thickness tolerance of ± .010". Bronze filled tolerance is ±.0025".

B= BRONZE FILLED PTFE



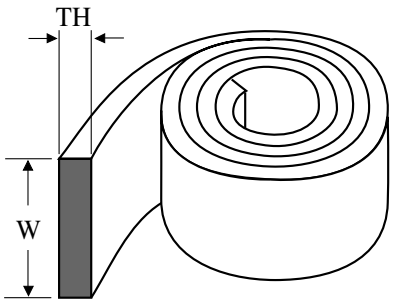
SEAL INFORMATION	
MATERIAL	GLASS FILLED 60% BRONZE FILLED PTFE
TEMPERATURE RANGE	-50° TO +400° F
TENSILE STRENGTH	2,100 PSI
COMPRESSIVE STRENGTH	1,500 PSI
PART NUMBER	(Prefix) - (Width)

Part Number	W Width	TH Thickness	Filler
606T-025	1/4	1/16	Bronze
606T-037	3/8	1/16	Bronze
606T-050	1/2	1/16	Bronze
606T-062	5/8	1/16	Bronze
606T-075	3/4	1/16	Bronze
606T-100	1	1/16	Bronze
609T-075	3/4	3/32	Bronze
609T-100	1	3/32	Bronze
609T-125	1-1/4	3/32	Bronze
612T-037B	3/8	1/8	Bronze

Part Number	W Width	TH Thickness	Filler
612T-050	1/2	1/8	Glass
612T-050B	1/2	1/8	Bronze
612T-062	5/8	1/8	Glass
612T-062B	5/8	1/8	Bronze
612T-075	3/4	1/8	Glass
612T-075B	3/4	1/8	Bronze
612T-100	1	1/8	Glass
612T-100B	1	1/8	Bronze
612T-112	1-1/8	1/8	Glass
612T-150	1-1/2	1/8	Glass

FLEXIBLE GUIDE BEARINGS - POLYESTER RESIN

Manufactured using woven-fabric-reinforced polyester resin, this material produces a dimensionally accurate rectangular strip which can be cut to any length. A low coefficient of friction and high compressive strength makes it an ideal bearing material. A common radial thickness of 1/8" allows the stacking of various widths. Cutting is made easy by using anvil type pruning shears. Radial wall thickness = 0.123 to 0.125"

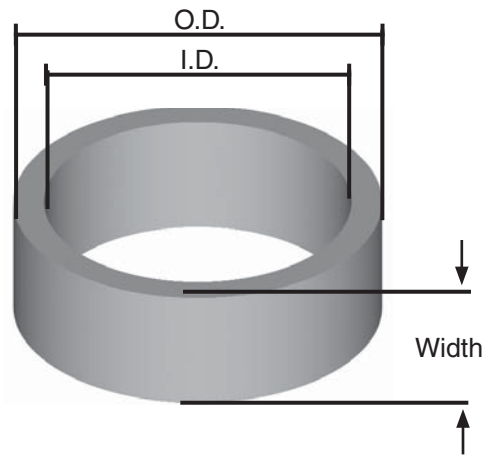


SEAL INFORMATION	
TEMPERATURE RANGE	-40° TO +250° F
TENSILE STRENGTH	8,000 PSI
COMPRESSIVE STRENGTH	24,000 PSI
PART NUMBER	(Prefix) - (Width)

Part Number	W Width	TH Thickness
612F-037	3/8	1/8
612F-050	1/2	1/8
612F-062	5/8	1/8

Part Number	W Width	TH Thickness
612F-075	3/4	1/8
612F-100	1	1/8

STYLE 660 BRONZE ROD BEARINGS

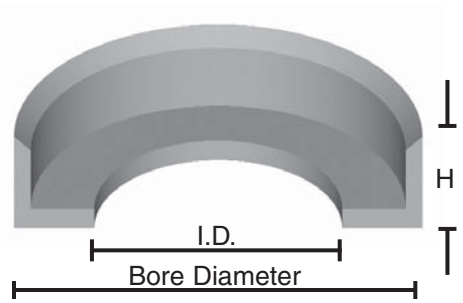


SEAL INFORMATION	
TENSILE STRENGTH	35,000 PSI
YIELD STRENGTH	18,000 PSI
PART NUMBER	(Prefix) - (ID) (CS) - (Width)

Part Number	ID	OD	Width
660-1754-100	1-3/4	2-1/4	1
660-1008-125	1	1-1/2	1-1/4
660-1004-125	1	1-1/4	1-1/4

STYLE FB FOLLOWER BEARINGS

These parts are used as companion pieces for Cascade vee sets, primarily as bearings.



SEAL INFORMATION	
MATERIAL	60D POLYESTER
TEMPERATURE RANGE	-65° TO +220° F
PART NUMBER	(Prefix) - (Bore Diameter)

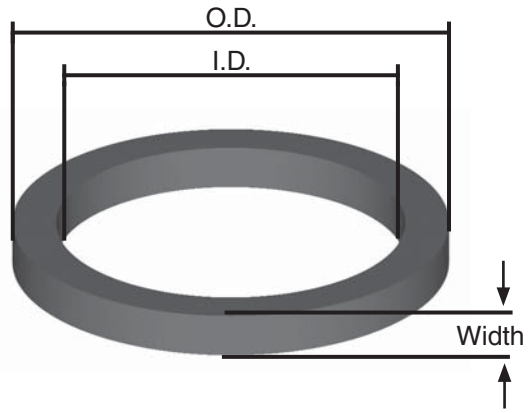
Part Number	Bore Diameter
FB-175	1-3/4
FB-200	2
FB-225	2-1/4
FB-250	2-1/2

Part Number	Bore Diameter
FB-300	3
FB-325	3-1/4
FB-350	3-1/2
FB-400	4

Part Number	Bore Diameter
FB-425	4-1/4
FB-475	4-3/4
FB-550	5-1/2
FB-650	6-1/2

STYLE MB MODULAR BACK-UPS

These back-up rings, made from urethane or nylon, are commonly used as spacers for u-seals.



SEAL INFORMATION	
MATERIAL	URETHANE, 70 SHORE D
TEMPERATURE RANGE	-40° TO +250° F
PART NUMBER	(Prefix) (CS) - (ID) - (Width)

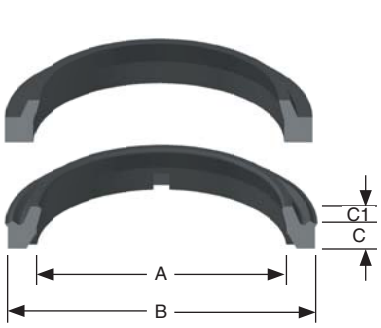
N = Nylon
S = Split
P = Hard Hytrel

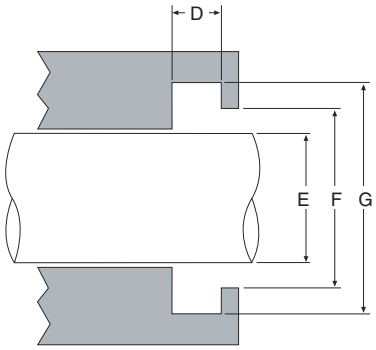
Part Number	I.D.	O.D.	Width
MB12-0.75-12-S	3/4	1	1/8
MB18-2.00-18	2	2-3/8	3/16
MB25-1.25-25	1-1/4	1-3/4	1/4
MB25-1.37-25	1-3/8	1-7/8	1/4
MB25-1.50-25	1-1/2	2	1/4
MB25-1.75-25	1-3/4	2-1/4	1/4
MB25-2.00-25	2	2-1/2	1/4
MB25-2.25-25	2-1/4	2-3/4	1/4
MB25-2.50-25	2-1/2	3	1/4
MB25-3.00-25	3	3-1/2	1/4
MB25-3.25-25	3-1/4	3-3/4	1/4
MB25-3.50-25	3-1/2	4	1/4
MB25-4.00-25	4	4-1/2	1/4
MB25-4.00-43	4	4-1/2	7/16
MB25-4.50-25	4-1/2	5	1/4
MB25-5.00-25	5	5-1/2	1/4
MB25-6.00-25	6	6-1/2	1/4
MB31-1.75-31	1-3/4	2-3/8	5/16
MB31-1.87-31	1-7/8	2-1/2	5/16
MB31-2.00-31	2	2-5/8	5/16
MB31-2.12-31	2-1/8	2-3/4	5/16
MB31-2.12-37	2-1/8	2-3/4	3/8
MB31-2.25-31	2-1/4	2-7/8	5/16
MB31-2.37-31	2-3/8	3	5/16
MB31-2.50-31	2-1/2	3-1/8	5/16
MB31-4.50-31	4-1/2	5-1/8	5/16
MB37-1.75-50	1-3/4	2-1/2	1/2
MB37-1.75-50N	1-3/4	2-1/2	1/2
MB37-1.75-56	1-3/4	2-1/2	9/16
MB37-2.00-25P	2	2-3/4	1/4
MB37-2.00-37	2	2-3/4	3/8

Part Number	I.D.	O.D.	Width
MB37-2.50-25P	2-1/2	3-1/4	1/4
MB37-2.62-50	2-5/8	3-3/8	1/2
MB37-2.62-50N	2-5/8	3-3/8	1/2
MB37-2.62-57	2-5/8	3-3/8	.575
MB37-2.75-25	2-3/4	3-1/2	1/4
MB37-3.00-37	3	3-3/4	3/8
MB37-3.12-37	3-1/8	3-7/8	3/8
MB37-3.50-25	3-1/2	4-1/4	1/4
MB37-3.50-37	3-1/2	4-1/4	3/8
MB37-3.50-44P	3-1/2	4-1/4	7/16
MB37-3.62-50N	3-5/8	4-3/8	1/2
MB37-3.62-56	3-5/8	4-3/8	9/16
MB37-4.00-37	4	4-3/4	3/8
MB37-4.25-37	4-1/4	5	3/8
MB37-4.50-28N	4-1/2	5-1/4	9/32
MB37-4.50-50	4-1/2	5-1/4	1/2
MB37-4.50-50N	4-1/2	5-1/4	1/2
MB37-4.75-37	4-3/4	5-1/2	3/8
MB37-4.75-37N	4-3/4	5-1/2	3/8
MB37-5.00-37	5	5-3/4	3/8
MB37-5.25-12	5-1/4	6	1/8
MB37-5.50-37	5-1/2	6-1/4	3/8
MB37-5.50-43NS	5-1/2	6-1/4	7/16
MB37-6.00-43NS	6	6-3/4	7/16
MB37-6.00-56	6	6-3/4	9/16
MB37-7.00-37	7	7-3/4	3/8
MB43-3.87-25	3-7/8	4-3/4	1/4
MB43-4.50-62	4-1/2	5-3/8	5/8
MB43-4.75-31	4-3/4	5-5/8	5/16
MB50-3.00-50	3	4	1/2

STYLE ST URETHANE WIPER RINGS

Style ST wiper rings are precision molded from 90A durometer urethane. Flexible enough to easily snap into a groove yet tough enough to handle difficult rod wiping applications. "V" tagged wipers are constructed of fluorocarbon.





SEAL INFORMATION	
MATERIAL	URETHANE / FLUORO-CARBON
TEMPERATURE RANGE	URETHANE: -40° TO +200° F FLUOROCARBON: -20° TO +400° F
PART NUMBER	(Prefix) - (Size) (Alternative Mat.)

Part Number	A Nom I.D.	B Nom O.D.	C Nom. Base Thick-ness	C1 Over-all Ht. (Max)	D Groove Width		E Nom. Rod Dia.	F Throat Diameter		G Housing Diameter	
ST-25	1/4	1/2	1/8	0.210	0.124	+0.004 -0.000	0.250	0.410	+0.010 -0.000	0.497	+0.006 -0.000
ST-31	5/16	9/16	1/8	0.210	0.124	+0.004 -0.000	0.312	0.475	+0.010 -0.000	0.560	+0.006 -0.000
ST-37	3/8	5/8	1/8	0.210	0.124	+0.004 -0.000	0.375	0.535	+0.010 -0.000	0.622	+0.006 -0.000
ST-43	7/16	11/16	1/8	0.210	0.124	+0.004 -0.000	0.438	0.600	+0.010 -0.000	0.685	+0.006 -0.000
ST-50	1/2	3/4	1/8	0.210	0.124	+0.004 -0.000	0.500	0.660	+0.010 -0.000	0.747	+0.006 -0.000
ST-56	9/16	13/16	1/8	0.210	0.124	+0.004 -0.000	0.563	0.725	+0.010 -0.000	0.810	+0.006 -0.000
ST-62	5/8	7/8	1/8	0.210	0.124	+0.004 -0.000	0.625	0.785	+0.010 -0.000	0.872	+0.006 -0.000
ST-62V	5/8	7/8	1/8	0.210	0.124	+0.004 -0.000	0.625	0.785	+0.010 -0.000	0.872	+0.006 -0.000
ST-75	3/4	1-1/8	3/16	0.305	0.187	+0.004 -0.000	0.750	0.995	+0.010 -0.000	1.122	+0.006 -0.000
ST-81	13/16	1-3/16	3/16	0.305	0.187	+0.004 -0.000	0.813	1.060	+0.010 -0.000	1.185	+0.006 -0.000
ST-87	7/8	1-1/4	3/16	0.305	0.187	+0.004 -0.000	0.875	1.120	+0.010 -0.000	1.247	+0.006 -0.000
ST-93	15/16	1-5/16	3/16	0.305	0.187	+0.004 -0.000	0.938	1.185	+0.010 -0.000	1.310	+0.006 -0.000
ST-100	1	1-3/8	3/16	0.305	0.187	+0.004 -0.000	1.000	1.245	+0.010 -0.000	1.372	+0.006 -0.000
ST-100V	1	1-3/8	3/16	0.305	0.187	+0.004 -0.000	1.000	1.245	+0.010 -0.000	1.372	+0.006 -0.000
ST-110	1.075	1.507	3/16	0.305	0.187	+0.004 -0.000	1.075	1.305	+0.010 -0.000	1.504	+0.006 -0.000
ST-112	1-1/8	1-1/2	3/16	0.305	0.187	+0.004 -0.000	1.125	1.370	+0.010 -0.000	1.497	+0.006 -0.000
ST-112V	1-1/8	1-1/2	3/16	0.305	0.187	+0.004 -0.000	1.125	1.370	+0.010 -0.000	1.497	+0.006 -0.000

STYLE ST URETHANE WIPER RINGS

Part Number	A Nom I.D.	B Nom O.D.	C Nom. Base Thick-ness	C1 Over-all Ht. (Max)	D Groove Width		E Nom. Rod Dia.	F Throat Diameter		G Housing Diameter	
ST-118	1-3/16	1-9/16	3/16	0.305	0.187	+0.004 -0.000	1.188	1.435	+0.010 -0.000	1.560	+0.006 -0.000
ST-125	1-1/4	1-5/8	3/16	0.305	0.187	+0.004 -0.000	1.250	1.495	+0.010 -0.000	1.622	+0.006 -0.000
ST-125V	1-1/4	1-5/8	3/16	0.305	0.187	+0.004 -0.000	1.250	1.495	+0.010 -0.000	1.622	+0.006 -0.000
ST-131	1-5/16	1-11/16	3/16	0.305	0.187	+0.004 -0.000	1.313	1.560	+0.010 -0.000	1.685	+0.006 -0.000
ST-137	1-3/8	1-3/4	3/16	0.305	0.187	+0.004 -0.000	1.375	1.620	+0.010 -0.000	1.747	+0.006 -0.000
ST-137V	1-3/8	1-3/4	3/16	0.305	0.187	+0.004 -0.000	1.375	1.620	+0.010 -0.000	1.747	+0.006 -0.000
ST-143	1-7/16	1-13/16	3/16	0.305	0.187	+0.004 -0.000	1.438	1.685	+0.010 -0.000	1.810	+0.006 -0.000
ST-150	1-1/2	1-7/8	3/16	0.305	0.187	+0.004 -0.000	1.500	1.745	+0.010 -0.000	1.872	+0.006 -0.000
ST-150V	1-1/2	1-7/8	3/16	0.305	0.187	+0.004 -0.000	1.500	1.745	+0.010 -0.000	1.872	+0.006 -0.000
ST-156	1-9/16	1-15/16	3/16	0.305	0.187	+0.004 -0.000	1.563	1.810	+0.010 -0.000	1.935	+0.006 -0.000
ST-162	1-5/8	2	3/16	0.305	0.187	+0.004 -0.000	1.625	1.870	+0.010 -0.000	1.997	+0.006 -0.000
ST-175	1-3/4	2-1/8	3/16	0.305	0.187	+0.004 -0.000	1.750	1.995	+0.010 -0.000	2.122	+0.006 -0.000
ST-175V	1-3/4	2-1/8	3/16	0.305	0.187	+0.004 -0.000	1.750	1.995	+0.010 -0.000	2.122	+0.006 -0.000
ST-187	1-7/8	2-1/4	3/16	0.305	0.187	+0.004 -0.000	1.875	2.120	+0.010 -0.000	2.247	+0.006 -0.000
ST-193	1-15/16	2-5/16	3/16	0.305	0.187	+0.004 -0.000	1.938	2.185	+0.010 -0.000	2.310	+0.006 -0.000
ST-200	2	2-1/2	1/4	0.395	0.249	+0.004 -0.000	2.000	2.327	+0.010 -0.000	2.497	+0.006 -0.000
ST-200V	2	2-1/2	1/4	0.395	0.249	+0.004 -0.000	2.000	2.327	+0.010 -0.000	2.497	+0.006 -0.000
ST-212	2-1/8	2-5/8	1/4	0.395	0.249	+0.004 -0.000	2.125	2.452	+0.010 -0.000	2.622	+0.006 -0.000
ST-212A	2-1/8	2-1/2	3/16	0.305	0.187	+0.004 -0.000	2.125	2.452	+0.010 -0.000	2.497	+0.006 -0.000
ST-225	2-1/4	2-3/4	1/4	0.395	0.249	+0.004 -0.000	2.250	2.577	+0.010 -0.000	2.747	+0.006 -0.000
ST-237	2-3/8	2-7/8	1/4	0.395	0.249	+0.004 -0.000	2.375	2.702	+0.010 -0.000	2.872	+0.006 -0.000
ST-250	2-1/2	3	1/4	0.395	0.249	+0.004 -0.000	2.500	2.827	+0.010 -0.000	2.997	+0.006 -0.000
ST-250V	2-1/2	3	1/4	0.395	0.249	+0.004 -0.000	2.500	2.827	+0.010 -0.000	2.997	+0.006 -0.000
ST-262	2-5/8	3-1/8	1/4	0.395	0.249	+0.004 -0.000	2.625	2.952	+0.010 -0.000	3.122	+0.006 -0.000

STYLE ST URETHANE WIPER RINGS

Part Number	A Nom I.D.	B Nom O.D.	C Nom. Base Thick-ness	C1 Over-all Ht. (Max)	D Groove Width		E Nom. Rod Dia.	F Throat Diameter		G Housing Diameter	
ST-275	2-3/4	3-1/4	1/4	0.395	0.249	+0.004 -0.000	2.750	3.077	+0.010 -0.000	3.247	+0.006 -0.000
ST-287	2-7/8	3-3/8	1/4	0.395	0.249	+0.004 -0.000	2.875	3.202	+0.010 -0.000	3.372	+0.006 -0.000
ST-300	3	3-1/2	1/4	0.395	0.249	+0.004 -0.000	3.000	3.327	+0.010 -0.000	3.497	+0.006 -0.000
ST-300V	3	3-1/2	1/4	0.395	0.249	+0.004 -0.000	3.000	3.327	+0.010 -0.000	3.497	+0.006 -0.000
ST-312	3-1/8	3-5/8	1/4	0.395	0.249	+0.004 -0.000	3.125	3.452	+0.010 -0.000	3.622	+0.006 -0.000
ST-325	3-1/4	3-3/4	1/4	0.395	0.249	+0.004 -0.000	3.250	3.577	+0.010 -0.000	3.747	+0.006 -0.000
ST-325V	3-1/4	3-3/4	1/4	0.395	0.249	+0.004 -0.000	3.250	3.577	+0.010 -0.000	3.747	+0.006 -0.000
ST-337	3-3/8	3-7/8	1/4	0.395	0.249	+0.004 -0.000	3.375	3.702	+0.010 -0.000	3.872	+0.006 -0.000
ST-350	3-1/2	4	1/4	0.395	0.249	+0.004 -0.000	3.500	3.827	+0.010 -0.000	3.997	+0.006 -0.000
ST-350V	3-1/2	4	1/4	0.395	0.249	+0.004 -0.000	3.500	3.827	+0.010 -0.000	3.997	+0.006 -0.000
ST-362	3-5/8	4-1/8	1/4	0.395	0.249	+0.004 -0.000	3.625	3.952	+0.010 -0.000	4.122	+0.006 -0.000
ST-375	3-3/4	4-1/4	1/4	0.395	0.249	+0.004 -0.000	3.750	4.077	+0.010 -0.000	4.247	+0.006 -0.000
ST-387	3-7/8	4-3/8	1/4	0.395	0.249	+0.004 -0.000	3.875	4.202	+0.010 -0.000	4.372	+0.006 -0.000
ST-400	4	4-1/2	1/4	0.395	0.249	+0.004 -0.000	4.000	4.327	+0.010 -0.000	4.497	+0.006 -0.000
ST-412	4-1/8	4-5/8	1/4	0.395	0.249	+0.004 -0.000	4.125	4.452	+0.010 -0.000	4.622	+0.006 -0.000
ST-425	4-1/4	4-3/4	1/4	0.395	0.249	+0.004 -0.000	4.250	4.577	+0.010 -0.000	4.747	+0.006 -0.000
ST-437	4-3/8	4-7/8	1/4	0.395	0.249	+0.004 -0.000	4.375	4.702	+0.010 -0.000	4.872	+0.006 -0.000
ST-451	4-1/2	5	1/4	0.395	0.249	+0.004 -0.000	4.500	4.827	+0.010 -0.000	4.997	+0.006 -0.000
ST-450	4-1/2	5-1/4	3/8	0.585	0.374	+0.004 -0.000	4.500	4.993	+0.010 -0.000	5.247	+0.006 -0.000
ST-475	4-3/4	5-1/2	3/8	0.585	0.374	+0.004 -0.000	4.750	5.243	+0.010 -0.000	5.497	+0.006 -0.000
ST-487	4-7/8	5-5/8	3/8	0.585	0.374	+0.004 -0.000	4.875	5.368	+0.010 -0.000	5.622	+0.006 -0.000
ST-501	5	5-1/2	1/4	0.395	0.249	+0.004 -0.000	5.000	5.327	+0.010 -0.000	5.497	+0.006 -0.000
ST-500	5	5-3/4	3/8	0.585	0.374	+0.004 -0.000	5.000	5.493	+0.010 -0.000	5.747	+0.006 -0.000
ST-525	5-1/4	6	3/8	0.585	0.374	+0.004 -0.000	5.250	5.743	+0.010 -0.000	5.997	+0.006 -0.000

STYLE ST URETHANE WIPER RINGS

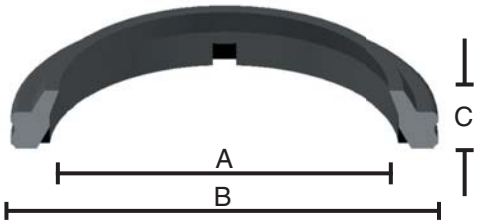
Part Number	A Nom I.D.	B Nom O.D.	C Nom. Base Thick-ness	C1 Over-all Ht. (Max)	D Groove Width		E Nom. Rod Dia.	F Throat Diameter		G Housing Diameter	
ST-550	5-1/2	6-1/4	3/8	0.585	0.374	+0.004 -0.000	5.500	5.993	+0.010 -0.000	6.247	+0.006 -0.000
ST-575	5-3/4	6-1/2	3/8	0.585	0.374	+0.004 -0.000	5.750	6.243	+0.010 -0.000	6.497	+0.006 -0.000
ST-600	6	6-3/4	3/8	0.585	0.374	+0.004 -0.000	6.000	6.493	+0.010 -0.000	6.747	+0.006 -0.000
ST-625	6-1/4	7	3/8	0.585	0.374	+0.004 -0.000	6.250	6.743	+0.010 -0.000	6.997	+0.006 -0.000
ST-660	6-1/2	7-1/2	1/2	0.775	0.499	+0.004 -0.000	6.500	6.993	+0.010 -0.000	7.497	+0.006 -0.000
ST-650-A	6-1/2	7-1/2	3/8	0.585	0.374	+0.004 -0.000	6.500	7.159	+0.010 -0.000	7.497	+0.006 -0.000
ST-650	6-1/2	7-1/4	3/8	0.585	0.374	+0.004 -0.000	6.500	6.993	+0.010 -0.000	7.247	+0.006 -0.000
ST-675	6-3/4	7-1/2	3/8	0.585	0.374	+0.004 -0.000	6.750	7.243	+0.010 -0.000	7.497	+0.006 -0.000
ST-702	7	8	0.400	0.675	0.399	+0.004 -0.000	7.000	7.659	+0.010 -0.000	7.997	+0.006 -0.000
ST-701	7	8	1/2	0.775	0.499	+0.004 -0.000	7.000	7.659	+0.010 -0.000	7.997	+0.006 -0.000
ST-700	7	7-3/4	3/8	0.585	0.374	+0.004 -0.000	7.000	7.493	+0.010 -0.000	7.747	+0.006 -0.000
ST-750-A	7-1/2	8-1/2	3/8	0.585	0.374	+0.004 -0.000	7.500	8.159	+0.010 -0.000	8.497	+0.006 -0.000
ST-750	7-1/2	8-1/4	3/8	0.585	0.374	+0.004 -0.000	7.500	7.993	+0.010 -0.000	8.247	+0.006 -0.000
ST-775	7-3/4	8-1/2	3/8	0.585	0.374	+0.004 -0.000	7.750	8.243	+0.010 -0.000	8.497	+0.006 -0.000
ST-801	8	8-1/2	1/4	0.395	0.249	+0.004 -0.000	8.000	8.327	+0.010 -0.000	8.497	+0.006 -0.000
ST-800	8	8-3/4	3/8	0.585	0.374	+0.004 -0.000	8.000	8.493	+0.010 -0.000	8.747	+0.006 -0.000
ST-825	8-1/4	9	3/8	0.585	0.374	+0.004 -0.000	8.250	8.743	+0.010 -0.000	8.997	+0.006 -0.000
ST-851	8-1/2	9	1/4	0.395	0.249	+0.004 -0.000	8.500	8.827	+0.010 -0.000	8.997	+0.006 -0.000
ST-850	8-1/2	9-1/4	3/8	0.585	0.374	+0.004 -0.000	8.500	8.993	+0.010 -0.000	9.247	+0.006 -0.000
ST-875	8-3/4	9-1/2	1/4	0.395	0.249	+0.004 -0.000	8.750	9.243	+0.010 -0.000	9.497	+0.006 -0.000
ST-900	9	9-3/4	3/8	0.585	0.374	+0.004 -0.000	9.000	9.493	+0.010 -0.000	9.747	+0.006 -0.000
ST-950	9-1/2	10-1/4	3/8	0.585	0.374	+0.004 -0.000	9.500	9.993	+0.010 -0.000	10.247	+0.006 -0.000
ST-975	9-3/4	10-1/2	3/8	0.585	0.374	+0.004 -0.000	9.750	10.243	+0.010 -0.000	10.497	+0.006 -0.000
ST-1000	10	11	1/2	0.775	0.499	+0.004 -0.000	10.000	10.659	+0.010 -0.000	10.997	+0.006 -0.000

STYLE ST URETHANE WIPER RINGS

Part Number	A Nom I.D.	B Nom O.D.	C Nom. Base Thick-ness	C1 Over-all Ht. (Max)	D Groove Width		E Nom. Rod Dia.	F Throat Diameter		G Housing Diameter	
ST-1000A	10	10-1/2	1/4	0.395	0.249	+0.004 -0.000	10.000	10.659	+0.010 -0.000	10.497	+0.006 -0.000
ST-1100	11	12	1/2	0.775	0.499	+0.004 -0.000	11.000	11.659	+0.010 -0.000	11.997	+0.006 -0.000
ST-1200	12	13	1/2	0.775	0.499	+0.004 -0.000	12.000	12.659	+0.010 -0.000	12.997	+0.006 -0.000
ST-1201	12	13-1/4	1/2	0.775	0.499	+0.004 -0.000	12.000	12.909	+0.010 -0.000	13.247	+0.006 -0.000
ST-1250	12-1/2	13-1/2	1/2	0.775	0.499	+0.004 -0.000	12.500	13.159	+0.010 -0.000	13.497	+0.006 -0.000

STYLE ST URETHANE WIPER RINGS WITH SLOTTED HEEL

A wide range of ST wipers are now offered in the slotted heel design. The slots in the heel allow excess hydraulic fluid to bypass the wiper, preventing wiper blowout.



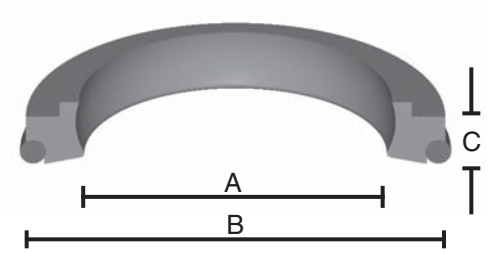
SEAL INFORMATION	
MATERIAL	90A URETHANE
TEMPERATURE RANGE	-40° TO +200° F
PART NUMBER	(Prefix) - (Size) - (Slotted Heel)

Part Number	A Rod Dia.	B OD Wiper	C - Base Thickness
ST-31-SH	5/16	9/16	1/8
ST-37-SH	3/8	5/8	1/8
ST-43-SH	7/16	11/16	1/8
ST-50-SH	1/2	3/4	1/8
ST-62-SH	5/8	7/8	1/8
ST-75-SH	3/4	1-1/8	3/16
ST-87-SH	7/8	1-1/4	3/16
ST-100-SH	1	1-3/8	3/16
ST-112-SH	1-1/8	1-1/2	3/16
ST-125-SH	1-1/4	1-5/8	3/16
ST-137-SH	1-3/8	1-3/4	3/16
ST-150-SH	1-1/2	1-7/8	3/16
ST-162-SH	1-5/8	2	3/16
ST-175-SH	1-3/4	2-1/8	3/16
ST-187-SH	1-7/8	2-1/4	3/16
ST-200-SH	2	2-1/2	1/4
ST-212-SH	2-1/8	2-5/8	1/4
ST-225-SH	2-1/4	2-3/4	1/4
ST-237-SH	2-3/8	2-7/8	1/4
ST-250-SH	2-1/2	3	1/4
ST-262-SH	2-5/8	3-1/8	1/4

Part Number	A Rod Dia.	B OD Wiper	C - Base Thickness
ST-275-SH	2-3/4	3-1/4	1/4
ST-300-SH	3	3-1/2	1/4
ST-312-SH	3-1/8	3-5/8	1/4
ST-325-SH	3-1/4	3-3/4	1/4
ST-350-SH	3-1/2	4	1/4
ST-362-SH	3-5/8	4-1/8	1/4
ST-375-SH	3-3/4	4-1/4	1/4
ST-400-SH	4	4-1/2	1/4
ST-425-SH	4-1/4	4-3/4	1/4
ST-450-SH	4-1/2	5-1/4	3/8
ST-475-SH	4-3/4	5-1/2	3/8
ST-500-SH	5	5-3/4	3/8
ST-525-SH	5-1/4	6	3/8
ST-550-SH	5-1/2	6-1/4	3/8
ST-600-SH	6	6-3/4	3/8
ST-700-SH	7	7-3/4	3/8
ST-725-SH	7-1/4	8	3/8
ST-750-SH	7-1/2	8-1/4	3/8
ST-800-SH	8	8-3/4	3/8
ST-900-SH	9	9-3/4	3/8

STYLE STXE ENERGIZED WIPER RINGS

STXE wipers are designed to retrofit the standard ST wiper groove while providing superior performance. The o-ring energizer limits dirt intrusion around the O.D. of the wiper. The energizer also makes this wiper more effective in applications with severe side deflections.



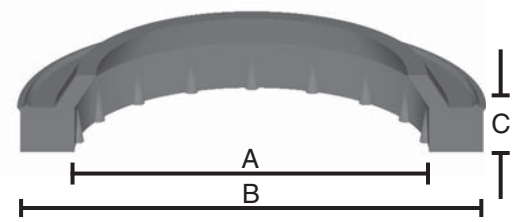
SEAL INFORMATION	
MATERIAL	URETHANE WIPER RUBBER ENERGIZER
TEMPERATURE RANGE	-40° TO +200° F
PART NUMBER	(Prefix) - (Size)

Part Number	A Rod Dia.	B OD Wiper	C - Base Thickness
STXE-150	1-1/2	1-7/8	3/16
STXE-175	1-3/4	2-1/8	3/16
STXE-200	2	2-1/2	1/4
STXE-250	2-1/2	3	1/4
STXE-300	3	3-1/2	1/4

Part Number	A Rod Dia.	B OD Wiper	C - Base Thickness
STXE-350	3-1/2	4	1/4
STXE-375	3-3/4	4-1/4	1/4
STXE-400	4	4-1/2	1/4
STXE-450	4-1/2	5-1/4	3/8

STYLE ST-XL URETHANE WIPER RINGS

Style ST-XL wipers are molded from premium urethane and are direct replacements for Style "ST" or "D" wipers. The outside diameter of the ring has a crush lip providing extra interference in the groove. A bead on the shoulder stops contaminates from entering through the groove. The inside diameter is ribbed to prevent pressure traps between the wiper and rod seal.



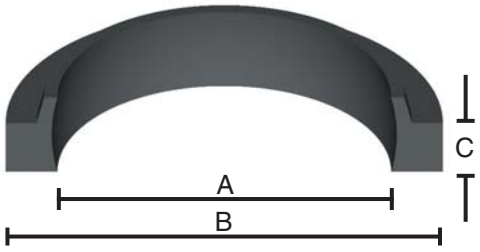
SEAL INFORMATION	
MATERIAL	94A URETHANE
TEMPERATURE RANGE	-40° TO +230° F
PART NUMBER	(Prefix) - (Size) - (Extra Lip)

Part Number	A Rod Dia.	B OD Wiper	C - Base Thickness
ST-75-XL	3/4	1-1/8	3/16
ST-100-XL	1	1-3/8	3/16
ST-112-XL	1-1/8	1-1/2	3/16
ST-125-XL	1-1/4	1-5/8	3/16
ST-137-XL	1-3/8	1-3/4	3/16
ST-150-XL	1-1/2	1-7/8	3/16
ST-175-XL	1-3/4	2-1/8	3/16
ST-162-XL	1-5/8	2	3/16
ST-200-XL	2	2-1/2	1/4
ST-225-XL	2-1/4	2-3/4	1/4

Part Number	A Rod Dia.	B OD Wiper	C - Base Thickness
ST-250-XL	2-1/2	3	1/4
ST-300-XL	3	3-1/2	1/4
ST-325-XL	3-1/4	3-3/4	1/4
ST-350-XL	3-1/2	4	1/4
ST-400-XL	4	4-1/2	1/4
ST-450-XL	4-1/2	5-1/4	3/8
ST-500-XL	5	5-3/4	3/8
ST-525-XL	5-1/4	6	3/8
ST-550-XL	5-1/2	6-1/4	3/8
ST-600-XL	6	6-3/4	3/8

STYLE ST-E WIPER RINGS

Style ST-E is a light to medium duty urethane wiper ring with a square shoulder, similar to our standard ST style wipers but with different dimensions.



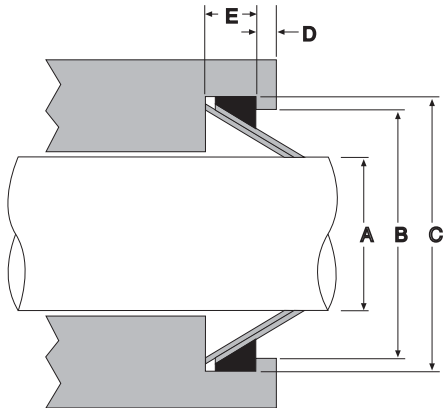
SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-31° TO +212° F
PART NUMBER	(Prefix) - (Size)

Part Number	A Rod Dia.	B OD Wiper	C - Base Thickness
ST-200-E	2	2.46	3/16
ST-275-E	2-3/4	3-3/16	3/16
ST-300-E	3	3-1/2	3/16
ST-350-E	3-1/2	4-1/6	3/16
ST-362-E	3-5/8	4-3/16	3/16
ST-437-E	4-3/8	4.90	3/16

Part Number	A Rod Dia.	B OD Wiper	C - Base Thickness
ST-525-E	5-1/4	5.84	3/16
ST-631-E	6-5/16	6.90	3/16
ST-731-E	7-5/16	7.90	3/16
ST-837-E	8-3/8	8.97	3/16
ST-943-E	9-7/16	10.09	3/16

STYLE SG - "SEAL GUARD" METALLIC ROD WIPERS

Each Seal Guard Wiper consists of two flexible bronze rings which are held in place by a nitrile cushion ring. The cushion ring absorbs side loads and energizes the wiper to maintain close contact with the rod. Particularly suited for hostile environments, seal guard wipers shave off sand, grift, slag, flux, paint, moisture, chips and slivers. Seal Guard Wipers are long-lasting, self-adjusting, and offer low friction. Seal Guard Wipers can be installed in standard "ST" or "D" Style grooves by increasing the "B" gland dimensions to the "B" diameter shown.



SEAL INFORMATION	
MATERIAL	660 BRONZE 70A NITRILE
TEMPERATURE RANGE	-40° TO +240° F
PART NUMBER	(Prefix) - (Size)

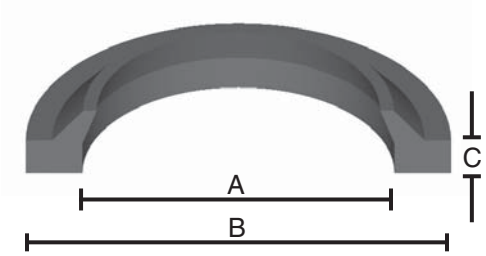
Part Number	A - Rod Diameter	B - Throat Diamter	C - Groove Diameter	D	E - Groove Width
SG-0.500	0.500	0.714	0.750	.018	.125
SG-0.750	0.750	1.082	1.125	.022	.188
SG-0.875	0.875	1.207	1.250	.022	.188
SG-1.000	1.000	1.332	1.375	.022	.188
SG-1.125	1.125	1.457	1.500	.022	.188

STYLE SG - "SEAL GUARD" METALLIC ROD WIPERS

Part Number	A - Rod Diameter	B - Throat Diamter	C - Groove Diameter	D	E - Groove Width
SG-1.250	1.250	1.582	1.625	.022	.188
SG-1.375	1.375	1.707	1.750	.022	.188
SG-1.500	1.500	1.832	1.875	.022	.188
SG-1.750	1.750	2.082	2.125	.022	.188
SG-2.000	2.000	2.440	2.500	.030	.250
SG-2.250	2.250	2.690	2.750	.030	.250
SG-2.500	2.500	2.940	3.000	.030	.250
SG-3.000	3.000	3.440	3.500	.030	.250
SG-3.500	3.500	3.940	4.000	.030	.250

STYLE AN URETHANE WIPER RINGS

Suffix "SH" designates slotted heel design, "V" designates fluorocarbon material, and "B" designates carboxilated nitrile material.



SEAL INFORMATION	
MATERIAL	90A URETHANE
TEMPERATURE RANGE	-40° TO +200° F
PART NUMBER	(Prefix) - (Size)

Part Number	A - Rod Diameter	B - Groove I.D.	C - Base Thickness
AN-01	1/2	.760	.104
AN-01-SH	1/2	.760	.104
AN-02	9/16	.823	.104
AN-03	5/8	.885	.104
AN-03-SH	5/8	.885	.104
AN-04	11/16	.948	.104
AN-05	3/4	1.010	.104
AN-05-N	3/4	1.010	.104
AN-05-SH	3/4	1.010	.104
AN-05V	3/4	1.010	.104
AN-06	13/16	1.084	.104
AN-06-SH	13/16	1.084	.104
AN-07	7/8	1.147	.104
AN-07A	7/8	1.118	.104
AN-07A-T	7/8	1.118	.104
AN-07-SH	7/8	1.147	.104
AN-08	15/16	1.209	.104

Part Number	A - Rod Diameter	B - Groove I.D.	C - Base Thickness
AN-09	1	1.272	.104
AN-09B	1	1.272	.104
AN-09-SH	1	1.272	.104
AN-09V	1	1.272	.104
AN-10	1-1/16	1.334	.104
AN-11	1-1/8	1.397	.104
AN-11-SH	1-1/8	1.397	.104
AN-12	1-3/16	1.459	.104
AN-13	1-1/4	1.522	.104
AN-13B	1-1/4	1.490	.104
AN-13-SH	1-1/4	1.522	.104
AN-13V	1-1/4	1.522	.104
AN-14	1-5/16	1.614	.104
AN-15	1-3/8	1.677	.104
AN-15-SH	1-3/8	1.677	.104
AN-15V	1-3/8	1.677	.104
AN-16	1-7/16	1.739	.104

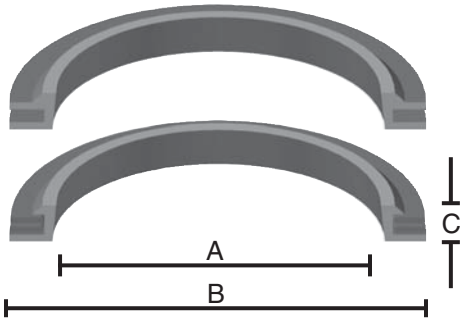
STYLE AN URETHANE WIPER RINGS

Part Number	A - Rod Diameter	B - Groove I.D.	C - Base Thickness
AN-17	1-1/2	1.802	.104
AN-17A	1-1/2	1.738	.104
AN-17-SH	1-1/2	1.802	.104
AN-17V	1-1/2	1.802	.104
AN-18	1-5/8	1.927	.104
AN-18-SH	1-5/8	1.927	.104
AN-19	1-3/4	2.052	.104
AN-19-SH	1-3/4	2.052	.104
AN-20	1-7/8	2.177	.104
AN-20-SH	1-7/8	2.177	.104
AN-21	2	2.302	.104
AN-21-SH	2	2.302	.104
AN-21V	2	2.302	.104
AN-22	2-1/8	2.427	.104
AN-22-SH	2-1/8	2.427	.104
AN-23	2-1/4	2.552	.104
AN-23B	2-1/4	2.552	.104
AN-23-SH	2-1/4	2.552	.104
AN-24	2-3/8	2.677	.104
AN-25	2-1/2	2.802	.104
AN-25-SH	2-1/2	2.802	.104
AN-25V	2.498	2.802	.104
AN-26	2-5/8	2.989	.119
AN-26-SH	2-5/8	2.989	.119
AN-27	2-3/4	3.114	.119
AN-27-SH	2-3/4	3.114	.119
AN-28	2-7/8	3.239	.119
AN-28-SH	2-7/8	3.239	.119
AN-29	3	3.364	.119
AN-29-SH	3	3.364	.119
AN-30	3-1/8	3.489	.119
AN-31	3-1/4	3.614	.119
AN-31-SH	3-1/4	3.614	.119
AN-32	3-3/8	3.729	.119
AN-33	3-1/2	3.864	.119
AN-33-SH	3-1/2	3.864	.119
AN-34	3-5/8	3.989	.119
AN-35	3-3/4	4.114	.119
AN-35-SH	3-3/4	4.114	.119

Part Number	A - Rod Diameter	B - Groove I.D.	C - Base Thickness
AN-36	3-7/8	4.239	.119
AN-37	4	4.427	.135
AN-37-SH	4	4.427	.135
AN-37V	4	4.427	.135
AN-38	4-1/8	4.552	.135
AN-39	4-1/4	4.677	.135
AN-40	4-3/8	4.802	.135
AN-41	4-1/2	4.927	.135
AN-41-SH	4-1/2	4.927	.135
AN-42	4-5/8	5.052	.135
AN-43	4-3/4	5.177	.135
AN-44	4-7/8	5.302	.135
AN-45	5	5.427	.135
AN-45-SH	5	5.427	.135
AN-46	5-1/8	5.552	.135
AN-47	5-1/4	5.677	.135
AN-48	5-3/8	5.802	.135
AN-49	5-1/2	5.927	.135
AN-50	5-5/8	6.114	.151
AN-51	5-3/4	6.239	.151
AN-52	5-7/8	6.364	.151
AN-53	6	6.489	.151
AN-54	6-1/4	6.739	.151
AN-55	6-1/2	6.989	.151
AN-56	6-3/4	7.239	.151
AN-57	7	7.484	.151
AN-58	7-1/4	7.739	. 151
AN-59	7-1/2	7.989	. 151
AN-60	7-3/4	8.247	.151
AN-61	8	8.484	.151
AN-62	8-1/2	8.989	.151
AN-63	9	9.497	.151
AN-64	9-1/2	9.989	.151
AN-65	10	10.497	.151
AN-66	10-1/2	10.997	.151
AN-67	11	11.497	.151
AN-69	12	12.504	.166
AN-E9-1/4	9-1/4	9.739	.135

STYLE AN-M2 BRASS WIPER RINGS

Style AN-M2 scrapers conform to MS28776-M2 sizes and are manufactured in brass. The scrapers are suitable for extreme environments with aggressive contaminants. The unique spring-loaded construction and ductile material result in close rod contact even when coping with rod ovality and helix grinding patterns.

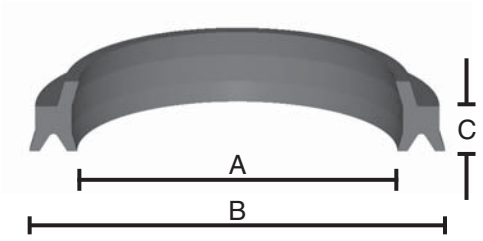


SEAL INFORMATION	
MATERIAL	BRASS
TEMPERATURE RANGE	-30° TO +300° F
PART NUMBER	(Prefix) - (Size)

Part Number	A - Rod Diameter	B - Groove Diameter	C - Groove Width	D - Throat Diameter
AN-03-M2	5/8	.885	.104	0.772
AN-05-M2	3/4	1.010	.104	0.897
AN-09-M2	1	1.272	.104	1.136
AN-13-M2	1-1/4	1.522	.104	1.386
AN-15-M2	1-3/8	1.677	.104	1.542
AN-17-M2	1-1/2	1.802	.104	1.668
AN-19-M2	1-3/4	2.052	.104	1.918
AN-21-M2	2	2.302	.104	2.178
AN-23-M2	2-1/4	2.552	.104	2.428
AN-25-M2	2-1/2	2.802	.104	2.678
AN-27-M2	2-3/4	3.114	.119	2.959
AN-29-M2	3	3.364	.119	3.209
AN-33-M2	3-1/2	3.864	.119	3.709
AN-37-M2	4	4.427	.135	4.240
AN-41-M2	4-1/2	4.927	.135	4.740
AN-45-M2	5	5.427	.135	5.240

STYLE HW URETHANE WIPER RINGS

Suffix "V" designates fluorocarbon material,"N" designates nitrile material, and "HT" designates high temperature urethane.



SEAL INFORMATION	
MATERIAL	90A URETHANE
TEMPERATURE RANGE	-40° TO +200° F N: -40° TO +225° F V: -20° TO +350° F HT: -40° TO +225° F
PART NUMBER	(Prefix) - (Size)

Part Number	A - Rod Diameter	B - Groove I.D.	C - Base Thickness
HW-0500	1/2	13/16	.194
HW-0500N	1/2	13/16	.194
HW-0500V	1/2	13/16	.194
HW-0625	5/8	15/16	.194
HW-0625-1	5/8	1	.203
HW-0625-1N	5/8	1	.203
HW-0625-2N	5/8	15/16	.192/0.311
HW-0625N	5/8	15/16	.189/0.235
HW-0625V	5/8	15/16	.194
HW-0750	3/4	1-1/16	.194
HW-0750N	3/4	1-1/16	.194
HW-0750V	3/4	1-1/16	.194
HW-0875	7/8	1-1/4	.212
HW-0875N	7/8	1-1/4	.212
HW-0937	15/16	1-5/16	.212
HW-1000	1	1-3/8	.212
HW-1000N	1	1-3/8	.212
HW-1000U	1	1-3/8	.212
HW-1000V	1	1-3/8	.212
HW-1125	1-1/8	1-1/2	.212
HW-1250	1-1/4	1-5/8	.212
HW-1250N	1-1/4	1-5/8	.212
HW-1375	1-3/8	1-3/4	.212
HW-1375HT	1-3/8	1-3/4	.206
HW-1375N	1-3/8	1-3/4	.212
HW-1375V	1-3/8	1-3/4	.212
HW-1500	1-1/2	1-7/8	.212
HW-1500N	1-1/2	1-7/8	.212
HW-1625	1-5/8	2	.212
HW-1750	1-3/4	2-1/8	.212
HW-1750N	1-3/4	2-1/8	.212
HW-1750V	1-3/4	2-1/8	.212

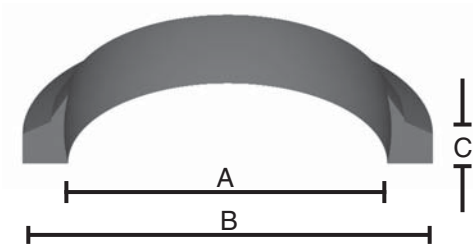
Part Number	A - Rod Diameter	B - Groove I.D.	C - Base Thickness
HW-1751	1-3/4	2-1/8	.168
HW-1875	1-7/8	2-1/4	.212
HW-1875N	1-7/8	2-1/4	.212
HW-2000	2	2-3/8	.212
HW-2000N	2	2-3/8	.212
HW-2000V	2	2-3/8	.212
HW-2125	2-1/8	2-1/2	.212
HW-2250	2-1/4	2-3/4	.275
HW-2375N	2-3/8	2-7/8	.275
HW-2500	2-1/2	3	.275
HW-2500N	2-1/2	3	.275
HW-2500V	2-1/2	3	.275
HW-2625	2-5/8	3-1/8	.275
HW-2750	2-3/4	3-1/4	.275
HW-3000	3	3-1/2	.275
HW-3000N	3	3-1/2	.275
HW-3000V	3	3-1/2	.275
HW-3250	3-1/4	3-3/4	.275
HW-3500	3-1/2	4	.275
HW-3500N	3-1/2	4	.275
HW-3500V	3-1/2	4	.275
HW-3750	3-3/4	4-1/4	.275
HW-4000	4	4-1/2	.275
HW-4000N	4	4-1/2	.275
HW-4000V	4	4-1/2	.275
HW-4250	4-1/4	4-3/4	.275
HW-4430	4-7/16	4-15/16	.275
HW-4500	4-1/2	5	.275
HW-4500N	4-1/2	5	.275
HW-4500V	4-1/2	5	.275
HW-4750	4-3/4	5-1/4	.275
HW-5000	5	5-1/2	.275

STYLE HW URETHANE WIPER RINGS

Part Number	A - Rod Diameter	B - Groove I.D.	C - Base Thickness
HW-5000N	5	5-1/2	.275
HW-5000V	5	5-1/2	.275
HW-5500	5-1/2	6	.275
HW-5500N	5-1/2	6	.275
HW-5500V	5-1/2	6	.275

Part Number	A - Rod Diameter	B - Groove I.D.	C - Base Thickness
HW-6000N	6	6-1/2	.275
HW-6000V	6	6-1/2	.275
HW-7000	7	7-1/2	.275
HW-8000	8	8-1/2	.275

STYLE BT URETHANE WIPER RINGS



SEAL INFORMATION	
MATERIAL	90A URETHANE
TEMPERATURE RANGE	-40° TO +200° F
PART NUMBER	(Prefix) (Size)

Part Number	A - Rod Diameter	B - Groove I.D.	C - Base Thickness
BT01050	5/8	7/8	5/32
BT01260	3/4	1-1/8	3/16
BT01460	7/8	1-1/4	3/16
BT10060	1	1-3/8	3/16
BT10260	1-1/8	1-1/2	3/16
BT10460	1-1/4	1-5/8	3/16
BT10660	1-3/8	1-3/4	3/16
BT10860	1-1/2	1-7/8	3/16
BT11260	1-3/4	2-1/8	3/16
BT11580	1-15/16	2-7/16	1/4
BT20060	2	2-3/8	3/16
BT20460	2-1/4	2-5/8	3/16
BT20791	2-7/16	3	.284
BT20860	2-1/2	2-7/8	3/16
BT20880	2-1/2	3	1/4
BT21080	2-5/8	3-1/8	1/4
BT21260	2-3/4	3-1/8	3/16
BT21280	2-3/4	3-1/4	1/4

Part Number	A - Rod Diameter	B - Groove I.D.	C - Base Thickness
BT30060	3	3-3/8	3/16
BT30080	3	3-1/2	1/4
BT30090	2.950	3-1/2	.275
BT30391	3.165	3.734	.284
BT30480	3-1/4	3-3/4	1/4
BT30860	3-1/2	3-7/8	3/16
BT30880	3-1/2	4	1/4
BT30890	3.450	4	.275
BT31080	3-5/8	4-1/8	1/4
BT31280	3-3/4	4-1/4	1/4
BT40080	4	4-1/2	1/4
BT40480	4-1/4	4-3/4	1/4
BT40880	4-1/2	5	1/4
BT41280	4-3/4	5-1/4	1/4
BT50080	5	5-1/2	1/4
BT50880	5-1/2	6	1/4
BT60080	6	6-1/2	1/4

BUNA-N WIPER CORD

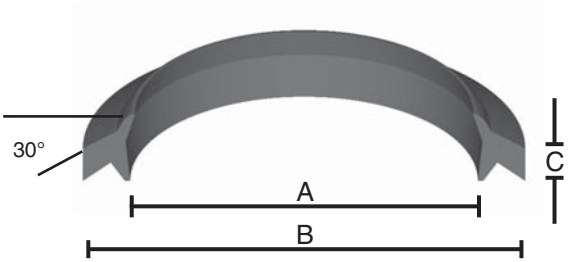
STYLE KW WIPER

STYLE ST WIPER

Part Number	Description
7580C 3/16”	KW Style 3/16” Cross Section
7580C 1/4”	KW Style 1/4” Cross Section
7581C 3/16”	ST Style 3/16” Cross Section

STYLE KW URETHANE WIPER RINGS

Suffix "N" designates nitrile material.



SEAL INFORMATION	
MATERIAL	90A URETHANE
TEMPERATURE RANGE	-40° TO +200° F
PART NUMBER	(Prefix)-(Size)

Part Number	A - Rod Diameter	B - Groove I.D.	C - Base Thickness
KW-0500	1/2	3/4	.156
KW-0625	5/8	7/8	.156
KW-0750	3/4	1-1/8	.190
KW-0875	7/8	1-1/4	.190
KW-1000	1	1-3/8	.190
KW-1125	1-1/8	1-1/2	.190
KW-1250	1-1/4	1-5/8	.190
KW-1250N	1-1/4	1-5/8	.190
KW-1375	1-3/8	1-3/4	.190
KW-1500	1-1/2	1-7/8	.190
KW-1625	1-5/8	2	.190
KW-1750	1-3/4	2-1/8	.190
KW-2000	2	2-3/8	.190
KW-2125	2-1/8	2-1/2	.190
KW-2250	2-1/4	2-3/4	.250
KW-2250-1	2-1/4	2-5/8	.187
KW-2450N	2.450	3	.281
KW-2500	2-1/2	3	.250
KW-2500N	2-1/2	3	.250
KW-2625	2-5/8	3-1/8	.250
KW-2750	2-3/4	3-1/4	.250

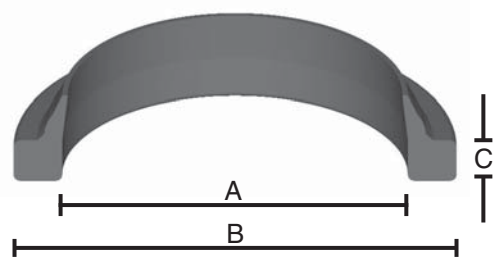
Part Number	A - Rod Diameter	B - Groove I.D.	C - Base Thickness
KW-3000	3	3-1/2	.250
KW-3000N	3	3-1/2	.250
KW-3125N	3-1/8	3-5/8	.250
KW-3250	3-1/4	3-3/4	.250
KW-3375	3-3/8	3-7/8	.250
KW-3450N	3.450	4	.243
KW-3500	3-1/2	4	.250
KW-3500-2	3-1/2	3-7/8	.190
KW-3750	3-3/4	4-1/4	.250
KW-3950N	3.95	4.45	.250
KW-4000	4	4-1/2	.250
KW-4060	4-1/16	4-9/16	.250
KW-4500	4-1/2	5	.250
KW-4500N	4-1/2	5	.250
KW-4750N	4-3/4	5-1/4	.255
KW-4875	4-7/8	5-3/8	.250
KW-5000	5	5-1/2	.250
KW-5250N	5-1/4	5-3/4	.250
KW-5375	5-3/8	5-7/8	.250
KW-6000	6	6-1/2	.250
KW-7000	7	7-1/2	.250

STYLE KW URETHANE WIPER RINGS

Part Number	A - Rod Diameter	B - Groove I.D.	C - Base Thickness
KW-8000	8	8-1/2	.255
KW-8000N	8	8-1/2	.255
KW-8125	8-1/8	8.63	.255

Part Number	A - Rod Diameter	B - Groove I.D.	C - Base Thickness
KW-9125	9-1/8	9.63	.255
KW-9375	9-3/8	9.89	.255

STYLE SWNC WIPER RINGS

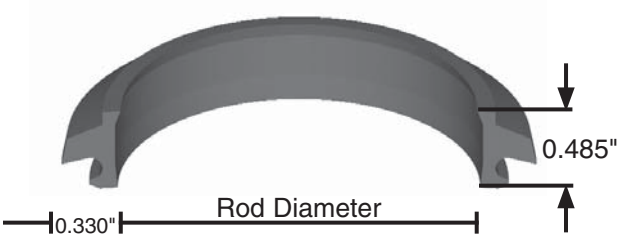


SEAL INFORMATION	
MATERIAL	BUNA-N
TEMPERATURE RANGE	-22° TO +212° F
PART NUMBER	(Prefix)-(Size)

Part Number	A Rod Dia.	B O.D. Wiper	C Height
SWNC-62	5/8	1.020	1/8
SWNC-75	3/4	1.150	1/8
SWNC-87	7/8	1.275	1/8
SWNC-100	1	1-3/8	1/8
SWNC-100A	1	1.400	1/8
SWNC-112	1-1/8	1-5/8	1/8
SWNC-125	1-1/4	1-3/4	1/8
SWNC-137	1-3/8	1-7/8	1/8
SWNC-150	1-1/2	2	1/8
SWNC-162	1-5/8	2-1/8	1/8
SWNC-175	1-3/4	2-1/4	1/8
SWNC-187	1-7/8	2-3/8	1/8
SWNC-200	2	2-1/2	1/8

Part Number	A Rod Dia.	B O.D. Wiper	C Height
SWNC-225	2-1/4	2-3/4	1/8
SWNC-237	2-3/8	2-7/8	1/8
SWNC-250	2-1/2	3	1/8
SWNC-275	2-3/4	3-1/4	1/8
SWNC-300	3	3-1/2	1/8
SWNC-325	3-1/4	4	3/16
SWNC-337	3-3/8	4-1/8	3/16
SWNC-350	3-1/2	4-1/4	3/16
SWNC-400	4	4-3/4	3/16
SWNC-425	4-1/4	5	3/16
SWNC-450	4-1/2	5-1/4	3/16
SWNC-500	5	5-3/4	3/16

CASCADE WIPERS

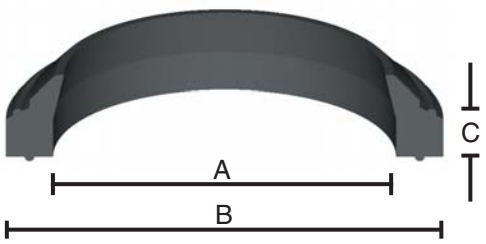


SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-65° TO +220° F
PART NUMBER	(Prefix)-(Size)

Part Number	Rod. Diameter Inches
CAS-605609	2.700
CAS-605648	2.825
CAS-605611	3.200

Part Number	Rod. Diameter Inches
CAS-605613	3.700
CAS-605620	5.450

STYLE SWSN WIPERS

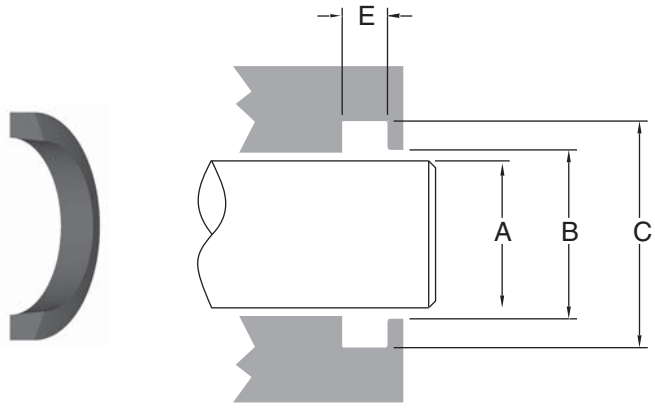


SEAL INFORMATION	
MATERIAL	BUNA-N
TEMPERATURE RANGE	-22° TO +212° F
PART NUMBER	(Prefix)-(Size)

Part Number	A Rod Dia.	B O.D. Wiper	C Height
SWSN-100	1	1-1/2	0.208
SWSN-112	1-1/8	1-5/8	0.208
SWSN-125	1-1/4	1-3/4	0.208
SWSN-150	1-1/2	2	0.208
SWSN-175	1-3/4	2-1/4	0.208
SWSN-175A	1-3/4	2-1/8	0.208
SWSN-187	1-7/8	2-3/8	0.208
SWSN-200	2	2-1/2	0.208
SWSN-212	2-1/8	2-5/8	0.208

Part Number	A Rod Dia.	B O.D. Wiper	C Height
SWSN-225	2-1/4	2-3/4	0.208
SWSN-250	2-1/2	3	0.208
SWSN-275	2-3/4	3-1/4	0.208
SWSN-300	3	3-1/2	0.208
SWSN-325	3-1/4	3-3/4	0.208
SWSN-337	3-3/8	3-7/8	0.208
SWSN-350	3-1/2	4	0.208
SWSN-362	3-5/8	4-1/8	0.208
SWSN-400	4	4-1/2	0.208

STYLE SWNB WIPER RINGS



SEAL INFORMATION	
MATERIAL	BUNA-N
TEMPERATURE RANGE	-22° TO +212° F
PART NUMBER	(Prefix)-(Size)

Part Number	A - Rod Diameter	B - Throat Diameter +.005/-0	C-Groove Diameter +0/-.005	E-Groove Width ±0.010
SWNB-62	5/8	0.700	0.820	0.140
SWNB-75	3/4	0.820	0.950	0.140
SWNB-87	7/8	0.950	1.080	0.150
SWNB-100	1	1.080	1.240	0.160
SWNB-112	1-1/8	1.210	1.375	0.160
SWNB-125	1-1/4	1.330	1.490	0.170
SWNB-137	1-3/8	1.460	1.625	0.170
SWNB-150	1-1/2	1.590	1.770	0.180
SWNB-175	1-3/4	1.850	2.030	0.190

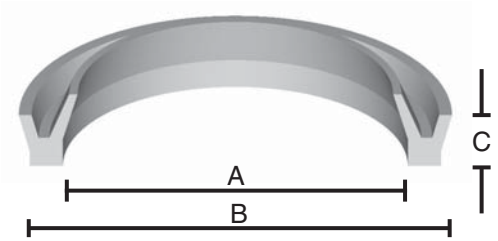
Part Number	A - Rod Diameter	B - Throat Diameter +.005/-0	C-Groove Diameter +0/-.005	E-Groove Width ±0.010
SWNB-187	1-7/8	1.970	2.160	0.190
SWNB-200	2	2.100	2.300	0.200
SWNB-212	2-1/8	2.230	2.430	0.210
SWNB-225	2-1/4	2.630	2.570	0.210
SWNB-237	2-3/8	2.490	2.700	0.220
SWNB-250	2-1/2	2.610	2.840	0.220
SWNB-262	2-5/8	2.740	2.970	0.230
SWNB-275	2-3/4	2.870	3.110	0.230
SWNB-287	2-7/8	3.000	3.240	0.240

STYLE SWNB WIPER RINGS

Part Number	A - Rod Diameter	B - Throat Diameter +.005/-0	C-Groove Diameter +0/-.005	E-Groove Width ±0.010
SWNB-300	3	3.130	3.380	0.240
SWNB-312	3-1/8	3.260	3.500	0.250
SWNB-350	3-1/2	3.640	3.920	0.270

Part Number	A - Rod Diameter	B - Throat Diameter +.005/-0	C-Groove Diameter +0/-.005	E-Groove Width ±0.010
SWNB-362	3-5/8	3.770	4.050	0.270
SWNB-375	3-3/4	3.900	4.190	0.280

STYLE CSW SNAP-IN WIPER RINGS

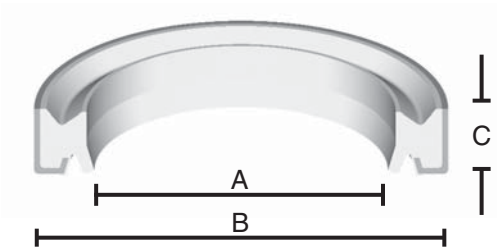


SEAL INFORMATION	
MATERIAL	NYLON
TEMPERATURE RANGE	-40° TO +212° F
PART NUMBER	(Prefix) - (Size)

Part Number	A Rod Dia.	B O.D. Wiper	C Height
CSW-62	5/8	1	0.230
CSW-87	7/8	1-3/8	0.230
CSW-100	1	1-1/2	0.230
CSW-112	1-1/8	1-5/8	0.230
CSW-125	1-1/4	1-3/4	0.230
CSW-137	1-3/8	1-7/8	0.230
CSW-150	1-1/2	2	0.230
CSW-162	1-5/8	2-1/8	0.237

Part Number	A Rod Dia.	B O.D. Wiper	C Height
CSW-175	1-3/4	2-1/4	0.237
CSW-200	2	2-1/2	0.237
CSW-225	2-1/4	2-3/4	0.237
CSW-250	2-1/2	3	0.237
CSW-275	2-3/4	3-1/4	0.237
CSW-325	3-1/4	3-3/4	0.237
CSW-350	3-1/2	4	0.237
CSW-400	4	4-1/2	0.237

STYLE MCHD METAL CLAD WIPERS



SEAL INFORMATION	
MATERIAL	92A URETHANE
TEMPERATURE RANGE	-65° TO +230° F
PART NUMBER	(Prefix) - (Size)

Part Number	A Rod Dia.	B Housing Dia. ±0.001	C Groove Wd. +0.015/-0
MCHD-1506-D	1-1/2	2-1/4	.433
MCHD-1755-D	1-3/4	2-7/16	.433

Part Number	A Rod Dia.	B Housing Dia. ±0.001	C Groove Wd. +0.015/-0
MCHD-2006-D	2	2-11/16	.433
MCHD-2253-D	2-1/4	3	.433

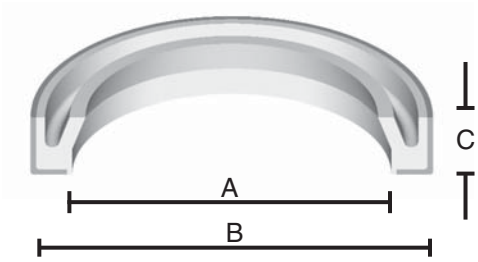
STYLE MCHD METAL CLAD WIPERS

Part Number	A Rod Dia.	B Housing Dia. ±0.001	C Groove Wd. +0.015/-0
MCHD-2502-D	2-1/2	3-1/4	.415
MCHD-2755-D	2-3/4	3-3/4	.555
MCHD-3008-D	3	4	.555
MCHD-3250-D	3-1/4	4-1/4	.555
MCHD-3508-D	3-1/2	4-1/2	.555
MCHD-3751-D	3-3/4	4-3/4	.555

Part Number	A Rod Dia.	B Housing Dia. ±0.001	C Groove Wd. +0.015/-0
MCHD-4000-D	4	5	.555
MCHD-4250-D	4-1/4	5-1/4	.555
MCHD-5002-D	5	6	.555
MCHD-5503-D	5-1/2	6-1/2	.555
MCHD-6753-D	6-3/4	7-3/4	.555
MCHD-7002-D	7	8	.555

STYLE MCU HEAVY DUTY METAL CLAD WIPER RINGS

Utilizing a sturdy metal case, these wipers are molded from the same high performance urethane used in our Heavy Duty U-seals. Built for severe service, these wipers are capable of surviving hostile environments.



SEAL INFORMATION	
MATERIAL	92A URETHANE
TEMPERATURE RANGE	-65° TO +230° F
PART NUMBER	(Prefix) - (Size)

Part Number	A Rod Dia.	B Housing Dia. ±0.001	C Groove Wd. ±0.015/-0
MCU-0625-D	5/8	1-1/8	5/16
MCU-0750-D	3/4	1-1/4	5/16
MCU-0875-D	7/8	1-3/8	5/16
MCU-1000-D	1	1-1/2	5/16
MCU-1120-D	1-1/8	1-5/8	5/16
MCU-1250-D	1-1/4	1-3/4	5/16
MCU-1254-D	1-1/4	1-3/4	1/4
MCU-1375-D	1-3/8	1-7/8	5/16
MCU-1500-D	1-1/2	2	5/16
MCU-1501-D	1-1/2	1-7/8	1/4
MCU-1502-D	1-1/2	2	1/4
MCU-1506-D	1-1/2	2-1/4	3/8
MCU-1624-D	1-5/8	2-1/8	1/4
MCU-1625-D	1-5/8	2-1/8	5/16
MCU-1750-D	1-3/4	2-1/4	5/16
MCU-1751-D	1-3/4	2-1/4	1/4
MCU-1755-D	1-3/4	2-7/16	3/8
MCU-1875-D	1-7/8	2-3/8	5/16
MCU-1876-D	1-7/8	2-9/16	3/8
MCU-2000-D	2	2-1/2	5/16

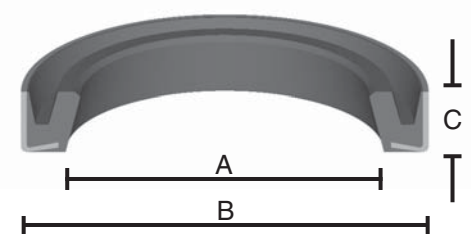
Part Number	A Rod Dia.	B Housing Dia. ±0.001	C Groove Wd. ±0.015/-0
MCU-2002-D	2	2-1/2	1/4
MCU-2004-D	2	2-5/8	1/4
MCU-2006-D	2	2-11/16	3/8
MCU-2124-D	2-1/8	2-5/8	5/16
MCU-2125-D	2-1/8	2-7/8	3/8
MCU-2188-D	2-3/16	2-11/16	3/8
MCU-2250-D	2-1/4	2-3/4	5/16
MCU-2251-D	2-1/4	2-3/4	1/4
MCU-2253-D	2-1/4	3	3/8
MCU-2375-D	2-3/8	2-7/8	5/16
MCU-2376-D	2-3/8	3-1/8	3/8
MCU-2500-D	2-1/2	3	5/16
MCU-2501-D	2-1/2	3-1/4	1/4
MCU-2502-D	2-1/2	3-1/4	3/8
MCU-2503-D	2-1/2	3	3/16
MCU-2624-D	2-5/8	3-1/8	5/16
MCU-2625-D	2-5/8	3-1/8	1/4
MCU-2750-D	2-3/4	3-1/4	5/16
MCU-2754-D	2-3/4	3-1/2	1/4
MCU-2755-D	2-3/4	3-3/4	1/2

STYLE MCU HEAVY DUTY METAL CLAD WIPER RINGS

Part Number	A Rod Dia.	B Housing Dia. ±0.001	C Groove Wd. ±0.015/-0
MCU-2758-D	2-3/4	3-1/2	1/2
MCU-3000-D	3	3-1/2	5/16
MCU-3002-D	3	3-3/4	1/4
MCU-3008-D	3	4	1/2
MCU-3125-D	3-1/8	3-3/4	3/8
MCU-3250-D	3-1/4	4-1/4	1/2
MCU-3254-D	3-1/4	3-3/4	5/16
MCU-3256-D	3-1/4	3-7/8	5/16
MCU-3375-D	3-3/8	4	5/16
MCU-3500-D	3-1/2	4	5/16
MCU-3504-D	3-1/2	4-1/4	1/4
MCU-3506-D	3-1/2	4-1/8	5/16
MCU-3508-D	3-1/2	4-1/2	1/2
MCU-3750-D	3-3/4	4-1/4	5/16
MCU-3751-D	3-3/4	4-3/4	1/2
MCU-3754-D	3-3/4	4-3/8	5/16
MCU-3755-D	3-3/4	4-1/2	5/16
MCU-4000-D	4	5	1/2
MCU-4002-D	4	4-3/4	5/16
MCU-4005-D	4	4-5/8	5/16
MCU-4250-D	4-1/4	5-1/4	1/2
MCU-4252-D	4-1/4	4-3/4	5/16
MCU-4375-D	4-3/8	5	5/16

Part Number	A Rod Dia.	B Housing Dia. ±0.001	C Groove Wd. ±0.015/-0
MCU-4505-D	4-1/2	5-1/8	5/16
MCU-4508-D	4-1/2	5-1/2	1/2
MCU-4750-D	4-3/4	5-3/4	1/2
MCU-4751-D	4-3/4	5-3/8	5/16
MCU-5000-D	5	5-3/4	5/16
MCU-5002-D	5	6	1/2
MCU-5250-D	5-1/4	6	5/16
MCU-5500-D	5-1/2	6-1/8	3/8
MCU-5750-D	5-3/4	6-3/8	3/8
MCU-5751-D	5-3/4	6-3/4	1/2
MCU-6001-D	6	6-5/8	3/8
MCU-6002-D	6	7	1/2
MCU-6250-D	6-1/4	6-3/4	5/16
MCU-6500-D	6-1/2	7-1/2	5/8
MCU-6503-D	6-1/2	7-1/4	5/16
MCU-6751-D	6-3/4	7-1/4	5/16
MCU-6753-D.	6-3/4	7-3/4	1/2
MCU-7002-D	7	8	1/2
MCU-8000-D	8	8-3/4	3/8
MCU-8120-D	8-1/8	8-5/8	5/16
MCU-11000-D	11	12	0.550
MCU-12500-D	12-1/2	13-1/2	0.550
MCU-13500-D	13-1/2	14-1/2	0.550

STYLE MCN METAL CLAD WIPERS - RUBBER LIP

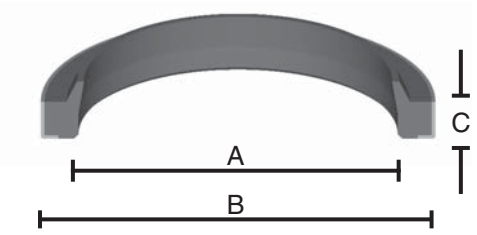


SEAL INFORMATION	
MATERIAL	RUBBER
TEMPERATURE RANGE	-40° TO +240° F
PART NUMBER	(Prefix) - (Size)

Part Number	A Rod Dia.	B Housing Dia. ±0.001	C Groove Wd. ±0.015/-0
MCN-0500	1/2	11/16	3/32
MCN-0501	1/2	3/4	1/8
MCN-0625	5/8	15/16	3/16
MCN-0626	5/8	7/8	1/8
MCN-0750	3/4	1-1/4	1/4
MCN-0751	3/4	1	1/8
MCN-0873	7/8	1-1/8	1/8
MCN-0875	7/8	1-1/4	3/16
MCN-1001	1	1-1/4	1/8
MCN-1003	1	1-3/8	3/16
MCN-1004	1	1-7/16	1/4
MCN-1005	1	1-1/2	3/16
MCN-1006	1	1-5/16	1/8
MCN-1060	1-1/16	1-1/2	3/16
MCN-1125	1-1/8	1-1/2	3/16
MCN-1126	1-1/8	1-3/8	1/8
MCN-1127	1-1/8	1-9/16	1/4
MCN-1129	1-1/8	1-5/8	1/4
MCN-1251	1-1/4	1-1/2	1/8
MCN-1253	1-1/4	1-11/16	3/16
MCN-1254	1-1/4	1-3/4	1/4
MCN-1255	1-1/4	1-7/8	1/4
MCN-1256	1-1/4	1-5/8	1/4
MCN-1375	1-3/8	1-3/4	3/16
MCN-1376	1-3/8	1-7/8	1/4
MCN-1377	1-3/8	1-5/8	1/8
MCN-1502	1-1/2	1-7/8	1/4
MCN-1503	1-1/2	1-7/8	3/16
MCN-1504	1-1/2	2	1/4

Part Number	A Rod Dia.	B Housing Dia. ±0.001	C Groove Wd. ±0.015/-0
MCN-1625	1-5/8	2-1/8	1/4
MCN-1626	1-5/8	2-5/8	1/4
MCN-1753	1-3/4	2-1/8	3/16
MCN-1754	1-3/4	2-1/4	1/4
MCN-1755	1-3/4	2-3/8	1/4
MCN-1756	1-3/4	2-5/8	1/4
MCN-1877	1-7/8	2-1/4	3/16
MCN-1879	1-7/8	2-1/2	1/4
MCN-2001	2	2-3/8	3/16
MCN-2002	2	2-5/8	1/4
MCN-2003	2	2-1/2	1/4
MCN-2006	2	2-3/4	1/4
MCN-2007	2	2-7/8	15/32
MCN-2125	2-1/8	2-1/2	3/16
MCN-2251	2-1/4	2-5/8	1/4
MCN-2253	2-1/4	2-3/4	1/4
MCN-2255	2-1/4	2-7/8	1/4
MCN-2371	2-3/8	3	1/4
MCN-2501	2-1/2	3	1/4
MCN-2504	2-1/2	3-1/8	1/4
MCN-2660	2.66	3-1/4	3/8
MCN-2750	2-3/4	3-1/4	1/4
MCN-2751	2-3/4	3-1/8	3/16
MCN-2756	2-3/4	3-3/4	3/8
MCN-3001	3	3-1/2	1/4
MCN-3003	3	3-3/4	1/4
MCN-3504	3-1/2	4	1/4

STYLE CWN METAL CLAD WIPERS



SEAL INFORMATION	
MATERIAL	BUNA-N
TEMPERATURE RANGE	-22° TO +212° F
PART NUMBER	(Prefix) - (Size)

Part Number	A Rod Dia.	B O.D. Wiper	C Height
CWN-100	1	1-3/8	3/16
CWN-112	1-1/8	1-1/2	3/16
CWN-125	1-1/4	1-5/8	3/16
CWN-150	1-1/2	1-7/8	3/16
CWN-175	1-3/4	2-1/8	3/16

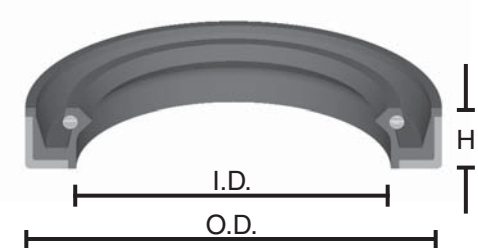
Part Number	A Rod Dia.	B O.D. Wiper	C Height
CWN-200	2	2-3/8	3/16
CWN-225	2-1/4	2-5/8	3/16
CWN-250	2-1/2	2-7/8	3/16
CWN-275	2-3/4	3-1/8	3/16
CWN-300	3	3-3/8	3/16

If you don't see the size you need, give us a call...

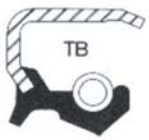
We are adding new sizes everyday!

OIL SEALS

Our Company offers several sizes of standard sized metal clad oil seals. These seals are for rotating shafts and are specifically designed to prevent oil or grease leakage at a maximum pressure of 10 PSI. Additional styles and sizes are available upon request.



SEAL INFORMATION	
MATERIAL	RUBBER
TEMPERATURE RANGE	-40° TO +240° F
PRESSURE RANGE	10 PSI MAXIMUM
PART NUMER	(Prefix) - (Size) - (Style)



Part Number	ID	OD	H
OS-0.31X0.75X0.25VTF	5/16	3/4	1/4
OS-0.37X0.68X0.15VM	3/8	11/16	5/32
OS-0.37X0.75X0.25SB	3/8	3/4	1/4
OS-0.37X1.00X0.25SM	3/8	1	1/4
OS-0.43X0.62X0.12VC	7/16	5/8	1/8
OS-0.43X0.83X0.18VM	7/16	.836	3/16
OS-0.43X0.87X0.25SM	7/16	7/8	1/4
OS-0.43X0.87X0.25TB	7/16	7/8	1/4
OS-0.43X1.00X0.25TC	7/16	1	1/4
OS-0.43X1.00X0.25VM	7/16	1	1/4
OS-0.43X1.00X0.37SB	7/16	1	3/8
OS-0.50X0.68X0.09VC	1/2	11/16	3/32
OS-0.50X0.75X0.12VM	1/2	3/4	1/8
OS-0.50X0.75X0.16TB	1/2	3/4	.167
OS-0.50X0.87X0.12VC	1/2	7/8	1/8
OS-0.50X0.87X0.12VM	1/2	7/8	1/8
OS-0.50X0.87X0.25SC	1/2	7/8	1/4
OS-0.50X0.87X0.25TB	1/2	7/8	1/4
OS-0.50X0.87X0.25TEC	1/2	7/8	1/4
OS-0.50X0.87X0.31TBY	1/2	7/8	5/16
OS-0.50X1.00X0.25TB	1/2	1	1/4

Part Number	ID	OD	H
OS-0.50X1.00X0.25TC	1/2	1	1/4
OS-0.50X1.00X0.25TC	1/2	1	1/4
OS-0.50X1.00X0.25TCN	1/2	1	1/4
OS-0.50X1.12X0.25SB	1/2	1-1/8	1/4
OS-0.50X1.12X0.25SC	1/2	1-1/8	1/4
OS-0.50X1.12X0.25TB	1/2	1-1/8	1/4
OS-0.50X1.25X0.25TC	1/2	1-1/4	1/4
OS-0.56X0.87X0.18TC	9/16	7/8	3/16
OS-0.56X1.00X0.25SB	9/16	1	1/4
OS-0.56X1.00X0.25TC	9/16	1	1/4
OS-0.56X1.12X0.25TB	9/16	1-1/8	1/4
OS-0.56X1.25X0.25TB	9/16	1-1/4	1/4
OS-0.62X0.81X0.09VC	5/8	13/16	3/32
OS-0.62X0.81X0.09VM	5/8	13/16	3/32
OS-0.62X0.87X0.12SM	5/8	7/8	1/8
OS-0.62X1.00X0.12VMY	5/8	1	1/8
OS-0.62X1.00X0.25SM	5/8	1	1/4
OS-0.62X1.00X0.25TB	5/8	1	1/4
OS-0.62X1.00X0.25TC	5/8	1	1/4
OS-0.62X1.00X0.25TC	5/8	1	1/4
OS-0.62X1.12X0.25TB	5/8	1-1/8	1/4

OIL SEALS

Part Number	ID	OD	H
OS-0.62X1.12X0.25TC	5/8	1-1/8	1/4
OS-0.62X1.12X0.37TBY	5/8	1-1/8	3/8
OS-0.62X1.12X0.37TC	5/8	1-1/8	3/8
OS-0.62X1.25X0.25TC	5/8	1-1/4	1/4
OS-0.62X1.37X0.25TB	5/8	1-3/8	1/4
OS-0.62X1.37X0.25VTB	5/8	1-3/8	1/4
OS-0.62X1.50X0.25SB-H	5/8	1-1/2	1/4
OS-0.65X1.12X0.25SC	21/32	1-1/8	1/4
OS-0.68X1.00X0.18VM	11/16	1	3/16
OS-0.68X1.06X0.18SM	11/16	1-1/16	3/16
OS-0.68X1.12X0.25SB	11/16	1-1/8	1/4
OS-0.68X1.12X0.25TC	11/16	1-1/8	1/4
OS-0.68X1.18X0.18SB	11/16	1-3/16	3/16
OS-0.68X1.25X0.25TZ	11/16	1-1/4	1/4
OS-0.68X1.37X0.31TC	11/16	1-3/8	5/16
OS-0.75X1.00X0.12VC	3/4	1	1/8
OS-0.75X1.00X0.15TC	3/4	1	5/32
OS-0.75X1.06X0.18TB	3/4	1-1/6	3/16
OS-0.75X1.12X0.15VC	3/4	1-1/8	5/32
OS-0.75X1.12X0.15VM	3/4	1-1/8	5/32
OS-0.75X1.12X0.18SZ	3/4	1-1/8	3/16
OS-0.75X1.12X0.18TB	3/4	1-1/8	3/16
OS-0.75X1.12X0.25TC	3/4	1-1/8	1/4
OS-0.75X1.18X0.25SB	3/4	1-3/16	1/4
OS-0.75X1.25X0.25SB	3/4	1-1/4	1/4
OS-0.75X1.25X0.25SC	3/4	1-1/4	1/4
OS-0.75X1.25X0.25TB	3/4	1-1/4	1/4
OS-0.75X1.25X0.25TC-G	3/4	1-1/4	1/4
OS-0.75X1.25X0.31TC	3/4	1-1/4	5/16
OS-0.75X1.25X0.31TZ	3/4	1-1/4	5/16
OS-0.75X1.25X0.31VTC	3/4	1-1/4	5/16
OS-0.75X1.31X0.25TB	3/4	1-5/16	1/4
OS-0.75X1.37X0.25PTC	3/4	1-3/8	1/4
OS-0.75X1.37X0.25TB	3/4	1-3/8	1/4
OS-0.75X1.50X0.25TB-H	3/4	1-1/2	1/4
OS-0.75X1.75X0.25SB	3/4	1-3/4	1/4
OS-0.75X1.75X0.31TZ	.3/4	1-3/4	5/16
OS-0.78X1.00X0.12VC	.787	1	1/8
OS-0.78X1.12X0.18SB	.787	1-1/8	3/16
OS-0.78X1.37X0.31SB	25/32	1-3/8	5/16
OS-0.78X1.75X0.31TZ	25/32	1-3/4	5/16
OS-0.81X1.06X0.12VC	13/16	1-1/16	1/8

Part Number	ID	OD	H
OS-0.81X1.25X0.18SM	13/16	1-1/4	3/16
OS-0.81X1.37X0.25TB	13/16	1-3/8	1/4
OS-0.87X1.12X0.12VM	7/8	1-1/8	1/8
OS-0.87X1.18X0.16VZ	7/8	1-3/16	.164
OS-0.87X1.25X0.18SB	7/8	1-1/4	3/16
OS-0.87X1.25X0.18TB	7/8	1-1/4	3/16
OS-0.87X1.25X.188SZ	7/8	1-1/4	3/16
OS-0.87X1.25X0.25SC	7/8	1-1/4	1/4
OS-0.87X1.37X0.25SB	7/8	1-3/8	1/4
OS-0.87X1.37X0.25TB	7/8	1-3/8	1/4
OS-0.87X1.37X0.25TBY	7/8	1-3/8	1/4
OS-0.87X1.37X0.25TC	7/8	1-3/8	1/4
OS-0.87X1.37X0.31SB	7/8	1-3/8	5/16
OS-0.87X1.37X0.31TA	7/8	1-3/8	5/16
OS-0.87X1.50X0.25TB-H	7/8	1-1/2	1/4
OS-0.87X1.50X0.25VTB	7/8	1-1/2	1/4
OS-0.87X1.50X0.31SC	7/8	1-1/2	5/16
OS-0.87X1.62X0.25TB	7/8	1-5/8	1/4
OS-0.87X1.82X0.37TB	7/8	1-53/64	3/8
OS-0.93X1.37X0.25TB	15/16	1-3/8	1/4
OS-0.93X1.50X0.25SB-H	15/16	1-1/2	1/4
OS-0.93X1.75X0.31TC	15/16	1-3/4	5/16
OS-0.93X1.50X0.25TB	31/32	1-1/2	1/4
OS-0.96X1.62X0.25SB-H	31/32	1-5/8	1/4
OS-1.00X1.25X0.12VB	1	1-1/4	1/8
OS-1.00X1.25X0.25TC	1	1-1/4	1/4
OS-1.00X1.31X0.12VL	1	1-5/16	1/8
OS-1.00X1.37X0.25PSB	1	1-3/8	1/4
OS-1.00X1.37X0.25TBY	1	1-3/8	1/4
OS-1.00X1.43X0.25SC	1	1-7/16	1/4
OS-1.00X1.50X0.18VB	1	1-1/2	3/16
OS-1.00X1.50X0.25SB-H	1	1-1/2	1/4
OS-1.00X1.50X0.25TB	1	1-1/2	1/4
OS-1.00X1.50X0.25TB-H	1	1-1/2	1/4
OS-1.00X1.50X0.25TBY	1	1-1/2	1/4
OS-1.00X1.50X0.25TC	1	1-1/2	1/4
OS-1.00X1.50X0.31TC	1	1-1/2	5/16
OS-1.00X1.56X0.25VB-H	1	1-9/16	1/4
OS-1.00X1.57X0.25TB	1	1.575	1/4
OS-1.00X1.62X0.25SB	1	1-5/8	1/4
OS-1.00X1.62X0.25TB	1	1-5/8	1/4
OS-1.00X1.62X0.25TC	1	1-5/8	1/4

OIL SEALS

Part Number	ID	OD	H
OS-1.00X1.62X0.25VB	1	1-5/8	1/4
OS-1.00X1.62X0.37SSTZN	1	1-5/8	3/8
OS-1.00X1.68X0.25TB	1	1-11/16	1/4
OS-1.00X1.75X0.25SB	1	1-3/4	1/4
OS-1.00X1.75X0.25TB	1	1-3/4	.1/4
OS-1.00X1.75X0.25VSB	1	1-3/4	1/4
OS-1.00X1.78X0.46VHY	1	1-25/32	5/16
OS-1.00X1.87X0.25SB	1	1-7/8	1/4
OS-1.00X1.87X0.25TB	1	1-7/8	1/4
OS-1.00X1.98X0.31TB	1	1.982	5/16
OS-1.00X2.06X0.37SC	1	2-1/16	3/8
OS-1.00X2.43X0.37TC	1	2-7/16	3/8
OS-1.06X1.50X0.25SB-H	1-1/16	1-1/2	.1/4
OS-1.06X1.62X0.25SB	1-1/16	1-5/8	1/4
OS-1.06X1.87X0.25SB	1-1/16	1-7/8	1/4
OS-1.12X1.37X0.12VM	1-1/8	1-3/8	1/8
OS-1.12X1.50X0.18VB	1-1/8	1-1/2	3/16
OS-1.12X1.50X0.18VTC	1-1/8	1-1/2	3/16
OS-1.12X1.56X0.25PSL	1-1/8	1-9/16	1/4
OS-1.12X1.56X0.25SB	1-1/8	1-9/16	1/4
OS-1.12X1.62X0.25SB	1-1/8	1-5/8	1/4
OS-1.12X1.62X0.25SC	1-1/8	1-5/8	1/4
OS-1.12X1.62X0.25TB	1-1/8	1-5/8	.1/4
OS-1.12X1.75X0.25SB	1-1/8	1-3/4	1/4
OS-1.12X1.75X0.25TB	1-1/8	1-3/4	1/4
OS-1.12X1.78X0.46TB	1-1/8	1-25/32	.469
OS-1.12X1.82X0.25TB	1-1/8	1-53/64	1/4
OS-1.12X1.82X0.25TC	1-1/8	1-53/64	1/4
OS-1.12X1.87X0.25TB	1-1/8	1-7/8	.1/4
OS-1.12X2.00X0.25SB	1-1/8	2	1/4
OS-1.12X2.00X0.37TB	1-1/8	2	3/8
OS-1.12X2.12X0.31SB	1-1/8	2-1/8	5/16
OS-1.15X1.68X0.31TC	1-5/32	1-11/16	5/16
OS-1.18X1.68X0.25SB	1-3/16	1-11/16	1/4
OS-1.18X1.87X0.25SB	1-3/16	1-7/8	1/4
OS-1.18X2.00X0.25TB	1-3/16	2	1/4
OS-1.25X1.50X0.12VB	1-1/4	1-1/2	1/8
OS-1.25X1.50X0.12VC	1-1/4	1-1/2	1/8
OS-1.25X1.62X0.18SB	1-1/4	1-5/8	3/16
OS-1.25X1.62X0.18SM	1-1/4	1-5/8	3/16
OS-1.25X1.62X0.25TC	1-1/4	1-5/8	.1/4
OS-1.25X1.68X0.18VB	1-1/4	1-11/16	3/16

Part Number	ID	OD	H
OS-1.25X1.68X0.25SB	1-1/4	1-11/16	1/4
OS-1.25X1.68X0.25SC	1-1/4	1-11/16	1/4
OS-1.25X1.68X0.25TC	1-1/4	1-11/16	1/4
OS-1.25X1.68X0.25TF	1-1/4	1-11/16	1/4
OS-1.25X1.68X0.31TB	1-1/4	1-11/16	.313
OS-1.25X1.75X0.25TB	1-1/4	1-3/4	1/4
OS-1.25X1.75X0.25TBY	1-1/4	1-3/4	1/4
OS-1.25X1.87X0.25TB	1-1/4	1-7/8	.1/4
OS-1.25X1.98X0.25TB	1-1/4	1.983	1/4
OS-1.25X1.98X0.25VH	1-1/4	1.983	1/4
OS-1.25X2.00X0.25TB	1-1/4	2	.1/4
OS-1.25X2.00X0.25VTB	1-1/4	2	1/4
OS-1.25X2.00X0.31TC	1-1/4	2	5/16
OS-1.25X2.00X0.43SB	1-1/4	2	7/16
OS-1.25X2.062X0.25TB	1-1/4	2-1/16	1/4
OS-1.25X2.12X0.25SB	1-1/4	2-1/8	1/4
OS-1.25X2.12X0.25TB	1-1/4	2-1/8	1/4
OS-1.25X2.25X0.25VB	1-1/4	2-1/4	1/4
OS-1.25X2.47X0.31SC	1-1/4	2.47	5/16
OS-1.28X2.00X0.37TB	1-9/32	2	3/8
OS-1.31X2.12X0.31TB	1-5/16	2-1/8	5/16
OS-1.37X1.75X0.18SM	1-3/8	1-3/4	3/16
OS-1.37X1.75X0.18VB	1-3/8	1-3/4	3/16
OS-1.37X1.75X0.21TB	1-3/8	1-3/4	.219
OS-1.37X1.82X0.31SB	1-3/8	1-53/64	5/16
OS-1.37X1.87X0.25SB	1-3/8	1-7/8	1/4
OS-1.37X1.93X0.25TB	1-3/8	1-15/16	.1/4
OS-1.37X1.93X0.25VB	1-3/8	1-15/16	1/4
OS-1.37X1.98X0.43TM	1-3/8	1.979	7/16
OS-1.37X2.00X0.31VTB	1-3/8	2	5/16
OS-1.37X2.00X0.37TA	1-3/8	2	3/8
OS-1.37X2.12X0.31TB	1-3/8	2-1/8	5/16
OS-1.37X2.12X0.31TC	1-3/8	2-1/8	5/16
OS-1.37X2.12X0.43SA	1-3/8	2-1/8	7/16
OS-1.37X2.25X0.31TB	1-3/8	2-1/4	5/16
OS-1.37X2.37X0.31TB	1-3/8	2-3/8	5/16
OS-1.37X2.44X0.31TB	1-3/8	2.441	5/16
OS-1.43X2.00X0.31TC	1-7/16	2	5/16
OS-1.43X2.12X0.37SC	1-7/16	2-1/8	3/8
OS-1.43X2.37X0.31TB	1-7/16	2-3/8	5/16
OS-1.50X1.87X0.25SB	1-1/2	1-7/8	.1/4
OS-1.50X1.87X0.25TB	1-1/2	1-7/8	.1/4

OIL SEALS

Part Number	ID	OD	H
OS-1.50X1.87X0.25VB	1-1/2	1-7/8	1/4
OS-1.50X1.98X0.18VB	1-1/2	1.983	3/16
OS-1.50X1.98X0.25TB	1-1/2	1.983	1/4
OS-1.50X1.99X0.25KB	1-1/2	1.989	1/4
OS-1.50X2.00X0.25VB	1-1/2	2	1/4
OS-1.50X2.00X0.31TB	1-1/2	2	5/16
OS-1.50X2.12X0.31TB	1-1/2	2-1/8	5/16
OS-1.50X2.25X0.25VH	1-1/2	2-1/4	1/4
OS-1.50X2.25X0.31SB	1-1/2	2-1/4	5/16
OS-1.50X2.25X0.31TB	1-1/2	2-1/4	5/16
OS-1.50X2.25X0.31VTB-H	1-1/2	2-1/4	5/16
OS-1.50X2.37X0.25VH	1-1/2	2-3/8	1/4
OS-1.50X2.37X0.31TB	1-1/2	2-3/8	5/16
OS-1.50X2.37X0.31TB-H	1-1/2	2-3/8	5/16
OS-1.50X2.50X0.31SB	1-1/2	2-1/2	5/16
OS-1.50X2.50X0.31TB	1-1/2	2-1/2	5/16
OS-1.50X2.75X0.31SB	1-1/2	2-3/4	5/16
OS-1.56X2.12X0.31SB	1-9/16	2-1/8	5/16
OS-1.56X2.37X0.31TB	1-9/16	2-3/8	5/16
OS-1.625X2.00X0.25SB	1-5/8	2	1/4
OS-1.62X2.12X0.25SB	1-5/8	2-1/8	1/4
OS-1.62X2.37X0.31TB	1-5/8	2-3/8	5/16
OS-1.62X2.37X0.37TC	1-5/8	2-3/8	3/8
OS-1.62X2.43X0.31TB	1-5/8	2-7/16	5/16
OS-1.62X2.50X0.31TB	1-5/8	2-1/2	5/16
OS-1.71X2.56X0.50TB	1-23/32	2-9/16	1/2
OS-1.75X2.12X0.18SB	1-3/4	2-1/8	3/16
OS-1.75X2.25X0.18VB	1-3/4	2-1/4	3/16
OS-1.75X2.25X0.31SB	1-3/4	2-1/4	5/16
OS-1.75X2.37X0.31TB	1-3/4	2-3/8	5/16
OS-1.75X2.43X0.31TB	1-3/4	2-7/16	5/16
OS-1.75X2.43X0.31TC	1-3/4	2-7/16	5/16
OS-1.75X2.50X0.31TB	1-3/4	2-1/2	5/16
OS-1.75X2.50X0.31VTB	1-3/4	2-1/2	5/16
OS-1.75X2.56X0.31TB	1-3/4	2-9/16	5/16
OS-1.75X2.62X0.31TB	1-3/4	2-5/8	5/16
OS-1.75X2.68X0.31SL-H	1-3/4	2.686	5/16
OS-1.75X2.75X0.31TB	1-3/4	2-3/4	5/16
OS-1.75X2.87X0.31SB	1-3/4	2-7/8	5/16
OS-1.75X3.00X0.37TB	1-3/4	3	3/8
OS-1.87X2.50X0.25VHY	1-7/8	2-1/2	1/4
OS-1.87X2.50X0.31SB	1-7/8	2-1/2	5/16

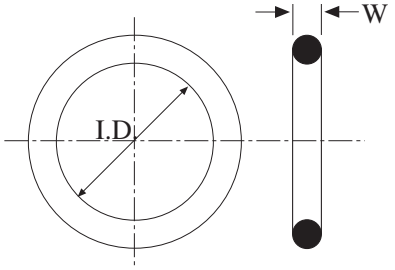
Part Number	ID	OD	H
OS-1.87X2.62X0.31TB	1-7/8	2-5/8	5/16
OS-1.87X2.62X0.31TB-H	1-7/8	2-5/8	5/16
OS-1.93X2.68X0.31TC	1-15/16	2-11/16	5/13
OS-1.93X2.68X0.31TL-H	1-15/16	2-11/16	5/16
OS-2.00X2.50X0.25TC	2	2-1/2	1/4
OS-2.00X2.50X0.25VB	2	2-1/2	1/4
OS-2.00X2.62X0.25VHY	2	2-5/8	1/4
OS-2.00X2.62X0.31TB	2	2-5/8	5/16
OS-2.00X2.68X0.37SB	2	2-11/16	3/8
OS-2.00X2.71X0.37TB	2	2-23/32	3/8
OS-2.00X2.75X0.18VM	2	2-3/4	3/16
OS-2.00X2.75X0.31TB	2	2-3/4	5/16
OS-2.00X2.75X0.31TC	2	2-3/4	5/16
OS-2.00X2.87X0.31TA	2	2-7/8	5/16
OS-2.00X3.00X0.25SB	2	3	1/4
OS-2.00X3.00X0.31TB	2	3	5/16
OS-2.00X3.00X0.37SA	2	3	3/8
OS-2.12X2.75X0.50TB	2-1/8	2-3/4	1/2
OS-2.12X2.87X0.25VB	2-1/8	2-7/8	1/4
OS-2.12X2.87X0.43TB	2-1/8	2-7/8	7/16
OS-2.12X3.06X0.50TA	2-1/8	3-1/16	1/2
OS-2.18X3.00X0.37TB	2-3/16	3	3/8
OS-2.25X2.87X0.25VH	2-1/4	2-7/8	1/4
OS-2.25X3.00X0.25TA	2-1/4	3	1/4
OS-2.25X3.00X0.37SB	2-1/4	3	3/8
OS-2.25X3.00X0.37TB	2-1/4	3	3/8
OS-2.25X3.00X0.37VTB	2-1/4	3	3/8
OS-2.25X3.25X0.25VH	2-1/4	3-1/4	1/4
OS-2.25X3.25X0.37TB	2-1/4	3-1/4	3/8
OS-2.37X3.00X0.25VH	2-3/8	3	1/4
OS-2.37X3.12X0.37SB	2-3/8	3-1/8	3/8
OS-2.37X3.12X0.43TA	2-3/8	3-1/8	7/16
OS-2.37X3.50X0.37SA	2-3/8	3-1/2	3/8
OS-2.50X3.00X0.25VB	2-1/2	3	1/4
OS-2.50X3.00X0.28WS	2-1/2	3	9/32
OS-2.50X3.06X0.25SM	2-1/2	3-1/16	.1/4
OS-2.50X3.18X0.37TB	2-1/2	3-3/16	3/8
OS-2.50X3.25X0.37TB	2-1/2	3-1/4	3/8
OS-2.50X3.25X0.43TA	2-1/2	3-1/4	7/16
OS-2.50X3.50X0.25VH	2-1/2	3-1/2	1/4
OS-2.50X3.50X0.37TB	2-1/2	3-1/2	3/8
OS-2.50X3.50X0.43TA	2-1/2	3-1/2	7/16

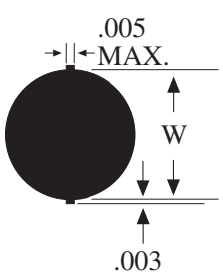
OIL SEALS

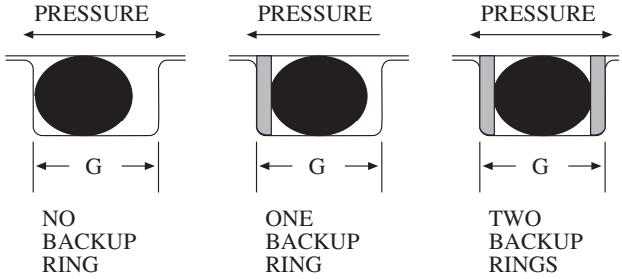
Part Number	ID	OD	H
OS-2.62X3.37X0.37TA	2-5/8	3-3/8	3/8
OS-2.62X3.50X0.37TB	2-5/8	3-1/2	3/8
OS-2.75X3.50X0.37TB	2-3/4	3-1/2	3/8
OS-2.81X3.87X0.43SA	2-13/16	3-7/8	7/16
OS-3.00X3.75X0.37TB	3	3-3/4	3/8
OS-3.00X3.75X0.37SB	3	3-3/4	3/8
OS-3.00X3.75X0.43TA	3	3-3/4	7/16
OS-3.00X4.00X0.37TB	3	4	3/8
OS-3.00X4.00X0.43TA	3	4	7/16
OS-3.25X4.00X0.37PTB	3-1/4	4	3/8
OS-3.25X4.25X0.37TB	3-1/4	4-1/4	3/8
OS-3.25X4.25X0.43TA	3-1/4	4-1/4	7/16
OS-3.25X4.50X0.43TA	3-1/4	4-1/2	7/16
OS-3.37X4.12X0.37TB	3-3/8	4-1/8	3/8

Part Number	ID	OD	H
OS-3.37X4.37X0.43TA	3-3/8	4-3/8	7/16
OS-3.50X4.37X0.37TB	3-1/2	4-3/8	3/8
OS-3.50X4.50X0.43SA	3-1/2	4-1/2	7/16
OS-3.50X4.75X0.25VH	3-1/2	4-3/4	1/4
OS-3.75X4.75X0.43STA	3-3/4	4-3/4	7/16
OS-3.87X5.25X0.43TA	3-7/8	5-1/4	7/16
OS-4.00X5.00X0.43TA	4	5	7/16
OS-4.00X5.37X0.50TA	4	5-3/8	1/2
OS-5.00X6.00X0.50TA	5	6	1/2
OS-5.00X6.25X0.50SA	5	6-1/4	1/2
OS-5.50X6.50X0.50SA	5-1/2	6-1/2	1/2
OS-5.62X6.62X0.50SA-H	5-5/8	6-5/8	1/2
OS-7.92X9.18X0.68Y	7.92	9-3/16	11/16

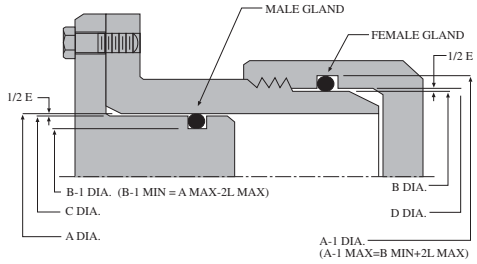
O-RING GLAND DIMENSIONS

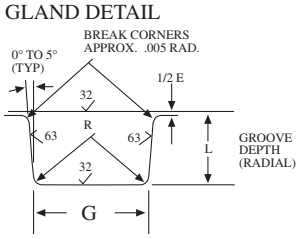






O-Ring Gland Design For Static Seals

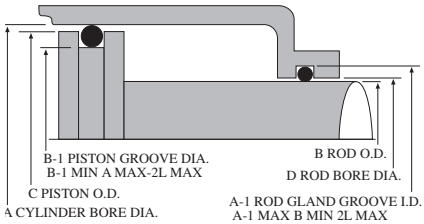


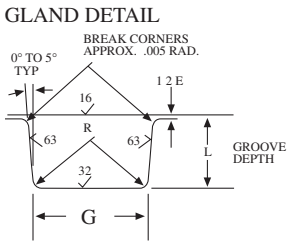


A – Bore Dia. (male gland)
A-1 – Groove Dia. (female gland)
B – Tube OD (female gland)
B-1 – Groove Dia. (male gland)
C – Plug Dia. (male gland)
D – Throat Dia. (female gland)
E – Diametrical Clearance

W O-RING CROSS SECTION	L GROOVE DEPTH		SQUEEZE				E DIAMETRICAL CLEARANCE MAX.	G GROOVE WIDTH ± .005			R GROOVE RADIUS	ECCEN-TRICITY MAX.
			RADIAL		AXIAL			NO BACKUP RING	ONE BACKUP RING	TWO BACKUP RINGS		
	RADIAL	AXIAL	INCHES	%	INCHES	%						
.070	.050-.052	.050 -.054	.015-.023	22-23	.013-.023	19-32	.004	.095	.140	.207	.005-.015	.002
.103	.081-.083	.074-.080	.017-.025	17-24	.020-.032	20-30	.005	.142	.173	.240	.005-.015	.002
.139	.111-.113	.101-.107	.022-.032	16-23	.028-.042	20-30	.006	.189	.210	.277	.010-.025	.003
.210	.170-.173	.152-.162	.032-.045	15-21	.043-.063	21-30	.006	.283	.313	.413	.020-.035	.004
.275	.226-.229	.201-.211	.040-.055	15-20	.058-.080	21-29	.007	.377	.410	.540	.020-.035	.00

O-Ring Gland Design For Reciprocating Seals





A – B D . C
B – OD R
C – OD P
D – B D . R

W O-RING CROSS SECTION	L GROOVE DEPTH	SQUEEZE		E DIAMETRICAL CLEARANCE MAX.	G GROOVE WIDTH ± .005			R GROOVE RADIUS	ECCEN-TRICITY MAX.
		INCHES	%		NO BACKUP RING	ONE BACKUP RING	TWO BACKUP RINGS		
.070	.055-.057	.010-.018	15-25	.004	.095	.140	.207	.005-.015	.002
.103	.088-.090	.010-.018	10-17	.005	.142	.173	.240	.005-.015	.002
.139	.121-.123	.012-.022	9-16	.006	.189	.210	.277	.010-.025	.003
.210	.185-.188	.017-.030	8-14	.006	.283	.313	.413	.020-.035	.004
.275	.237-.240	.029-.044	11-16	.007	.377	.410	.540	.020-.035	.005

O-RING SIZE CHART AND INSTALLATION DATA

AS-568A SERIES	NOMINAL SIZE			ACTUAL DIMENSIONS	
	I.D.	O.D.	Width	I.D. Tol.	W. Tol.
-001	1/32	3/32	1/32	.029±.004	.040+.003
-001 1/2	1/16	1/8	1/32	.070±.004	.040±.003
-002	3/64	9/64	3/64	.042±.004	.050±.003
-003	1/16	3/16	1/16	.056±.004	.060±.003
-004	5/64	13/64	1/16	.070±.005	.070±.003
-005	3/32	7/32	1/16	.101±.005	.070±.003
-006	1/8	1/4	1/16	.114±.005	.070±.003
-007	5/32	9/32	1/16	.145±.005	.070±.003
-008	3/16	5/16	1/16	.176±.005	.070±.003
-009	7/32	11/32	1/16	.208±.005	.070±.003
-010	1/4	3/8	1/16	.239±.005	.070±.003
-011	5/16	7/16	1/16	.301±.005	.070±.003
-012	3/8	1/2	1/16	.364±.005	.070±.003
-013	7/16	9/16	1/16	.426±.005	.070±.003
-014	1/2	5/8	1/16	.489±.005	.070±.003
-015	9/16	11/16	1/16	.551±.007	.070±.003
-016	5/8	3/4	1/16	.614±.009	.070±.003
-017	11/16	13/16	1/16	.676±.009	.070±.003
-018	3/4	7/8	1/16	.739±.009	.070±.003
-019	13/16	15/16	1/16	.801±.009	.070±.003
-020	7/8	1	1/16	.864±.009	.070±.003
-021	15/16	1 1/16	1/16	.926±.009	.070±.003
-022	1	1 1/8	1/16	.989±.010	.070±.003
-023	1 1/16	1 3/16	1/16	1.051±.010	.070±.003
-024	1 1/8	1 1/4	1/16	1.114±.010	.070±.003
-025	1 3/16	1 5/16	1/16	1.176±.011	.070±.003
-026	1 1/4	1 3/8	1/16	1.239±.011	.070±.003
-027	1 5/16	1 7/16	1/16	1.301±.011	.070±.003
-028	1 3/8	1 1/2	1/16	1.364±.013	.070±.003
-029	1 1/2	1 5/8	1/16	1.489±.013	.070±.003
-030	1 5/8	1 3/4	1/16	1.614±.013	.070±.003
-031	1 3/4	1 7/8	1/16	1.739±.015	.070±.003
-032	1 7/8	2	1/16	1.864±.015	.070±.003
-033	2	2 1/8	1/16	1.989±.018	.070±.003
-034	2 1/8	2 1/4	1/16	2.114±.018	.070±.003
-035	2 1/4	2 3/8	1/16	2.239±.018	.070±.003
-036	2 3/8	2 1/2	1/16	2.364±.018	.070±.003
-037	2 1/2	2 5/8	1/16	2.489±.018	.070±.003
-038	2 5/8	2 3/4	1/16	2.614±.020	.070±.003
-039	2 3/4	2 7/8	1/16	2.739±.020	.070±.003
-040	2 7/8	3	1/16	2.864±.020	.070±.003
-041	3	3 1/8	1/16	2.989±.024	.070±.003
-042	3 1/4	3 3/8	1/16	3.239±.024	.070±.003
-043	3 1/2	3 5/8	1/16	3.489±.024	.070±.003
-044	3 3/4	3 7/8	1/16	3.739±.027	.070±.003
-045	4	4 1/8	1/16	3.989±.027	.070±.003
-046	4 1/4	4 3/8	1/16	4.239±.030	.070±.003

AS-568A SERIES	NOMINAL SIZE			ACTUAL DIMENSIONS	
	I.D.	O.D.	Width	I.D. Tol.	W. Tol.
-047	4 1/2	4 5/8	1/16	4.489±.030	.070±.003
-048	4 3/4	4 7/8	1/16	4.739±.030	.070±.003
-049	5	5 1/8	1/16	4.989±.037	.070±.003
-050	5 1/4	5 3/8	1/16	5.239±.037	.070±.003
-102	1/16	1/4	3/32	.049±.005	.103±.003
-103	3/32	9/32	3/32	.081±.005	.103±.003
-104	1/8	5/16	3/32	.112±.005	.103±.003
-105	5/32	11/32	3/32	.143±.005	.103±.003
-106	3/16	3/8	3/32	.174±.005	.103±.003
-107	7/32	13/32	3/32	.206±.005	.103±.003
-108	1/4	7/16	3/32	.237±.005	.103±.003
-109	5/16	1/2	3/32	.299±.005	.103±.003
-110	3/8	9/16	3/32	.362±.005	.103±.003
-111	7/16	5/8	3/32	.424±.005	.103±.003
-112	1/2	11/16	3/32	.487±.005	.103±.003
-113	9/16	3/4	3/32	.549±.005	.103±.003
-114	5/8	13/16	3/32	.612±.009	.103±.003
-115	11/16	7/8	3/32	.674±.009	.103±.003
-116	3/4	15/16	3/32	.737±.009	.103±.003
-117	13/16	1	3/32	.799±.010	.103±.003
-118	7/8	1 1/16	3/32	.862±.010	.103±.003
-119	15/16	1 1/8	3/32	.924±.010	.103±.003
-120	1	1 3/16	3/32	.987±.010	.103±.003
-121	1 1/16	1 1/4	3/32	1.049±.010	.103±.003
-122	1 1/8	1 5/16	3/32	1.112±.010	.103±.003
-123	1 3/16	1 3/8	3/32	1.174±.012	.103±.003
-124	1 1/4	1 7/16	3/32	1.237±.012	.103±.003
-125	1 5/16	1 1/2	3/32	1.299±.012	.103±.003
-126	1 3/8	1 9/16	3/32	1.362±.012	.103±.003
-127	1 7/16	1 5/8	3/32	1.424±.012	.103±.003
-128	1 1/2	1 11/16	3/32	1.487±.012	.103±.003
-129	1 9/16	1 3/4	3/32	1.549±.015	.103±.003
-130	1 5/8	1 13/16	3/32	1.612±.015	.103±.003
-131	1 11/16	1 7/8	3/32	1.674±.015	.103±.003
-132	1 3/4	1 15/16	3/32	1.737±.015	.103±.003
-133	1 13/16	2	3/32	1.799±.015	.103±.003
-134	1 7/8	2 1/16	3/32	1.862±.015	.103±.003
-135	1 15/16	2 1/8	3/32	1.925±.017	.103±.003
-136	2	2 3/16	3/32	1.987±.017	.103±.003
-137	2 1/16	2 1/4	3/32	2.050±.017	.103±.003
-138	2 1/8	2 5/16	3/32	2.112±.017	.103±.003
-139	2 3/16	2 3/8	3/32	2.175±.017	.103±.003
-140	2 1/4	2 7/16	3/32	2.237±.017	.103±.003
-141	2 5/16	2 1/2	3/32	2.300±.020	.103±.003
-142	2 3/8	2 9/16	3/32	2.362±.020	.103±.003
-143	2 7/16	2 5/8	3/32	2.425±.020	.103±.003
-144	2 1/2	2 11/16	3/32	2.487±.020	.103±.003

O-RING SIZE CHART AND INSTALLATION DATA

AS-568A SERIES	NOMINAL SIZE			ACTUAL DIMENSIONS	
	I.D.	O.D.	Width	I.D. Tol.	W. Tol.
-145	2 9/16	2 3/4	3/32	2.550±.020	.103±.003
-146	2 5/8	2 13/16	3/32	2.612±.020	.103±.003
-147	2 11/16	2 7/8	3/32	2.675±.022	.103±.003
-148	2 3/4	2 15/16	3/32	2.737±.022	.103±.003
-149	2 13/16	3	3/32	2.800±.022	.103±.003
-150	2 7/8	3 1/16	3/32	2.862±.022	.103±.003
-151	3	3 3/16	3/32	2.987±.024	.103±.003
-152	3 1/4	3 7/16	3/32	3.237±.024	.103±.003
-153	3 1/2	3 11/16	3/32	3.487±.024	.103±.003
-154	3 3/4	3 15/16	3/32	3.737±.028	.103±.003
-155	4	4 3/16	3/32	3.987±.028	.103±.003
-156	4 1/4	4 7/16	3/32	4.237±.030	.103±.003
-157	4 1/2	4 11/16	3/32	4.487±.030	.103±.003
-158	4 3/4	4 15/16	3/32	4.737±.030	.103±.003
-159	5	5 3/16	3/32	4.987±.035	.103±.003
-160	5 1/4	5 7/16	3/32	5.237±.035	.103±.003
-161	5 1/2	5 11/16	3/32	5.487±.035	.103±.003
-162	5 3/4	5 15/16	3/32	5.767±.035	.103±.003
-163	6	6 3/16	3/32	5.987±.035	.103±.003
-164	6 1/4	6 7/16	3/32	6.237±.040	.103±.003
-165	6 1/2	6 11/16	3/32	6.487±.040	.103±.003
-166	6 3/4	6 15/16	3/32	6.737±.040	.103±.003
-167	7	7 3/16	3/32	6.987±.040	.103±.003
-168	7 1/4	7 7/16	3/32	7.237±.045	.103±.003
-169	7 1/2	7 11/16	3/32	7.487±.045	.103±.003
-170	7 3/4	7 15/16	3/32	7.737±.045	.103±.003
-171	8	8 3/16	3/32	7.987±.045	.103±.003
-172	8 1/4	8 7/16	3/32	8.237±.050	.103±.003
-173	8 1/2	8 11/16	3/32	8.487±.050	.103±.003
-174	8 3/4	8 15/16	3/32	8.737±.050	.103±.003
-175	9	9 3/16	3/32	8.987±.050	.103±.003
-176	9 1/4	9 7/16	3/32	9.237±.055	.103±.003
-177	9 1/2	9 11/16	3/32	9.487±.055	.103±.003
-178	9 3/4	9 15/16	3/32	9.737±.055	.103±.003
-201	3 16	7/16	1/8	.171±.005	.139±.004
-202	1/4	1/2	1/8	.234±.005	.139±.004
-203	5/16	9/16	1/8	.296±.005	.139±.004
-204	3/8	5/8	1/8	.359±.005	.139±.004
-205	7/16	11/16	1/8	.421±.005	.139±.004
-206	1/2	3/4	1/8	.484±.005	.139±.004
-207	9/16	13/16	1/8	.546±.007	.139±.004
-208	5/8	7/8	1/8	.609±.009	.139±.004
-209	11/16	15/16	1/8	.671±.009	.139±.004
-210	3/4	1	1/8	.734±.010	.139±.004
-211	13/16	1 1/16	1/8	.796±.010	.139±.004
-212	7/8	1 1/8	1/8	.859±.010	.139±.004
-213	15/16	1 3/16	1/8	.921±.010	.139±.004

AS-568A SERIES	NOMINAL SIZE			ACTUAL DIMENSIONS	
	I.D.	O.D.	Width	I.D. Tol.	W. Tol.
-214	1	1 1/4	1/8	.984±.010	.139±.004
-215	1 1/16	1 5/16	1/8	1.046±.010	.139±.004
-216	1 1/8	1 3/8	1/8	1.109±.012	.139±.004
-217	1 3/16	1 7/16	1/8	1.171±.012	.139±.004
-218	1 1/4	1 1/2	1/8	1.234±.012	.139±.004
-219	1 5/16	1 9/16	1/8	1.296±.012	.139±.004
-220	1 3/8	1 5/8	1/8	1.359±.012	.139±.004
-221	1 7/16	1 11/16	1/8	1.421±.012	.139±.004
-222	1 1/2	1 3/4	1/8	1.484±.015	.139±.004
-223	1 5/8	1 7/8	1/8	1.609±.015	.139±.004
-224	1 3/4	2	1/8	1.734±.015	.139±.004
-225	1 7/8	2 1/8	1/8	1.859±.018	.139±.004
-226	2	2 1/4	1/8	1.984±.018	.139±.004
-227	2 1/8	2 3/8	1/8	2.109±.018	.139±.004
-228	2 1/4	2 1/2	1/8	2.234±.020	.139±.004
-229	2 3/8	2 5/8	1/8	2.359±.020	.139±.004
-230	2 1/2	2 3/4	1/8	2.484±.020	.139±.004
-231	2 5/8	2 7/8	1/8	2.609±.020	.139±.004
-232	2 3/4	3	1/8	2.734±.024	.139±.004
-233	2 7/8	3 1/8	1/8	2.859±.024	.139±.004
-234	3	3 1/4	1/8	2.984±.024	.139±.004
-235	3 1/8	3 3/8	1/8	3.109±.024	.139±.004
-236	3 1/4	3 1/2	1/8	3.234±.024	.139±.004
-237	3 3/8	3 5/8	1/8	3.359±.024	.139±.004
-238	3 1/2	3 3/4	1/8	3.484±.024	.139±.004
-239	3 5/8	3 7/8	1/8	3.609±.028	.139±.004
-240	3 3/4	4	1/8	3.734±.028	.139±.004
-241	3 7/8	4 1/8	1/8	3.859±.028	.139±.004
-242	4	4 1/4	1/8	3.984±.028	.139±.004
-243	4 1/8	4 3/8	1/8	4.109±.028	.139±.004
-244	4 1/4	4 1/2	1/8	4.234±.030	.139±.004
-245	4 3/8	4 5/8	1/8	4.359±.030	.139±.004
-246	4 1/2	4 3/4	1/8	4.484±.030	.139±.004
-247	4 5/8	4 7/8	1/8	4.609±.030	.139±.004
-248	4 3/4	5	1/8	4.734±.030	.139±.004
-249	4 7/8	5 1/8	1/8	4.859±.035	.139±.004
-250	5	5 1/4	1/8	4.984±.035	.139±.004
-251	5 1/8	5 3/8	1/8	5.109±.035	.139±.004
-252	5 1/4	5 1/2	1/8	5.234±.035	.139±.004
-253	5 3/8	5 5/8	1/8	5.359±.035	.139±.004
-254	5 1/2	5 3/4	1/8	5.484±.035	.139±.004
-255	5 5/8	5 7/8	1/8	5.609±.035	.139±.004
-256	5 3/4	6	1/8	5.734±.035	.139±.004
-257	5 7/8	6 1/8	1/8	5.859±.035	.139±.004
-258	6	6 1/4	1/8	5.984±.035	.139±.004
-259	6 1/4	6 1/2	1/8	6.234±.040	.139±.004
-260	6 1/2	6 3/4	1/8	6.484±.040	.139±.004

O-RING SIZE CHART AND INSTALLATION DATA

AS-568A SERIES	NOMINAL SIZE			ACTUAL DIMENSIONS	
	I.D.	O.D.	Width	I.D. Tol.	W. Tol.
-261	6 3/4	7	1/8	6.734±.040	.139±.004
-262	7	7 1/4	1/8	6.984±.040	.139±.004
-263	7 1/4	7 1/2	1/8	7.234±.045	.139±.004
-264	7 1/2	7 3/4	1/8	7.484±.045	.139±.004
-265	7 3/4	8	1/8	7.734±.045	.139±.004
-266	8	8 1/4	1/8	7.984±.045	.139±.004
-267	8 1/4	8 1/2	1/8	8.234±.050	.139±.004
-268	8 1/2	8 3/4	1/8	8.484±.050	.139±.004
-269	8 3/4	9	1/8	8.734±.050	.139±.004
-270	9	9 1/4	1/8	8.984±.050	.139±.004
-271	9 1/4	9 1/2	1/8	9.234±.055	.139±.004
-272	9 1/2	9 3/4	1/8	9.484±.055	.139±.004
-273	9 3/4	10	1/8	9.734±.055	.139±.004
-274	10	10 1/4	1/8	9.984±.055	.139±.004
-275	10 1/2	10 3/4	1/8	10.484±.055	.139±.004
-276	11	11 1/4	1/8	10.984±.065	.139±.004
-277	11 1/2	11 3/4	1/8	11.484±.065	.139±.004
-278	12	12 1/4	1/8	11.984±.065	.139±.004
-279	13	13 1/4	1/8	12.984±.065	.139±.004
-280	14	14 1/4	1/8	13.984±.065	.139±.004
-281	15	15 1/4	1/8	14.984±.065	.139±.004
-282	16	16 1/4	1/8	15.955±.075	.139±.004
-283	17	17 1/4	1/8	16.955±.080	.139±.004
-284	18	18 1/4	1/8	17.955±.085	.139±.004
-309	7/16	13/16	3/16	.412±.005	.210±.005
-310	1/2	7/8	3/16	.475±.005	.210±.005
-311	9/16	15/16	3/16	.537±.007	.210±.005
-312	5/8	1	3/16	.600±.009	.210±.005
-313	11/16	11/16	3/16	.662±.009	.210±.005
-314	3/4	1 1/8	3/16	.725±.010	.210±.005
-315	13/16	1 3/16	3/16	.787±.010	.210±.005
-316	7/8	1 1/4	3/16	.850±.010	.210±.005
-317	15/16	1 5/16	3/16	.912±.010	.210±.005
-318	1	1 3/8	3/16	.975±.010	.210±.005
-319	1 1/16	1 7/16	3/16	1.037±.010	.210±.005
-320	1 1/8	1 1/2	3/16	1.100±.012	.210±.005
-321	1 3/16	1 9/16	3/16	1.162±.012	.210±.005
-322	1 1/4	1 5/8	3/16	1.225±.012	.210±.005
-323	1 5/16	1 11/16	3/16	1.287±.012	.210±.005
-324	1 3/8	1 3/4	3/16	1.350±.012	.210±.005
-325	1 1/2	1 7/8	3/16	1.475±.015	.210±.005
-326	1 5/8	2	3/16	1.600±.015	.210±.005
-327	1 3/4	2 1/8	3/16	1.725±.015	.210±.005
-328	1 7/8	2 1/4	3/16	1.850±.015	.210±.005
-329	2	2 3/8	3/16	1.975±.018	.210±.005
-330	2 1/8	2 1/2	3/16	2.100±.018	.210±.005
-331	2 1/4	2 5/8	3/16	2.225±.018	.210±.005

AS-568A SERIES	NOMINAL SIZE			ACTUAL DIMENSIONS	
	I.D.	O.D.	Width	I.D. Tol.	W. Tol.
-332	2 3/8	2 3/4	3/16	2.350±.018	.210±.005
-333	2 1/2	2 7/8	3/16	2.475±.020	.210±.005
-334	2 5/8	3	3/16	2.600±.020	.210±.005
-335	2 3/4	3 1/8	3/16	2.725±.020	.210±.005
-336	2 7/8	3 1/4	3/16	2.850±.020	.210±.005
-337	3	3-3/8	3/16	2.975±.024	.210±.005
-338	3-1/8	3-1/2	3/16	3.100±.024	.210±.005
-339	3-1/4	3-5/8	3/16	3.225±.024	.210±.005
-340	3-3/8	3-3/4	3/16	3.350±.024	.210±.005
-341	3-1/2	3-7/8	3/16	3.475±.024	.210±.005
-342	3 5/8	4	3/16	3.600±.028	.210±.005
-343	3 3/4	4 1/8	3/16	3.725±.028	.210±.005
-344	3 7/8	4 1/4	3/16	3.850±.028	.210±.005
-345	4	4 3/8	3/16	3.975±.028	.210±.005
-346	4 1/8	4 1/2	3/16	4.100±.028	.210±.005
-347	4 1/4	4 5/8	3/16	4.225±.030	.210±.005
-348	4 3/8	4 3/4	3/16	4.350±.030	.210±.005
-349	4 1/2	4 7/8	3/16	4.475±.030	.210±.005
-350	4 5/8	5	3/16	4.600±.030	.210±.005
-351	4 3/4	5 1/8	3/16	4.725±.030	.210±.005
-352	4 7/8	5 1/4	3/16	4.850±.030	.210±.005
-353	5	5 3/8	3/16	4.975±.037	.210±.005
-354	5 1/8	5 1/2	3/16	5.100±.037	.210±.005
-355	5 1/4	5 5/8	3/16	5.225±.037	.210±.005
-356	5 3/8	5 3/4	3/16	5.350±.037	.210±.005
-357	5 1/2	5 7/8	3/16	5.475±.037	.210±.005
-358	5 5/8	6	3/16	5.600±.037	.210±.005
-359	5 3/4	6 1/8	3/16	5.725±.037	.210±.005
-360	5 7/8	6 1/4	3/16	5.850±.037	.210±.005
-361	6	6 3/8	3/16	5.975±.037	.210±.005
-362	6 1/4	6 5/8	3/16	6.225±.040	.210±.005
-363	6 1/2	6 7/8	3/16	6.475±.040	.210±.005
-364	6 3/4	7 1/8	3/16	6.725±.040	.210±.005
-365	7	7 3/8	3/16	6.975±.040	.210±.005
-366	7 1/4	7 5/8	3/16	7.225±.045	.210±.005
-367	7 1/2	7 7/8	3/16	7.475±.045	.210±.005
-368	7 3/4	8 1/8	3/16	7.725±.045	.210±.005
-369	8	8 3/8	3/16	7.975±.045	.210±.005
-370	8 1/4	8 5/8	3/16	8.225±.050	.210±.005
-371	8 1/2	8 7/8	3/16	8.475±.050	.210±.005
-372	8 3/4	9 1/8	3/16	8.725±.050	.210±.005
-373	9	9 3/8	3/16	8.975±.050	.210±.005
-374	9 1/4	9 5/8	3/16	9.225±.055	.210±.005
-375	9 1/2	9 7/8	3/16	9.475±.055	.210±.005
-376	9 3/4	10 1/8	3/16	9.725±.055	.210±.005
-377	10	10 3/8	3/16	9.975±.055	.210±.005
-378	10 1/2	10 7/8	3/16	10.475±.060	.210±.005

O-RING SIZE CHART AND INSTALLATION DATA

AS-568A SERIES	NOMINAL SIZE			ACTUAL DIMENSIONS	
	I.D.	O.D.	Width	I.D. Tol.	W. Tol.
-379	11	11 3/8	3/16	10.975±.060	.210±.005
-380	11 1/2	11 7/8	3/16	11.475±.065	.210±.005
-381	12	12 3/8	3/16	11.975±.065	.210±.005
-382	13	13 3/8	3/16	12.975±.065	.210±.005
-383	14	14 3/8	3/16	13.975±.070	.210±.005
-384	15	15 3/8	3/16	14.975±.070	.210±.005
-385	16	16 3/8	3/16	15.955±.075	.210±.005
-386	17	17 3/8	3/16	16.955±.080	.210±.005
-387	18	18 3/8	3/16	17.955±.085	.210±.005
-388	19	19 3/8	3/16	18.955±.090	.210±.005
-389	20	20 3/8	3/16	19.995±.095	.210±.005
-390	21	21 3/8	3/16	20.955±.095	.210±.005
-391	22	22 3/8	3/16	21.955±.100	.210±.005
-392	23	23 3/8	3/16	22.940±.105	.210±.005
-393	24	24 3/8	3/16	23.940±.110	.210±.005
-394	25	25 3/8	3/16	24.940±.115	.210±.005
-395	26	26 3/8	3/16	25.940±.120	.210±.005
-400*	1-3/8	1-7/8	1/4	1.225±.012	.275±.006
-401*	1-1/2	2	1/4	1.475±.014	.275±.006
-402*	1-5/8	2-1/8	1/4	1.600±.015	.275±.006
-403*	1-3/4	2-1/4	1/4	1.725±.016	.275±.006
-404*	1-7/8	2-3/8	1/4	1.850±.016	.275±.006
-405*	2	2-1/2	1/4	1.975±.017	.275±.006
-406*	2-1/8	2-5/8	1/4	2.100±.018	.275±.006
-407*	2-1/4	2-3/4	1/4	2.225±.018	.275±.006
-408*	2-3/8	2-7/8	1/4	2.350±.020	.275±.006
-409*	2-1/2	3	1/4	2.475±.020	.275±.006
-410*	2-5/8	3-1/8	1/4	2.600±.020	.275±.006
-411*	2-3/4	3-1/4	1/4	2.725±.022	.275±.006
-412*	2-7/8	3-3/8	1/4	2.850±.022	.275±.006
-413*	3	3-1/2	1/4	2.975±.024	.275±.006
-414*	3-1/8	3-5/8	1/4	3.100±.024	.275±.006
-415*	3-1/4	3-3/4	1/4	3.225±.024	.275±.006
-416*	3-3/8	3-7/8	1/4	3.350±.026	.275±.006
-417*	3-1/2	4	1/4	3.475±.026	.275±.006
-418*	3-5/8	4-1/8	1/4	3.600±.026	.275±.006
-419*	3-3/4	4-1/4	1/4	3.725±.028	.275±.006
-420*	3-7/8	4-3/8	1/4	3.850±.028	.275±.006
-421*	4	4-1/2	1/4	3.975±.028	.275±.006
-422*	4-1/8	4-5/8	1/4	4.100±.030	.275±.006
-423*	4-1/4	4-3/4	1/4	4.225±.030	.275±.006
-424*	4-3/8	4-7/8	1/4	4.350±.030	.275±.006
-425	4 1/2	5	1/4	4.475±.033	.275±.006
-426	4 5/8	5 1/8	1/4	4.600±.033	.275±.006
-427	4 3/4	5 1/4	1/4	4.725±.033	.275±.006
-428	4 7/8	5 3/8	1/4	4.850±.033	.275±.006
-429	5	5 1/2	1/4	4.975±.037	.275±.006

AS-568A SERIES	NOMINAL SIZE			ACTUAL DIMENSIONS	
	I.D.	O.D.	Width	I.D. Tol.	W. Tol.
-430	5 1/8	5 5/8	1/4	5.100±.037	.275±.006
-431	5 1/4	5 3/4	1/4	5.225±.037	.275±.006
-432	5 3/8	5 7/8	1/4	5.350±.037	.275±.006
-433	5 1/2	6	1/4	5.475±.037	.275±.006
-434	5 5/8	6 1/8	1/4	5.600±.037	.275±.006
-435	5 3/4	6 1/4	1/4	5.725±.037	.275±.006
-436	5 7/8	6 3/8	1/4	5.850±.037	.275±.006
-437	6	6 1/2	1/4	5.975±.037	.275±.006
-438	6 1/4	6 3/4	1/4	6.225±.040	.275±.006
-439	6 1/2	7	1/4	6.475±.040	.275±.006
-440	6 3/4	7 1/4	1/4	6.725±.040	.275±.006
-441	7	7 1/2	1/4	6.975±.040	.275±.006
-442	7 1/4	7 3/4	1/4	7.225±.045	.275±.006
-443	7 1/2	8	1/4	7.475±.045	.275±.006
-444	7 3/4	8 1/4	1/4	7.725±.045	.275±.006
-445	8	8 1/2	1/4	7.975±.045	.275±.006
-446	8 1/2	9	1/4	8.475±.055	.275±.006
-447	9	9 1/2	1/4	8.975±.055	.275±.006
-448	9 1/2	10	1/4	9.475±.055	.275±.006
-449	10	10 1/2	1/4	9.975±.055	.275±.006
-450	10 1/2	11	1/4	10.475±.060	.275±.006
-451	11	11 1/2	1/4	10.975±.060	.275±.006
-452	11 1/2	12	1/4	11.475±.060	.275±.006
-453	12	12 1/2	1/4	11.975±.060	.275±.006
-454	12 1/2	13	1/4	12.475±.060	.275±.006
-455	13	13 1/2	1/4	12.975±.060	.275±.006
-456	13 1/2	14	1/4	13.475±.070	.275±.006
-457	14	14 1/2	1/4	13.975±.070	.275±.006
-458	14 1/2	15	1/4	14.475±.070	.275±.006
-459	15	15 1/2	1/4	14.975±.070	.275±.006
-460	15 1/2	16	1/4	15.475±.070	.275±.006
-461	16	16 1/2	1/4	15.955±.075	.275±.006
-462	16 1/2	17	1/4	16.455±.075	.275±.006
-463	17	17 1/2	1/4	16.955±.080	.275±.006
-464	17 1/2	18	1/4	17.455±.085	.275±.006
-465	18	18 1/2	1/4	17.955±.085	.275±.006
-466	18 1/2	19	1/4	18.455±.085	.275±.006
-467	19	19 1/2	1/4	18.955±.090	.275±.006
-468	19 1/2	20	1/4	19.455±.090	.275±.006
-469	20	20 1/2	1/4	19.955±.090	.275±.006
-470	21	21 1/2	1/4	20.955±.090	.275±.006
-471	22	22 1/2	1/4	21.955±.100	.275±.006
-472	23	23 1/2	1/4	22.940±.105	.275±.006
-473	24	24 1/2	1/4	23.940±.110	.275±.006
-474	25	25 1/2	1/4	24.940±.115	.275±.006
-475	26	26 1/2	1/4	25.940±.120	.275±.006

* NON-ANSI STANDARD

STYLE 568, 70 DURO BUNA-N O-RINGS

Reduced prices available for bulk quantity purchases of 70 Durometer O-Rings on pages 161 and 162.

SEAL INFORMATION	
MATERIAL	BUNA-N RUBBER
TEMPERATURE RANGE	-40° TO +240° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Dash No.)

Part Number	Min. Pkg. Qty.
568-001	50
568-001-1/2	50
568-002	50
568-003	50
568-004	50
568-005	50
568-006	50
568-007	50
568-008	50
568-009	50
568-010	50
568-011	50
568-012	50
568-013	50
568-014	50
568-015	50
568-016	50
568-017	50
568-018	50
568-019	50
568-020	50
568-021	50
568-022	50
568-023	50
568-024	50
568-025	50
568-026	50
568-027	50
568-028	20
568-029	20
568-030	20
568-031	20
568-032	20
568-033	20
568-034	20
568-035	20
568-036	20
568-037	20
568-038	20
568-039	20

Part Number	Min. Pkg. Qty.
568-040	20
568-041	20
568-042	20
568-043	20
568-044	10
568-045	10
568-046	10
568-047	10
568-048	10
568-049	10
568-050	10
568-102	50
568-103	50
568-104	50
568-105	50
568-106	50
568-107	50
568-108	50
568-109	50
568-110	50
568-111	50
568-112	50
568-113	50
568-114	50
568-115	50
568-116	50
568-117	50
568-118	50
568-119	50
568-120	50
568-121	50
568-122	50
568-123	50
568-124	50
568-125	50
568-126	20
568-127	20
568-128	20
568-129	20
568-130	20

Part Number	Min. Pkg. Qty.
568-131	20
568-132	20
568-133	20
568-134	20
568-135	20
568-136	20
568-137	20
568-138	20
568-139	20
568-140	20
568-141	20
568-142	20
568-143	20
568-144	20
568-145	20
568-146	20
568-147	20
568-148	20
568-149	20
568-150	20
568-151	20
568-152	20
568-153	20
568-154	20
568-155	10
568-156	10
568-157	10
568-158	10
568-159	10
568-160	5
568-161	5
568-162	5
568-163	5
568-164	5
568-165	5
568-166	5
568-167	5
568-168	5
568-169	5
568-170	5

Part Number	Min. Pkg. Qty.
568-171	1
568-172	1
568-173	1
568-174	1
568-175	1
568-176	1
568-177	1
568-178	1
568-201	50
568-202	50
568-203	50
568-204	50
568-205	50
568-206	50
568-207	50
568-208	50
568-209	50
568-210	50
568-211	50
568-212	50
568-213	50
568-214	50
568-215	50
568-216	50
568-217	50
568-218	50
568-219	50
568-220	20
568-221	20
568-222	20
568-223	20
568-224	20
568-225	20
568-226	20
568-227	20
568-228	20
568-229	20
568-230	20
568-231	20
568-232	20

STYLE 568, 70 DURO BUNA-N O-RINGS

Part Number	Min. Pkg. Qty.
568-233	20
568-234	20
568-235	20
568-236	20
568-237	20
568-238	20
568-239	20
568-240	20
568-241	20
568-242	10
568-243	10
568-244	10
568-245	10
568-246	10
568-247	10
568-248	10
568-249	10
568-250	10
568-251	10
568-252	10
568-253	10
568-254	5
568-255	5
568-256	5
568-257	5
568-258	5
568-259	5
568-260	5
568-261	5
568-262	5
568-263	5
568-264	5
568-265	5
568-266	5
568-267	5
568-268	1
568-269	1
568-270	1
568-271	1
568-272	1
568-273	1
568-274	1
568-275	1
568-276	1
568-277	1
568-278	1
568-279	1
568-280	1
568-281	1
568-282	1

Part Number	Min. Pkg. Qty.
568-283	1
568-284	1
568-309	50
568-310	50
568-311	50
568-312	50
568-313	50
568-314	50
568-315	50
568-316	50
568-317	50
568-318	50
568-319	50
568-320	20
568-321	20
568-322	20
568-323	20
568-324	20
568-325	20
568-326	20
568-327	20
568-328	20
568-329	20
568-330	20
568-331	20
568-332	20
568-333	20
568-334	20
568-335	10
568-336	10
568-337	10
568-338	10
568-339	10
568-340	10
568-341	10
568-342	10
568-343	10
568-344	10
568-345	10
568-346	10
568-347	10
568-348	10
568-349	10
568-350	5
568-351	5
568-352	5
568-353	5
568-354	5
568-355	5
568-356	5

Part Number	Min. Pkg. Qty.
568-357	5
568-358	5
568-359	5
568-360	5
568-361	5
568-362	5
568-363	5
568-364	5
568-365	5
568-366	5
568-367	5
568-368	5
568-369	1
568-370	1
568-371	1
568-372	1
568-373	1
568-374	1
568-375	1
568-376	1
568-377	1
568-378	1
568-379	1
568-380	1
568-381	1
568-382	1
568-383	1
568-384	1
568-385	1
568-386	1
568-387	1
568-388	1
568-389	1
568-390	1
568-391	1
568-392	1
568-393	1
568-394	1
568-395	1
568-425	5
568-426	5
568-427	5
568-428	5
568-429	5
568-430	5
568-431	5
568-432	5
568-433	5
568-434	5
568-435	5

Part Number	Min. Pkg. Qty.
568-436	5
568-437	5
568-438	5
568-439	5
568-440	1
568-441	1
568-442	1
568-443	1
568-444	1
568-445	1
568-446	1
568-447	1
568-448	1
568-449	1
568-450	1
568-451	1
568-452	1
568-453	1
568-454	1
568-455	1
568-456	1
568-457	1
568-458	1
568-459	1
568-460	1
568-461	1
568-462	1
568-463	1
568-464	1
568-465	1
568-466	1
568-467	1
568-468	1
568-469	1
568-470	1
568-471	1
568-472	1
568-473	1
568-474	1
568-475	1

STYLE 568, BULK 70 DURO BUNA-N O-RINGS

Standard size packages available on pages 159 and 160.

SEAL INFORMATION	
MATERIAL	BUNA-N RUBBER
TEMPERATURE RANGE	-40° TO +240° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Dash No.)

Part Number	Min. Pkg. Qty.	Part Number	Min. Pkg. Qty.	Part Number	Min. Pkg. Qty.	Part Number	Min. Pkg. Qty.
568-001-B	1000	568-041-B	400	568-132-B	400	568-172-B	100
568-002-B	1000	568-042-B	400	568-133-B	400	568-173-B	100
568-003-B	1000	568-043-B	400	568-134-B	400	568-174-B	100
568-004-B	1000	568-044-B	400	568-135-B	400	568-175-B	100
568-005-B	1000	568-045-B	400	568-136-B	400	568-176-B	100
568-006-B	1000	568-046-B	200	568-137-B	400	568-177-B	100
568-007-B	1000	568-047-B	200	568-138-B	400	568-178-B	100
568-008-B	1000	568-048-B	200	568-139-B	400	568-201-B	1000
568-009-B	1000	568-049-B	200	568-140-B	400	568-202-B	1000
568-010-B	1000	568-050-B	200	568-141-B	400	568-203-B	1000
568-011-B	1000	568-102-B	1000	568-142-B	400	568-204-B	1000
568-012-B	1000	568-103-B	1000	568-143-B	400	568-205-B	1000
568-013-B	1000	568-104-B	1000	568-144-B	400	568-206-B	1000
568-014-B	1000	568-105-B	1000	568-145-B	400	568-207-B	1000
568-015-B	1000	568-106-B	1000	568-146-B	400	568-208-B	1000
568-016-B	1000	568-107-B	1000	568-147-B	400	568-209-B	1000
568-017-B	1000	568-108-B	1000	568-148-B	400	568-210-B	1000
568-018-B	1000	568-109-B	1000	568-149-B	400	568-211-B	1000
568-019-B	1000	568-110-B	1000	568-150-B	400	568-212-B	1000
568-020-B	1000	568-111-B	1000	568-151-B	400	568-213-B	1000
568-021-B	1000	568-112-B	1000	568-152-B	400	568-214-B	1000
568-022-B	1000	568-113-B	1000	568-153-B	400	568-215-B	1000
568-023-B	1000	568-114-B	1000	568-154-B	400	568-216-B	1000
568-024-B	1000	568-115-B	1000	568-155-B	200	568-217-B	1000
568-025-B	1000	568-116-B	1000	568-156-B	200	568-218-B	1000
568-026-B	1000	568-117-B	1000	568-157-B	200	568-219-B	1000
568-027-B	1000	568-118-B	1000	568-158-B	200	568-220-B	400
568-028-B	400	568-119-B	1000	568-159-B	200	568-221-B	400
568-029-B	400	568-120-B	1000	568-160-B	200	568-222-B	400
568-030-B	400	568-121-B	1000	568-161-B	200	568-223-B	400
568-031-B	400	568-122-B	1000	568-162-B	200	568-224-B	400
568-032-B	400	568-123-B	1000	568-163-B	200	568-225-B	400
568-033-B	400	568-124-B	1000	568-164-B	200	568-226-B	400
568-034-B	400	568-125-B	1000	568-165-B	200	568-227-B	400
568-035-B	400	568-126-B	400	568-166-B	200	568-228-B	400
568-036-B	400	568-127-B	400	568-167-B	200	568-229-B	400
568-037-B	400	568-128-B	400	568-168-B	200	568-230-B	400
568-038-B	400	568-129-B	400	568-169-B	200	568-231-B	400
568-039-B	400	568-130-B	400	568-170-B	200	568-232-B	400
568-040-B	400	568-131-B	400	568-171-B	100	568-233-B	400

STYLE 568, BULK 70 DURO BUNA-N O-RINGS

Part Number	Min. Pkg. Qty.
568-234-B	400
568-235-B	400
568-236-B	400
568-237-B	400
568-238-B	400
568-239-B	400
568-240-B	400
568-241-B	400
568-242-B	200
568-243-B	200
568-244-B	200
568-245-B	200
568-246-B	200
568-247-B	200
568-248-B	200
568-249-B	200
568-250-B	200
568-251-B	200
568-252-B	200
568-253-B	200
568-254-B	200
568-255-B	200
568-256-B	200
568-257-B	200
568-258-B	200
568-259-B	200
568-260-B	200
568-261-B	200
568-262-B	200
568-263-B	200
568-264-B	200
568-265-B	200
568-266-B	100
568-267-B	100
568-268-B	100
568-269-B	100
568-270-B	100
568-271-B	100
568-272-B	100
568-273-B	100
568-274-B	100
568-275-B	100
568-276-B	100
568-277-B	100
568-278-B	100
568-279-B	100
568-280-B	100
568-281-B	100
568-282-B	100
568-283-B	100

Part Number	Min. Pkg. Qty.
568-284-B	100
568-309-B	1000
568-310-B	1000
568-311-B	1000
568-312-B	1000
568-313-B	1000
568-314-B	1000
568-315-B	1000
568-316-B	1000
568-317-B	1000
568-318-B	1000
568-319-B	1000
568-320-B	1000
568-321-B	1000
568-322-B	1000
568-323-B	1000
568-324-B	400
568-325-B	400
568-326-B	400
568-327-B	400
568-328-B	400
568-329-B	400
568-330-B	400
568-331-B	400
568-332-B	400
568-333-B	400
568-334-B	400
568-335-B	400
568-336-B	400
568-337-B	400
568-338-B	400
568-339-B	400
568-340-B	400
568-341-B	400
568-342-B	400
568-343-B	400
568-344-B	400
568-345-B	200
568-346-B	200
568-347-B	200
568-348-B	200
568-349-B	200
568-350-B	200
568-351-B	200
568-352-B	200
568-353-B	200
568-354-B	200
568-355-B	200
568-356-B	200
568-357-B	200

Part Number	Min. Pkg. Qty.
568-358-B	200
568-359-B	200
568-360-B	200
568-361-B	200
568-362-B	200
568-363-B	200
568-364-B	200
568-365-B	200
568-366-B	200
568-367-B	200
568-368-B	200
568-369-B	100
568-370-B	100
568-371-B	100
568-372-B	100
568-373-B	100
568-374-B	100
568-375-B	100
568-376-B	100
568-377-B	100
568-378-B	100
568-379-B	100
568-380-B	100
568-381-B	100
568-382-B	100
568-383-B	100
568-384-B	100
568-385-B	100
568-386-B	100
568-387-B	100
568-388-B	20
568-389-B	20
568-390-B	20
568-391-B	20
568-392-B	20
568-393-B	20
568-394-B	20
568-395-B	20
568-425-B	200
568-426-B	200
568-427-B	200
568-428-B	200
568-429-B	200
568-430-B	200
568-431-B	200
568-432-B	200
568-433-B	200
568-434-B	200
568-435-B	200
568-436-B	200

Part Number	Min. Pkg. Qty.
568-437-B	200
568-438-B	200
568-439-B	200
568-440-B	200
568-441-B	200
568-442-B	200
568-443-B	200
568-444-B	200
568-445-B	100
568-446-B	100
568-447-B	100
568-448-B	100
568-449-B	100
568-450-B	100
568-451-B	100
568-452-B	100
568-453-B	100
568-454-B	100
568-455-B	100
568-456-B	100
568-457-B	20
568-458-B	20
568-459-B	20
568-460-B	20
568-461-B	20
568-462-B	20
568-463-B	20
568-464-B	20
568-465-B	20
568-466-B	20
568-467-B	20
568-468-B	20
568-469-B	20
568-470-B	20
568-471-B	20
568-472-B	20
568-473-B	20
568-474-B	20
568-475-B	20

NON-STANDARD 1/4" CROSS SECTION STYLE 568, 70 DURO BUNA-N O-RINGS

SEAL INFORMATION	
MATERIAL	BUNA-N RUBBER
TEMPERATURE RANGE	-40° TO +240° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Dash No.)

Part Number	Min. Pkg. Qty.	ID	OD	CS
568-400	5	1-3/8	1-7/8	1/4
568-401	5	1-1/2	2	1/4
568-402	5	1-5/8	2-1/8	1/4
568-403	5	1-3/4	2-1/4	1/4
568-404	5	1-7/8	2-3/8	1/4
568-405	5	2	2-1/2	1/4
568-406	5	2-1/8	2-5/8	1/4
568-407	5	2-1/4	2-3/4	1/4
568-408	5	2-3/8	2-7/8	1/4
568-409	5	2-1/2	3	1/4
568-410	5	2-5/8	3-1/8	1/4
568-411	5	2-3/4	3-1/4	1/4
568-412	5	2-7/8	3-3/8	1/4

Part Number	Min. Pkg. Qty.	ID	OD	CS
568-413	5	3	3-1/2	1/4
568-414	5	3-1/8	3-5/8	1/4
568-415	5	3-1/4	3-3/4	1/4
568-416	5	3-3/8	3-7/8	1/4
568-417	5	3-1/2	4	1/4
568-418	5	3-5/8	4-1/8	1/4
568-419	5	3-3/4	4-1/4	1/4
568-420	5	3-7/8	4-3/8	1/4
568-421	5	4	4-1/2	1/4
568-422	5	4-1/8	4-5/8	1/4
568-423	5	4-1/4	4-3/4	1/4
568-424	5	4-3/8	4-7/8	1/4

STYLE 568C AND 580C, 70 DURO BUNA-N O-RING CORD

SEAL INFORMATION	
MATERIAL	BUNA-N RUBBER
TEMPERATURE RANGE	-40° TO +240° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Cord) - (Nominal)

Part Number	Nominal C/S	Actual C/S
568C-062	1/16 ROUND	.070
568C-093	3/32 ROUND	.103
568C-125	1/8 ROUND	.139
568C-187	3/16 ROUND	.210
568C-250	1/4 ROUND	.275
568C-313	5/16 ROUND	.313
568C-375	3/8 ROUND	.375

Part Number	Nominal C/S	Actual C/S
568C-437	7/16 ROUND	.437
568C-500	1/2 ROUND	.500
580C-093	3/32 SQUARE	.099
580C-125	1/8 SQUARE	.134
580C-187	3/16 SQUARE	.203
580C-250	1/4 SQUARE	.266

STYLE 568, 90 DURO BUNA-N O-RINGS

Reduced prices are available for large quantity purchases of 70 & 90 Durometer O-Rings.

SEAL INFORMATION	
MATERIAL	BUNA-N RUBBER
TEMPERATURE RANGE	-40° TO +240° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Dash No.) - (90 Duro.)

Part Number	Min. Pkg. Qty.
568-001-90D	50
568-002-90D	50
568-003-90D	50
568-004-90D	50
568-005-90D	50
568-006-90D	50
568-007-90D	50
568-008-90D	50
568-009-90D	50
568-010-90D	50
568-011-90D	50
568-012-90D	50
568-013-90D	50
568-014-90D	50
568-015-90D	50
568-016-90D	50
568-017-90D	50
568-018-90D	50
568-019-90D	50
568-020-90D	50
568-021-90D	50
568-022-90D	50
568-023-90D	50
568-024-90D	50
568-025-90D	50
568-026-90D	50
568-027-90D	50
568-028-90D	20
568-029-90D	20
568-030-90D	20
568-031-90D	20
568-032-90D	20
568-033-90D	20
568-034-90D	20
568-035-90D	20

Part Number	Min. Pkg. Qty.
568-036-90D	20
568-037-90D	20
568-038-90D	20
568-039-90D	20
568-040-90D	20
568-041-90D	20
568-042-90D	10
568-043-90D	10
568-044-90D	10
568-045-90D	10
568-046-90D	10
568-047-90D	5
568-048-90D	5
568-049-90D	5
568-050-90D	5
568-102-90D	50
568-103-90D	50
568-104-90D	50
568-105-90D	50
568-106-90D	50
568-107-90D	50
568-108-90D	50
568-109-90D	50
568-110-90D	50
568-111-90D	50
568-112-90D	50
568-113-90D	50
568-114-90D	50
568-115-90D	50
568-116-90D	50
568-117-90D	50
568-118-90D	50
568-119-90D	50
568-120-90D	50
568-121-90D	50

Part Number	Min. Pkg. Qty.
568-122-90D	50
568-123-90D	50
568-124-90D	50
568-125-90D	50
568-126-90D	20
568-127-90D	20
568-128-90D	20
568-129-90D	20
568-130-90D	20
568-131-90D	20
568-132-90D	20
568-133-90D	20
568-134-90D	20
568-135-90D	20
568-136-90D	20
568-137-90D	20
568-138-90D	20
568-139-90D	20
568-140-90D	20
568-141-90D	20
568-142-90D	20
568-143-90D	20
568-144-90D	20
568-145-90D	20
568-146-90D	20
568-147-90D	20
568-148-90D	20
568-149-90D	20
568-150-90D	20
568-151-90D	20
568-152-90D	10
568-153-90D	10
568-154-90D	10
568-155-90D	10
568-156-90D	10

Part Number	Min. Pkg. Qty.
568-157-90D	5
568-158-90D	5
568-159-90D	5
568-160-90D	5
568-161-90D	5
568-162-90D	5
568-163-90D	5
568-164-90D	5
568-165-90D	5
568-166-90D	5
568-167-90D	5
568-171-90D	1
568-173-90D	1
568-173-90D	1
568-178-90D	1
568-201-90D	50
568-202-90D	50
568-203-90D	50
568-204-90D	50
568-205-90D	50
568-206-90D	50
568-207-90D	50
568-208-90D	50
568-209-90D	50
568-210-90D	50
568-211-90D	50
568-212-90D	50
568-213-90D	50
568-214-90D	50
568-215-90D	50
568-216-90D	50
568-217-90D	50
568-218-90D	20
568-219-90D	20
568-220-90D	20

STYLE 568, 90 DURO BUNA-N O-RINGS

Part Number	Min. Pkg. Qty.
568-221-90D	20
568-222-90D	20
568-223-90D	20
568-224-90D	20
568-225-90D	20
568-226-90D	20
568-227-90D	20
568-228-90D	20
568-229-90D	20
568-230-90D	20
568-231-90D	20
568-232-90D	10
568-233-90D	10
568-234-90D	10
568-235-90D	10
568-236-90D	10
568-237-90D	10
568-238-90D	10
568-239-90D	10
568-240-90D	10
568-241-90D	10
568-242-90D	10
568-243-90D	10
568-244-90D	10
568-245-90D	10
568-246-90D	5
568-247-90D	5
568-248-90D	5
568-249-90D	5
568-250-90D	5
568-251-90D	5
568-252-90D	5
568-253-90D	5
568-254-90D	5
568-255-90D	5
568-256-90D	5
568-257-90D	5
568-258-90D	5
568-259-90D	5
568-260-90D	1
568-261-90D	1
568-262-90D	1
568-263-90D	1
568-264-90D	1
568-265-90D	1
568-266-90D	1
568-267-90D	1
568-268-90D	1
568-269-90D	1
568-270-90D	1

Part Number	Min. Pkg. Qty.
568-271-90D	1
568-272-90D	1
568-273-90D	1
568-274-90D	1
568-275-90D	1
568-276-90D	1
568-277-90D	1
568-278-90D	1
568-279-90D	1
568-280-90D	1
568-281-90D	1
568-282-90D	1
568-284-90D	1
568-310-90D	50
568-311-90D	50
568-312-90D	50
568-313-90D	20
568-315-90D	20
568-316-90D	20
568-317-90D	20
568-318-90D	20
568-319-90D	20
568-320-90D	20
568-321-90D	20
568-322-90D	20
568-323-90D	20
568-324-90D	20
568-325-90D	20
568-326-90D	20
568-327-90D	20
568-328-90D	20
568-329-90D	20
568-330-90D	20
568-331-90D	10
568-332-90D	10
568-333-90D	10
568-334-90D	10
568-335-90D	10
568-336-90D	10
568-337-90D	10
568-338-90D	10
568-339-90D	10
568-340-90D	10
568-341-90D	10
568-342-90D	10
568-343-90D	10
568-344-90D	5
568-345-90D	5
568-346-90D	5
568-347-90D	5

Part Number	Min. Pkg. Qty.
568-348-90D	5
568-349-90D	5
568-350-90D	5
568-351-90D	5
568-352-90D	5
568-353-90D	5
568-354-90D	5
568-355-90D	5
568-356-90D	5
568-357-90D	5
568-358-90D	5
568-359-90D	5
568-360-90D	5
568-361-90D	1
568-362-90D	1
568-363-90D	1
568-364-90D	1
568-365-90D	1
568-366-90D	1
568-367-90D	1
568-368-90D	1
568-369-90D	1
568-370-90D	1
568-371-90D	1
568-372-90D	1
568-373-90D	1
568-374-90D	1
568-375-90D	1
568-376-90D	1
568-377-90D	1
568-378-90D	1
568-379-90D	1
568-380-90D	1
568-381-90D	1
568-382-90D	1
568-383-90D	1
568-384-90D	1
568-385-90D	1
568-387-90D	1
568-401-90D	5
568-402-90D	5
568-403-90D	5
568-404-90D	5
568-405-90D	5
568-406-90D	5
568-407-90D	5
568-408-90D	5
568-409-90D	5
568-410-90D	5
568-411-90D	5

Part Number	Min. Pkg. Qty.
568-412-90D	5
568-413-90D	5
568-414-90D	5
568-415-90D	5
568-416-90D	5
568-417-90D	5
568-418-90D	5
568-419-90D	5
568-420-90D	5
568-421-90D	5
568-422-90D	5
568-423-90D	5
568-424-90D	5
568-425-90D	5
568-426-90D	5
568-427-90D	5
568-428-90D	5
568-429-90D	5
568-430-90D	5
568-431-90D	5
568-432-90D	5
568-433-90D	5
568-434-90D	5
568-435-90D	1
568-436-90D	1
568-437-90D	1
568-438-90D	1
568-439-90D	1
568-440-90D	1
568-441-90D	1
568-442-90D	1
568-443-90D	1
568-444-90D	1
568-445-90D	1
568-446-90D	1
568-447-90D	1
568-448-90D	1
568-449-90D	1
568-450-90D	1
568-451-90D	1
568-452-90D	1
568-453-90D	1
568-454-90D	1
568-456-90D	1
568-457-90D	1
568-458-90D	1
568-459-90D	1
568-460-90D	1
568-461-90D	1
568-462-90D	1

STYLE 568, 90 DURO BUNA-N O-RINGS

Part Number	Min. Pkg. Qty.
568-463-90D	1
568-464-90D	1
568-466-90D	1

Part Number	Min. Pkg. Qty.
568-467-90D	1
568-468-90D	1
568-469-90D	1

Part Number	Min. Pkg. Qty.
568-471-90D	1
568-472-90D	1
568-473-90D	1

Part Number	Min. Pkg. Qty.
568-474-90D	1
568-475-90D	1

STYLE 568, 90 DURO BUNA-N O-RING BOSS GASKETS FOR STRAIGHT THREAD FITTINGS

AS-568A UNIVERSAL SERIES DASH NO.	TUBE SIZE (O.D.) INCHES	ACTUAL SIZE	
		I.D.	W.
-901	3/32	.185 ±.005	.056 ±.003
-902	1/8	.239 ±.005	.064 ±.003
-903	3/16	.301 ±.005	.064 ±.003
-904	1/4	.351 ±.005	.072 ±.003
-905	5/16	.414 ±.005	.072 ±.003
-906	3/8	.468 ±.005	.078 ±.003
-907	7/16	.530 ±.005	.082 ±.003
-908	1/2	.644 ±.009	.087 ±.003
-909	9/16	.706 ±.009	.097 ±.003
-910	5/8	.755 ±.009	.097 ±.003
-911	11/16	.863 ±.009	.116 ±.004
-912	3/4	.924 ±.009	.116 ±.004
-913	13/16	.986 ±.010	.116 ±.004
-914	7/8	1.047 ±.010	.116 ±.004
-916	1	1.171 ±.010	.116 ±.004
-918	1-1/8	1.355 ±.012	.116 ±.004
-920	1-1/4	1.475 ±.012	.118 ±.004
-924	1-1/2	1.720 ±.014	.118 ±.004
-928	1-3/4	2.090 ±.018	.118 ±.004
-932	2	2.337 ±.018	.118 ±.004

SEAL INFORMATION	
MATERIAL	90 DUROMETER BUNA-N RUBBER
TEMPERATURE RANGE	-40° TO +240° F
PART NUMBER	(Prefix) - (Dash No.)

Part Number	Min. Pkg. Qty.
568-901	50
568-902	50
568-903	50
568-904	50
568-905	50
568-906	50
568-907	50
568-908	50
568-909	50
568-910	50

Part Number	Min. Pkg. Qty.
568-911	50
568-912	50
568-913	20
568-914	20
568-916	20
568-918	20
568-920	20
568-924	10
568-928	10
568-932	10

STYLE 568, 75 DURO FLUOROCARBON O-RINGS

SEAL INFORMATION	
MATERIAL	BROWN FLUOROCARBON
TEMPERATURE RANGE	-20° TO +400° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix)-(Dash No.)-(Fluorocarbon)

Part Number	Min. Pkg. Qty.
568-001V	56
568-002V	50
568-003V	14
568-004V	14
568-005V	9
568-006V	40
568-007V	40
568-008V	40
568-009V	30
568-010V	30
568-011V	30
568-012V	20
568-013V	20
568-014V	20
568-015V	20
568-016V	20
568-017V	15
568-018V	15
568-019V	15
568-020V	15
568-021V	15
568-022V	15
568-023V	15
568-024V	15
568-025V	8
568-026V	10
568-027V	10
568-028V	10
568-029V	10
568-030V	5
568-031V	5
568-032V	5
568-033V	5
568-034V	3
568-035V	3
568-036V	3
568-037V	3
568-038V	3

Part Number	Min. Pkg. Qty.
568-039V	3
568-040V	3
568-041V	3
568-042V	3
568-043V	3
568-044V	3
568-045V	2
568-046V	2
568-047V	2
568-048V	2
568-049V	2
568-050V	1
568-102V	50
568-104V	15
568-105V	27
568-106V	15
568-107V	15
568-108V	15
568-109V	15
568-110V	15
568-111V	15
568-112V	15
568-113V	15
568-114V	15
568-115V	10
568-116V	10
568-117V	10
568-118V	10
568-119V	10
568-120V	10
568-121V	10
568-122V	10
568-123V	10
568-124V	10
568-125V	5
568-126V	5
568-127V	5
568-128V	5

Part Number	Min. Pkg. Qty.
568-129V	5
568-130V	5
568-131V	3
568-132V	4
568-133V	4
568-134V	3
568-135V	3
568-136V	3
568-137V	4
568-138V	3
568-139V	2
568-140V	2
568-141V	3
568-142V	3
568-143V	2
568-144V	3
568-145V	2
568-146V	2
568-147V	3
568-148V	3
568-149V	2
568-150V	2
568-151V	2
568-152V	2
568-153V	5
568-154V	2
568-155V	2
568-156V	2
568-157V	1
568-158V	2
568-159V	1
568-160V	1
568-161V	1
568-162V	1
568-163V	1
568-164V	1
568-165V	1
568-166V	1

Part Number	Min. Pkg. Qty.
568-167V	1
568-168V	1
568-169V	1
568-170V	1
568-171V	1
568-172V	1
568-173V	1
568-174V	1
568-175V	1
568-176V	1
568-177V	1
568-178V	1
568-201V	15
568-202V	15
568-203V	10
568-204V	10
568-205V	8
568-206V	8
568-207V	10
568-208V	7
568-209V	6
568-210V	5
568-211V	5
568-212V	5
568-213V	5
568-214V	5
568-215V	4
568-216V	5
568-217V	3
568-218V	3
568-219V	3
568-220V	3
568-221V	3
568-222V	3
568-223V	3
568-224V	3
568-225V	3
568-226V	3

STYLE 568, 75 DURO FLUOROCARBON O-RINGS

Part Number	Min. Pkg. Qty.
568-227V	2
568-228V	3
568-229V	2
568-230V	2
568-231V	2
568-232V	2
568-233V	2
568-234V	2
568-235V	2
568-236V	2
568-237V	2
568-238V	2
568-239V	2
568-240V	2
568-241V	1
568-242V	1
568-243V	1
568-244V	1
568-245V	1
568-246V	1
568-247V	1
568-248V	1
568-249V	1
568-250V	1
568-251V	1
568-252V	1
568-253V	1
568-254V	1
568-255V	1
568-256V	1
568-257V	1
568-258V	1
568-259V	1
568-260V	1
568-261V	1
568-262V	1
568-263V	1
568-264V	1
568-265V	1
568-266V	1
568-267V	1
568-268V	1
568-269V	1
568-270V	1
568-271V	1
568-272V	1
568-273V	1
568-274V	1
568-275V	1
568-276V	1

Part Number	Min. Pkg. Qty.
568-277V	1
568-278V	1
568-279V	1
568-280V	1
568-281V	1
568-282V	1
568-284V	1
568-309V	3
568-310V	3
568-311V	3
568-312V	3
568-313V	3
568-314V	3
568-315V	3
568-316V	3
568-317V	3
568-318V	2
568-319V	2
568-320V	2
568-321V	2
568-322V	2
568-323V	2
568-324V	2
568-325V	2
568-326V	1
568-327V	1
568-328V	1
568-329V	1
568-330V	1
568-331V	1
568-332V	1
568-333V	1
568-334V	1
568-335V	1
568-336V	1
568-337V	1
568-338V	1
568-339V	1
568-340V	1
568-341V	1
568-342V	1
568-343V	1
568-344V	1
568-345V	1
568-346V	1
568-347V	1
568-348V	1
568-349V	1
568-350V	1
568-351V	1

Part Number	Min. Pkg. Qty.
568-352V	1
568-353V	1
568-354V	1
568-355V	1
568-356V	1
568-357V	1
568-358V	1
568-359V	1
568-360V	1
568-361V	1
568-362V	1
568-363V	1
568-364V	1
568-365V	1
568-366V	1
568-367V	1
568-368V	1
568-369V	1
568-370V	1
568-371V	1
568-372V	1
568-373V	1
568-374V	1
568-375V	1
568-376V	1
568-377V	1
568-378V	1
568-379V	1
568-380V	1
568-381V	1
568-382V	1
568-383V	1
568-384V	1
568-385V	1
568-386V	1
568-388V	1
568-389V	1
568-390V	1
568-391V	1
568-392V	1
568-394V	1
568-425V	1
568-426V	1
568-427V	1
568-428V	1
568-429V	1
568-430V	1
568-431V	1
568-432V	1
568-433V	1

Part Number	Min. Pkg. Qty.
568-434V	1
568-435V	1
568-436V	1
568-437V	1
568-438V	1
568-439V	1
568-440V	1
568-441V	1
568-442V	1
568-443V	1
568-444V	1
568-445V	1
568-446V	1
568-447V	1
568-448V	1
568-449V	1
568-450V	1
568-451V	1
568-452V	1
568-453V	1
568-454V	1
568-455V	1
568-456V	1
568-457V	1
568-458V	1
568-459V	1
568-460V	1
568-461V	1
568-462V	1
568-463V	1
568-464V	1
568-465V	1
568-466V	1
568-467V	1
568-468V	1
568-469V	1
568-470V	1
568-471V	1
568-472V	1
568-473V	1
568-474V	1
568-475V	1

STYLE 568, 75 DURO FLUOROCARBON O-RINGS

SEAL INFORMATION	
MATERIAL	BLACK FLUOROCARBON
TEMPERATURE RANGE	-20° TO +400° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Dash No.) - (Black)

Part Number	Min. Pkg. Qty.
568-007V-BLACK	40
568-008V-BLACK	40
568-010V-BLACK	30
568-011V-BLACK	30
568-012V-BLACK	20
568-014V-BLACK	20
568-015V-BLACK	20
568-016V-BLACK	20
568-032V-BLACK	10
568-110V-BLACK	15
568-111V-BLACK	15
568-112V-BLACK	15
568-113V-BLACK	15
568-114V-BLACK	15
568-115V-BLACK	15
568-116V-BLACK	10
568-119V-BLACK	10
568-125V-BLACK	5

Part Number	Min. Pkg. Qty.
568-129V-BLACK	5
568-136V-BLACK	3
568-145V-BLACK	2
568-146V-BLACK	2
568-151V-BLACK	2
568-161V-BLACK	2
568-162V-BLACK	2
568-163V-BLACK	2
568-206V-BLACK	5
568-208V-BLACK	5
568-210V-BLACK	5
568-211V-BLACK	5
568-213V-BLACK	5
568-214V-BLACK	5
568-218V-BLACK	5
568-220V-BLACK	3
568-222V-BLACK	3
568-228V-BLACK	3

Part Number	Min. Pkg. Qty.
568-231V-BLACK	2
568-233V-BLACK	2
568-236V-BLACK	2
568-237V-BLACK	2
568-238V-BLACK	2
568-240V-BLACK	1
568-241V-BLACK	1
568-245V-BLACK	1
568-248V-BLACK	1
568-271V-BLACK	1
568-331V-BLACK	1
568-334V-BLACK	1
568-336V-BLACK	1
568-360V-BLACK	1
568-364V-BLACK	1
568-445V-BLACK	1

STYLE 568, 75 DURO FLUOROCARBON O-RING CORD

NOTE: Cord is Black fluorocarbon.
See O-Ring Kit section for splicing Information.

Part Number	Nominal C/S
568C-062V	1/16" ROUND
568C-093V	3/32" ROUND
568C-125V	1/8" ROUND
568C-187V	3/16" ROUND
568C-250V	1/4" ROUND

SEAL INFORMATION	
MATERIAL	BLACK FLUOROCARBON
TEMPERATURE RANGE	-20° TO +400° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) (Cord) - (Nom. Size) (Fluorocarbon)

STYLE 568, 90 DURO FLUOROCARBON O-RINGS

SEAL INFORMATION	
MATERIAL	FLUOROCARBON
TEMPERATURE RANGE	-20° TO +400° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Dash No.) - (90 Duro Fluorocarbon)

Part Number	Min. Pkg. Qty.
568-011-90DV	15
568-012-90DV	15
568-014-90DV	10
568-015-90DV	15
568-016-90DV	15
568-018-90DV	15
568-019-90DV	15
568-020-90DV	15
568-021-90DV	15
568-022-90DV	15
568-113-90DV	15

Part Number	Min. Pkg. Qty.
568-121-90DV	1
568-131-90DV	1
568-214-90DV	3
568-215-90DV-BLACK	1
568-218-90DV	2
568-223-90DV	2
568-224-90DV	2
568-226-90DV	2
568-227-90DV	2
568-233-90DV	3
568-239-90DV	2

Part Number	Min. Pkg. Qty.
568-240-90DV	1
568-246-90DV	1
568-254-90DV	1
568-260-90DV	1
568-264-90DV	1
568-272-90DV	1
568-277-90DV	1
568-363-90DV	1
568-364-90DV	1

STYLE 568, 90 DURO FLUOROCARBON BOSS O-RINGS

SEAL INFORMATION	
MATERIAL	FLUOROCARBON
TEMPERATURE RANGE	-20° TO +400° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Dash No.) (90 Duro Fluorocarbon)

Part Number	Min. Pkg. Qty.
568-901V	10
568-902V	10
568-903V	10
568-904V	10
568-905V	10

Part Number	Min. Pkg. Qty.
568-906V	10
568-907V	10
568-908V	10
568-909V	10
568-910V	10

Part Number	Min. Pkg. Qty.
568-911V	5
568-912V	5
568-913V	5
568-914V	3
568-916V	3

Part Number	Min. Pkg. Qty.
568-918V	3
568-920V	3
568-924V	2
568-928V	2
568-932V	2

STYLE 568, 70A DURO ETHYLENE PROPYLENE O-RINGS

NOTE: This compound is NOT D.O.T. certified for brake system use.

SEAL INFORMATION	
MATERIAL	ETHYLENE PROPYLENE
TEMPERATURE RANGE	-65° TO +300° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Dash No.) - (Ethylene Propylene)

Part Number	Min. Pkg. Qty.
568-008EP	14
568-010EP	12
568-011EP	12
568-012EP	12
568-013EP	8
568-014EP	6

Part Number	Min. Pkg. Qty.
568-015EP	10
568-018EP	6
568-043EP	2
568-110EP	10
568-111EP	10
568-112EP	8

Part Number	Min. Pkg. Qty.
568-113EP	8
568-114EP	8
568-115EP	8
568-116EP	8
568-212EP	5
568-214EP	6

Part Number	Min. Pkg. Qty.
568-215EP	6
568-218EP	5
568-220EP	5
568-222EP	5
568-238EP	1
568-248EP	3

STYLE 568, 90A DURO ETHYLENE PROPYLENE O-RINGS

Part Number	Min. Pkg. Qty.
568-126-90DEP	5
568-144-90DEP	3
568-264-90DEP	1
568-280-90DEP	1
568-281-90DEP	1

SEAL INFORMATION	
MATERIAL	ETHYLENE PROPYLENE
TEMPERATURE RANGE	-65° TO +300° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Dash No.) (90 Duro Ethylene Propylene)

STYLE 568, 70A DURO SILICONE O-RINGS

SEAL INFORMATION	
MATERIAL	SILICONE
TEMPERATURE RANGE	-70° TO +400° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Dash No.) (Silicone)

Part Number	Min. Pkg. Qty.
568-008S	50
568-010S	20
568-011S	20
568-012S	20
568-013S	20
568-014S	12
568-015S	20
568-016S	12
568-018S	12
568-025S	11
568-028S	11
568-042S	10
568-108S	12

Part Number	Min. Pkg. Qty.
568-110S	12
568-111S	12
568-112S	12
568-113S	14
568-115S	13
568-116S	12
568-117S	11
568-118S	10
568-120S	8
568-210S	10
568-212S	8
568-213S	7
568-214S	7

Part Number	Min. Pkg. Qty.
568-215S	6
568-216S	6
568-218S	6
568-219S	6
568-220S	5
568-222S	8
568-223S	5
568-224S	5
568-226S	4
568-227S	4
568-228S	4
568-231S	3
568-232S	3

Part Number	Min. Pkg. Qty.
568-238S	3
568-239S	2
568-240S	2
568-248S	2
568-265S	1
568-320S	5
568-325S	4
568-326S	4
568-328S	3
568-329S	3
568-334S	3
568-367S	1
568-445S	1

STYLE 568, 55 - 58 SHORE D PTFE O-RING

SEAL INFORMATION	
MATERIAL	55 - 58 SHORE D PTFE
TEMPERATURE RANGE	-65° TO +500° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Dash No.) (PTFE)

Part Number	Min. Pkg. Qty.
568-006T	7
568-009T	6
568-010T	1
568-011T	5
568-012T	5
568-013T	6
568-014T	5
568-015T	5
568-016T	4
568-018T	4
568-020T	4
568-021T	3
568-022T	3
568-023T	3
568-024T	3
568-026T	3

Part Number	Min. Pkg. Qty.
568-028T	2
568-029T	2
568-030T	2
568-032T	2
568-109T	5
568-110T	5
568-111T	5
568-112T	4
568-114T	4
568-115T	4
568-116T	4
568-117T	4
568-121T	4
568-122T	4
568-126T	3
568-132T	2

Part Number	Min. Pkg. Qty.
568-133T	2
568-137T	2
568-142T	2
568-210T	3
568-212T	2
568-213T	3
568-214T	3
568-215T	3
568-218T	1
568-219T	2
568-220T	2
568-223T	2
568-224T	2
568-225T	2
568-226T	2
568-228T	1

Part Number	Min. Pkg. Qty.
568-229T	1
568-231T	1
568-232T	1
568-234T	1
568-235T	1
568-236T	1
568-240T	1
568-242T	1
568-248T	1
568-258T	1
568-268T	1
568-273T	1
568-326T	1
568-327T	1
568-330T	1
568-342T	1

STYLE 568, 90 DURO URETHANE O-RINGS

SEAL INFORMATION	
MATERIAL	90A URETHANE
TEMPERATURE RANGE	-65° TO +220° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Dash No.) (Urethane)

Part Number	Min. Pkg. Qty.
568-006U	4
568-008U	3
568-009U	3
568-010U	3
568-011U	3
568-012U	3
568-013U	3
568-014U	3
568-014U-70D	3
568-015U	1
568-016U	3
568-016U-70D	3
568-017U	3
568-018U	3
568-020U	3
568-022U	3
568-023U	3
568-110U	2
568-111U	2
568-112U	3
568-113U	2
568-114U	2
568-115U	2
568-116U	2
568-117U	2
568-118U	2

Part Number	Min. Pkg. Qty.
568-119U	2
568-120U	2
568-121U	2
568-121U-70D	2
568-122U	2
568-123U	2
568-124U	2
568-131U	2
568-133U	2
568-134U	1
568-136U-70D	2
568-148U	1
568-206U	3
568-210U	3
568-211U	2
568-213U	2
568-216U	2
568-218U	2
568-219U	2
568-220U	2
568-221U	2
568-222U	2
568-223U	2
568-224U	2
568-225U	1
568-226U	2

Part Number	Min. Pkg. Qty.
568-227U	2
568-228U	2
568-230U	2
568-232U	2
568-233U	1
568-234U	1
568-235U	1
568-236U	1
568-238U	1
568-240U	1
568-242U	1
568-244U	1
568-248U	1
568-256U	1
568-260U	1
568-326U	1
568-327U	1
568-328U	1
568-329U	1
568-330U	1
568-331U	1
568-332U	1
568-335U	1
568-336U	1
568-337U	1
568-348U	1

STYLE 580, SQUARE BUNA-N O-RINGS

SEAL INFORMATION	
MATERIAL	BUNA-N RUBBER
TEMPERATURE RANGE	-40° TO +240° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Dash No.)

Part Number	Min. Pkg. Qty.
580-008	10
580-014	38
580-015	50
580-016	38
580-017	30
580-019	30
580-021	25
580-022	29
580-025	25
580-026	24
580-028	25
580-029	25
580-032	15
580-033	15
580-034	15
580-035	15
580-036	13
580-037	13
580-038	13
580-039	12
580-040	12
580-041	9
580-042	9
580-043	9
580-044	9
580-045	8
580-046	7
580-047	7
580-110	23
580-113	13
580-115	14
580-116	35
580-117	30
580-118	30
580-119	13

Part Number	Min. Pkg. Qty.
580-120	27
580-121	25
580-122	25
580-123	12
580-124	12
580-125	12
580-125-90D	5
580-126	27
580-127	12
580-128	12
580-129	12
580-130	12
580-131	12
580-132	11
580-133	11
580-134	11
580-135	11
580-136	11
580-137	11
580-138	11
580-139	11
580-140	11
580-141	11
580-142	11
580-143	11
580-144	11
580-145	11
580-146	11
580-147	10
580-148	10
580-149	10
580-150	10
580-151	10
580-152	10
580-153	9

Part Number	Min. Pkg. Qty.
580-154	9
580-155	7
580-156	6
580-157	5
580-158	5
580-159	4
580-160	4
580-161	4
580-163	3
580-164	3
580-170	3
580-206	15
580-209	15
580-210	15
580-211	15
580-213	15
580-214	15
580-215	15
580-216	15
580-217	15
580-218	15
580-220	15
580-221	15
580-222	15
580-223	15
580-224	15
580-225	15
580-226	15
580-227	15
580-229	15
580-230	15
580-231	15
580-232	15
580-233	15
580-234	14

Part Number	Min. Pkg. Qty.
580-235	13
580-236	12
580-237	12
580-238	12
580-239	10
580-240	10
580-241	10
580-242	10
580-243	9
580-244	9
580-245	8
580-246	7
580-247	6
580-248	5
580-249	5
580-250	5
580-251	5
580-252	5
580-253	4
580-254	4
580-255	4
580-256	4
580-257	4
580-258	4
580-259	4
580-260	3
580-261	3
580-262	3
580-263	3
580-264	3
580-265	3
580-266	3
580-267	3
580-268	3
580-269	3

STYLE 580, SQUARE BUNA-N O-RINGS

Part Number	Min. Pkg. Qty.
580-271	3
580-273	3
580-274	3
580-278	1
580-322	5
580-324	8
580-325	15
580-326	15
580-328	15
580-329	13
580-330	13
580-331	13
580-332	13
580-333	13
580-334	13
580-335	12
580-336	11

Part Number	Min. Pkg. Qty.
580-337	10
580-338	10
580-339	10
580-340	10
580-341	9
580-342	9
580-343	8
580-344	7
580-345	7
580-346	7
580-347	7
580-348	7
580-349	6
580-350	6
580-351	6
580-352	6
580-353	5

Part Number	Min. Pkg. Qty.
580-354	4
580-355	4
580-356	4
580-357	4
580-358	4
580-366	4
580-414	2
580-423	2
580-425	3
580-426	3
580-427	3
580-428	3
580-429	3
580-430	3
580-431	3
580-433	3
580-434	3

Part Number	Min. Pkg. Qty.
580-435	3
580-436	3
580-437	3
580-438	3
580-439	3
580-440	3
580-441	2
580-442	2
580-443	2
580-444	2
580-445	2
580-446	2
580-447	2
580-448	2
580-449	2
580-450	1
580-451	1

STYLE QR, BUNA-N QUAD® RINGS

Quad® Rings provide improved stability and lubricity over conventional o-rings, reducing the tendency to spiral in the groove. They interchange standard o-rings in a variety of static and dynamic sealing applications including rotary, reciprocating or oscillating motion.

NOTE: Last three digits of part number corresponds to standard o-ring dash numbers (568-218 = QR-4218)

V = FLUOROCARBON

SEAL INFORMATION	
MATERIAL	BUNA-N RUBBER
TEMPERATURE RANGE	-40° TO +240° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Dash No.)

Part Number	Min. Pkg. Qty.
QR-4004	6
QR-4005	6
QR-4006	6
QR-4007	6
QR-4008	6
QR-4009	6
QR-4010	6
QR-4011	6
QR-4012	6
QR-4013	6

Part Number	Min. Pkg. Qty.
QR-4014	6
QR-4015	6
QR-4016	5
QR-4017	5
QR-4018	5
QR-4019	5
QR-4020	5
QR-4021	5
QR-4022	4
QR-4023	4

Part Number	Min. Pkg. Qty.
QR-4024	4
QR-4025	3
QR-4026	3
QR-4027	3
QR-4028	3
QR-4029	3
QR-4030	3
QR-4031	3
QR-4032	2
QR-4033	3

Part Number	Min. Pkg. Qty.
QR-4034	3
QR-4035	3
QR-4036	3
QR-4037	2
QR-4038	2
QR-4039	2
QR-4040	2
QR-4041	2
QR-4042	2
QR-4043	2

STYLE QR, BUNA-N QUAD® RINGS

Part Number	Min. Pkg. Qty.
QR-4044	2
QR-4045	2
QR-4046	2
QR-4047	2
QR-4048	2
QR-4050	2
QR-4108	5
QR-4109	5
QR-4110	5
QR-4111	5
QR-4112	5
QR-4113	5
QR-4113V	1
QR-4114	5
QR-4115	5
QR-4116	5
QR-4117	5
QR-4118	5
QR-4119	5
QR-4120	5
QR-4121	5
QR-4122	5
QR-4123	5
QR-4124	5
QR-4125	4
QR-4126	4
QR-4127	4
QR-4128	4
QR-4129	4
QR-4130	4
QR-4131	4
QR-4132	4
QR-4133	4
QR-4134	4
QR-4135	3
QR-4136	3
QR-4137	3
QR-4138	3
QR-4139	3
QR-4140	3
QR-4141	3
QR-4142	3
QR-4143	2
QR-4144	2
QR-4145	2
QR-4146	2
QR-4147	2
QR-4148	2
QR-4149	2
QR-4151	2

Part Number	Min. Pkg. Qty.
QR-4152	2
QR-4153	2
QR-4154	2
QR-4156	2
QR-4157	2
QR-4158	2
QR-4159	2
QR-4161	2
QR-4164	1
QR-4202	5
QR-4204	5
QR-4205	5
QR-4206	5
QR-4207	5
QR-4208	5
QR-4209	5
QR-4210	5
QR-4211	5
QR-4212	5
QR-4213	5
QR-4214	5
QR-4215	5
QR-4216	4
QR-4217	4
QR-4218	4
QR-4219	4
QR-4220	4
QR-4221	4
QR-4222	4
QR-4223	3
QR-4224	3
QR-4225	3
QR-4226	3
QR-4227	3
QR-4228	3
QR-4229	3
QR-4230	3
QR-4231	3
QR-4232	3
QR-4233	3
QR-4234	3
QR-4235	3
QR-4236	3
QR-4237	3
QR-4238	2
QR-4239	2
QR-4240	2
QR-4241	2
QR-4242	2
QR-4243	2

Part Number	Min. Pkg. Qty.
QR-4244	2
QR-4245	2
QR-4246	2
QR-4247	2
QR-4248	2
QR-4249	2
QR-4250	2
QR-4251	2
QR-4252	1
QR-4253	1
QR-4254	1
QR-4255	1
QR-4256	1
QR-4257	1
QR-4258	1
QR-4259	1
QR-4260	1
QR-4261	1
QR-4263	1
QR-4265	1
QR-4266	1
QR-4268	1
QR-4278	1
QR-4314	3
QR-4316	3
QR-4318	3
QR-4319	3
QR-4320	3
QR-4321	3
QR-4322	3
QR-4323	3
QR-4324	3
QR-4325	3
QR-4326	3
QR-4327	3
QR-4328	3
QR-4329	3
QR-4330	3
QR-4331	3
QR-4332	3
QR-4333	3
QR-4334	3
QR-4335	2
QR-4336	2
QR-4337	2
QR-4338	2
QR-4339	2
QR-4340	2
QR-4341	2
QR-4342	2

Part Number	Min. Pkg. Qty.
QR-4343	2
QR-4344	1
QR-4345	1
QR-4346	1
QR-4347	1
QR-4348	1
QR-4349	1
QR-4350	1
QR-4351	1
QR-4352	1
QR-4353	1
QR-4354	1
QR-4355	1
QR-4356	1
QR-4357	1
QR-4358	1
QR-4361	1
QR-4362	1
QR-4363	1
QR-4366	1
QR-4367	1
QR-4368	1
QR-4369	1
QR-4372	1
QR-4374	1
QR-4375	1
QR-4425	1
QR-4426	1
QR-4427	1
QR-4428	1
QR-4429	1
QR-4430	1
QR-4431	1
QR-4432	1
QR-4433	1
QR-4434	1
QR-4435	1
QR-4436	1
QR-4437	1
QR-4438	1
QR-4439	1
QR-4440	1
QR-4441	1
QR-4442	1
QR-4443	1
QR-4444	1
QR-4445	1
QR-4446	1
QR-4447	1
QR-4448	1

STYLE QR, BUNA-N QUAD® RINGS

Part Number	Min. Pkg. Qty.
QR-4450	1
QR-4452	1
QR-4453	1

Part Number	Min. Pkg. Qty.
QR-4454	1
QR-4455	1

Part Number	Min. Pkg. Qty.
QR-4458	1
QR-4464	1

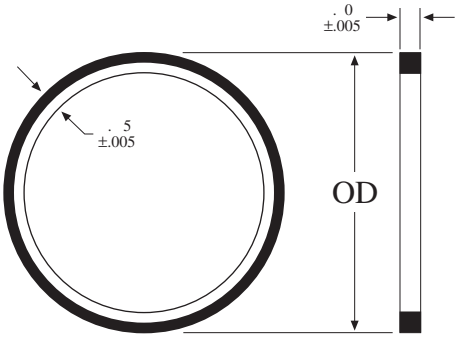
Part Number	Min. Pkg. Qty.
QR-4468	1
QR-4470	1

STYLE SFS SPLIT FLANGE SEALS

FOR 4-BOLT SPLIT FLANGE CONNECTORS

Flange seals are a one piece dual durometer urethane static seal. The black outer part is a tough, extrusion-resistant 95 Durometer urethane, and the yellow inner layer is 57 Durometer with low compression set and excellent sealing properties. These seals are a direct replacement for o-rings and do not require modification to any split flange groove.

SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-40° TO +200° F
PRESSURE RANGE	0 TO 6,000 PSI
PART NUMBER	(Prefix) - (Dash No.)



Part Number	Flange Size	Replaces O-Ring No.	Outside Diam.
SFS-8	1/2	-210	1.005
SFS-12	3/4	-214	1.255
SFS-16	1	-219	1.565
SFS-20	1-1/4	-222	1.755
SFS-24	1-1/2	-225	2.125
SFS-32	2	-228	2.500
SFS-40	2-1/2	-232	3.005
SFS-48	3	-237	3.625

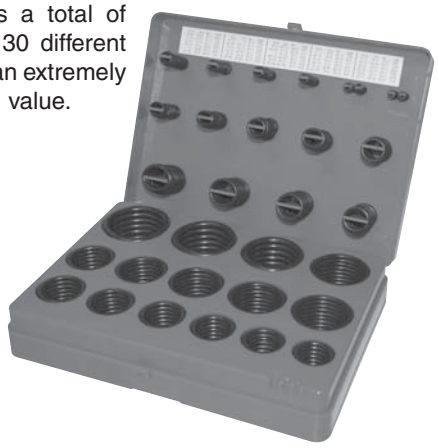
O-RING KITS

O-RING KIT

Part Number: 568 Kit-A

PART NUMBER	QTY	PART NUMBER	QTY
006-012	20	210-222	10
110-116	13	325-327	7

This kit contains a total of 382 O-Rings in 30 different sizes, providing an extremely low cost per size value.



O-RING METRIC KIT

Part Number: Metric O Kit-J-A

I.D X C.S. (mm)	QTY	I.D X C.S. (mm)	QTY
3 X 2.0	16	20 X 3.0	12
4 X 2.0	16	22 X 3.0	12
5 X 2.0	16	24 X 3.0	12
6 X 2.0	16	25 X 3.0	12
7 X 2.0	16	27 X 3.0	12
8 X 2.0	16	28 X 3.0	12
10 X 2.0	16	30 X 3.0	12
10 X 2.5	16	32 X 3.0	12
11 X 2.5	13	33 X 3.0	12
12 X 2.5	13	35 X 3.0	12
14 X 2.5	13	36 X 3.0	12
16 X 2.5	13	38 X 3.0	12
17 X 2.5	13	38 X 4.0	9
19 X 2.5	13	41 X 4.0	9
19 X 3.0	12	44 X 4.0	9

The Metric O-Kit J-A contains a total of 389 O-Rings in 30 different sizes, another extremely low cost per size value.

U.S. INDUSTRIAL O-RING KIT

Part Number: 568 Kit

PART NUMBER	QTY	PART NUMBER	QTY
005-011	25	111-116	10
012	15	117-121	7
013-018	10	210-211	10
110	15	212-219	7

This kit contains a total of 436 70 Durometer O-Rings in 36 different sizes, providing an extremely low cost per size value.

O-RING KITS

O-RING WAREHOUSE KIT

Part Number: 568 WH Kit

PART NUMBER	QTY	PART NUMBER	QTY
001-016	20	217-229	5
017-024	10	230-232	3
025-031	7	233-237	2
032-043	5	325-328	5
044-046	2	329-330	4
110-116	15	331-338	2
117-124	10	901-914	5
125-142	5	916, 918	5
143-146	3	920, 924	5
147-151	2	928, 932	5
210-216	10		

Our O-ring Warehouse kit is ideally suited for the repair shop that needs a large on-hand selection of O-rings to insure quick repair of all machine types. 1,110 O-Rings in 150 different sizes are included in this kit. Each size is individually packaged in heavy duty ziploc bags to protect against environmental exposure and contamination. All packages are then stored in a sturdy styrene cabinet with pull-out drawers for easy access to parts. Included card shows size, dimensions, and drawer location for each ring.

90 DUROMETER O-RING WAREHOUSE KIT

Part Number: 568 WH Kit-90D

PART NUMBER	QTY	PART NUMBER	QTY
001-016-90D	20	217-229-90D	5
017-024-90D	10	230-232-90D	3
025-031-90D	7	233-237-90D	2
032-043-90D	5	325-328-90D	5
044-046-90D	2	329-330-90D	4
110-116-90D	15	331-338-90D	2
117-124-90D	10	901-914-90D	5
125-142-90D	5	916, 918-90D	5
143-146-90D	3	920, 924-90D	5
147-151-90D	2	928, 932-90D	5
210-216-90D	10		

Our 90 Durometer O-ring Warehouse kit is ideally suited for the repair shop that needs a large on-hand selection of O-Rings to insure quick repair of all machine types. 1,110 O-Rings in 150 different sizes are included in this kit.

O-RING KITS

90 DUROMETER O-RING KIT

Part Number: 568 90D Kit

PART NUMBER	QTY	PART NUMBER	QTY
005-011-90D	25	111-116-90D	10
012-90D	15	117-121-90D	7
013-018-90D	10	210-211-90D	10
110-90D	15	212-219-90D	7

This kit contains a total of 436 90 Durometer O-Rings in 36 different sizes, providing an extremely low cost per size value.

SAE 900 O-RING BOSS KIT

Part Number: 900 Boss Kit

PART NUMBER	QTY	SAE PORT SIZE	PART NUMBER	QTY	SAE PORT SIZE
568-904	35	-4	568-910	20	-10
568-905	30	-5	568-911	15	-11
568-906	30	-6	568-912	15	-12
568-907	20	-7	568-913	15	-13
568-908	20	-8	568-914	15	-14
568-909	20	-9	568-916	15	-16

This 250 piece assortment contains the most popular size 90 Durometer Boss O-rings in 12 different fitting sizes, individually separated, which will supply your shop, service truck, or parts counter with the sizes you need!

QUAD WAREHOUSE KIT

Part Number: Quad-Ring WH Kit

PART NUMBER	QTY	PART NUMBER	QTY
QR-4004-012	10	QR-4125-135	3
QR-4013-030	5	QR-4136-154	2
QR-4031-038	3	QR-4204-216	5
QR-4039-048	2	QR-4217-229	3
QR-4108-116	10	QR-4230-338	2
QR-4117-124	5		

Similar to the O-Ring Warehouse kit, the Quad Seal Warehouse kit contains a total of 583 four-lobed seals in 145 different sizes. This kit is ideal for the small distributor who wishes to have a comprehensive on-hand inventory of Quad seals for counter sales.

This 250 piece assortment contains the most popular size 90 Durometer Boss O-rings, individually boxed, which will supply your shop, service truck, or parts counter with the sizes you need!

O-RING KITS

MAX O-RING KIT

Part Number:
MAX 1381 Kit

Part Number:
MAX 1381 Kit-90D

These sturdy kits, packaged in a heavy duty box, contains 1415 O-Rings in the most popular sizes. Every service truck should have one of these. Five internal boxes contain 1/16" C/S, 3/32" C/S, 1/8" C/S, Boss and Flange fitting o-rings. Contents and quantities are listed below.

Flange Seals

FLANGE NUMBER	QTY	FLANGE NUMBER	QTY
8	10	20	5
12	10	24	5
16	10	32	5

Boss O-Rings

BOSS NUMBER	QTY	BOSS NUMBER	QTY
903	15	907	25
904	25	910	25
906	15	912	15
906	25	916	10

1/16" C/S O-Rings

O-RING NUMBER	QTY	O-RING NUMBER	QTY
006 - 118	25	028	15
019 - 021	20	029	10
022 - 026	15	030	10

3/32" C/S O-Rings

O-RING NUMBER	QTY	O-RING NUMBER	QTY
109 - 118	25	129	10
119 - 120	20	131	10
121 - 127	15	133	10
128	10	135	5

1/8" C/S O-Rings

O-RING NUMBER	QTY	O-RING NUMBER	QTY
210 - 214	20	228	10
215 - 222	15	232	10
223 - 224	10	236	10
226	10		

FLUOROCARBON O-RING KIT

Part Number: 568 FC Kit

PART NUMBER	QTY	PART NUMBER	QTY
005-011V	25	111-116V	10
012V	15	117-121V	7
013-018V	10	210-211V	10
110V	15	212-219V	7

This kit contains a total of 436 75 Durometer Fluorocarbon O-Rings in 36 different sizes, providing an extremely low cost per size value.

O-RING KITS

SAE 900 O-RING BOSS FLUOROCARBON KIT

Part Number: 900 Boss FC

PART NUMBER	QTY	SAE PORT SIZE	PART NUMBER	QTY	SAE PORT SIZE
568-904V	35	-4	568-910V	20	-10
568-905V	30	-5	568-911V	15	-11
568-906V	30	-6	568-912V	15	-12
568-907V	20	-7	568-913V	15	-13
568-908V	20	-8	568-914V	15	-14
568-909V	20	-9	568-916V	15	-16

This 250 piece assortment contains the most popular size 90 Durometer FKM Boss O-rings in 12 different fitting sizes, individually separated, which will supply your shop, service truck, or parts counter with the sizes you need!

PTFE O-RING KIT

Part Number: 568 PTFE Kit

PART NUMBER	QTY
005-012T	15
013-018T	10
110-116T	10
117-121T	5
210-219T	5

This kit contains a total of 325 PTFE O-Rings (55 - 58 Shore D) in 36 different sizes. PTFE O-Rings can withstand temperatures up to 500° F and are impervious to a wide range of chemicals.

QUAD RING KIT

Part Number: Quad-Ring Kit

PART NUMBER	QTY	PART NUMBER	QTY
4005-4012	10	4110-4116	6
4013-4016	6	4117-4121	4
4017-4018	5	4210-4219	5

This kit contains a total of 226 Quad Seals in 36 different sizes, providing an extremely low cost per size value.

O-RING KITS

O-RING FACE KIT

Part Number: 568 Face Kit

PART NUMBER	QTY	PART NUMBER	QTY
011-90D	25	018-90D	20
012-90D	25	021-90D	15
014-90D	25	025-90D	10
016-90D	25	029-90D	10

This kit contains a total of 155 90 Durometer O-Rings in 8 different sizes, providing an extremely low cost per size value.

O-RING FLANGE KIT

Part Number: 568 Flange Kit

PART NUMBER	QTY	PART NUMBER	QTY
210-90D	10	225-90D	10
214-90D	10	228-90D	10
219-90D	10	232-90D	10
222-90D	10		

This kit contains a total of 70, 90 Durometer O-Rings, in 7 different sizes, providing an extremely low cost per size value.

SPLIT FLANGE SEAL KIT

Part Number: SFS Kit

PART NUMBER	QTY	PART NUMBER	QTY
SFS-8	5	SFS-24	5
SFS-12	5	SFS-32	5
SFS-16	5	SFS-40	5
SFS-20	5		

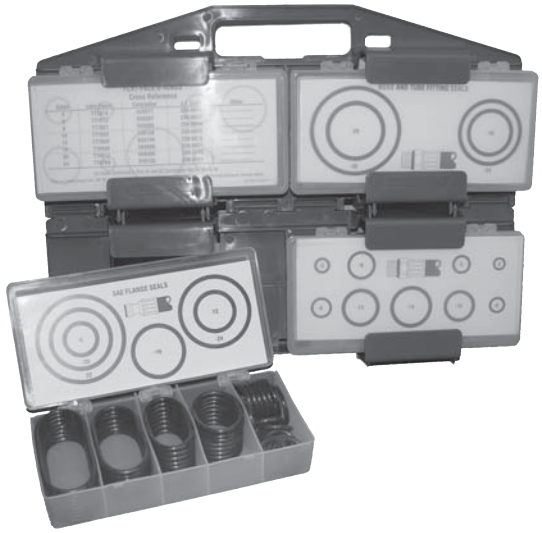
This kit contains 35 Split Flange Seals in 7 popular sizes.

O-RING KITS

HOSE END & ADAPTER KIT

Part Number: O-R Fitting Kit

This handy kit contains 27 sizes and 216 pieces of 90A Durometer O-rings for boss, split flange and flat face hose end fittings and adapters. Each box has a graphic label identifying the type of application and dash number for the seal. A chart on the back of the box lists popular OEM part number matches for each O-ring. Due to popular demand, these kits are now available individually.



SAE FLANGE SEALS

Part Number: SAE Flange Seals

BOX PART NUMBER	PART NUMBER	QTY
-8	568-210-90D	8
-12	568-214-90D	8
-16	568-219-90D	8
-20	568-222-90D	8
-24	568-225-90D	8
-32	568-228-90D	8

FLAT FACE SEALS

Part Number: Flat Face O-Rings

BOX PART NUMBER	PART NUMBER	QTY
-4	568-011-90D	8
-6	568-012-90D	8
-8	568-014-90D	8
-10	568-016-90D	8
-12	568-018-90D	8
-16	568-021-90D	8
-20	568-025-90D	8
-24	568-029-90D	8

BOSS & TUBE SEALS

Part Number: Boss & Tube Fittings-1
Part Number: Boss & Tube Fittings-2

BOX PART NUMBER	PART NUMBER	QTY	KIT NUMBER
-2	568-902	8	FITTINGS-1
-3	568-903	8	FITTINGS-1
-4	568-904	8	FITTINGS-1
-5	568-905	8	FITTINGS-1
-6	568-906	8	FITTINGS-1
-8	568-908	8	FITTINGS-1
-10	568-910	8	FITTINGS-1

BOX PART NUMBER	PART NUMBER	QTY	KIT NUMBER
-12	568-912	8	FITTINGS-1
-14	568-914	8	FITTINGS-1
-16	568-916	8	FITTINGS-2
-20	568-920	8	FITTINGS-2
-24	568-924	8	FITTINGS-2
-32	568-932	8	FITTINGS-2

O-RING KITS

O-RING SPLICE KIT
INCH SIZES

Part Number: 568 Splice Kit

Kit Contains:
1. Stock of 70 Durometer Buna O-ring Cord
2. Razor Blade
3. Splicing tool
4. Tube of Adhesive

Replacement Parts

Parts:
#568 Splice Tool
#568 Adhesive
70 Duro. Cord

O-RING SPLICE KIT
INCH& METRIC SIZES

Part Number: Met/Inch Splice Kit

This kit can produce O-Rings of any standard inch size cross-section plus a wide variety of metric sizes. Each kit contains quick drying adhesive, cutting and splicing jig, razor blade and 14 lengths of 70 Durometer Buna-N cord stock as follows:

Inch cross-sections: (inch)
1/16" (.070), 3/32" (.103), 1/8" (.139),
3/16" (.210), 1/4" (.275)
Metric cross-sections: (mm)
1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 5.0, 5.7, 8.4

These kits can produce O-Rings of any circumference. The 568 kit contains the most popular inch cross sectional sized O-ring cord. The Metric and Inch Kit has both standard inch size cross sectional cord plus a wide variety of metric sized cord. Both kits contain quick drying adhesive, a cutting and splicing jig, a razor blade and 70 Durometer Buna-N cord.

FLUOROCARBON O-RING SPLICE KIT
INCH SIZES

Part Number: 568 FC Splice Kit

Kit Contains:
1. Stock of 75 Durometer Fluorocarbon Cord
2. Razor Blade
3. Splicing tool
4. Tube of Adhesive

Replacement Parts

Parts:
#568 Splice Tool
#568 Adhesive
75 Duro. Fluorocarbon Cord

STYLE 573 HYTREL BACK-UP RINGS

Molded of 55D Durometer Hytrel, these back-up rings provide excellent extrusion resistance and tolerance to fluids such as phosphate esters, hydraulic oil and water. Stretched for installation, they return quickly to their original size for easy installation.

NOTE: Sizes (Dash No.) corresponds to standard o-ring numbers.

SEAL INFORMATION	
MATERIAL	55D HYTREL
TEMPERATURE RANGE	-65° TO +275° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Dash No.)

Part Number	Min. Pkg. Qty.
573-014	10
573-015	10
573-016	10
573-017	10
573-018	10
573-019	10
573-020	10
573-021	10
573-022	10
573-023	10
573-024	10
573-025	10
573-026	10
573-027	10
573-028	10
573-029	10
573-030	10
573-031	10
573-032	10
573-033	10
573-034	10
573-035	10
573-036	10
573-038	10
573-039	10
573-040	10
573-041	10
573-042	10
573-043	10
573-044	2

Part Number	Min. Pkg. Qty.
573-045	2
573-047	2
573-048	2
573-049	2
573-050	2
573-111	9
573-112	9
573-113	9
573-114	9
573-115	9
573-116	9
573-117	9
573-118	9
573-119	9
573-120	8
573-122	8
573-123	8
573-124	8
573-125	8
573-126	8
573-127	8
573-128	8
573-129	8
573-131	8
573-132	8
573-133	8
573-134	8
573-135	8
573-136	8
573-137	8

Part Number	Min. Pkg. Qty.
573-138	8
573-139	8
573-140	7
573-141	7
573-142	7
573-143	7
573-144	6
573-145	6
573-146	6
573-147	6
573-148	6
573-149	6
573-150	6
573-151	6
573-152	5
573-153	5
573-154	3
573-155	3
573-158	3
573-159	3
573-160	3
573-161	3
573-162	3
573-163	3
573-205	10
573-206	10
573-207	10
573-208	10
573-209	10
573-210	9

Part Number	Min. Pkg. Qty.
573-211	9
573-212	9
573-213	9
573-214	9
573-215	9
573-216	9
573-217	9
573-218	9
573-219	9
573-220	10
573-221	10
573-222	10
573-223	8
573-224	8
573-225	10
573-226	10
573-227	10
573-228	10
573-229	10
573-230	7
573-231	7
573-232	7
573-233	7
573-234	6
573-235	6
573-236	6
573-237	5
573-238	5
573-239	5
573-240	5

STYLE 573 HYTREL BACK-UP RINGS

Part Number	Min. Pkg. Qty.
573-241	5
573-242	5
573-243	5
573-244	4
573-245	4
573-246	3
573-247	3
573-248	3
573-249	3
573-250	3
573-251	3
573-252	3
573-253	3
573-254	3
573-255	2
573-256	2
573-257	2
573-258	2
573-259	2
573-260	2
573-261	2
573-262	2
573-263	2
573-264	2
573-265	2
573-266	2
573-267	2
573-268	2
573-269	2
573-270	1
573-271	1

Part Number	Min. Pkg. Qty.
573-272	1
573-273	1
573-309	10
573-310	10
573-311	10
573-312	9
573-313	9
573-314	8
573-315	8
573-316	8
573-317	8
573-318	8
573-319	8
573-320	8
573-321	8
573-322	8
573-323	8
573-324	8
573-325	8
573-326	8
573-327	8
573-328	8
573-329	8
573-330	8
573-331	8
573-332	8
573-333	8
573-334	7
573-335	7
573-336	7
573-337	7

Part Number	Min. Pkg. Qty.
573-338	7
573-339	6
573-340	6
573-341	6
573-342	5
573-343	5
573-344	4
573-345	4
573-346	4
573-347	4
573-348	4
573-350	3
573-351	3
573-352	3
573-353	3
573-354	3
573-355	3
573-356	3
573-357	2
573-358	2
573-359	2
573-360	2
573-361	2
573-362	2
573-363	2
573-364	2
573-366	2
573-367	2
573-368	2
573-369	2
573-370	2

Part Number	Min. Pkg. Qty.
573-371	2
573-372	2
573-375	2
573-425	3
573-426	3
573-427	3
573-428	3
573-429	3
573-430	3
573-431	3
573-432	2
573-433	2
573-434	2
573-435	2
573-436	2
573-437	2
573-438	2
573-439	2
573-440	2
573-441	2
573-442	2
573-443	2
573-444	1
573-445	1
573-446	1
573-447	1
573-448	1
573-450	1
573-455	1

STYLE 574 BUNA-N BACK-UP RINGS

Molded of 90A Durometer Buna-N Rubber, these "Parback®" Style Dished Cross Section back-up rings provide excellent extrusion resistance. Stretched for installation, they return quickly to their original size for easy installation.

NOTE: Sizes (Dash No.) corresponds to standard o-ring numbers.

SEAL INFORMATION	
MATERIAL	90A BUNA-N RUBBER
TEMPERATURE RANGE	-40° TO +240° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Dash No.)

Part Number	Min. Pkg. Qty.
574-004	25
574-005	25
574-006	25
574-007	25
574-008	25
574-009	25
574-010	25
574-011	25
574-012	25
574-013	25
574-014	25
574-015	25
574-016	25
574-017	25
574-018	25
574-019	25
574-020	25
574-021	25
574-022	25
574-023	25
574-024	25
574-025	25
574-026	25
574-027	25
574-028	10
574-029	10
574-030	10
574-031	10
574-032	10
574-033	10
574-034	10
574-035	10
574-036	10
574-037	10
574-038	10
574-039	10

Part Number	Min. Pkg. Qty.
574-040	10
574-041	10
574-042	10
574-043	10
574-044	5
574-045	5
574-046	5
574-047	5
574-048	5
574-049	5
574-050	5
574-102	25
574-103	25
574-104	25
574-105	25
574-106	25
574-107	25
574-108	25
574-109	25
574-110	25
574-111	25
574-112	25
574-113	25
574-114	25
574-115	25
574-116	25
574-117	25
574-118	25
574-119	25
574-120	25
574-121	25
574-122	25
574-123	25
574-124	25
574-125	25
574-126	10

Part Number	Min. Pkg. Qty.
574-127	10
574-128	10
574-129	10
574-130	10
574-131	10
574-132	10
574-133	10
574-134	10
574-135	10
574-136	10
574-137	10
574-138	10
574-139	10
574-140	10
574-141	10
574-142	10
574-143	10
574-144	10
574-145	10
574-146	10
574-147	10
574-148	10
574-149	10
574-150	10
574-151	10
574-152	5
574-153	5
574-154	5
574-155	5
574-156	5
574-157	5
574-158	5
574-159	1
574-160	1
574-161	1
574-162	1

Part Number	Min. Pkg. Qty.
574-163	1
574-164	1
574-165	1
574-166	1
574-167	1
574-168	1
574-169	1
574-170	1
574-171	1
574-172	1
574-173	1
574-174	1
574-175	1
574-176	1
574-177	1
574-178	1
574-202	25
574-205	25
574-206	25
574-207	25
574-208	25
574-209	25
574-210	25
574-211	25
574-212	25
574-213	25
574-214	25
574-215	25
574-216	25
574-217	25
574-218	10
574-219	10
574-220	10
574-221	10
574-222	10
574-223	10

STYLE 574 BUNA-N BACK-UP RINGS

Part Number	Min. Pkg. Qty.
574-224	10
574-225	10
574-226	10
574-227	10
574-228	10
574-229	10
574-230	10
574-231	10
574-232	10
574-233	10
574-234	10
574-235	10
574-236	10
574-237	10
574-238	10
574-239	10
574-240	5
574-241	5
574-242	5
574-243	5
574-244	5
574-245	5
574-246	5
574-247	5
574-248	5
574-249	5
574-250	5
574-251	5
574-252	5
574-253	5
574-254	1
574-255	1
574-256	1
574-257	1
574-258	1
574-259	1
574-260	1
574-261	1
574-262	1
574-263	1
574-264	1
574-265	1
574-266	1
574-267	1
574-268	1
574-269	1
574-270	1
574-271	1

Part Number	Min. Pkg. Qty.
574-272	1
574-273	1
574-274	1
574-275	1
574-276	1
574-277	1
574-278	1
574-279	1
574-280	1
574-281	1
574-282	1
574-283	1
574-284	1
574-309	25
574-310	25
574-311	25
574-312	25
574-313	10
574-314	10
574-315	10
574-316	10
574-317	10
574-318	10
574-319	10
574-320	10
574-321	10
574-322	10
574-323	10
574-324	10
574-325	10
574-326	10
574-327	10
574-328	10
574-329	10
574-330	10
574-331	10
574-332	10
574-333	10
574-334	10
574-335	10
574-336	10
574-337	10
574-338	10
574-339	10
574-340	5
574-341	5
574-342	5
574-343	5

Part Number	Min. Pkg. Qty.
574-344	5
574-345	5
574-346	5
574-347	5
574-348	5
574-349	5
574-350	5
574-351	5
574-352	5
574-353	5
574-354	5
574-355	1
574-356	1
574-357	1
574-358	1
574-359	1
574-360	1
574-361	1
574-362	1
574-363	1
574-364	1
574-365	1
574-366	1
574-367	1
574-368	1
574-369	1
574-370	1
574-371	1
574-372	1
574-373	1
574-374	1
574-375	1
574-377	1
574-378	1
574-379	1
574-380	1
574-381	1
574-382	1
574-383	1
574-384	1
574-425	1
574-426	1
574-427	1
574-428	1
574-429	1
574-430	1
574-431	1
574-432	1

Part Number	Min. Pkg. Qty.
574-433	1
574-434	1
574-435	1
574-436	1
574-437	1
574-438	1
574-439	1
574-440	1
574-441	1
574-442	1
574-443	1
574-444	1
574-445	1
574-446	1
574-447	1
574-448	1
574-449	1
574-450	1
574-451	1
574-452	1
574-453	1
574-454	1
574-455	1
574-456	1
574-457	1
574-458	1
574-459	1
574-460	1
574-461	1
574-462	1
574-463	1
574-464	1
574-465	1
574-466	1
574-467	1
574-468	1
574-469	1
574-470	1
574-471	1
574-472	1
574-473	1

STYLE 575 URETHANE BACK-UP RINGS

Molded of 95A Durometer Urethane these back-up rings provide excellent extrusion resistance. Stretched for installation, they return quickly to their original size for easy installation.

NOTE: Sizes (Dash No.) corresponds to standard o-ring numbers.

SEAL INFORMATION	
MATERIAL	95A DUROMETER URETHANE
TEMPERATURE RANGE	-65° TO +220° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Dash No.)

Part Number	Min. Pkg. Qty.
575-004	10
575-005	10
575-006	10
575-007	10
575-008	10
575-009	10
575-010	10
575-011	10
575-012	10
575-013	10
575-014	10
575-015	10
575-016	10
575-017	10
575-018	10
575-019	10
575-020	10
575-021	10
575-022	10
575-023	10
575-024	10
575-025	10
575-026	10
575-027	10
575-028	10
575-029	10
575-030	10
575-031	10
575-032	10
575-033	10
575-034	10
575-035	10
575-036	10
575-037	10
575-038	10

Part Number	Min. Pkg. Qty.
575-039	10
575-040	10
575-041	10
575-042	10
575-043	10
575-044	10
575-045	5
575-046	5
575-047	5
575-048	5
575-049	5
575-050	5
575-102	10
575-103	10
575-104	10
575-105	10
575-106	10
575-107	10
575-108	10
575-109	10
575-110	10
575-111	10
575-112	10
575-113	10
575-114	10
575-115	10
575-116	10
575-117	10
575-118	10
575-119	10
575-120	10
575-121	10
575-122	10
575-123	10
575-124	10

Part Number	Min. Pkg. Qty.
575-125	10
575-126	10
575-127	10
575-128	10
575-129	10
575-130	10
575-131	10
575-132	10
575-133	10
575-134	10
575-135	10
575-136	10
575-137	10
575-138	10
575-139	10
575-140	10
575-141	10
575-142	10
575-143	10
575-144	10
575-145	10
575-146	10
575-147	10
575-148	10
575-149	10
575-150	10
575-151	10
575-152	5
575-153	5
575-154	5
575-155	5
575-156	5
575-157	5
575-158	5
575-159	1

Part Number	Min. Pkg. Qty.
575-160	1
575-160	1
575-161	1
575-162	1
575-163	1
575-164	1
575-165	1
575-166	1
575-167	1
575-168	1
575-169	1
575-170	1
575-171	1
575-172	1
575-173	1
575-174	1
575-175	1
575-205	10
575-206	10
575-207	10
575-208	10
575-209	10
575-210	10
575-211	10
575-212	10
575-213	10
575-214	10
575-215	10
575-216	10
575-217	10
575-218	10
575-219	10
575-220	10
575-221	10
575-222	10

STYLE 575 URETHANE BACK-UP RINGS

Part Number	Min. Pkg. Qty.
575-223	10
575-224	10
575-225	10
575-226	10
575-227	10
575-228	10
575-229	10
575-230	10
575-231	10
575-232	10
575-233	10
575-234	10
575-235	10
575-236	10
575-237	5
575-238	5
575-239	5
575-240	5
575-241	5
575-242	5
575-243	5
575-244	5
575-245	5
575-246	5
575-247	5
575-248	1
575-249	1
575-250	1
575-251	1
575-252	1
575-253	1
575-254	1
575-255	1
575-256	1
575-257	1
575-258	1
575-259	1
575-260	1
575-261	1
575-262	1
575-263	1
575-264	1

Part Number	Min. Pkg. Qty.
575-265	1
575-266	1
575-267	1
575-268	1
575-269	1
575-270	1
575-271	1
575-272	1
575-273	1
575-274	1
575-275	1
575-276	1
575-278	1
575-279	1
575-309	10
575-310	10
575-311	10
575-312	10
575-313	10
575-314	10
575-315	10
575-316	10
575-317	10
575-318	10
575-319	10
575-320	10
575-321	10
575-322	10
575-323	10
575-324	10
575-325	10
575-326	10
575-327	10
575-328	10
575-329	10
575-330	10
575-331	10
575-332	10
575-333	10
575-334	10
575-335	10
575-336	10

Part Number	Min. Pkg. Qty.
575-337	10
575-338	10
575-339	10
575-340	5
575-341	5
575-342	5
575-343	5
575-344	5
575-345	5
575-346	5
575-347	5
575-348	5
575-349	5
575-350	5
575-351	1
575-352	1
575-353	1
575-354	1
575-355	1
575-356	1
575-357	1
575-358	1
575-359	1
575-360	1
575-361	1
575-362	1
575-363	1
575-364	1
575-365	1
575-366	1
575-367	1
575-368	1
575-369	1
575-370	1
575-371	1
575-372	1
575-373	1
575-374	1
575-375	1
575-376	1
575-377	1
575-379	1

Part Number	Min. Pkg. Qty.
575-381	1
575-382	1
575-383	1
575-421	3
575-425	3
575-426	3
575-427	1
575-428	1
575-429	1
575-430	1
575-431	1
575-432	1
575-433	1
575-434	1
575-435	1
575-436	1
575-437	1
575-438	1
575-439	1
575-440	1
575-441	1
575-442	1
575-443	1
575-444	1
575-445	1
575-446	1
575-447	1
575-448	1
575-448	1
575-449	1
575-450	1
575-451	1
575-452	1
575-453	1
575-454	1
575-455	1
575-456	1
575-457	1
575-460	1

STYLE 575 PTFE BACK-UP RINGS

Letter suffix: T = Solid, ST = Split, TS = Spiral Cut, TW = .085 Wide

SEAL INFORMATION	
MATERIAL	PTFE
TEMPERATURE RANGE	-40° TO +500° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Dash No.) (Config.)

Part Number	Min. Pkg. Qty.
575-004ST	6
575-005ST	6
575-006ST	6
575-007ST	6
575-008ST	6
575-009ST	6
575-010ST	12
575-010T	6
575-011ST	6
575-011T	1
575-012ST	10
575-013ST	6
575-014ST	6
575-015ST	6
575-016ST	10
575-017ST	5
575-018ST	5
575-019ST	5
575-020ST	5
575-020T	5
575-021ST	5
575-022ST	5
575-022T	5
575-023ST	5
575-024ST	5
575-025ST	5
575-026ST	4
575-026T	4
575-027ST	4
575-028ST	4
575-029ST	3
575-029T	3
575-030ST	3
575-031T	2
575-032T	2

Part Number	Min. Pkg. Qty.
575-033ST	2
575-033T	2
575-034T	2
575-036T	2
575-037T	2
575-038ST	1
575-038T	2
575-039T	2
575-041T	2
575-044T	2
575-045T	2
575-110ST	6
575-111ST	5
575-112ST	5
575-112T	5
575-112TS	5
575-113ST	5
575-114ST	4
575-114T	5
575-115ST	4
575-116ST	8
575-116T	4
575-116TS	5
575-117ST	4
575-117T	4
575-118ST	4
575-118T	4
575-118TS	4
575-119ST	10
575-119T	3
575-120ST	3
575-120T	3
575-121ST	3
575-122ST	3
575-122T	3

Part Number	Min. Pkg. Qty.
575-123ST	6
575-124ST	6
575-125ST	6
575-126ST	3
575-127ST	3
575-128ST	3
575-129ST	3
575-130ST	3
575-131ST	3
575-131T	3
575-132ST	3
575-133ST	3
575-134ST	3
575-134TS	1
575-135ST	3
575-136ST	3
575-137ST	3
575-138ST	2
575-139T	2
575-139TS	1
575-140T	2
575-140TS	1
575-141T	2
575-144ST	2
575-146T	2
575-148T	2
575-149T	2
575-152T	2
575-159T	1
575-210ST	4
575-210T	4
575-211ST	6
575-212ST	4
575-212T	2
575-212TS	1

Part Number	Min. Pkg. Qty.
575-212TW	1
575-213ST	4
575-214ST	4
575-214T	6
575-215ST	4
575-216ST	4
575-217ST	4
575-218ST	5
575-218T	5
575-218TS	5
575-219ST	3
575-219T	1
575-220ST	3
575-220T	2
575-220TS	1
575-221ST	3
575-221T	3
575-222ST	3
575-222TS	3
575-223T	2
575-223TS	1
575-224ST	3
575-224T	3
575-224TS	1
575-225ST	3
575-226ST	5
575-226TS	2
575-227ST	3
575-228ST	2
575-229ST	2
575-230ST	2
575-230T	2
575-231T	2
575-232T	2
575-232TS	2

STYLE 575 PTFE BACK-UP RINGS

Part Number	Min. Pkg. Qty.
575-232TW	1
575-233T	2
575-234T	2
575-235ST	2
575-235T	2
575-236T	2
575-237T	2
575-238T	2
575-239ST	2
575-239T	2
575-240T	2
575-240TS	2
575-241ST	2
575-242T	2
575-243ST	2
575-244T	1
575-244T	1
575-245T	2
575-247T	2
575-248T	2
575-249ST	1
575-249T	1
575-250T	1
575-252T	1
575-253T	1
575-254T	1

Part Number	Min. Pkg. Qty.
575-256T	1
575-258T	1
575-260T	1
575-261T	1
575-262TS	1
575-263ST	1
575-320T	2
575-325ST	2
575-325T	2
575-326ST	2
575-326T	1
575-327ST	2
575-328ST	2
575-329ST	1
575-330ST	2
575-330T	2
575-332TS	1
575-333ST	2
575-333T	2
575-333TS	1
575-334ST	2
575-334TS	1
575-335T	1
575-336ST	1
575-337TS	1
575-338ST	1

Part Number	Min. Pkg. Qty.
575-338TS	1
575-338T	1
575-340ST	1
575-340TS	1
575-341ST	1
575-342ST	1
575-344ST	1
575-344TS	1
575-345ST	2
575-345TS	1
575-346ST	1
575-346TS	1
575-348TS	1
575-349T	1
575-349TS	1
575-350ST	1
575-354ST	1
575-356ST	1
575-359T	1
575-360T	1
575-362ST	1
575-363T	1
575-363TS	1
575-364T	1
575-365T	1
575-367ST	1

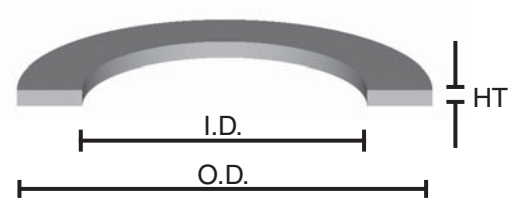
Part Number	Min. Pkg. Qty.
575-375T	1
575-379T	1
575-413ST	1
575-425ST	1
575-426ST	1
575-427ST	1
575-430ST	1
575-431T	1
575-433ST	1
575-436ST	1
575-437T	1
575-438T	1
575-439T	1
575-440ST	1
575-443T	1
575-445TS	1
575-446T	1
575-447T	1
575-448T	1
575-450T	1
575-451T	1
575-452T	1
575-454T	1

STYLE 575 PTFE BACK-UP RINGS - SPECIAL SIZES

Part Number	I.D.	O.D.	HT.
575-1-3/16X1-1/2T	1-3/16	1-1/2	0.062
575-2.4X2.6X.06ST	2.457	2.687	0.060
575-2.7X2.9X.06ST	2.707	2.937	0.060
575-5.5X6.12T	5-1/2	6-1/8	0.062
575-6.12X7ST	6-1/8	7	1/8

Part Number	I.D.	O.D.	HT.
575-7X8T	7	8	1/8
575-7.75X8.75X.125T	7-3/4	8-3/4	1/8
575-9X10T	9	10	1/8
575-13X14T	13	14	0.140

STYLE 576 SPLIT NYLON BACK-UP RINGS



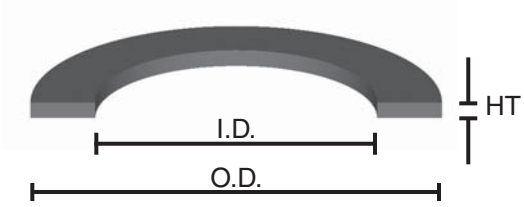
SEAL INFORMATION	
MATERIAL	NYLON
TEMPERATURE RANGE	-40° TO +250° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Dash No.)

Part Number	ID	OD	HT
576-314	3/4	1-1/8	.070
576-216	1-1/8	1-3/8	.060
576-320	1-1/8	1-1/2	.070
576-324	1-3/8	1-3/4	.070
576-325	1-1/2	1-7/8	.070
576-326	1-5/8	2	.070
576-327	1-3/4	2-1/8	.070
576-328	1-7/8	2-1/4	.070
576-329	2	2-3/8	.070
576-330	2-1/8	2-1/2	.070
576-331	2-1/4	2-5/8	.070
576-407	2-1/4	2-3/4	.070
576-2.37X.125	2-3/8	2-5/8	.070
576-332	2-3/8	2-3/4	.060
576-408	2-3/8	2-7/8	.070
576-2.50X.125	2-1/2	2-3/4	.070
576-333	2-1/2	2-7/8	.070
576-409	2-1/2	3	.070
576-334	2-5/8	3	.070
576-2.62X3.00X.085	2-5/8	3	.085
576-2.62X3.12X.06	2-5/8	3-1/8	.060
576-411	2-3/4	3-1/4	.070

Part Number	ID	OD	HT
576-412	2-7/8	3-3/8	.070
576-413	3	3-1/2	.070
576-338	3-1/8	3-1/2	.070
576-3.18X3.75	3-3/16	3-3/4	.070
576-415	3-1/4	3-3/4	.070
576-3.4X4.0X1/8	3.405	4	.125
576-417	3-1/2	4	.070
576-418-1/2	3-11/16	4-3/16	.070
576-419	3-3/4	4-1/4	.070
576-421	4	4-1/2	.070
576-4X5	4	5	.125
576-423-1	4-1/4	4-3/4	.070
576-425	4-1/2	5	.070
576-4.5X5.2	4-1/2	5-1/4	.130
576-427	4-3/4	5-1/4	.070
576-429	5	5-1/2	.075
576-433	5-1/2	6	.120
576-5.5X6.25	5-1/2	6-1/4	.187
576-5.75X.185	5-3/4	6-1/8	.185
576-6.00X6.75X.125	6	6-3/4	.125
576-6X7	6	7	.125

STYLE 590 HIGH PERFORMANCE BACK-UP RINGS

Style 590 Back-up Rings feature exceptional strength and abrasion resistance along with a 53 Shore D hardness rating which makes them suitable for high pressure service where extrusion is a problem. Primarily used as a u-seal back-up, these rings can be used with o-rings. They also retrofit urethane and teflon back-up rings, with greater performance characteristics. "S" suffix designates a split ring.



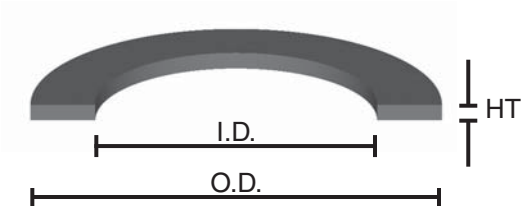
SEAL INFORMATION	
MATERIAL	HIGH PERFORMANCE URETHANE
TEMPERATURE RANGE	-40° TO +275° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Dash No.)

Part Number	I.D.	O.D.	HT.
590-15	1/2	3/4	1/16
590-17	5/8	7/8	1/16
590-19S	3/4	1	1/16
590-32	1	1-5/16	1/16
590-34S	1-3/16	1-1/2	1/16
590-36	1-3/8	1-11/16	1/16
590-45	1-5/8	2	1/16
590-45S	1-5/8	2	1/16
590-46	1-3/4	2-1/8	1/16
590-48	2	2-3/8	1/16
590-227	2-1/8	2-3/8	1/16
590-49	2-1/8	2-1/2	1/16
590-49S	2-1/8	2-1/2	1/16
590-228	2-1/4	2-1/2	1/16
590-54	2-1/2	2-15/16	1/16
590-57	2-13/16	3-1/4	1/16
590-57S	2-13/16	3-1/4	1/16
590-58	3	3-7/16	1/16
590-338	3-1/8	3-1/2	1/16
590-237	3-3/8	3-5/8	1/16
590-341	3-1/2	3-7/8	1/16
590-66	3-1/2	4	1/16
590-66S	3-1/2	4	1/16
590-239	3-5/8	3-7/8	1/16
590-345	4	4-3/8	1/16
590-68	4	4-1/2	1/16

Part Number	I.D.	O.D.	HT.
590-346	4-1/8	4-1/2	1/16
590-347	4-1/4	4-5/8	1/16
590-73S	4-7/16	5	1/16
590-349	4-1/2	4-7/8	1/16
590-70	4-1/2	5	1/16
590-70S	4-1/2	5	1/16
590-352	4-7/8	5-1/4	1/16
590-75	5	5-9/16	1/16
590-354	5-1/8	5-1/2	1/16
590-79	5-3/8	6	1/16
590-79S	5-3/8	6	1/16
590-5.43X6S	5-7/16	6	1/16
590-5.5X6.12	5-1/2	6-1/8	1/16
590-358	5-5/8	6	1/16
590-83	6-3/8	7	1/16
590-83S	6-3/8	7	1/16
590-6.43X7S	6-7/16	7	1/16
590-84	7-3/8	8	1/16
590-84S	7-3/8	8	1/16
590-85S	9-5/16	10	1/16
590-11X12S	11	12	1/16
590-86S	11-1/4	12	1/16
590-87S	13	14	1/16
590-13.18X14S	13-3/16	14	1/16

STYLE 595 PTFE BACK-UP RINGS FOR U-SEALS

Used primarily as an anti-extrusion device for u-seals, these back-up rings combine high performance with very low friction. "ST" suffix designates a split ring.



SEAL INFORMATION	
MATERIAL	PTFE
TEMPERATURE RANGE	-40° TO +500° F
PRESSURE RANGE	VARIES ACCORDING TO DIAMETRAL CLEARANCE
PART NUMBER	(Prefix) - (Dash No.) (Config.)

Part Number	ID	OD	HT
595-15T	1/2	3/4	1/16
595-17T	5/8	7/8	1/16
595-19ST	3/4	1	1/16
595-32T	1	1-5/16	1/16
595-34ST	1-3/16	1-1/2	1/16
595-36T	1-3/8	1-11/16	1/16
595-45ST	1-5/8	2	1/16
595-46T	1-3/4	2-1/8	1/16
595-48T	2	2-3/8	1/16
595-49ST	2-1/8	2-1/2	1/16
595-54T	2-1/2	2-15/16	1/16
595-57ST	2-13/16	3-1/4	1/16
595-58T	3	3-7/16	1/16
595-66ST	3-1/2	4	1/16
595-66T	3-1/2	4	1/16
595-3.62X4X.09	3-5/8	4	0.090
595-68T	4	4-1/2	1/16

Part Number	ID	OD	HT
595-73ST	4-7/16	5	1/16
595-70ST	4-1/2	5	1/16
595-70T	4-1/2	5	1/16
595-75T	5	5-9/16	1/16
595-5.12X6ST	5-1/8	6	1/8
595-5.2X6T	5-1/4	6	1/8
595-79ST	5-3/8	6	1/16
595-5.43X6ST	5-7/16	6	1/16
595-83ST	6-3/8	7	1/16
595-6.43X7ST	6-7/16	7	1/16
595-84ST	7-3/8	8	1/16
595-85ST	9-5/16	10	1/16
595-11X12ST	11	12	1/16
595-86ST	11-1/4	12	1/16
595-87ST	13	14	1-16
595-13.18X14ST	13-3/16	14	1/16

BACK-UP RING ASSORTMENT KITS

574 BACK-UP RING KIT

Part Number: 574 Kit

PART NUMBER	QTY	PART NUMBER	QTY
574-005	10	574-114	10
574-006	10	574-115	10
574-007	10	574-116	10
574-008	10	574-117	5
574-009	10	574-118	5
574-010	10	574-119	5
574-011	10	574-120	5
574-012	10	574-121	5
574-013	10	574-210	7
574-014	10	574-211	7
574-015	10	574-212	7
574-016	10	574-213	7
574-017	10	574-214	5
574-018	10	574-215	5
574-110	10	574-216	5
574-111	10	574-217	5
574-112	10	574-218	5
574-113	10	574-219	5

This 293 piece kit contains 36 of the most popular size “Parback®” Style Dished Cross Section back-up rings. Molded of 90A Durometer Buna-N Rubber, they stretch for installation and return quickly to their original size. SIZES CORRESPOND TO O-RING NUMBERS. Your shop and service truck should not be without this handy kit.

575 BACK-UP RING KIT

Part Number: 575 Kit

PART NUMBER	QTY	PART NUMBER	QTY
575-111	25	575-216	25
575-112	25	575-217	15
575-113	25	575-218	15
575-114	25	575-219	15
575-115	25	575-220	15
575-116	25	575-221	15
575-210	25	575-222	15
575-211	25	575-223	15
575-212	25	575-224	15
575-213	25	575-325	10
575-214	25	575-326	10
575-215	25	575-327	10

This 475 piece kit contains 24 of the most popular size Urethane Back-up Rings. This assortment is essential for parts counters, shop use, and service trucks.

BACK-UP RING ASSORTMENT KITS

PTFE BACK-UP RING KIT

Part Number: 575 PTFE Kit S

PART NUMBER	QTY	PART NUMBER	QTY
575-005ST	15	575-114ST	10
575-006ST	15	575-115ST	10
575-007ST	15	575-116ST	10
575-008ST	15	575-117ST	5
575-009ST	15	575-118ST	5
575-010ST	15	575-119ST	5
575-011ST	15	575-120ST	5
575-012ST	15	575-121ST	5
575-013ST	10	575-210ST	5
575-014ST	10	575-211ST	5
575-015ST	10	575-212ST	5
575-016ST	10	575-213ST	5
575-017ST	10	575-214ST	5
575-018ST	10	575-215ST	5
575-110ST	10	575-216ST	5
575-111ST	10	575-217ST	5
575-112ST	10	575-218ST	5
575-113ST	10	575-219ST	5

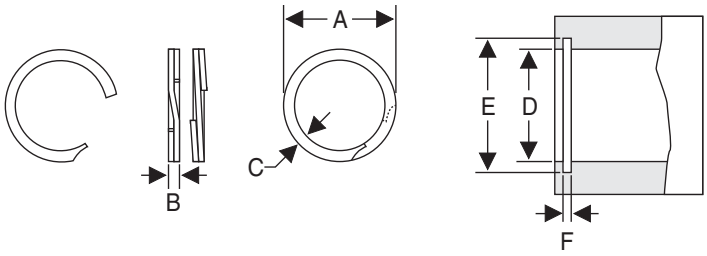
This 325 piece kit contains 36 of the most popular size PTFE Back-up Rings. These rings are compatible with all hydraulic fluids, since they are virtually chemically inert, and can be used in applications involving elevated operating temperatures. These rings are scarf cut to facilitate installation.

Is there an assortment that you use that we don't offer?

Let us know what you need and we will give you a quote!

SPIRAL INTERNAL RETAINER RINGS

SPIRAL RETAINER CROSS REFERENCE	
Prefix	Ramsey Spirolox Prefix
VH-	UR-
WH-	RR-
WHM-	RRN-
WHT-	RRT-



Part Number	A Free OD	B Thickness	C Radial Wall	D Housing Dia.	E Groove Dia.	F Groove Width
WHM-50	.538	.035	.045	.500	.530	.039
WH-62	.658	.025	.045	.625	.651	.030
WHM-62	.675	.035	.055	.625	.665	.039
WHT-68	.730	.035	.055	.688	.724	.039
WHM-68	.743	.035	.065	.688	.732	.039
WHM-75	.807	.035	.065	.750	.796	.039
WH-78	.821	.031	.065	.781	.812	.036
WH-87	.922	.031	.065	.875	.912	.036
WHM-87	.943	.042	.085	.875	.931	.046
WH-100	1.054	.037	.075	1.000	1.043	.042
WHM-100	1.080	.042	.085	1.000	1.066	.046
WH-112	1.180	.037	.075	1.125	1.167	.042
WHM-112	1.205	.050	.103	1.125	1.197	.056
WH-125	1.312	.043	.085	1.250	1.298	.048
WHM-125	1.339	.050	.103	1.250	1.330	.056
WH-128	1.342	.043	.085	1.281	1.329	.048
WHT-131	1.395	.050	.093	1.312	1.385	.056
VH-137	1.433	.025	.088	1.375	1.419	.031
WH-137	1.442	.043	.095	1.375	1.427	.048
WHM-137	1.475	.050	.118	1.375	1.461	.056
VH-150	1.559	.025	.088	1.500	1.544	.031
WH-150	1.567	.043	.095	1.500	1.552	.048
WHT-150	1.591	.050	.108	1.500	1.580	.056
WHM-150	1.605	.050	.118	1.500	1.594	.056
WH-156	1.634	.049	.108	1.562	1.617	.056
WHM-156	1.675	.062	.128	1.562	1.658	.068
VH-162	1.701	.031	.118	1.625	1.682	.039
WH-162	1.701	.049	.108	1.625	1.684	.056
WHT-162	1.727	.062	.113	1.625	1.715	.068
WH-175	1.834	.049	.118	1.750	1.813	.056
WHT-175	1.858	.062	.118	1.750	1.845	.068
WHM-175	1.876	.062	.128	1.750	1.858	.068
VH-187	1.953	.031	.118	1.875	1.932	.039
WH-187	1.960	.049	.118	1.875	1.942	.056
WHT-187	1.989	.062	.128	1.875	1.975	.068
VH-200	2.079	.031	.118	2.000	2.057	.039
WH-200	2.091	.049	.128	2.000	2.071	.056
WHT-200	2.125	.062	.138	2.000	2.110	.068
WH-204	2.138	.049	.128	2.047	2.118	.056
WHM-200	2.142	.062	.158	2.000	2.122	.068

SPIRAL INTERNAL RETAINER RINGS

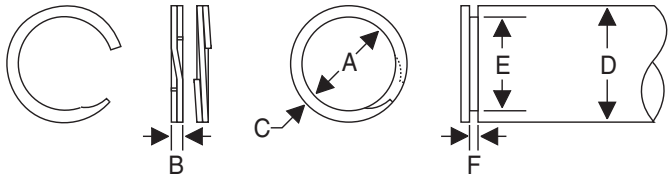
Part Number	A Free OD	B Thickness	C Radial Wall	D Housing Dia.	E Groove Dia.	F Groove Width
VH-206	2.162	.031	.158	2.062	2.18	.039
WHT-206	2.190	.078	.141	2.062	2.175	.086
WHM-206	2.201	.078	.168	2.062	2.186	.086
WHM-218	2.334	.078	.168	2.188	2.318	.086
VH-225	2.352	.031	.158	2.250	2.326	.039
WHT-225	2.386	.078	.141	2.250	2.370	.086
WHM-225	2.399	.078	.168	2.250	2.382	.086
WH-231	2.413	.049	.138	2.312	2.390	.056
VH-231	2.415	.031	.158	2.312	2.388	.039
WH-237	2.476	.049	.138	2.375	2.453	.056
VH-243	2.541	.031	.158	2.437	2.513	.039
WHT-244	2.588	.078	.188	2.440	2.570	.086
VH-250	2.605	.031	.158	2.5	2.576	.039
WH-250	2.606	.049	.148	2.500	2.582	.056
WHT-250	2.653	.078	.188	2.500	2.635	.086
WHM-250	2.667	.078	.200	2.500	2.648	.086
WHT-253	2.687	.078	.188	2.530	2.668	.086
WHT-256	2.720	.093	.188	2.562	2.834	.103
WHM-256	2.733	.093	.225	2.562	2.714	.103
VH-281	2.920	.031	.158	2.812	2.888	.039
VH-281SS	2.920	.031	.158	2.812	2.888	.039
WHT-275	2.921	.093	.188	2.750	2.900	.103
WH-283	2.954	.049	.168	2.834	2.928	.056
WH-287	2.995	.049	.168	2.875	2.969	.056
WHT-283	3.009	.093	.188	2.834	2.987	.103
WHM-283	3.027	.093	.225	2.834	3.006	.103
VH-300	3.110	.031	.158	3.000	3.076	.039
WH-300	3.122	.061	.168	3.000	3.096	.068
WHT-300	3.188	.093	.188	3.000	3.165	.103
WHM-300	3.204	.093	.225	3.000	3.182	.103
WHT-312	3.318	.111	.250	3.125	3.295	.120
WH-325	3.379	.061	.178	3.250	3.350	.068
WHT-325	3.450	.111	.250	3.250	3.426	.120
WH-350	3.636	.061	.188	3.500	3.606	.068
WHLA-368	3.684	.060	.168	3.500	3.665	.068
WH-356	3.703	.061	.198	3.562	3.672	.068
WHT-350	3.716	.111	.250	3.500	3.690	.120
WHL-371	3.725	.086	.187	3.500	3.705	.091
WHM-350	3.736	.111	.281	3.500	3.710	.120
WHL-378-HDC	3.780	.077	.132	3.625	3.755	.086
WHL-392	3.929	.093	.187	3.750	3.909	.103
WH-400	4.157	.061	.218	4.000	4.124	.068
WH-406	4.222	.061	.218	4.063	4.187	.068
WHT-400	4.248	.111	.250	4.000	4.220	.120
WHL-424	4.249	.090	.187	4.125	4.220	.098
WHM-400	4.270	.111	.312	4.000	4.240	.120
VH-412	4.279	.046	.225	4.125	4.235	.052

SPIRAL INTERNAL RETAINER RINGS

Part Number	A Free OD	B Thickness	C Radial Wall	D Housing Dia.	E Groove Dia.	F Groove Width
WHM-425	4.520	.111	.312	4.250	4.490	.120
WHM-433	4.600	.111	.312	4.330	4.570	.120
WH-450	4.674	.061	.238	4.500	4.636	.068
WHL-472	4.721	.093	.187	4.500	4.700	.098
WHL-473	4.732	.111	.250	4.500	4.712	.120
WHT-450	4.768	.111	.312	4.500	4.735	.120
WHM-450	4.770	.111	.312	4.500	4.740	.120
VH-462	4.784	.046	.225	4.625	4.735	.052
WHL-495	4.958	.093	.187	4.750	4.938	.103
WHT-475	5.028	.111	.312	4.750	4.995	.120
WH-500	5.185	.072	.250	5.000	5.144	.079
WHL-525	5.252	.090	.187	5.125	5.223	.098
WHT-500	5.295	.111	.312	5.000	5.260	.120
WH-525	5.436	.072	.250	5.250	5.393	.079
WH-550	5.693	.072	.250	5.550	5.647	.079
VH-550	5.694	.061	.225	5.500	5.638	.067
WH-551	5.703	.072	.250	5.511	5.658	.079
WHL-573	5.739	.111	.250	5.500	5.720	.120
WHL-574	5.740	.093	.187	5.500	5.720	.098
WHT-550	5.810	.127	.375	5.500	5.770	.139
WH-570	5.909	.072	.250	5.708	5.861	.079
VH-575	5.953	.061	.225	5.750	5.894	.067
WHL-595	5.956	.122	.187	5.750	5.936	.131
WH-600	6.202	.072	.250	6.000	6.153	.079
WHM-600	6.314	.127	.350	6.000	6.270	.139
WHT-600	6.314	.127	.375	6.000	6.270	.139
WH-612	6.349	.086	.312	6.125	6.297	.094
WHL-672	6.726	.111	.250	6.500	6.706	.120
WHL-683	6.830	.105	.204	6.500	6.800	.115
WHT-650	6.837	.165	.312	6.500	6.790	.174
WHT-662	6.973	.165	.312	6.625	6.925	.174
VH-675	6.988	.061	.265	6.750	6.919	.067
WH-700	7.239	.086	.312	7.000	7.182	.094
WHL-724	7.249	.122	.245	6.875	7.229	.131
WHT-700	7.366	.165	.312	7.000	7.315	.174
WH-712	7.376	.086	.312	7.125	7.317	.094
WHL-770	7.700	.111	.250	7.500	7.680	.120
WH-750	7.754	.086	.312	7.500	7.692	.094
WHL-849	8.493	.122	.245	8.125	8.473	.131
WHL-871	8.710	.111	.250	8.500	8.690	.120
WHL-876	8.760	.111	.250	8.520	8.740	.120
WH-850	8.780	.086	.375	8.500	8.712	.094
WHL-992	9.927	.108	.250	9.625	9.907	.115
WHL-1013	10.120	.108	.250	10.00	10.100	.115
WHT-975	10.260	.189	.375	9.750	10.189	.209
WHT-1050	11.072	.189	.375	10.500	10.970	.209

SPIRAL EXTERNAL RETAINER RINGS

SPIRAL RETAINER CROSS REFERENCE	
Prefix	Ramsey Spirolox Prefix
VS-	US-
WS-	RS-
WST-	RSN-
WSM-	RST-

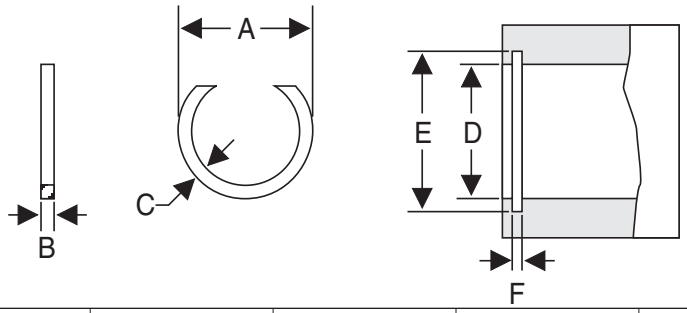


Part Number	A Free ID	B Thickness	C Radial Wall	D Shaft Dia.	E Groove Dia.	F Groove Width
WSM-50	.464	.035	.050	.500	.468	.039
WSM-62	.583	.035	.055	.625	.588	.039
WSM-75	.698	.042	.065	.750	.704	.046
WSM-87	.814	.042	.075	.875	.821	.046
WST-93	.886	.042	.075	.938	.894	.046
WSM-100	.932	.042	.085	1.000	.940	.046
WST-106	1.005	.050	.088	1.062	1.015	.056
WSM-112	1.047	.050	.103	1.125	1.059	.056
WSM-125	1.163	.050	.103	1.250	1.176	.056
WS-131	1.251	.043	.095	1.312	1.264	.048
WSM-137	1.277	.050	.118	1.375	1.291	.056
WS-137	1.308	.043	.095	1.375	1.323	.048
WS-143	1.370	.043	.095	1.437	1.385	.048
WSM-150	1.390	.050	.118	1.500	1.406	.056
WST-162	1.537	.062	.118	1.625	1.550	.068
VS-162	1.550	.031	.118	1.625	1.568	.039
WST-168	1.598	.062	.118	1.687	1.610	.068
WSM-175	1.633	.062	.128	1.750	1.650	.068
WST-175	1.657	.062	.118	1.750	1.670	.068
WS-175	1.673	.049	.118	1.750	1.691	.056
WST-187	1.774	.062	.123	1.875	1.790	.068
VS-187	1.798	.031	.118	1.875	1.818	.039
WSM-200	1.867	.062	.158	2.000	1.886	.068
WS-196	1.882	.049	.128	1.969	1.871	.056
WS-206	1.971	.049	.128	2.062	1.992	.056
WS-225	2.153	.049	.138	2.250	2.176	.056
WS-231	2.211	.049	.138	2.312	2.340	.056
WS-236	2.261	.049	.138	2.362	2.284	.056
WST-250	2.366	.078	.188	2.500	2.385	.086
WS-250	2.394	.049	.148	2.500	2.418	.056
WST-262	2.485	.078	.188	2.625	2.505	.086
WS-268	2.572	.049	.158	2.688	2.5796	.056
WST-275	2.604	.093	.188	2.750	2.625	.103
WS-275	2.635	.049	.158	2.750	2.660	.056
WS-293	2.817	.049	.168	2.937	2.843	.056

SPIRAL EXTERNAL RETAINER RINGS

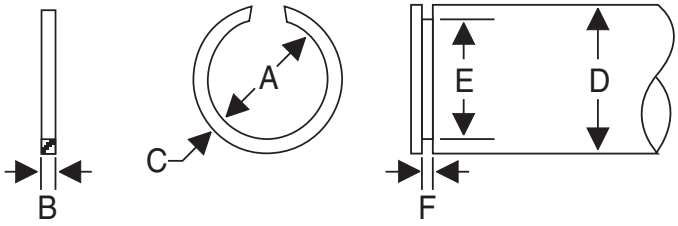
Part Number	A Free ID	B Thickness	C Radial Wall	D Shaft Dia.	E Groove Dia.	F Groove Width
WST-300	2.838	.093	.188	3.000	2.860	.103
WS-312	3.000	.061	.178	3.125	3.027	.068
WSM-325	3.054	.093	.225	3.250	3.076	.103
WS-325	3.121	.061	.178	3.250	3.150	.068
WS-334	3.210	.061	.188	3.343	3.239	.068
WST-343	3.254	.093	.188	3.437	3.280	.103
WST-350	3.315	.111	.250	3.500	3.340	.120
WS-362	3.483	.061	.198	3.625	3.515	.068
WST-375	3.550	.111	.250	3.750	3.577	.120
WST-400	3.787	.111	.250	4.000	3.756	.120
VS-400	3.867	.039	.188	4.000	3.908	.044
VS-412	3.973	.046	.225	4.125	4.015	.052
WST-425	4.032	.111	.250	4.250	4.065	.120
WST-450	4.280	.111	.250	4.500	4.310	.120
WS-450	4.326	.061	.238	4.500	4.364	.068
WST-500	4.755	.111	.250	5.000	4.790	.120
WS-525	5.064	.072	.250	5.25	5.107	.079
VS-525	5.067	.061	.225	5.250	5.119	.067
WS-537	5.187	.072	.250	5.375	5.228	.079
WS-550	5.308	.072	.250	5.500	5.353	.079
VS-625	6.033	.061	.265	6.250	6.094	.067
WST-675	6.182	.165	.312	6.750	6.465	.174

EATON NAN SERIES INTERNAL RETAINER RINGS



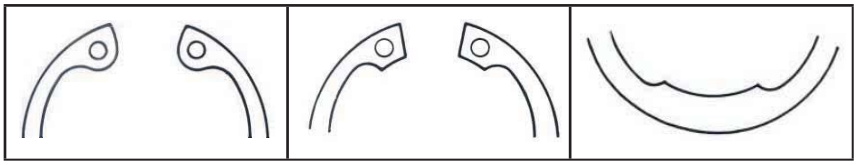
Part Number	A Free OD	B Thickness	C Radial Wall	D Housing Dia.	E Groove Dia.	F Groove Width
NAN-50	.530	.035	.040	.500	.524	.039
NAN-62	.670	.035	.048	.625	.657	.039
NAN-75	.799	.035	.048	.750	.786	.039
NAN-87	.934	.042	.062	.875	.919	.046
NAN-100	1.070	.042	.078	1.000	1.052	.046
NAN-112	1.202	.050	.093	1.125	1.181	.056
NAN-125	1.337	.050	.109	1.250	1.314	.056
NAN-137	1.472	.050	.109	1.375	1.447	.056
NAN-150	1.607	.050	.125	1.500	1.576	.056
NAN-156	1.668	.062	.125	1.562	1.642	.068

EATON XAN SERIES EXTERNAL RETAINER RINGS



Part Number	A Free ID	B Thickness	C Radial Wall	D Shaft Dia,	E Groove Dia.	F Groove Width
XAN-50	.464	.035	.048	.500	.474	.039
XAN-62	.586	.035	.062	.625	.597	.039
XAN-75	.703	.042	.062	.750	.716	.046
XAN-87	.820	.042	.078	.875	.835	.046
XAN-100	.941	.042	.093	1.000	.956	.046
XAN-112	1.060	.050	.093	1.125	1.075	.056
XAN-125	1.179	.050	.093	1.250	1.194	.056
XAN-137	1.291	.050	.109	1.375	1.390	.056
XAN-150	1.408	.050	.109	1.500	1.430	.056
XAN-275	2.594	.093	.187	2.750	2.624	.103
XAN-325	3.070	.093	.250	3.250	3.100	.103
XAN-375	3.541	.109	.250	3.750	3.576	.120

INTERNAL RETAINER RINGS (TRU-ARC TYPE)

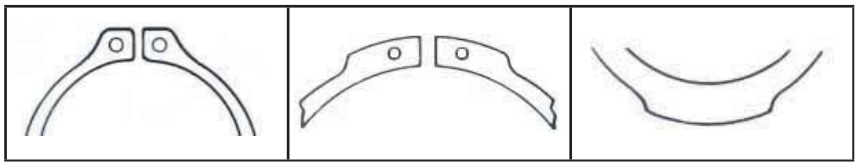


Part Number	Housing Diameter	Ring OD	Ring Thickness
300-025	.250	.280	.015
300-045	.453	.498	.025
300-050	.500	.548	.035
300-062	.625	.694	.035
300-075	.750	.831	.035
300-087	.875	.986	.042
300-090	.901	1.000	.042
300-093	.938	1.040	.042
300-100	1.000	1.111	.042
300-102	1.023	1.136	.042
300-106	1.062	1.18	.050
300-112	1.125	1.249	.050
300-118	1.187	1.300	.050
300-125	1.250	1.388	.050
300-137	1.375	1.526	.050
300-143	1.438	1.596	.050
300-150	1.500	1.660	.050
300-156	1.562	1.734	.062
300-162	1.625	1.804	.062
300-165	1.755	1.835	.062
300-168	1.688	1.874	.062
300-175	1.750	1.942	.062
300-187	1.989	2.072	.062
300-193	2.056	2.141	.062
300-200	2.000	2.210	.062
300-206	2.062	2.280	.078
300-212	2.125	2.350	.078
300-225	2.250	2.490	.078
300-231	2.312	2.56	.078
300-237	2.375	2.596	.078
300-244	2.440	2.702	.078
300-250	2.500	2.775	.078

Part Number	Housing Diameter	Ring OD	Ring Thickness
300-256	2.562	2.844	.093
300-262	2.625	2.910	.093
300-275	2.750	2.970	.093
300-281	2.812	3.121	.093
300-287	2.875	3.191	.093
300-300	3.000	3.325	.093
300-306	3.062	3.418	.109
300-312	3.125	3.488	.109
300-315	3.149	3.523	.109
300-325	3.250	3.623	.109
300-350	3.500	3.890	.109
300-354	3.543	3.936	.109
300-362	3.625	4.015	.109
300-375	3.750	4.140	.109
300-387	3.875	4.291	.109
300-393	3.938	4.358	.109
300-400	4.000	4.424	.109
300-412	4.125	4.558	.109
300-425	4.250	4.691	.109
300-433	4.331	4.756	.109
300-450	4.500	4.924	.109
300-462	4.625	5.076	.109
300-475	4.750	5.204	.109
300-500	5.000	5.485	.109
300-525	5.250	5.770	.125
300-537	5.375	5.910	.125
300-550	5.500	6.066	.125
300-600	6.000	6.620	.125
300-625	6.250	6.895	.156
300-650	6.500	7.170	.156
300-700	7.000	7.720	.156

EXTERNAL RETAINER RINGS (TRU-ARC TYPE)

HD= HEAVY DUTY RING



Part Number	Shaft Diameter	Ring ID	Ring Thickness
310-025	.250	.225	.025
310-037	.338	.375	.025
310-050	.500	.461	.035
310-062	.625	.579	.035
310-068	.688	.635	.042
310-075	.750	.693	.042
310-081	.812	.751	.042
310-087	.875	.810	.042
310-093	.938	.867	.042
310-100	1.000	.925	.042
310-112	1.125	1.041	.050
310-118	1.188	1.098	.050
310-125	1.250	1.156	.050
310-137	1.375	1.268	.050
310-150	1.500	1.387	.050
310-162	1.625	1.503	.062
310-175	1.750	1.618	.062
310-175HD	1.750	1.608	.109

Part Number	Shaft Diameter	Ring ID	Ring Thickness
310-200	2.000	1.850	.062
310-212	2.125	1.964	.078
310-225	2.250	2.081	.078
310-237	2.375	2.197	.078
310-250	2.500	2.313	.078
310-262	2.625	2.428	.078
310-275	2.750	2.543	.093
310-287	2.875	2.659	.093
310-300	3.000	2.775	.093
310-325	3.250	2.920	.093
310-350	3.500	3.237	.109
310-400	4.000	3.700	.109
310-425	4.250	3.989	.109
310-437	4.375	4.106	.109
310-450	4.500	4.223	.109
310-500	5.000	4.692	.109
310-575	5.750	5.396	.125

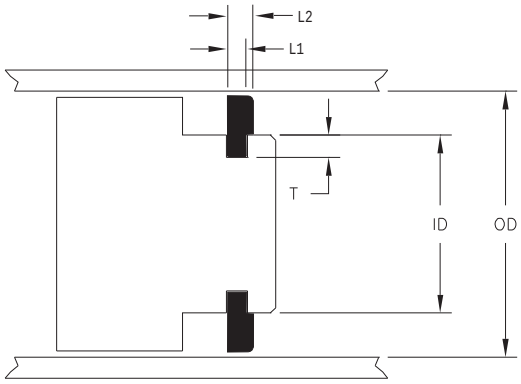
STYLE RSR RETAINER RINGS

Part Number	ID	C/S
RSR-031	0.280	0.035
RSR-052	0.517	0.053
RSR-092	0.920	0.080
RSR-105	1.050	0.075
RSR-138	1.380	0.140
RSR-150	1.500	0.062
RSR-150A	1.610	0.062
RSR-151	1.462	0.059
RSR-152	1.450	0.093
RSR-175	1.688	0.062
RSR-175X090	1.720	0.090
RSR-200	2.125	0.074
RSR-201	1.932	0.092
RSR-202	1.920	0.128

Part Number	ID	C/S
RSR-203	2.030	0.125
RSR-204	1.980	0.070
RSR-225	2.280	0.125
RSR-225A	2.186	0.092
RSR-225B	2.050	0.100
RSR-250	2.466	0.147
RSR-256X125	2.520	0.125
RSR-260	2.450	0.075
RSR-275	2.686	0.092
RSR-3.50X.18X.25	3.140	0.180
RSR-300	2.930	0.128
RSR-301	2.966	0.147
RSR-422	3.920	0.156

STYLE SR U-SEAL RETAINER RINGS

These rings are split for ease of installation and are retained in a groove. Their use is primarily to retain single acting piston seals. Commonly used with UFN style piston seals.



SEAL INFORMATION	
MATERIAL	ACETAL
TEMPERATURE RANGE	-22° TO +212° F

Part Number	OD	ID	T	L1	L2
SR-1.50X1.00	1.500	1.000	.250	.082	.130
SR-2.00X1.37	2.000	1.375	.250	.082	.130
SR-2.37X1.75	2.375	1.750	.250	.082	.130
SR-2.50X1.87	2.500	1.875	.250	.082	.130
SR-2.62X2.00	2.625	2.000	.250	.082	.130
SR-2.75X2.12	2.750	2.125	.250	.082	.130
SR-3.00X2.25	3.000	2.250	.250	.082	.130
SR-3.25X2.62	3.250	2.625	.250	.082	.130
SR-3.37X2.75	3.375	2.750	.250	.082	.130
SR-3.50X2.75	3.500	2.750	.250	.082	.130
SR-3.62X3.00	3.625	3.000	.250	.082	.130
SR-4.00X3.25	4.000	3.250	.250	.082	.130
SR-4.12X3.50	4.125	3.500	.250	.082	.130

RETAINER RING ASSORTMENT KITS

Each kit has an assortment of retainer rings (Tru-arc, Eaton, or spiral wound style) packed in a reusable plastic box. All rings are made in the USA from carbon spring steel.

Each kit contains: 18 sizes - 9 internal, 9 external • 216 rings per box • 12 rings per size

TRU-ARC

Part Number: 300-310 Kit

PART NUMBER	QTY.	PART NUMBER	QTY.
300-050	12	310-050	12
300-062	12	310-062	12
300-075	12	310-075	12
300-087	12	310-087	12
300-100	12	310-100	12
300-112	12	310-112	12
300-125	12	310-125	12
300-137	12	310-137	12
300-150	12	310-150	12

SPIRAL WOUND

Part Number: SRR Kit

PART NUMBER	QTY.	PART NUMBER	QTY.
WHM-050	12	WSM-050	12
WHM-062	12	WSM-062	12
WHM-075	12	WSM-075	12
WHM-087	12	WSM-087	12
WHM-100	12	WSM-100	12
WHM-112	12	WSM-112	12
WHM-125	12	WSM-125	12
WHM-137	12	WSM-137	12
WHM-150	12	WSM-150	12

EATON

Part Number: ERR Kit

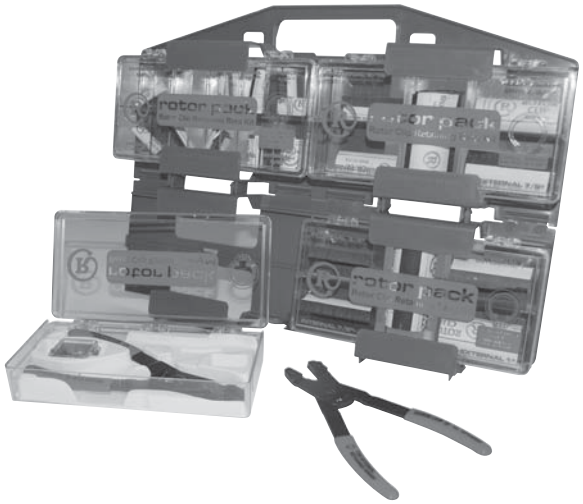
PART NUMBER	QTY.	PART NUMBER	QTY.
NAN-050	12	XAN-050	12
NAN-062	12	XAN-062	12
NAN-075	12	XAN-075	12
NAN-087	12	XAN-087	12
NAN-100	12	XAN-100	12
NAN-112	12	XAN-112	12
NAN-125	12	XAN-125	12
NAN-137	12	XAN-137	12
NAN-150	12	XAN-150	12

RETAINER RING ASSORTMENT KITS

ROTOR PACK KIT

Part Number: RPK 4 KIT

Packaged in four plastic cases with a handy carrying case, our rotor pack kit contains approximately 50 each of 20 common internal/external retaining ring sizes. The internal rings fit housings or bores from 3/8" internal diameter to 1-1/8". External rings accommodate shaft sizes from 1/4" internal diameter to 1-1/8". Two retainer ring installation pliers are also included.



EXTERNAL RETAINER RINGS

Part Number: 310 KIT

PART NUMBER	SHAFT SIZE	QTY.	PART NUMBER	SHAFT SIZE	QTY.
310-100	1.000	5	310-200	2.000	5
310-125	1.250	5	310-225	2.250	5
310-137	1.375	5	310-250	2.500	5
310-150	1.500	5	310-275	2.750	3
310-175	1.750	5	310-300	3.000	3

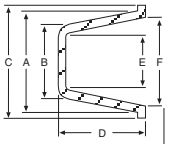
These assortments contain the most popular size retainer rings, boxed in a handy storage and display case, which will supply your shop, service truck, or parts counter with the sizes you need!

INTERNAL RETAINER RINGS

Part Number: 300 KIT

PART NUMBER	BORE SIZE	QTY.	PART NUMBER	BORE SIZE	QTY.
300-075	0.750	10	300-200	2.000	10
300-087	0.875	10	300-225	2.250	5
300-100	1.000	10	300-250	2.500	5
300-112	1.125	10	300-275	2.750	5
300-125	1.250	10	300-300	3.000	5
300-137	1.375	10	300-350	3.500	5
300-150	1.500	10	300-400	4.000	5
300-162	1.625	10	300-450	4.500	2
300-175	1.750	10	300-500	5.000	2

PLASTIC CAP PLUGS



Tapered Caps & Plugs For Misc. Applications

Part Number	A	B	C	D	E	F
CAP-00	.180	.115	5/16	13/32	.051	.118
CAP-0	.240	.175	3/8	3/8	.109	.175
CAP-1	.302	.240	15/32	3/8	.175	.240
CAP-1-X	.335	.265	15/32	3/8	.240	.275
CAP-2	.365	.300	17/32	3/8	.234	.301
CAP-3	.428	.360	19/32	3/8	.299	.365
CAP-3-X	.460	.390	5/8	3/8	.325	.396
CAP-4-X	.512	.447	5/8	3/8	.385	.448
CAP-5	.547	.490	23/32	1/2	.409	.485
CAP-5-X	.568	.500	3/4	7/16	.435	.503
CAP-6	.620	.531	3/4	1/2	.468	.555
CAP-7	.675	.590	7/8	17/32	.520	.605
CAP-7-X	.695	.610	27/32	1/5	.549	.634
CAP-8	.728	.641	7/8	1/2	.575	.665
CAP-8-X	.754	.675	7/8	5/8	.615	.690
CAP-9-X	.925	.725	1	3/4	.662	.760
CAP-10	.848	.750	1-1/32	5/8	.686	.785
CAP-11	.910	.802	1-3/32	3/4	.740	.846
CAP-11-X	.931	.820	1-1/8	5/8	.754	.868
CAP-13	1.091	.966	1-1/4	3/4	.902	1.025
CAP-13-X	1.145	1.002	1-5/16	3/4	.938	1.079
CAP-14-X	1.285	1.180	1-7/16	3/4	1.105	1.215
CAP-15	1.350	1.225	1-1/2	3/4	1.160	1.295
CAP-18	1.680	1.560	1-7/8	3/4	1.497	1.620
CAP-20	1.958	1.806	2.125	1	1.745	1.893
CAP-21	2.078	1.902	2-1/4	1	1.839	2.015
CAP-38	1.045	.980	1-1/4	1/2	.916	.984
CAP-220	2.132	1.980	2-1/4	1	1.915	2.068
CAP-230	2.330	2.156	2-5/8	1	2.094	2.264
CAP-240	2.465	2.300	2-5/8	1	2.235	2.400
CAP-250	2.605	2.395	2-5/8	1	2.331	2.541

Tapered Caps & Plugs For NPT Style Ports

Part Number	NPT Port Size	OD Size Tapered	HT	Min Std Pkg
CAP-2-X	1/8	.330/.396	3/8	50
CAP-4	1/4	.419/.485	3/8	50
CAP-6-X	3/8	.550/.631	7/16	50
CAP-9	1/2	.690/.788	9/16	50
CAP-12	3/4	.870/.975	5/8	120
CAP-12-X	3/4	.915/1.040	11/16	25
CAP-14	1	1.094/1.215	3/4	25
CAP-15	1	1.225/1.355	3/4	3
CAP-15-X	1	1.235/1.350	3/4	25
CAP-17	1-1/4	1.450/1.600	3/4	60
CAP-17-S	1-1/4	1.513/1.600	1/2	25
CAP-19	1-1/2	1.735/1.870	3/4	25
CAP-20-S	1-1/2	1.781/1.805	3/8	25
CAP-24-S	2	2.230/2.260	1/2	20

This style cap plug is equipped with a handy fold-down pull ring.

Tapered Caps & Plugs With Pull Ring

Part Number	NPT Port Size	OD Size Tapered	HT	Min Std Pkg
CAP-PR-9	1/8	.337/.375	1/4	50
CAP-PR-12	1/4	.436/.475	1/4	50
CAP-PR-17	3/8	.552/.615	3/8	50
CAP-PR-22	1/2	.668/.767	1/2	40
CAP-PR-27X	3/4	.878/.977	1/2	40
CAP-PR-32	1	1.113/1.212	1/2	25
CAP-PR-39	1-1/4	1.505/1.580	1/2	25
CAP-PR-43	1-1/2	1.780/1.860	1/2	20
CAP-PR-50	2	2.226/2.258	1/2	20

CAP PLUG APPLICATION CHART

	NPT		INCH THREAD		METRIC THREAD	
CAP-	CAPS	PLUGS	CAPS	PLUGS	CAPS	PLUGS
00				10/32	M2,M2.5	M5
0				1/4	M3,M3.5	M6
1				5/16	M5	M8x1
1-X					M6	
2			15/64	3/8	M7	M10x1.25
2-X		1/8				
3				7/16	M8x1	M12
3-X			3/8			M12x1.25
4	1/8	1/4		1/2	M10x1.25	M14
4-X			7/16			M14x1.5
5			1/2	9/16		
5-X					M12x1.25	M16
6	1/4			5/8		
6-X		3/8	9/16			M18
7			5/8		M14x1.5	M18x1.5
7-X						
8				3/4		M20
8-X	3/8				M16x1.5	M20x1.5
9		1/2				M22
9-X			3/4			M22x1.5
10				7/8	M18x1.5	M24
11	1/2					M24x2
11-X			7/8		M20x1.5	
12		3/4				
12-X				1-1/16	M22x1.5	M27x2
13	3/4				M24x2	
13-X			1-1/16			M30x2
14		1			M27x2	M33
17		1-1/4			M36x3	
17-S				1-5/8		
18	1-1/4		1-5/8	1-3/4	M39x3	
19		1-1/2		1-7/8		
20	1-1/2		1-7/8			
20-S						
21						
220						
230			2-1/4			
24-S		2				
240	2					
250			2-1/2			

PLASTIC CAP PLUGS

Female Threaded Cap Plugs for J.I.C. Fittings

Part Number	Std Thread Size	O.D. Size Tube	Dash Size	Min Std Pkg
CAP-G-2	7/16-20	1/4	#4	20
CAP-G-8	9/16-18	3/8	#6	20
CAP-G-14	3/4-16	1/2	#8	20
CAP-G-18	7/8-14	5/8	#10	20
CAP-G-20	7/8-18	5/8	#10	20
CAP-G-22	1-1/16-12	3/4	#12	20
CAP-G-25	1-3/16-12	7/8	#14	20
CAP-G-27	1-5/16-12	1	#16	20

O-Ring Face Fitting Caps

These low density polyethylene caps are designed to fit female o-ring face seals.

Part Number	Thread Size	Min Std Pkg
CAP-OR-4	9/16-18	35
CAP-OR-6	11/16-16	25
CAP-OR-8	13/16-16	25
CAP-OR-10	1-14	25
CAP-OR-12	1-3/16-12	25
CAP-OR-16	1-7/16-12	15
CAP-OR-20	1-11/16-12	10

Flat Face Fitting Caps

Part Number	Tube Size OD	Thread Size	Min Std Pkg
CAP-PDF-40	1/4	9/16-18.	25
CAP-PDF-60	3/8	11/16-16	25
CAP-PDF-80	1/2	13/16-16.	25
CAP-PDF-100	5/8	1-14	20
CAP-PDF-120	3/4	1-3/16-12	20
CAP-PDF-160	1	1-7/16-12	10

Male Threaded Pipe Plugs (Sq. Top)

Part Number	NPT Port Size	Thread Size	Min Std Pkg
CAP-P-18	1/8	0.364	25
CAP-P-28	1/4	0.477	25
CAP-P-38	3/8	0.612	25
CAP-P-48	1/2	0.758	25
CAP-P-68-H	3/4	0.968	25
CAP-P-88-H	1	1.214	20
CAP-TP-13	1-1/4	1.557	5
CAP-TP-15	1-1/2	1.796	5

Male Threaded Cap Plugs for Flared J.I.C. Fittings

Part Number	Std Thread Size	OD Size Tube	Dash Size	Min Std Pkg
CAP-PD-40	7/16-20	1/4	#4	25
CAP-PD-50	1/2-20	5/16	#5	25
CAP-PD-60	9/16-18	3/8	#6	25
CAP-PD-80	3/4-16	1/2	#8	25
CAP-PD-100	7/8-14	5/8	#10	25
CAP-PD-120	1-1/16-12	3/4	#12	25
CAP-PD-140	1-3/16-12	7/8	#14	20
CAP-PD-160	1-5/16-12	1	#16	20
CAP-PD-200	1-5/8-12	1-1/4	#20	15
CAP-PD-220	1-3/4-12	1-3/8	#22	10
CAP-PD-240	1-7/8-12	1-1/2	#24	10

PLASTIC CAP PLUGS

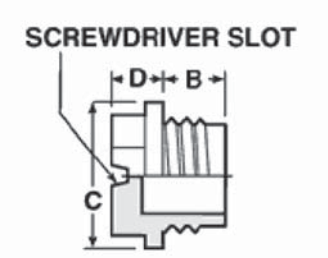
These low density polyethylene caps protect the faces of split flange connectors

Split Flange Coupling Caps - SAE CODE 61

Part Number	Flange Size	Cap Size	Min Std Pkg
CAP-SF-10	5/8	1.35	50
CAP-SF-12	3/4	1.50	50
CAP-SF-16	1	1.75	35
CAP-SF-20	1-1/4	2.00	35
CAP-SF-24	1-1/2	2.38	25
CAP-SF-32	2	2.81	15
CAP-SF-40	2-1/2	3.31	15
CAP-SF-8	1/2	1.19	50

Split Flange Coupling Caps - SAE CODE 62

Part Number	Flange Size	Cap Size	Min Std Pkg
CAP-HPSF-8	1/2	1.25	10
CAP-HPSF-12	3/4	1.625	10
CAP-HPSF-16	1	1.87	10
CAP-HPSF-20	1-1/4	2.125	10
CAP-HPSF-24	1-1/2	2.5	10
CAP-HPSF-32	2	3.125	10



Threaded O-Ring Plugs

Part Number	Std Thread Size	B	C	D	Min Std Pkg
CAP-TF-9-OR	9/16-18	0.35	0.81	0.19	10
CAP-TF-12-OR	3/4-16	0.44	0.89	0.18	10

BOLTED SPLIT FLANGE PROTECTORS

3,000 PSI Flanges
SAE Code 61

Part Number	Port Size	Min Std Pkg
CAP-8218	1/2	10
CAP-8219	3/4	10
CAP-8220	1	10
CAP-8221	1-1/4	10
CAP-8222	1-1/2	10
CAP-8223	2	10
CAP-8224	2-1/2	10

5,000 PSI Flanges
SAE Code 62

CAP-XP-075	3/4	10
CAP-XP-100	1	10
CAP-XP-125	1-1/4	10
CAP-XP-150	1-1/2	10
CAP-XP-200	2	10

GREASE FITTING CAP

Low density polyethane cap plug for use with standard grease fittings.

Part Number	Description
CAP-GF-10	Cap Plug

CAP PLUG KIT

Part Number: Cap Plug Kit

Our new and improved cap plug kit contains 22% more cap plugs in an environmentally friendly corrugated box. Separated areas hold 625 cap plugs in 24 of the most popular sizes.

Cap Plug Number	QTY	Cap Plug Number	QTY	Cap Plug Number	QTY
CAP-2-X	50	CAP-PD-100	25	CAP-G-22	20
CAP-4	50	CAP-PD-120	25	CAP-G-25	20
CAP-6-X	50	CAP-PD-140	20	CAP-G-27	20
CAP-9	50	CAP-PD-160	20	CAP-P-28	25
CAP-12-X	25	CAP-G-2	20	CAP-P-38	25
CAP-14	25	CAP-G-8	20	CAP-P-48	25
CAP-PD-60	25	CAP-G-14	20	CAP-P-68-H	25
CAP-PD-80	25	CAP-G-18	20	CAP-P-88-H	20

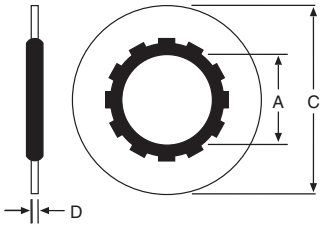
CAP PLUG CASE

Part Number: Cap Plug Case

This rugged case has 24 empty compartments to hold a limited variety of cap plugs from the master kit (shown left).

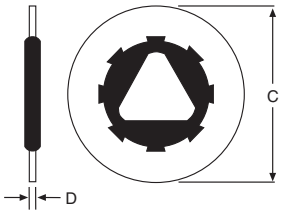
Case only - cap plugs sold separately.

STYLE 110 FACE SEALS



Part Number	Max Screw Size	A Rubber I.D.	B Steel I.D.	C Steel O.D.	D Steel Thick.
DY-110X8	.164	.156	.255	.385	.041
DY-110X10	.177	.180	.317	.443	.050
DY-110X3/16	.190	.220	.281	.425	.054
DY-110X7/32	.216	.246	.307	.455	.054
DY-110X1/4	.250	.240	.381	.505	.054
DY-110X5/16	.312	.301	.488	.603	.054
DY-110X3/8	.375	.368	.546	.666	.054
DY-110X7/16	.437	.427	.618	.760	.054
DY-110X1/2	.500	.490	.696	.880	.054
DY-110X9/16	.562	.552	.759	1.067	.054
DY-110X5/8	.625	.615	.818	1.193	.054

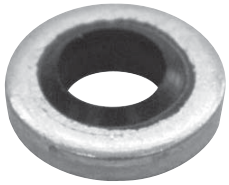
THREAD SEAL

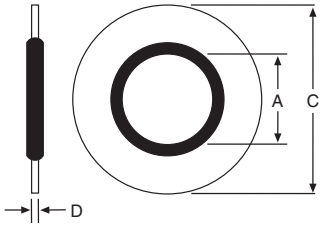


Thread seals provide a postive seal directly against the threads of a bolt. Self-centering and easily installed.

Part Number	C	D	Thread Size
TS7500X10	.469	.051	-10
TS7500X1/4	.562	.051	1/4
TS7500X5/16	.687	.064	5/16
TS7500X3/8	.750	.064	3/8
TS7500X7/16	.906	.078	7/16
TS7500X1/2	1.000	.078	1/2
TS7500X7/8	1.562	.109	7/8

STYLE SB FACE SEALS

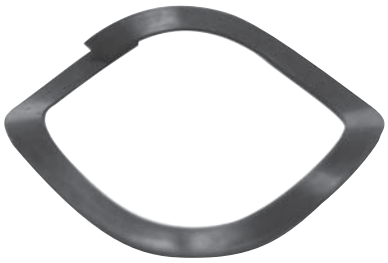


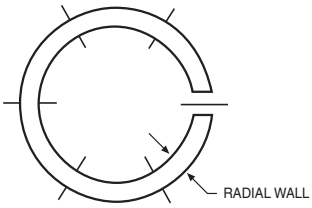


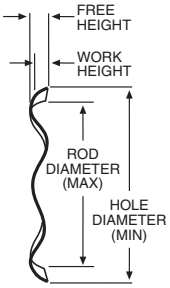
Part Number	A	C	D
DY-SB-001	.115	.250	.048
DY-SB-002	.157	.286	.048
DY-SB-003	.205	.330	.051
DY-SB-004	.270	.520	.051
DY-SB-005	.270	.525	.048
DY-SB-006	.322	.525	.048
DY-SB-007	.340	.560	.051
DY-SB-020A	.408	.625	.083
DY-SB-008	.443	.723	.083
DY-SB-009	.460	.750	.083
DY-SB-225	.531	.866	.059
DY-SB-021B	.541	.810	.083
DY-SB-010	.585	.875	.083
DY-SB-022BB	.625	.875	.083
DY-SB-011	.650	1.000	.083
DY-SB-023C	.680	.937	.083
DY-SB-012	.715	1.000	.097
DY-SB-024CC	.775	1.060	.097
DY-SB-025D	.848	1.125	.097
DY-SB-026E	.925	1.250	.097
DY-SB-013	.955	1.310	.097
DY-SB-027F	1.065	1.375	.097
DY-SB-240	1.083	1.417	.07
DY-SB-028	1.095	1.520	.097
DY-SB-014	1.150	1.440	.092
DY-SB-029G	1.213	1.500	.097
DY-SB-015	1.280	1.630	.128
DY-SB-031	1.329	1.685	.092
DY-SB-030H	1.334	1.685	.133
DY-SB-016	1.410	1.750	.133
DY-SB-032J	1.690	2.062	.133
DY-SB-033K	1.907	2.307	.103
DY-SB-019	2.030	2.500	.128
DY-SB-034	2.161	2.750	.133
DY-SB-036	2.385	2.875	.133
DY-SB-038	2.625	3.130	.133
DY-SB-039	2.995	3.550	.133

WAVE SPRINGS

Wave Springs offer a convenient method of exerting a pre-load on vee packing where little or no adjustment is available. Because of a low fatigue factor, the spring should provide a proper pre-load throughout the life of the packing.



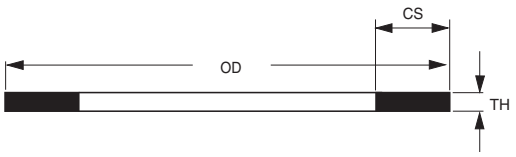




Part Number	Hole Diameter (Min)	Rod Diameter (Max)	Free Height	Work Height	Radial Wall
SSR-0125	1.250	.960	.150	.078	.133
SSR-0150	1.500	1.170	.170	.078	.143
SSR-0175	1.750	1.440	.140	.078	.143
SSR-0187	1.875	1.560	.150	.078	.143
SSR-0200	2.000	1.680	.140	.093	.150
SSR-0225	2.250	1.930	.170	.093	.150
SSR-0237	2.375	1.990	.160	.093	.178
SSR-0250	2.500	2.120	.170	.093	.178
SSR-0262	2.625	2.240	.190	.093	.178
SSR-0275	2.750	2.340	.170	.109	.188
SSR-0300	3.000	2.590	.190	.109	.188
SSR-0312	3.120	2.710	.210	.109	.188
SSR-0325	3.250	2.750	.200	.109	.233
SSR-0350	3.500	3.000	.230	.109	.233
SSR-0362	3.625	3.120	.240	.109	.233
SSR-0375	3.750	3.250	.260	.109	.233
SSR-0425	4.250	3.740	.210	.109	.233
SSR-0462	4.625	4.125	.230	.109	.233
SSR-0512	5.125	4.610	.340	.125	.233

CARBON STEEL SHIMS

These carbon steel shims are commonly used with vee packing sets to fill the empty space in a gland.



Part Number	OD	Thickness	Cross Section
SSRS-0150	1.500	.024	.150
SSRS-0175	1.750	.024	.150
SSRS-0200	2.000	.024	.150

Part Number	OD	Thickness	Cross Section
SSRS-0237	2.375	.024	.178
SSRS-0312	3.125	.030	.188
SSRS-0375	3.750	.030	.233

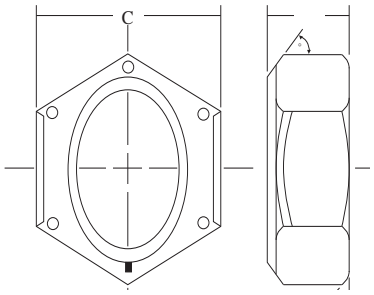
GRADE C LOCKNUTS

These fine-threaded Grade C locknuts are formed from medium carbon, heat-treated steel and are designed to be used with a Grade 8 bolt. Smaller size locknuts employ an automation style collar while the larger ones use a full collar design. Both locknut types are stocked with cadmium and wax plating.

Automation Style

Part Number	Size	Thread Pitch	C Width Across Flats		D Overall Thickness	
			Max	Min	Max	Min
LN-1/2-13	1/2	13	0.7500	0.736	0.510	0.490
LN-1/2-20	1/2	20	0.752	0.741	0.609	0.579
LN-1-14	1	14	1.5020	1.450	0.887	0.831
LN-3/4-16	3/4	16	1.1250	1.088	0.665	0.617
LN-5/8-18	5/8	18	0.9375	0.922	0.645	0.621
LN-7/8-14	7/8	14	1.3145	1.269	0.922	0.724
LN-7/16-20	7/16	20	0.627	0.616	0.468	0.438

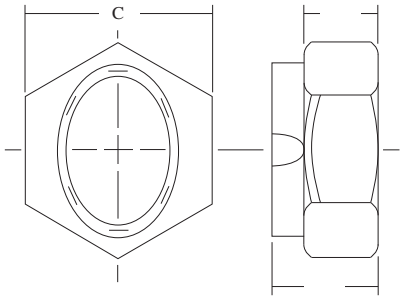
Automation Style



Full Collar Style

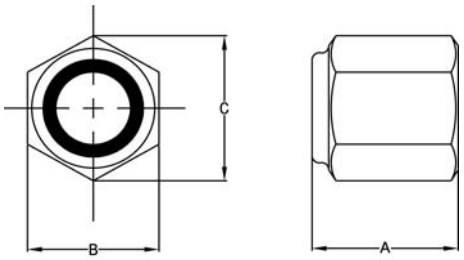
Part Number	Size	Thread Pitch	C Width Across Flats		D Overall Thickness		F Hex Height	
			Max	Min	Max	Min	Max	Min
LN-1-1/2-12	1-1/2	12	2.250	2.175	1.317	1.246	0.885	0.843
LN-1-1/4-12	1-1/4	12	1.876	1.812	1.094	1.030	0.719	0.698
LN-1-1/8-12	1-1/8	12	1.687	1.631	0.999	0.939	0.657	0.636
LN-1-3/4-12	1-3/4	12	2.625	2.538	1.540	1.460	1.012	0.989
LN-1-3/8-12	1-3/8	12	2.062	1.994	1.206	1.138	0.795	0.771
LN-2-12	2	12	3.000	2.900	1.763	1.675	1.158	1.134
LN-2-1/2-12	2-1/2	12	3.750	3.625	2.193	2.089	1.930	1.840

Full Collar Style

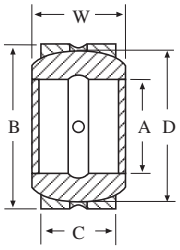


Part Number	Bar Size	A	B	C
CM-LN45050	1/2”-20	0.60	0.75	0.84
CM-LN45062	5/8”-18	0.75	0.94	1.06
CM-LN45075	3/4”-16	0.88	1.06	1.19
CM-LN45087	7/8”-14	1.00	1.25	1.40
CM-LN45100	1”-14	1.06	1.44	1.62
CM-LN45101	1”-14	0.88	1.62	1.83
CM-LN45112	1-1/8”-12	1.19	1.62	1.83
CM-LN45126	1-1/4”-12	1.38	1.81	2.06
CM-LN45151	1-1/2”-12	1.62	2.19	2.44
CM-LN45152	1-1/2”-12	0.81	2.19	2.44
CM-LN45175	1-3/4”-12	1.50	2.75	3.06
CM-LN45200	2”-12	1.62	3.12	3.50
CM-LN45225	2-1/4”-12	1.94	3.50	3.94
CM-LN45226	2-1/4”-12	2.81	3.50	3.94
CM-LN45250	2-1/2”-12	2.25	4.00	4.60

Nylon Insert Lock Nut



SELF ALIGNING BEARINGS



SUFFIX:
2RS = SEALED BEARINGS

Part Number	A	B	W	C	D
HH008ES	1/2	.875	.437	.375	.709
HH010ES	5/8	1.062	.547	.469	0.899
HH012ES	3/4	1.250	.656	.562	1.083
HH014ES	7/8	1.438	.765	.656	1.260
HH100ES	1	1.625	.875	.750	1.417
HH104ES	1-1/4	2.000	1.093	.937	1.772
HH106ES	1-3/8	2.187	1.187	1.031	1.929
HH108ES	1-1/2	2.438	1/312	1/125	2.165
HH108ES2RS	1-1/2	2.438	1.312	1.125	2.165
HH112ES	1-3/4	2.812	1.531	1.312	2.520
HH112ES2RS	1-3/4	2.812	1.531	1.312	2.520
HH200ES	2	3.187	1.750	1.500	2.874
HH200ES2RS	2	3.187	1.750	1.500	2.874
HH204ES	2-1/4	3.562	1.969	1.687	3.228
HH204ES2RS	2-1/4	3.562	1.969	1.687	3.228
HH208ES	2-1/2	3.937	2.187	1.875	3.583
HH208ES2RS	2-1/2	3.937	2.187	1.875	3.583
HH212ES	2-3/4	4.375	2.406	2.062	3.937
HH212ES2RS	2-3/4	4.375	2.406	2.062	3.937
HH300ES	3	4.750	2.625	2.250	4.331
HH300ES2RS	3	4.750	2.625	2.250	4.331
HH304ES	3-1/4	5.125	2.844	2.437	4.685
HH308ES	3-1/2	5.500	3.062	2.625	5.039
HH308ES2RS	3-1/2	5.500	3.062	2.625	5.039
HH312ES	3-3/4	5.875	3.281	2.812	5.394
HH400ES	4	6.250	3.500	3.000	5.748
HH400ES2RS	4	6.250	3.500	3.000	5.748
HH408ES	4-1/2	7.000	3.937	3.375	6.457
HH500ES	5	7.750	4.375	3.750	7.205
HH600ES	6	8.750	4.750	4.125	8.150

SET SCREWS

These set screws are used on many cylinder headnuts. Use nylon plugs to ensure no damage to the headnut threads. All set screws employ Allen wrench heads.

Part Number	Thread Size	Length
SS-1/4-20X1/2	1/4-20	1/2
SS-1/4-20X3/8	1/4-20	3/8
SS-1/4-28X1/4	1/4-28	1/4
SS-1/4-28X3/8	1/4-28	3/8
SS-5/16-18X1/4	5/16-18	1/4
SS-5/16-18X3/8	5/16-18	3/8
SS-5/16-18X3/4	5/16-18	3/4
SS-5/16-24X5/16	5/16-24	5/16
SS-5/16-24X3/8	5/16-24	3/8
SS-3/8-16X3/8	3/8-16	3/8
SS-3/8-16X1/2	3/8-16	1/2
SS-3/8-16X5/8	3/8-16	5/8
SS-3/8-16X7/8	3/8-16	7/8
SS-1/2-13X1/2	1/2-13	1/2
SS-1/2-13X5/8	1/2-13	5/8
SS-#10-24X1/4	#10-24	1/4

NYLON PLUGS

These nylon plugs are used with headnut set screws to ensure that there is no damage to the headnut threads.

Part Number	Diameter	Length
NYPLUG-125-125	1/8	1/8
NYPLUG-125-156	1/8	5/32
NYPLUG-125-875	1/8	7/8
NYPLUG-187-109	3/16	7/64
NYPLUG-187-187	3/16	3/16
NYPLUG-187-250	3/16	1/4
NYPLUG-250-070	1/4	0.070
NYPLUG-250-125	1/4	1/8
NYPLUG-250-187	1/4	3/16
NYPLUG-250-250	1/4	1/4
NYPLUG-312-125	5/16	1/8
NYPLUG-312-250	5/16	1/4
NYPLUG-312-312	5/16	5/16
NYPLUG-375-250	3/8	1/4
NYPLUG-500-875-125H	1/2	7/8

MANUAL BLEEDER VALVES

Part Number	Thread Size
WH705	1/8 NPT

NYLON PLUG KIT

Part Number: Nylon Plug Kit

220 Pieces
11 Sizes

Nyplug-125-125 1/8" x 1/8" 20 pcs.	Nyplug-187-109 3/16" x 7/64" 20 pcs.	Nyplug-250-125 1/4" x 1/8" 20 pcs.	
Nyplug-125-156 1/8" x 5/32" 20 pcs.	Nyplug-187-187 3/16" x 3/16" 20 pcs.	Nyplug-250-187 1/4" x 3/16" 20 pcs.	Nyplug-312-125 5/16" x 1/8" 20 pcs.
Nyplug-125-875 1/8" x 7/8" 20 pcs.	Nyplug-187-250 3/16" x 1/4" 20 pcs.	Nyplug-250-250 1/4" x 1/4" 20 pcs.	Nyplug-375-250 3/8" x 1/4" 20 pcs.

WIND-IN LOCK WIRES

Part Number	Thickness	Length
LW-093-1262	3/32 sq.	12-5/8
MARION-35240	1/8 sq.	10-1/4
MARION-35250	1/8 sq.	13-3/8
MARION-35260	1/8 sq.	16-3/8
MARION-35270	1/8 sq.	19-1/4
MARION-1031	3/16 sq.	21.00
1/8 RD WIRE	1/8 round	11

FILTER VENT PLUGS

These plugs are used to allow air to pass in and out of the non-pressurized end of a single-acting cylinder.

Part Number	NPT Port Size
FV-.125	1/8
FV-.250	1/4
FV-.375	3/8
FV-.500	1/2
FV-.750	3/4
FV-1.000	1

LOCTITE

Threadlocker 242 locks fasteners 1/4" and larger yet allows easy disassembly with hand tools. Prevents rust and corrosion.

Part Number	Application
LOCTITE-24205	Removable Threadlocker 0.5 ml bottle
LOCTITE-24221	Removable Threadlocker 10 ml bottle
LOCTITE-24231	Removable Threadlocker 50 ml bottle
LOCTITE-27105	High Strength Threadlocker 0.5 ml bottle
LOCTITE-29021	Penetrating Threadlocker 10 ml bottle
LOCTITE-29031	Penetrating Threadlocker 50 ml bottle
LOCTITE-54531	Hyd/Pneum Thread Sealant 50 ml tube
LOCTITE-76764	Anti Seize Lubricant 16 oz brush can
LOCTITE-82325	Super Lube 3 oz tube

TURBO LOCK

Turbo Lock threadlocker adhesive series is an economical alternative to Loctite.

Part Number	Application
THREAD LOCKER-11-001	Removable Threadlocker 2 ml bottle
THREAD LOCKER-11-010	Removable Threadlocker 10 ml bottle
THREAD LOCKER-11-050	Removable Threadlocker 50 ml bottle
THREAD LOCKER-14-001	High Strength Threadlocker 2 ml bottle
THREAD LOCKER-14-250	High Strength Threadlocker 250 ml bottle
THREAD LOCKER-16-010	Penetrating Threadlocker 10 ml bottle
THREAD LOCKER-16-050	Penetrating Threadlocker 50 ml bottle

SEAL LUBE™

O-Ring Lubricant

Part Number: SEAL LUBE

Seal-Lube™ lubricant is a thick, clear, high viscosity silicone oil recommended for use with most seal compounds (except silicone) and a wide variety of hydraulic fluids. Insoluble in water, alcohol, petroleum oil and glycol, Seal-Lube™ can prolong seal life when applied prior to seal installation. Chemically inert and non-toxic, Seal-Lube™ retains its viscosity over a wide temperature range. The handy squeeze 2 ounce bottle dispenses just enough where you want it.

TEFLON TAPE

Part Number: TEFLON TAPE

1/2" Wide by 520" Roll

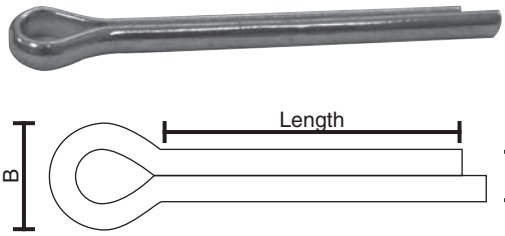
GREASE FITTING KIT

Part Number: GREASE FITTING KIT

32 Pieces	1/8" NPT Straight 6 pcs.	1/4" - 28 Straight 6 pcs.
	3/16" Drive Straight 4 pcs.	1/8"- NPT 45 1/8"-NPT 90 3 pcs. each
	1/4"- 28 45 1/4"- 28 90 3 pcs. each	5/16" Drive Straight 4 pcs.

Part Number	Description
GF-125NPTS	1/8” NPT STRAIGHT
GF-125NPT45	1/8” NPT 45°
GF-125NPT90	1/8” NPT 90°
GF-187DS	3/16” DRIVE STRAIGHT
GF-250-28S	1/4”-28 STRAIGHT
GF-250-28-45	1/4”-28 45°
GF-250-28-90	1/4”-28 90°
GF-312DS	5/16” DRIVE STRAIGHT

COTTER PINS



Part Number	Length	A	B
CP-1X3/32	1	.082	3/16
CP-1-1/4X1/8	1-1/4	. 115	1/4
CP-1-1/2X5/32	1-1/2	.150	5/16
CP-1-3/4X3/16	1-3/4	3/16	.390
CP-2X3/16	2	.176	3/8
CP-2X1/4	2	.225	1/2
CP-2-1/2X5/32	2-1/2	5/32	.357
CP-2-1/2X1/8	2-1/2	.115	1/4
CP-2-1/2X3/16	2-1/2	.176	3/8
CP-2-1/2X1/4	2-1/2	.225	1/2
CP-3X5/32	3	.150	5/16
CP-3X1/4	3	1/4	.520
CP-3-1/2X1/4	3-1/2	.225	1/2
CP-4X1/4	4	.225	1/2
CP-5X1/4	5	.225	1/2
CP-6X5/16	6	.280	5/8

WOODRUFF KEY KIT

Part Number: WOODRUFF KEYS KIT

65 Pieces	1/8" X 1/2" No. 3 16 pcs.	1/8" X 5/8" No. 5 15 pcs.
	3/32" X 5/8" No. 6 15 pcs.	3/16" X 3/4" No. 9 10 pcs.
	1/4" X 7/8" No. A 5 pcs.	1/4" X 1" No. 15 4 pcs.

COTTER PIN KIT

Part Number: COTTER PIN KIT

555 Pieces	1/16" X 1" 150 pcs.	3/32" X 1" 150 pcs.
	3/32" X 1-1/2" 100 pcs.	1/8" X 1-1/4" 75 pcs.
	1/8" X 2" 50 pcs.	5/32" X 2-1/2" 30 pcs.

METRIC / INCH CONVERSION TABLE

FRACTIONS, DECIMALS AND MILLIMETERS

Inches		
Fractions	Decimals	M M
—	.0004	.01
—	.004	.10
—	.01	.25
1/64	.0156	.397
—	.0197	.50
—	.0295	.75
1/32	.03125	.794
—	.0394	1.0
3/64	.0469	1.191
—	.059	1.5
1/16	.062	1.588
5/64	.0781	1.984
—	.0787	2.0
3/32	.094	2.381
—	.0984	2.5
7/64	.109	2.778
—	.1181	3.0
1/8	.125	3.175
—	.1378	3.5
9/64	.141	3.572
5/32	.156	3.969
—	.1575	4.0
11/64	.172	4.366
—	.177	4.5
3/16	.1875	4.763
—	.1969	5.0
13/64	.203	5.159
—	.2165	5.5
7/32	.219	5.556
15/64	.234	5.953
—	.2362	6.0
1/4	.250	6.350
—	.2559	6.5
17/64	.2656	6.747
—	.2756	7.0
9/32	.281	7.144
—	.2953	7.5
19/64	.297	7.541
5/16	.312	7.938
—	.315	8.0
21/64	.328	8.334
—	.335	8.5
11/32	.344	8.731
—	.3543	9.0
23/64	.359	9.128
—	.374	9.5
3/8	.375	9.525
25/64	.391	9.922
—	.3937	10.0
13/32	.406	10.319
—	.413	10.5
27/64	.422	10.716
—	.4331	11.0
7/16	.438	11.113
29/64	.453	11.509
15/32	.469	11.906
—	.4724	12.0
31/64	.484	12.303
—	.492	12.5
1/2	.500	12.700
—	.5118	13.0
33/64	.5156	13.097
17/32	.531	13.494
35/64	.547	13.891
—	.5512	14.0
9/16	.563	14.288
—	.571	14.5
37/64	.578	14.684
—	.5906	15.0
19/32	.594	15.081
39/64	.609	15.478
5/8	.625	15.875
—	.6299	16.0
41/64	.6406	16.272
—	.6496	16.5
21/32	.658	16.669
—	.6693	17.0
43/64	.672	17.066
11/16	.6875	17.463
45/64	.703	17.859
—	.7087	18.0
23/32	.719	18.256
—	.7283	18.5
47/64	.734	18.653
—	.7480	19.0
3/4	.750	19.050
49/64	.7656	19.447

Inches		
Fractions	Decimals	M M
25/32	.781	19.844
—	..7874	20.0
51/64	.797	20.241
13/16	.8125	20.638
—	.8268	21.0
53/64	.828	21.034
27/32	.844	21.431
55/64	.859	21.828
—	.8661	22.0
7/8	.875	22.225
57/64	.8906	22.622
—	.9055	23.0
29/32	.9062	23.019
59/64	.922	23.416
15/16	.9375	23.813
—	.9449	24.0
61/64	.953	24.209
31/32	.969	24.606
—	.9843	25.0
63/64	.9844	25.003
1	1.000	25.400
—	1.0236	26.0
1-1/32	1.0312	26.194
1-1/16	1.062	26.988
—	1.063	27.0
1-3/32	1.094	27.781
—	1.1024	28.0
1-1/8	1.125	28.575
—	1.1417	29.0
1-5/32	1.156	29.369
—	1.1811	30.0
1-3/16	1.1875	30.163
1-7/32	1.219	30.956
—	1.2205	31.0
1-1/4	1.250	31.750
—	1.2598	32.0
1-9/32	1.281	32.544
—	1.2992	33.0
1-5/16	1.312	33.338
—	1.3386	34.0
1-11/32	1.344	34.131
1-3/8	1.375	34.925
—	1.3779	35.0
1-13/32	1.406	35.719
—	1.4173	36.0
1-7/16	1.438	36.513
—	1.4567	37.0
1-15/32	1.469	37.306
—	1.4961	38.0
1-1/2	1.500	38.100
1-17/32	1.531	38.894
—	1.5354	39.0
1-9/16	1.562	39.688
—	1.5748	40.0
1-19/32	1.594	40.481
—	1.6142	41.0
1-5/8	1.625	41.275
—	1.6535	42.0
1-21/32	1.6562	42.069
1-11/16	1.6875	42.863
—	1.6929	43.0
1-23/32	1.719	43.656
—	1.7323	44.0
1-3/4	1.750	44.450
—	1.7717	45.0
1-25/32	1.781	45.244
—	1.8110	46.0
1-13/16	1.8125	46.038
1-27/32	1.844	46.831
—	1.8504	47.0
1-7/8	1.875	47.625
—	1.8898	48.0
1-29/32	1.9062	48.419
—	1.9291	49.0
1-15/16	1.9375	49.213
—	1.9685	50.0
1-31/32	1.969	50.006
2	2.000	50.800
—	2.0079	51.0
2-1/32	2.03125	51.594
—	2.0472	52.0
2-1/6	2.062	52.388
—	2.0866	53.0
2-3/32	2.094	53.181
2-1/8	2.125	53.975
—	2.126	54.0
2-5/32	2.156	54.769

Inches		
Fractions	Decimals	M M
—	2.165	55.0
2-3/16	2.1875	55.563
—	2.2047	56.0
2-7/32	2.219	56.356
—	2.244	57.0
2-1/4	2.250	57.150
2-9/32	2.281	57.944
—	2.2835	58.0
2-5/16	2.312	58.738
—	2.3228	59.0
2-11/32	2.344	59.531
—	2.3622	60.0
2-3/8	2.375	60.325
—	2.4016	61.0
2-13/32	2.406	61.119
2-7/16	2.438	61.913
—	2.4409	62.0
2-15/32	2.469	62.706
—	2.4803	63.0
2-1/2	2.500	63.500
—	2.5197	64.0
2-17/32	2.531	64.294
—	2.559	65.0
2-9/16	2.562	65.088
2-19/32	2.594	65.881
—	2.5984	66.0
2-5/8	2.625	66.675
—	2.638	67.0
2-21/32	2.656	67.469
—	2.6772	68.0
2-11/16	2.6875	68.263
—	2.7165	69.0
2-23/32	2.719	69.056
2-3/4	2.750	69.850
—	2.7559	70.0
2-25/32	2.781	70.6439
—	2.7953	71.0
2-13/16	2.8125	71.4376
—	2.8346	72.0
2-27/32	2.844	72.2314
—	2.8740	73.0
2-7/8	2.875	73.025
2-29/32	2.9062	73.819
—	2.9134	74.0
2-15/16	2.9375	74.613
—	2.9527	75.0
2-31/32	2.969	75.406
—	2.9921	76.0
3	3.000	76.200
3-1/32	3.0312	76.994
—	3.0315	77.0
3-1/16	3.062	77.788
—	3.0709	78.0
3-3/32	3.094	78.581
—	3.1102	79.0
3-1/8	3.125	79.581
—	3.1496	80.0
3-5/32	3.156	80.169
3-3/16	3.1875	80.963
—	3.1890	81.0
3-7/32	3.219	81.756
—	3.2283	82.0
3-1/4	3.250	82.550
—	3.2677	83.0
3-9/32	3.281	83.344
—	3.3071	84.0
3-5/16	3.312	84.1377
3-11/32	3.344	84.9314
—	3.3464	85.0
3-3/8	3.375	85.725
—	3.3858	86.0
3-13/32	3.406	86.519
—	3.4252	87.0
3-7/16	3.438	87.313
—	3.4648	88.0
3-15/32	3.469	88.108
3-1/2	3.500	88.900
—	3.5039	89.0
3-17/32	3.531	89.694
—	3.5433	90.0
3-9/16	3.562	90.4877
—	3.5827	91.0
3-19/32	3.594	91.281
—	3.622	92.0
3-5/8	3.625	92.075
3-21/32	3.656	92.869
—	3.6614	93.0

Inches		
Fractions	Decimals	M M
3-11/16	3.6875	93.663
—	3.7008	94.0
3-23/32	3.719	94.456
—	3.7401	95.0
3-3/4	3.750	95.250
—	3.7795	96.0
3-25/32	3.781	96.044
3-13/16	3.8125	96.838
—	3.8189	97.0
3-27/32	3.844	97.631
—	3.8583	98.0
3-7/8	3.875	98.425
—	3.8976	99.0
3-29/32	3.9062	99.219
—	3.9370	100.0
3-15/16	3.9375	100.013
3-31/32	3.969	100.806
—	3.9764	101.0
4	4.000	101.600
4-1/16	4.062	103.188
4-1/8	4.125	104.775
—	4.1338	105.0
4-3/16	4.1875	106.363
4-1/4	4.250	107.950
4-5/16	4.312	109.538
—	4.3307	110.0
4-3/8	4.375	111.125
4-7/16	4.438	112.713
4-1/2	4.500	114.300
—	4.5275	115.0
4-9/16	4.562	115.888
4-5/8	4.625	117.475
4-11/16	4.6875	119.063
—	4.7244	120.0
4-3/4	4.750	120.650
4-13/16	4.8125	122.238
4-7/8	4.875	123.825
—	4.9212	125.0
4-15/16	4.9375	125.413
5	5.000	127.000
—	5.1181	130.0
5-1/4	5.250	133.350
5-1/2	5.500	139.700
—	5.5118	140.0
5-3/4	5.750	146.050
—	5.9055	150.0
6	6.000	152.400
6-1/4	6.250	158.750
—	6.2992	160.0
6-1/2	6.500	165.100
—	6.6929	170.0
6-3/4	6.750	171.450
7	7.000	177.800
—	7.0866	180.0
—	7.4803	190.0
7-1/2	7.500	190.500
—	7.8740	200.0
8	8.000	203.200
—	8.2677	210.0
8-1/2	8.500	215.900
—	8.6614	220.0
9	9.000	228.600
—	9.0551	230.0
—	9.4488	240.0
9-1/2	9.500	241.300
—	9.8425	250.0
10	10.000	254.00
—	10.2362	260.0
—	10.6299	270.0
11	11.000	279.40
—	11.0236	280.0
—	11.4173	290.0
—	11.8110	300.0
12	12.000	304.80
13	13.000	330.20
—	13.7795	350.0
14	14.000	355.60
15	15.000	381.00
—	15.7480	400.0
16	16.000	406.40
17	17.000	431.80
—	17.7165	450.0
18	18.000	457.20
19	19.000	482.60
—	19.6850	500.0
20	20.000	508.00

Metric Seals

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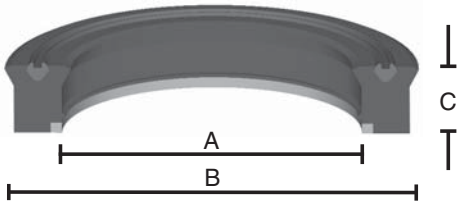
STYLE MRTUB SUPER-DUTY ROD U-SEALS

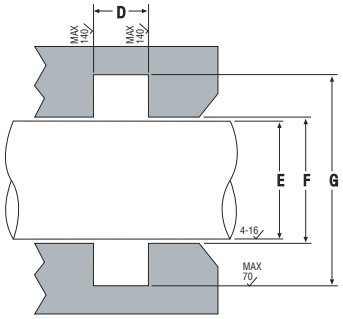
Our premium single-acting polyurethane rod seal incorporates an NBR energizer to seal at low pressures. The twin lip design provides stability and friction-reducing lube retention for dry rod sealing, and the included hard acetal backup ring resists extrusion. MRTUB is capable of pressures up to 10,000 psi in approved applications. Please consult our Engineering Department for pressures above 6,000 psi.



PART NUMBERS

MRTUB - 35 x 50 x 9.5

Type of Seal | Rod Diameter | Groove Diameter | Height



SEAL INFORMATION					
MATERIAL	94A URETHANE SEAL RUBBER ENERGIZER POLYACETAL ANTI-EXTRUSION RING				
MAXIMUM OPERATING CONDITIONS					
MAXIMUM SPEED	PRESSURE RANGE		TEMPERATURE RANGE		
3 ft/sec	0 - 6,000 psi		-50° to +230° F		
MAXIMUM EXTRUSION GAP					
PRESSURE	2,400 psi	3,750 psi	6,000 psi	7,500 psi	10,000 psi
MAX. DIAM. GAP	.040”	.032”	.024”	.016”	.010”

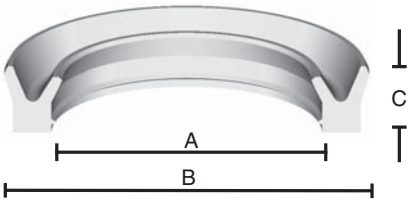
Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Throat Diameter	G Housing Diameter
MRTUB-35X50X9.5	35	50	9.5	10.5 +0.25 -0.00	35.00 -0.025 -0.087	35.00 +0.062 -0.000	50.00 ±0.080
MRTUB-36X46X7.3	36	46	7.3	8.0 +0.25 -0.00	36.00 -0.025 -0.087	36.00 +0.062 -0.000	46.00 ±0.080
MRTUB-40X50X7.3	40	50	7.3	8.0 +0.25 -0.00	40.00 -0.025 -0.087	40.00 +0.062 -0.000	50.00 ±0.080
MRTUB-45X55X7.3	45	55	7.3	8.0 +0.25 -0.00	45.00 -0.025 -0.087	45.00 +0.062 -0.000	55.00 ±0.095
MRTUB-45X60X11.4	45	60	11.4	12.5 +0.25 -0.00	45.00 -0.025 -0.087	45.00 +0.062 -0.000	60.00 ±0.095
MRTUB-50X60X7.3	50	60	7.3	8.0 +0.25 -0.00	50.00 -0.025 -0.087	50.00 +0.062 -0.000	60.00 ±0.095
MRTUB-50X65X11.4	50	65	11.4	12.5 +0.25 -0.00	50.00 -0.025 -0.087	50.00 +0.062 -0.000	65.00 ±0.095
MRTUB-55X70X11.4	55	70	11.4	12.5 +0.25 -0.00	55.00 -0.030 -0.104	55.00 +0.074 -0.000	70.00 ±0.095
MRTUB-56X71X11.4	56	71	11.4	12.5 +0.25 -0.00	56.00 -0.030 -0.104	56.00 +0.074 -0.000	71.00 ±0.095
MRTUB-60X73X13	60	73	13.0	14.0 +0.25 -0.00	60.00 -0.030 -0.104	60.00 +0.074 -0.000	73.00 ±0.095

STYLE MRTUB SUPER-DUTY ROD U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Throat Diameter	G Housing Diameter
MRTUB-60X75X11.4	60	75	11.4	12.5 +0.25 -0.00	60.00 -0.030 -0.104	60.00 +0.074 -0.000	75.00 ±0.095
MRTUB-63X78X11.4	63	78	11.4	12.5 +0.25 -0.00	63.00 -0.030 -0.104	63.00 +0.074 -0.000	78.00 ±0.095
MRTUB-63X83X11.8	63	83	11.8	13.0 +0.25 -0.00	63.00 -0.030 -0.104	63.00 +0.074 -0.000	83.00 ±0.110
MRTUB-70X85X11.4	70	85	11.4	12.5 +0.25 -0.00	70.00 -0.030 -0.104	70.00 +0.074 -0.000	85.00 ±0.110
MRTUB-75X88X13	75	88	13.0	14.0 +0.25 -0.00	75.00 -0.030 -0.104	75.00 +0.074 -0.000	88.00 ±0.110
MRTUB-80X95X11.4	80	95	11.4	12.5 +0.25 -0.00	80.00 -0.030 -0.104	80.00 +0.074 -0.000	95.00 ±0.110
MRTUB-80X95X13	80	95	13.0	14.0 +0.25 -0.00	80.00 -0.030 -0.104	80.00 +0.074 -0.000	95.00 ±0.110
MRTUB-85X100X13	85	100	13.0	14.0 +0.25 -0.00	85.00 -0.036 -0.123	85.00 +0.087 -0.000	100.00 ±0.110
MRTUB-90X105X11.4	90	105	11.4	12.5 +0.25 -0.00	90.00 -0.036 -0.123	90.00 +0.087 -0.000	105.00 ±0.110
MRTUB-90X105X13	90	105	13.0	14.0 +0.25 -0.00	90.00 -0.036 -0.123	90.00 +0.087 -0.000	105.00 ±0.110
MRTUB-95X110X13	95	110	13.0	14.0 +0.25 -0.00	95.00 -0.036 -0.123	95.00 +0.087 -0.000	110.00 ±0.110
MRTUB-100X115X13	100	115	13.0	14.0 +0.25 -0.00	100.00 -0.036 -0.123	100.00 +0.087 -0.000	115.00 ±0.110
MRTUB-100X120X14.6	100	120	14.6	16.0 +0.25 -0.00	100.00 -0.036 -0.123	100.00 +0.087 -0.000	120.00 ±0.110
MRTUB-110X130X13	110	130	13.0	14.0 +0.25 -0.00	110.00 -0.036 -0.123	110.00 +0.087 -0.000	130.00 ±0.125
MRTUB-110X130X14.6	110	130	14.6	16.0 +0.25 -0.00	110.00 -0.036 -0.123	110.00 +0.087 -0.000	130.00 ±0.125
MRTUB-120X135X14.6	120	135	14.6	16.0 +0.25 -0.00	120.00 -0.036 -0.123	120.00 +0.087 -0.000	135.00 ±0.125
MRTUB-120X140X13	120	140	13.0	14.0 +0.25 -0.00	120.00 -0.036 -0.123	120.00 +0.087 -0.000	140.00 ±0.125
MRTUB-140X160X13	140	160	13.0	14.0 +0.25 -0.00	140.00 -0.043 -0.143	140.00 +0.100 -0.000	160.00 ±0.125

STYLE MRTU ROD U-SEALS

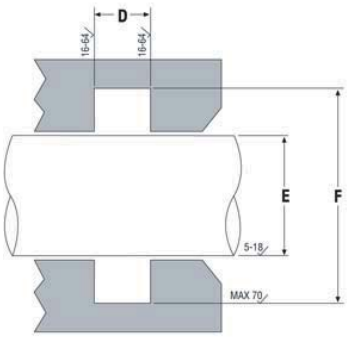
Molded in a tough urethane, this seal employs an additional lip near the heel. The Twin Lip design provides stability, friction-reducing lube retention, and some contaminant resistance. VME - Secondary lip is further from heel than standard MRTU. **NOTE:** E = European Urethane.



PART NUMBERS

MRTU - 12 x 18 x 5.7

Type of Seal | I.D. | O.D. | Height



SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-40° TO +225° F E: -22° TO +212° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	G Housing Diameter
MRTU-12X18X5.7	12	18	5.7	6.3 +0.250 0.000	12 -0.016 -0.059	18 ±0.055
MRTU-12X20X5.7	12	20	5.7	6.3 +0.250 0.000	12 -0.016 -0.059	20 ±0.065
MRTU-16X22X5	16	22	5	6 +0.250 0.000	16 -0.016 -0.059	22 ±0.065
MRTU-16X24X5	16	24	5	5.50 +0.250 0.000	16 -0.016 -0.059	24 ±0.065
MRTU-16X24X5.7	16	24	5.7	6.3 +0.250 0.000	16 -0.016 -0.059	24 ±0.065
MRTU-16X26X7.7	16	26	7.7	9 +0.250 0.000	16 -0.016 -0.059	26 ±0.065
MRTU-18X25X5	18	25	5	6 +0.250 0.000	18 -0.016 -0.059	25 ±0.065
MRTU-18X26X6	18	26	6	7 +0.250 0.000	18 -0.016 -0.059	26 ±0.065
MRTU-20X26X5	20	26	5	5.5 +0.250 0.000	20 -0.020 -0.072	26 ±0.065
MRTU-20X28X5.7	20	28	5.7	6.3 +0.250 0.000	20 -0.020 -0.072	28 ±0.065
MRTU-20X30X7.7	20	30	7.7	9 +0.250 0.000	20 -0.020 -0.072	30 ±0.065
MRTU-22X30X5.7	22	30	5.7	6.3 +0.250 0.000	22 -0.020 -0.072	30 ±0.065
MRTU-22X32X7.3	22	32	7.3	8 +0.250 0.000	22 -0.020 -0.072	32 ±0.080
MRTU-25X33X5.7	25	33	5.7	6.3 +0.250 0.000	25 -0.020 -0.072	33 ±0.080
MRTU-25X35X7.7	25	35	7.7	9 +0.250 0.000	25 -0.020 -0.072	35 ±0.080
MRTU-25X35X8	25	35	8	9 +0.250 0.000	25 -0.020 -0.072	35 ±0.080
MRTU-25X35X10	25	35	10	11 +0.250 0.000	25 -0.020 -0.072	35 ±0.080
MRTU-28X38X7.3	28	38	7.3	8 +0.250 0.000	28 -0.020 -0.072	38 ±0.080
MRTU-28X43X11.4	28	43	11.4	12.5 +0.250 0.000	28 -0.020 -0.072	43 ±0.080

STYLE MRTU ROD U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	G Housing Diameter
MRTU-30X38X6.3	30	38	6.3	7 +0.250 0.000	30 -0.020 -0.072	38 ±0.080
MRTU-30X40X6	30	40	6	7 +0.250 0.000	30 -0.020 -0.072	40 ±0.080
MRTU-30X40X6.5-E	30	40	6.5	7.5 +0.250 0.000	30 -0.020 -0.072	40 ±0.080
MRTU-30X40X10	30	40	10	11 +0.250 0.000	30 -0.020 -0.072	40 ±0.080
MRTU-32X40X6	32	40	6	7 +0.250 0.000	32 -0.025 -0.087	40 ±0.080
MRTU-32X40X7.7	32	40	7.7	9 +0.250 0.000	32 -0.025 -0.087	40 ±0.080
MRTU-32X42X5.7	32	42	5.7	6.3 +0.250 0.000	32 -0.025 -0.087	42 ±0.080
MRTU-32X42X7.3	32	42	7.3	8 +0.250 0.000	32 -0.025 -0.087	42 ±0.080
MRTU-32X42X10	32	42	10	11 +0.250 0.000	32 -0.025 -0.087	42 ±0.080
MRTU-32X47X9.1	32	47	9.1	10 +0.250 0.000	32 -0.025 -0.087	47 ±0.080
MRTU-32X47X10	32	47	10	11 +0.250 0.000	32 -0.025 -0.087	47 ±0.080
MRTU-35X43X6.3	35	43	6.3	7 +0.250 0.000	35 -0.025 -0.087	43 ±0.080
MRTU-35X43X8.2	35	43	8.2	9 +0.250 0.000	35 -0.025 -0.087	43 ±0.080
MRTU-35X45X6	35	45	6	7 +0.250 0.000	35 -0.025 -0.087	45 ±0.080
MRTU-35X45X6-E	35	45	6	7 +0.250 0.000	35 -0.025 -0.087	45 ±0.080
MRTU-35X45X7.7	35	45	7.7	9 +0.250 0.000	35 -0.025 -0.087	45 ±0.080
MRTU-35X45X10	35	45	10	11 +0.250 0.000	35 -0.025 -0.087	45 ±0.080
MRTU-35X50X9	35	50	9	10 +0.250 0.000	35 -0.025 -0.087	50 ±0.080
MRTU-35X50X10	35	50	10	11 +0.250 0.000	35 -0.025 -0.087	50 ±0.080
MRTU-36X44X6.4	36	44	6.4	7.5 +0.250 0.000	36 -0.025 -0.087	44 ±0.080
MRTU-36X44X8	36	44	8	9 +0.250 0.000	36 -0.025 -0.087	44 ±0.080
MRTU-36X46X7	36	46	7	8 +0.250 0.000	36 -0.025 -0.087	46 ±0.080
MRTU-36X46X10	36	46	10	11 +0.250 0.000	36 -0.025 -0.087	46 ±0.080
MRTU-38X48X8	38	48	8	9 +0.250 0.000	38 -0.025 -0.087	48 ±0.080
MRTU-40X48X5.8-E	40	48	5.8	6.3 +0.250 0.000	40 -0.025 -0.087	48 ±0.080
MRTU-40X48X8.2	40	48	8.2	9 +0.250 0.000	40 -0.025 -0.087	48 ±0.080
MRTU-40X50X7	40	50	7	8 +0.250 0.000	40 -0.025 -0.087	50 ±0.080
MRTU-40X50X8	40	50	8	9 +0.250 0.000	40 -0.025 -0.087	50 ±0.080
MRTU-40X50X10	40	50	10	11 +0.250 0.000	40 -0.025 -0.087	50 ±0.080

STYLE MRTU ROD U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	G Housing Diameter
MRTU-40X55X10	40	55	10	11 +0.250 0.000	40 -0.025 -0.087	55 ±0.095
MRTU-45X53X8.1	45	53	8.1	9 +0.250 0.000	45 -0.025 -0.087	53 ±0.095
MRTU-45X55X7.3	45	55	7.3	8 +0.250 0.000	45 -0.025 -0.087	55 ±0.095
MRTU-45X55X10	45	55	10	11 +0.250 0.000	45 -0.025 -0.087	55 ±0.095
MRTU-45X60X10	45	60	10	11 +0.250 0.000	45 -0.025 -0.087	60 ±0.095
MRTU-45X65X10	45	65	10	11 +0.250 0.000	45 -0.025 -0.087	65 ±0.095
MRTU-48X56X12-E	48	56	12	13 +0.250 0.000	48 -0.025 -0.087	56 ±0.095
MRTU-50X60X7.3	50	60	7.3	8 +0.250 0.000	50 -0.025 -0.087	60 ±0.095
MRTU-50X60X10	50	60	10	11 +0.250 0.000	50 -0.025 -0.087	60 ±0.095
MRTU-50X60X11.8	50	60	11.8	13 +0.250 0.000	50 -0.025 -0.087	60 ±0.095
MRTU-50X65X9.5	50	65	9.5	10.5 +0.250 0.000	50 -0.025 -0.087	65 ±0.095
MRTU-50X65X10	50	65	10	11 +0.250 0.000	50 -0.025 -0.087	65 ±0.095
MRTU-50X65X11	50	65	11	12 +0.250 0.000	50 -0.025 -0.087	65 ±0.095
MRTU-50X65X14.5	50	65	14.5	16 +0.250 0.000	50 -0.025 -0.087	65 ±0.095
MRTU-55X65X10	55	65	10	11 +0.250 0.000	55 -0.030 -0.104	65 ±0.095
MRTU-55X70X11.8	55	70	11.8	13 +0.250 0.000	55 -0.030 -0.104	70 ±0.095
MRTU-56X66X10	56	66	10	11 +0.250 0.000	56 -0.030 -0.104	66 ±0.095
MRTU-56X71X10	56	71	10	11 +0.250 0.000	56 -0.030 -0.104	71 ±0.095
MRTU-56X71X11	56	71	11	12.5 +0.250 0.000	56 -0.030 -0.104	71 ±0.095
MRTU-60X68X11	60	68	11	12.5 +0.250 0.000	60 -0.030 -0.104	68 ±0.095
MRTU-60X70X10	60	70	10	11 +0.250 0.000	60 -0.030 -0.104	70 ±0.095
MRTU-60X70X11.8	60	70	11.8	13 +0.250 0.000	60 -0.030 -0.104	70 ±0.095
MRTU-60X71X7	60	71	7	8 +0.250 0.000	60 -0.030 -0.104	71 ±0.095
MRTU-60X72X10	60	72	10	11 +0.250 0.000	60 -0.030 -0.104	72 ±0.095
MRTU-60X75X10	60	75	10	11 +0.250 0.000	60 -0.030 -0.104	75 ±0.095
MRTU-60X75X11.8	60	75	11.8	13 +0.250 0.000	60 -0.030 -0.104	75 ±0.095
MRTU-60X76X10	60	76	10	11 +0.250 0.000	60 -0.030 -0.104	76 ±0.095
MRTU-60X80X12	60	80	12	13 +0.250 0.000	60 -0.030 -0.104	80 ±0.095

STYLE MRTU ROD U-SEALS

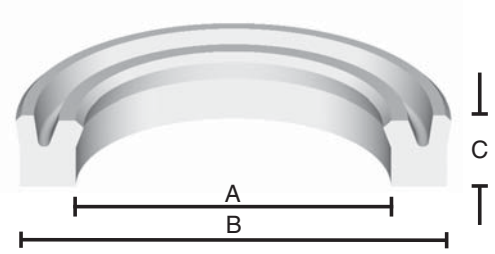
Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	G Housing Diameter
MRTU-63X73X12	63	73	12	13 +0.250 0.000	63 -0.030 -0.104	73 ±0.095
MRTU-63X78X10	63	78	10	11 +0.250 0.000	63 -0.030 -0.104	78 ±0.095
MRTU-63X78X11.4	63	78	11.4	12.5 +0.250 0.000	63 -0.030 -0.104	78 ±0.095
MRTU-65X75X11.8	65	75	11.8	13 +0.250 0.000	65 -0.030 -0.104	75 ±0.095
MRTU-65X78X10	65	78	10	11 +0.250 0.000	65 -0.030 -0.104	78 ±0.095
MRTU-70X80X12	70	80	12	13 +0.250 0.000	70 -0.030 -0.104	80 ±0.095
MRTU-70X83X10	70	83	10	11 +0.250 0.000	70 -0.030 -0.104	83 ±0.110
MRTU-70X85X10	70	85	10	11 +0.250 0.000	70 -0.030 -0.104	85 ±0.110
MRTU-70X85X11.5	70	85	11.5	12.5 +0.250 0.000	70 -0.030 -0.104	85 ±0.110
MRTU-75X85X11.8	75	85	11.8	13 +0.250 0.000	75 -0.030 -0.104	85 ±0.110
MRTU-75X88X10	75	88	10	11 +0.250 0.000	75 -0.030 -0.104	88 ±0.110
MRTU-80X90X10	80	90	10	11 +0.250 0.000	80 -0.030 -0.104	90 ±0.110
MRTU-80X90X12	80	90	12	13 +0.250 0.000	80 -0.030 -0.104	90 ±0.110
MRTU-80X93X10	80	93	10	11 +0.250 0.000	80 -0.030 -0.104	93 ±0.110
MRTU-80X95X12	80	95	12	13 +0.250 0.000	80 -0.030 -0.104	95 ±0.110
MRTU-80X100X12	80	100	12	13 +0.250 0.000	80 -0.030 -0.104	100 ±0.110
MRTU-80X100X14.5	80	100	14.5	16 +0.250 0.000	80 -0.030 -0.104	100 ±0.110
MRTU-85X100X9	85	100	9	10 +0.250 0.000	85 -0.036 -0.123	100 ±0.110
MRTU-85X100X10	85	100	10	11 +0.250 0.000	85 -0.036 -0.123	100 ±0.110
MRTU-90X100X11.5-VME	90	100	11.5	12.5 +0.250 0.000	90 -0.036 -0.123	100 ±0.110
MRTU-90X105X9	90	105	9	10 +0.250 0.000	90 -0.036 -0.123	105 ±0.110
MRTU-90X105X11.4	90	105	11.4	12.5 +0.250 0.000	90 -0.036 -0.123	105 ±0.110
MRTU-95X115X12	95	115	12	13 +0.250 0.000	95 -0.036 -0.123	115 ±0.110
MRTU-100X115X9	100	115	9	10 +0.250 0.000	100 -0.036 -0.123	115 ±0.110
MRTU-100X115X12	100	115	12	13 +0.250 0.000	100 -0.036 -0.123	115 ±0.110
MRTU-100X120X11.8	100	120	11.8	13 +0.250 0.000	100 -0.036 -0.123	120 ±0.110
MRTU-100X120X14.5	100	120	14.5	16 +0.250 0.000	100 -0.036 -0.123	120 ±0.110
MRTU-105X113X13.5-E	105	113	13.5	14.5 +0.250 0.000	105 -0.036 -0.123	113 ±0.110

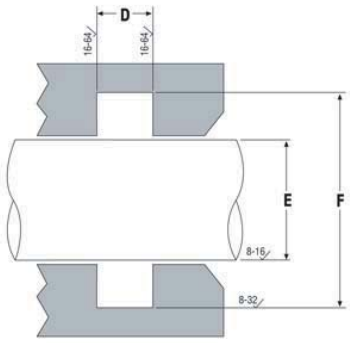
STYLE MRTU ROD U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	G Housing Diameter
MRTU-105X115X11.5-VME	105	115	11.5	12.5 +0.250 0.000	105 -0.036 -0.123	115 ±0.110
MRTU-105X115X13.2	105	115	13.2	14.5 +0.250 0.000	105 -0.036 -0.123	115 ±0.110
MRTU-105X120X14.5	105	120	14.5	16 +0.250 0.000	105 -0.036 -0.123	120 ±0.110
MRTU-110X125X14.5	110	125	14.5	16 +0.250 0.000	110 -0.036 -0.123	125 ±0.125
MRTU-110X130X11.8	110	130	11.8	13 +0.250 0.000	110 -0.036 -0.123	130 ±0.125
MRTU-110X130X14.5	110	130	14.5	16 +0.250 0.000	110 -0.036 -0.123	130 ±0.125
MRTU-120X130X11.5-VME	120	130	11.5	12.5 +0.250 0.000	120 -0.036 -0.123	130 ±0.125
MRTU-120X135X15	120	135	15	16 +0.250 0.000	120 -0.036 -0.123	135 ±0.125
MRTU-125X145X14.5	125	145	14.5	16 +0.250 0.000	125 -0.043 -0.143	145 ±0.125
MRTU-130X140X14.5	130	140	14.5	16 +0.250 0.000	130 -0.043 -0.143	140 ±0.125
MRTU-130X145X10	130	145	10	11 +0.250 0.000	130 -0.043 -0.143	145 ±0.125
MRTU-130X150X14.5	130	150	14.5	16 +0.250 0.000	130 -0.043 -0.143	150 ±0.125
MRTU-140X150X11.5	140	150	11.5	12 +0.250 0.000	140 -0.043 -0.143	150 ±0.125
MRTU-140X160X11.8	140	160	11.8	13 +0.250 0.000	140 -0.043 -0.143	160 ±0.125
MRTU-140X160X14.5	140	160	14.5	16 +0.250 0.000	140 -0.043 -0.143	160 ±0.125
MRTU-150X170X13	150	170	13	14.5 +0.250 0.000	150 -0.043 -0.143	170 ±0.125
MRTU-160X170X11.5-VME	160	170	11.5	12.5 +0.250 0.000	160 -0.043 -0.143	170 ±0.125
MRTU-160X180X14.5	160	180	14.5	16 +0.250 0.000	160 -0.043 -0.143	180 ±0.125
MRTU-177.7X195X9.5	177.7	195	9.5	10.5 +0.250 0.000	177.7 -0.043 -0.143	195 ±0.145

STYLE MRU ROD U-SEALS

Molded in a tough urethane, this rod u-seal fits tightly in the groove while providing increased radial force on the rod.
NOTE: E = European Urethane.





PART NUMBERS

MRU - 6 x 14 x 5.7-E

Type of Seal | I.D. | O.D. | Height

SEAL INFORMATION

MATERIAL	URETHANE
TEMPERATURE RANGE	-65° TO +230° F E: -22° TO +212° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter
MRU-6X14X5.7-E	6	14	5.7	6.5 +0.300 0.000	6 -0.010 -0.028	14 +0.070 0.000
MRU-12X20X5.7-E	12	20	5.7	6.5 +0.300 0.000	12 -0.016 -0.043	20 +0.084 0.000
MRU-15X25X10	15	25	10	11 +0.300 0.000	15 -0.016 -0.043	25 +0.084 0.000
MRU-18X24X4.5-E	18	24	4.5	5 +0.300 0.000	18 -0.016 -0.043	24 +0.084 0.000
MRU-18X26X5.7-E	18	26	5.7	6.5 +0.300 0.000	18 -0.016 -0.043	26 +0.084 0.000
MRU-18X28X8-E	18	28	8	9 +0.300 0.000	18 -0.016 -0.043	28 +0.084 0.000
MRU-20X28X5.7	20	28	5.7	6.5 +0.300 0.000	20 -0.020 -0.053	28 +0.084 0.000
MRU-20X30X8	20	30	8	9 +0.300 0.000	20 -0.020 -0.053	30 +0.084 0.000
MRU-20X35X10-E	20	35	10	11 +0.300 0.000	20 -0.020 -0.053	35 +0.100 0.000
MRU-22X30X5.7-E	22	30	5.7	6.5 +0.300 0.000	22 -0.020 -0.053	30 +0.084 0.000
MRU-25X33X5.7	25	33	5.7	6.5 +0.300 0.000	25 -0.020 -0.053	33 +0.100 0.000
MRU-25X33X6.3-E	25	33	6.3	7 +0.300 0.000	25 -0.020 -0.053	33 +0.100 0.000
MRU-25X33X10-E	25	33	10	11 +0.300 0.000	25 -0.020 -0.053	33 +0.100 0.000
MRU-25X35X5	25	35	5	5.7 +0.300 0.000	25 -0.020 -0.053	35 +0.100 0.000
MRU-25X35X6	25	35	6	6.5 +0.300 0.000	25 -0.020 -0.053	35 +0.100 0.000
MRU-25X35X7.2-E	25	35	7.2	8 +0.300 0.000	25 -0.020 -0.053	35 +0.100 0.000
MRU-25X35X8	25	35	8	9 +0.300 0.000	25 -0.020 -0.053	35 +0.100 0.000

STYLE MRU ROD U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter
MRU-25X35X10-E	25	35	10	11 +0.300 0.000	25 -0.020 -0.053	35 +0.100 0.000
MRU-25X40X10-E	25	40	10	11 +0.300 0.000	25 -0.020 -0.053	40 +0.100 0.000
MRU-28X38X7.3	28	38	7.3	8 +0.300 0.000	28 -0.020 -0.053	38 +0.100 0.000
MRU-30X38X5.7-E	30	38	5.7	6.5 +0.300 0.000	30 -0.020 -0.053	38 +0.100 0.000
MRU-30X38X8-E	30	38	8	9 +0.300 0.000	30 -0.020 -0.053	38 +0.100 0.000
MRU-30X40X6	30	40	6	6.5 +0.300 0.000	30 -0.020 -0.053	40 +0.100 0.000
MRU-30X40X7	30	40	7	8 +0.300 0.000	30 -0.020 -0.053	40 +0.100 0.000
MRU-30X40X7.3	30	40	7.3	8 +0.300 0.000	30 -0.020 -0.053	40 +0.100 0.000
MRU-30X40X8	30	40	8	9 +0.300 0.000	30 -0.020 -0.053	40 +0.100 0.000
MRU-30X40X10-E	30	40	10	11 +0.300 0.000	30 -0.020 -0.053	40 +0.100 0.000
MRU-30X43X9-E	30	43	9	10 +0.300 0.000	30 -0.020 -0.053	43 +0.100 0.000
MRU-30X43X10	30	43	10	11 +0.300 0.000	30 -0.020 -0.053	43 +0.100 0.000
MRU-30X46X9	30	46	9	10 +0.300 0.000	30 -0.020 -0.053	46 +0.100 0.000
MRU-32X40X8-E	32	40	8	9 +0.300 0.000	32 -0.025 -0.064	40 +0.100 0.000
MRU-32X42X6	32	42	6	6.5 +0.300 0.000	32 -0.025 -0.064	42 +0.100 0.000
MRU-32X42X7.2-E	32	42	7.2	8 +0.300 0.000	32 -0.025 -0.064	42 +0.100 0.000
MRU-32X45X9.5-E	32	45	9.5	10.5 +0.300 0.000	32 -0.025 -0.064	45 +0.100 0.000
MRU-32X47X10-E	32	47	10	11 +0.300 0.000	32 -0.025 -0.064	47 +0.100 0.000
MRU-33X43X10-E	33	43	10	11 +0.300 0.000	33 -0.025 -0.064	43 +0.100 0.000
MRU-35X43X5.7-E	35	43	5.7	6.5 +0.300 0.000	35 -0.025 -0.064	43 +0.100 0.000
MRU-35X43X8-E	35	43	8	9 +0.300 0.000	35 -0.025 -0.064	43 +0.100 0.000
MRU-35X45X6	35	45	6	6.5 +0.300 0.000	35 -0.025 -0.064	45 +0.100 0.000
MRU-35X45X6.3	35	45	6.3	7 +0.300 0.000	35 -0.025 -0.064	45 +0.100 0.000
MRU-35X45X7	35	45	7	8 +0.300 0.000	35 -0.025 -0.064	45 +0.100 0.000
MRU-35X45X7.3	35	45	7.3	8 +0.300 0.000	35 -0.025 -0.064	45 +0.100 0.000
MRU-35X51X9	35	51	9	10 +0.300 0.000	35 -0.025 -0.064	51 +0.120 0.000
MRU-36X44X5.7	36	44	5.7	6.5 +0.300 0.000	36 -0.025 -0.064	44 +0.100 0.000

STYLE MRU ROD U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter
MRU-36X46X7-E	36	46	7	8 +0.300 0.000	36 -0.025 -0.064	46 +0.100 0.000
MRU-36X51X10-E	36	51	10	11 +0.300 0.000	36 -0.025 -0.064	51 +0.120 0.000
MRU-40X48X5	40	48	5	5.7 +0.300 0.000	40 -0.025 -0.064	48 +0.100 0.000
MRU-40X48X5.7-E	40	48	5.7	6.5 +0.300 0.000	40 -0.025 -0.064	48 +0.100 0.000
MRU-40X50X6	40	50	6	6.5 +0.300 0.000	40 -0.025 -0.064	50 +0.100 0.000
MRU-40X50X7.3	40	50	7.3	8 +0.300 0.000	40 -0.025 -0.064	50 +0.100 0.000
MRU-40X52X8-E	40	52	8	9 +0.300 0.000	40 -0.025 -0.064	52 +0.120 0.000
MRU-40X55X9	40	55	9	10 +0.300 0.000	40 -0.025 -0.064	55 +0.120 0.000
MRU-40X55X10	40	55	10	11 +0.300 0.000	40 -0.025 -0.064	55 +0.120 0.000
MRU-40X56X12	40	56	12	13 +0.300 0.000	40 -0.025 -0.064	56 +0.120 0.000
MRU-40X60X12	40	60	12	13 +0.300 0.000	40 -0.025 -0.064	60 +0.120 0.000
MRU-42X50X6	42	50	6	6.5 +0.300 0.000	42 -0.025 -0.064	50 +0.100 0.000
MRU-42X52X7.3	42	52	7.3	8 +0.300 0.000	42 -0.025 -0.064	52 +0.120 0.000
MRU-45X53X5.8-E	45	53	5.8	6.5 +0.300 0.000	45 -0.025 -0.064	53 +0.120 0.000
MRU-45X55X6	45	55	6	6.5 +0.300 0.000	45 -0.025 -0.064	55 +0.120 0.000
MRU-45X55X7.3	45	55	7.3	8 +0.300 0.000	45 -0.025 -0.064	55 +0.120 0.000
MRU-45X58X9-E	45	58	9	10 +0.300 0.000	45 -0.025 -0.064	58 +0.120 0.000
MRU-45X60X9	45	60	9	10 +0.300 0.000	45 -0.025 -0.064	60 +0.120 0.000
MRU-45X60X10-E	45	60	10	11 +0.300 0.000	45 -0.025 -0.064	60 +0.120 0.000
MRU-45X60X11.5-E	45	60	11.5	12.5 +0.300 0.000	45 -0.025 -0.064	60 +0.120 0.000
MRU-45X65X12	45	65	12	13 +0.300 0.000	45 -0.025 -0.064	65 +0.120 0.000
MRU-50X58X8.2	50	58	8.2	9 +0.300 0.000	50 -0.025 -0.064	58 +0.120 0.000
MRU-50X60X7.3	50	60	7.3	8 +0.300 0.000	50 -0.025 -0.064	60 +0.120 0.000
MRU-50X60X10-E	50	60	10	11 +0.300 0.000	50 -0.025 -0.064	60 +0.120 0.000
MRU-50X60X12-E	50	60	12	13 +0.300 0.000	50 -0.025 -0.064	60 +0.120 0.000
MRU-50X63X8	50	63	8	9 +0.300 0.000	50 -0.025 -0.064	63 +0.120 0.000
MRU-50X63X10	50	63	10	11 +0.300 0.000	50 -0.025 -0.064	63 +0.120 0.000

STYLE MRU ROD U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter
MRU-50X65X9	50	65	9	10 +0.300 0.000	50 -0.025 -0.064	65 +0.120 0.000
MRU-50X65X10	50	65	10	11 +0.300 0.000	50 -0.025 -0.064	65 +0.120 0.000
MRU-50X65X11.5-E	50	65	11.5	12.5 +0.300 0.000	50 -0.025 -0.064	65 +0.120 0.000
MRU-50X65X15.5-E	50	65	15.5	17 +0.300 0.000	50 -0.025 -0.064	65 +0.120 0.000
MRU-50X66X12	50	66	12	13 +0.300 0.000	50 -0.025 -0.064	66 +0.120 0.000
MRU-50X70X12	50	70	12	13 +0.300 0.000	50 -0.025 -0.064	70 +0.120 0.000
MRU-55X65X7.2-E	55	65	7.2	8 +0.300 0.000	55 -0.030 -0.076	65 +0.120 0.000
MRU-55X68X10	55	68	10	11 +0.300 0.000	55 -0.030 -0.076	68 +0.120 0.000
MRU-55X70X9	55	70	9	10 +0.300 0.000	55 -0.030 -0.076	70 +0.120 0.000
MRU-55X70X10-E	55	70	10	11 +0.300 0.000	55 -0.030 -0.076	70 +0.120 0.000
MRU-55X71X12	55	71	12	13 +0.300 0.000	55 -0.030 -0.076	71 +0.120 0.000
MRU-55X75X12	55	75	12	13 +0.300 0.000	55 -0.030 -0.076	75 +0.120 0.000
MRU-56X66X7.3	56	66	7.3	8 +0.300 0.000	56 -0.030 -0.076	66 +0.120 0.000
MRU-56X66X10-E	56	66	10	11 +0.300 0.000	56 -0.030 -0.076	66 +0.120 0.000
MRU-56X71X9	56	71	9	10 +0.300 0.000	56 -0.030 -0.076	71 +0.120 0.000
MRU-56X71X10-E	56	71	10	11 +0.300 0.000	56 -0.030 -0.076	71 +0.120 0.000
MRU-60X70X7.3	60	70	7.3	8 +0.300 0.000	60 -0.030 -0.076	70 +0.120 0.000
MRU-60X72X9-E	60	72	9	10 +0.300 0.000	60 -0.030 -0.076	72 +0.120 0.000
MRU-60X73X10	60	73	10	11 +0.300 0.000	60 -0.030 -0.076	73 +0.120 0.000
MRU-60X75X9	60	75	9	10 +0.300 0.000	60 -0.030 -0.076	75 +0.120 0.000
MRU-60X76X10	60	76	10	11 +0.300 0.000	60 -0.030 -0.076	76 +0.120 0.000
MRU-60X80X12	60	80	12	13 +0.300 0.000	60 -0.030 -0.076	80 +0.120 0.000
MRU-63X73X12-E	63	73	12	13 +0.300 0.000	63 -0.030 -0.076	73 +0.120 0.000
MRU-63X78X10-E	63	78	10	11 +0.300 0.000	63 -0.030 -0.076	78 +0.120 0.000
MRU-63X79X11.5-GT	63	79	11.5	12.5 +0.300 0.000	63 -0.030 -0.076	79 +0.120 0.000
MRU-63X83X12	63	83	12	13 +0.300 0.000	63 -0.030 -0.076	83 +0.140 0.000
MRU-65X75X6	65	75	6	6.5 +0.300 0.000	65 -0.030 -0.076	75 +0.120 0.000

STYLE MRU ROD U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter
MRU-65X78X10	65	78	10	11 +0.300 0.000	65 -0.030 -0.076	78 +0.120 0.000
MRU-65X80X9	65	80	9	10 +0.300 0.000	65 -0.030 -0.076	80 +0.120 0.000
MRU-65X80X10-E	65	80	10	11 +0.300 0.000	65 -0.030 -0.076	80 +0.120 0.000
MRU-65X85X12	65	85	12	13 +0.300 0.000	65 -0.030 -0.076	85 +0.140 0.000
MRU-70X80X7-E	70	80	7	8 +0.300 0.000	70 -0.030 -0.076	80 +0.120 0.000
MRU-70X83X10	70	83	10	11 +0.300 0.000	70 -0.030 -0.076	83 +0.140 0.000
MRU-70X85X9	70	85	9	10 +0.300 0.000	70 -0.030 -0.076	85 +0.140 0.000
MRU-70X85X10-E	70	85	10	11 +0.300 0.000	70 -0.030 -0.076	85 +0.140 0.000
MRU-70X85X12-E	70	85	12	13 +0.300 0.000	70 -0.030 -0.076	85 +0.140 0.000
MRU-70X90X12	70	90	12	13 +0.300 0.000	70 -0.030 -0.076	90 +0.140 0.000
MRU-75X85X6.3	75	85	6.3	7 +0.300 0.000	75 -0.030 -0.076	85 +0.140 0.000
MRU-75X85X7-E	75	85	7	8 +0.300 0.000	75 -0.030 -0.076	85 +0.140 0.000
MRU-75X85X12-E	75	85	12	13 +0.300 0.000	75 -0.030 -0.076	85 +0.140 0.000
MRU-75X88X10	75	88	10	11 +0.300 0.000	75 -0.030 -0.076	88 +0.140 0.000
MRU-75X90X9	75	90	9	10 +0.300 0.000	75 -0.030 -0.076	90 +0.140 0.000
MRU-75X90X10-E	75	90	10	11 +0.300 0.000	75 -0.030 -0.076	90 +0.140 0.000
MRU-75X90X11.4	75	90	11.4	12.5 +0.300 0.000	75 -0.030 -0.076	90 +0.140 0.000
MRU-75X95X12	75	95	12	13 +0.300 0.000	75 -0.030 -0.076	95 +0.140 0.000
MRU-80X93X10	80	93	10	11 +0.300 0.000	80 -0.030 -0.076	93 +0.140 0.000
MRU-80X95X9	80	95	9	10 +0.300 0.000	80 -0.030 -0.076	95 +0.140 0.000
MRU-80X95X10	80	95	10	11 +0.300 0.000	80 -0.030 -0.076	95 +0.140 0.000
MRU-80X95X11.5-E	80	95	11.5	12.5 +0.300 0.000	80 -0.030 -0.076	95 +0.140 0.000
MRU-80X100X12	80	100	12	13 +0.300 0.000	80 -0.030 -0.076	100 +0.140 0.000
MRU-85X100X9	85	100	9	10 +0.300 0.000	85 -0.036 -0.090	100 +0.140 0.000
MRU-85X100X10	85	100	10	11 +0.300 0.000	85 -0.036 -0.090	100 +0.140 0.000
MRU-85X100X11.4	85	100	11.4	12.5 +0.300 0.000	85 -0.036 -0.090	100 +0.140 0.000
MRU-85X105X12	85	105	12	13 +0.300 0.000	85 -0.036 -0.090	105 +0.140 0.000

STYLE MRU ROD U-SEALS

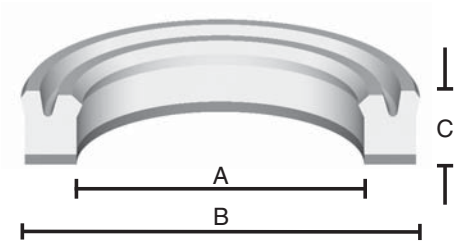
Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter
MRU-90X105X9	90	105	9	10 +0.300 0.000	90 -0.036 -0.090	105 +0.140 0.000
MRU-90X105X10	90	105	10	11 +0.300 0.000	90 -0.036 -0.090	105 +0.140 0.000
MRU-90X105X11.5-E	90	105	11.5	12.5 +0.300 0.000	90 -0.036 -0.090	105 +0.140 0.000
MRU-90X110X12	90	110	12	13 +0.300 0.000	90 -0.036 -0.090	110 +0.140 0.000
MRU-90X110X15-E	90	110	15	16.5 +0.300 0.000	90 -0.036 -0.090	110 +0.140 0.000
MRU-95X110X9	95	110	9	10 +0.300 0.000	95 -0.036 -0.090	110 +0.140 0.000
MRU-95X110X10	95	110	10	11 +0.300 0.000	95 -0.036 -0.090	110 +0.140 0.000
MRU-95X115X12	95	115	12	13 +0.300 0.000	95 -0.036 -0.090	115 +0.140 0.000
MRU-100X113X12.5-E	100	113	12.5	14 +0.300 0.000	100 -0.036 -0.090	113 +0.140 0.000
MRU-100X115X10	100	115	10	11 +0.300 0.000	100 -0.036 -0.090	115 +0.140 0.000
MRU-100X115X12-E	100	115	12	13 +0.300 0.000	100 -0.036 -0.090	115 +0.140 0.000
MRU-100X120X12	100	120	12	13 +0.300 0.000	100 -0.036 -0.090	120 +0.140 0.000
MRU-100X120X15-E	100	120	15	16.5 +0.300 0.000	100 -0.036 -0.090	120 +0.140 0.000
MRU-105X120X9	105	120	9	10 +0.300 0.000	105 -0.036 -0.090	120 +0.140 0.000
MRU-105X120X10	105	120	10	11 +0.300 0.000	105 -0.036 -0.090	120 +0.140 0.000
MRU-105X125X12	105	125	12	13 +0.300 0.000	105 -0.036 -0.090	125 +0.160 0.000
MRU-105X125X15	105	125	15	16.5 +0.300 0.000	105 -0.036 -0.090	125 +0.160 0.000
MRU-110X125X9	110	125	9	10 +0.300 0.000	110 -0.036 -0.090	125 +0.160 0.000
MRU-110X125X10	110	125	10	11 +0.300 0.000	110 -0.036 -0.090	125 +0.160 0.000
MRU-110X130X10	110	130	10	11 +0.300 0.000	110 -0.036 -0.090	130 +0.160 0.000
MRU-110X130X12	110	130	12	13 +0.300 0.000	110 -0.036 -0.090	130 +0.160 0.000
MRU-110X130X13	110	130	13	14.5 +0.300 0.000	110 -0.036 -0.090	130 +0.160 0.000
MRU-110X130X15	110	130	15	16.5 +0.300 0.000	110 -0.036 -0.090	130 +0.160 0.000
MRU-112X127X10	112	127	10	11 +0.300 0.000	112 -0.036 -0.090	127 +0.160 0.000
MRU-115X130X9	115	130	9	10 +0.300 0.000	115 -0.036 -0.090	130 +0.160 0.000
MRU-115X130X10	115	130	10	11 +0.300 0.000	115 -0.036 -0.090	130 +0.160 0.000
MRU-115X135X12	115	135	12	13 +0.300 0.000	115 -0.036 -0.090	135 +0.160 0.000

STYLE MRU ROD U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter
MRU-120X135X9	120	135	9	10 +0.300 0.000	120 -0.036 -0.090	135 +0.160 0.000
MRU-120X140X10	120	140	10	11 +0.300 0.000	120 -0.036 -0.090	140 +0.160 0.000
MRU-120X140X12	120	140	12	13 +0.300 0.000	120 -0.036 -0.090	140 +0.160 0.000
MRU-120X140X13	120	140	13	14.5 +0.300 0.000	120 -0.036 -0.090	140 +0.160 0.000
MRU-120X140X15	120	140	15	16.5 +0.300 0.000	120 -0.036 -0.090	140 +0.160 0.000
MRU-125X145X12	125	145	12	13 +0.300 0.000	125 -0.043 -0.106	145 +0.160 0.000
MRU-130X145X9	130	145	9	10 +0.300 0.000	130 -0.043 -0.106	145 +0.160 0.000
MRU-130X150X12	130	150	12	13 +0.300 0.000	130 -0.043 -0.106	150 +0.160 0.000
MRU-130X150X13	130	150	13	14.5 +0.300 0.000	130 -0.043 -0.106	150 +0.160 0.000
MRU-130X150X16	130	150	16	17 +0.300 0.000	130 -0.043 -0.106	150 +0.160 0.000
MRU-140X155X9	140	155	9	10 +0.300 0.000	140 -0.043 -0.106	155 +0.160 0.000
MRU-140X160X12	140	160	12	13 +0.300 0.000	140 -0.043 -0.106	160 +0.160 0.000
MRU-150X170X12	150	170	12	13 +0.300 0.000	150 -0.043 -0.106	170 +0.160 0.000
MRU-150X170X16	150	170	16	17 +0.300 0.000	150 -0.043 -0.106	170 +0.160 0.000
MRU-160X180X12	160	180	12	13 +0.300 0.000	160 -0.043 -0.106	180 +0.160 0.000
MRU-160X180X15	160	180	15	16 +0.300 0.000	160 -0.043 -0.106	180 +0.160 0.000
MRU-160X185X16	160	185	16	17 +0.300 0.000	160 -0.043 -0.106	185 +0.185 0.000
MRU-170X190X12-E	170	190	12	13 +0.300 0.000	170 -0.043 -0.106	190 +0.185 0.000
MRU-170X195X16	170	195	16	17 +0.300 0.000	170 -0.043 -0.106	195 +0.185 0.000
MRU-180X205X16	180	205	16	17 +0.300 0.000	180 -0.043 -0.106	205 +0.185 0.000
MRU-200X225X16	200	225	16	17 +0.300 0.000	200 -0.050 -0.122	225 +0.185 0.000

STYLE MRUB ROD U-SEALS W/BACK-UP RINGS

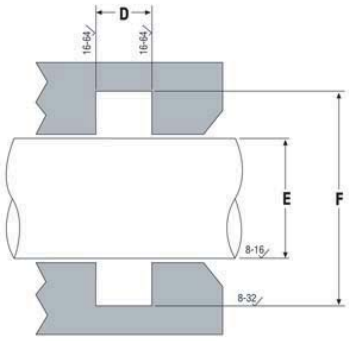
Molded in a tough urethane this rod u-seal fits tightly in the groove while providing increased radial force on the rod. The employment of a nylon back-up makes it highly extrusion resistant. GT= GREEN TWEED SEAL



PART NUMBERS

MRUB - 50 x 63 x 13

Type of Seal | I.D. | O.D. | Height



SEAL INFORMATION	
MATERIAL	URETHANE SEAL NYLON BACK-UP
TEMPERATURE RANGE	-65° TO +220° F
PRESSURE RANGE	0 TO 5,500 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

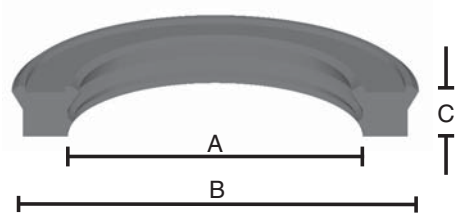
Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter
MRUB-50X63X13	50	63	13	14 +0.300 0.000	50 -0.025 -0.064	63 +0.120 0.000
MRUB-55X68X13	55	68	13	14 +0.300 0.000	55 -0.030 -0.076	68 +0.120 0.000
MRUB-60X73X13.2	60	73	13.2	14 +0.300 0.000	60 -0.030 -0.076	73 +0.120 0.000
MRUB-63X78X11.5-GT	63	78	11.5	12.5 +0.300 0.000	63 -0.030 -0.076	78 +0.120 0.000
MRUB-65X78X13.2	65	78	13.2	14 +0.300 0.000	65 -0.030 -0.076	78 +0.120 0.000
MRUB-65X80X12	65	80	12	13 +0.300 0.000	65 -0.030 -0.076	80 +0.120 0.000
MRUB-70X83X13.2	70	83	13.2	14 +0.300 0.000	70 -0.030 -0.076	83 +0.140 0.000
MRUB-70X86X11.5-GT	70	86	11.5	12.5 +0.300 0.000	70 -0.030 -0.076	86 +0.140 0.000
MRUB-75X88X13.2	75	88	13.2	14 +0.300 0.000	75 -0.030 -0.076	88 +0.140 0.000
MRUB-80X93X13.2	80	93	13.2	14 +0.300 0.000	80 -0.030 -0.076	93 +0.140 0.000
MRUB-85X100X13.2	85	100	13.2	14 +0.300 0.000	85 -0.036 -0.090	100 +0.140 0.000
MRUB-90X105X13.2	90	105	13.2	14 +0.300 0.000	90 -0.036 -0.090	105 +0.140 0.000
MRUB-95X110X13.2	95	110	13.2	14 +0.300 0.000	95 -0.036 -0.090	110 +0.140 0.000
MRUB-100X115X13.2	100	115	13.2	14 +0.300 0.000	100 -0.036 -0.090	115 +0.140 0.000
MRUB-105X120X12	105	120	12	13 +0.300 0.000	105 -0.036 -0.090	120 +0.140 0.000
MRUB-110X130X13	110	130	13	14 +0.300 0.000	110 -0.036 -0.090	130 +0.160 0.000

STYLE MRUB ROD U-SEALS W/BACK-UP RINGS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter
MRUB-130X150X16	130	150	16	17 +0.300 0.000	130 -0.043 -0.106	150 +0.160 0.000
MRUB-140X160X15	140	160	15	16 +0.300 0.000	140 -0.043 -0.106	160 +0.160 0.000
MRUB-200X225X20	200	225	20	21 +0.300 0.000	200 -0.050 -0.122	225 +0.185 0.000

STYLE MRTS ROD U-SEALS

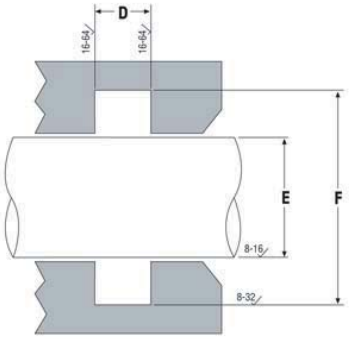
Designed specifically for rod applications, the short lip design and solid 'U' cavity provide high sealability at low pressure. At the heel, a secondary lip provides stability, friction-reducing lube retention, and some contamination resistance.



PART NUMBERS

MRTS - 12 x 20 x 5.8

Type of Seal | I.D. | O.D. | Height



SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter
MRTS-12X20X5.8	12	20	5.8	6.3 +0.200 0.000	12 -0.016 -0.043	20 ±0.042
MRTS-16X24X6	16	24	6	6.5 +0.200 0.000	16 -0.016 -0.043	24 ±0.042
MRTS-18X25X5	18	25	5	5.5 +0.200 0.000	18 -0.016 -0.043	25 ±0.042
MRTS-18X26X5.8	18	26	5.8	6.3 +0.200 0.000	18 -0.016 -0.043	26 ±0.042
MRTS-20X28X6.5	20	28	6.5	7 +0.200 0.000	20 -0.020 -0.053	28 ±0.042
MRTS-22X28X4.5	22	28	4.5	5 +0.200 0.000	22 -0.020 -0.053	28 ±0.042
MRTS-22X30X5.8	22	30	5.8	6.3 +0.200 0.000	22 -0.020 -0.053	30 ±0.042
MRTS-22X32X7	22	32	7	7.5 +0.200 0.000	22 -0.020 -0.053	32 ±0.050
MRTS-25X33X5.8	25	33	5.8	6.3 +0.200 0.000	25 -0.020 -0.053	33 ±0.050
MRTS-25X35X5.8	25	35	5.8	6.3 +0.200 0.000	25 -0.020 -0.053	35 ±0.050
MRTS-25X35X7	25	35	7	7.5 +0.200 0.000	25 -0.020 -0.053	35 ±0.050
MRTS-25X35X8	25	35	8	9 +0.200 0.000	25 -0.020 -0.053	35 ±0.050
MRTS-28X36X5.8	28	36	5.8	6.3 +0.200 0.000	28 -0.020 -0.053	36 ±0.050
MRTS-28X38X7	28	38	7	7.5 +0.200 0.000	28 -0.020 -0.053	38 ±0.050
MRTS-30X38X5.8	30	38	5.8	6.3 +0.200 0.000	30 -0.020 -0.053	38 ±0.050
MRTS-30X38X8	30	38	8	9 +0.200 0.000	30 -0.020 -0.053	38 ±0.050
MRTS-30X40X6.5	30	40	6.5	7 +0.200 0.000	30 -0.020 -0.053	40 ±0.050

STYLE MRTS ROD U-SEALS

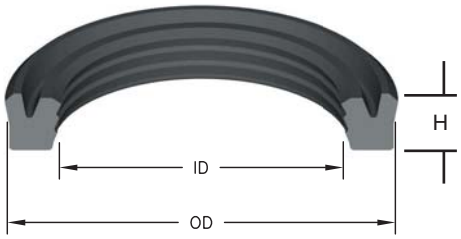
Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter
MRTS-30X40X10	30	40	10	11 +0.200 0.000	30 -0.020 -0.053	40 ±0.050
MRTS-32X42X8	32	42	8	9 +0.200 0.000	32 -0.025 -0.064	42 ±0.050
MRTS-35X43X5.8	35	43	5.8	6.3 +0.200 0.000	35 -0.025 -0.064	43 ±0.050
MRTS-35X43X6	35	43	6	6.5 +0.200 0.000	35 -0.025 -0.064	43 ±0.050
MRTS-35X43X8	35	43	8	9 +0.200 0.000	35 -0.025 -0.064	43 ±0.050
MRTS-35X45X10	35	45	10	11 +0.200 0.000	35 -0.025 -0.064	45 ±0.050
MRTS-35X50X10	35	50	10	11 +0.200 0.000	35 -0.025 -0.064	50 ±0.050
MRTS-36X44X5.7	36	44	5.7	6.2 +0.200 0.000	36 -0.025 -0.064	44 ±0.050
MRTS-40X48X5.8	40	48	5.8	6.3 +0.200 0.000	40 -0.025 -0.064	48 ±0.050
MRTS-40X50X7	40	50	7	7.5 +0.200 0.000	40 -0.025 -0.064	50 ±0.050
MRTS-40X50X10	40	50	10	11 +0.200 0.000	40 -0.025 -0.064	50 ±0.050
MRTS-42X52X8	42	52	8	9 +0.200 0.000	42 -0.025 -0.064	52 ±0.060
MRTS-45X53X8	45	53	8	9 +0.200 0.000	45 -0.025 -0.064	53 ±0.060
MRTS-45X55X7	45	55	7	7.5 +0.200 0.000	45 -0.025 -0.064	55 ±0.060
MRTS-45X55X10	45	55	10	11 +0.200 0.000	45 -0.025 -0.064	55 ±0.060
MRTS-46X54X8.2	46	54	8.2	9.2 +0.200 0.000	46 -0.025 -0.064	54 ±0.060
MRTS-50X60X7	50	60	7	7.5 +0.200 0.000	50 -0.025 -0.064	60 ±0.060
MRTS-50X60X9	50	60	9	10 +0.200 0.000	50 -0.025 -0.064	60 ±0.060
MRTS-50X60X10	50	60	10	11 +0.200 0.000	50 -0.025 -0.064	60 ±0.060
MRTS-50X65X10	50	65	10	11 +0.200 0.000	50 -0.025 -0.064	65 ±0.060
MRTS-55X65X10	55	65	10	11 +0.200 0.000	55 -0.030 -0.076	65 ±0.060
MRTS-56X71X11.5	56	71	11.5	12.5 +0.200 0.000	56 -0.030 -0.076	71 ±0.060
MRTS-60X68X8	60	68	8	9 +0.200 0.000	60 -0.030 -0.076	68 ±0.060
MRTS-60X68X11.5	60	68	11.5	12.5 +0.200 0.000	60 -0.030 -0.076	68 ±0.060
MRTS-60X70X11.5	60	70	11.5	12.5 +0.200 0.000	60 -0.030 -0.076	70 ±0.060

STYLE MRTS ROD U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter
MRTS-60X72X9	60	72	9	10 +0.200 0.000	60 -0.030 -0.076	72 ±0.060
MRTS-60X75X10	60	75	10	11 +0.200 0.000	60 -0.030 -0.076	75 ±0.060
MRTS-70X78X8	70	78	8	9 +0.200 0.000	70 -0.030 -0.076	78 ±0.060
MRTS-70X80X10	70	80	10	11 +0.200 0.000	70 -0.030 -0.076	80 ±0.060
MRTS-75X83X8	75	83	8	9 +0.200 0.000	75 -0.030 -0.076	83 ±0.070
MRTS-75X85X7	75	85	7	7.5 +0.200 0.000	75 -0.030 -0.076	85 ±0.070
MRTS-75X90X10.5	75	90	10.5	11.5 +0.200 0.000	75 -0.030 -0.076	90 ±0.070
MRTS-80X88X8	80	88	8	9 +0.200 0.000	80 -0.030 -0.076	88 ±0.070
MRTS-80X92X9	80	92	9	10 +0.200 0.000	80 -0.030 -0.076	92 ±0.070
MRTS-80X95X11	80	95	11	12 +0.200 0.000	80 -0.030 -0.076	95 ±0.070
MRTS-80X96X9.5	80	96	9.5	10.5 +0.200 0.000	80 -0.030 -0.076	96 ±0.070
MRTS-85X93X8	85	93	8	9 +0.200 0.000	85 -0.036 -0.090	93 ±0.070
MRTS-86X101X12	86	101	12	13 +0.200 0.000	86 -0.036 -0.090	101 ±0.070
MRTS-90X102X9	90	102	9	10 +0.200 0.000	90 -0.036 -0.090	102 ±0.070
MRTS-90X105X11.5	90	105	11.5	12.5 +0.200 0.000	90 -0.036 -0.090	105 ±0.070
MRTS-90X110X14	90	110	14	15 +0.200 0.000	90 -0.036 -0.090	110 ±0.070
MRTS-92X107X11.4	92	107	11.4	12.4 +0.200 0.000	92 -0.036 -0.090	107 ±0.070
MRTS-100X108X8	100	108	8	9 +0.200 0.000	100 -0.036 -0.090	108 ±0.070
MRTS-100X115X12	100	115	12	13 +0.200 0.000	100 -0.036 -0.090	115 ±0.070
MRTS-110X120X11.5	110	120	11.5	12.5 +0.200 0.000	110 -0.036 -0.090	120 ±0.070
MRTS-110X125X11.3	110	125	11.3	12.3 +0.200 0.000	110 -0.036 -0.090	125 ±0.080
MRTS-120X128X8	120	128	8	9 +0.200 0.000	120 -0.036 -0.090	128 ±0.080

STYLE MHMU ROD U-SEALS

The MHMU style multi-lip rod u-seal combines the pressure-compensating, uni-directional characteristics of a u-seal with the multi-lip sealing effectiveness of compression-type stacked packings. Made from premium materials, the MHMU utilizes several sealing lip edges for dry rod performance while minimizing friction. The multi-lip design maintains a critical sealing edge even though increasing pressure moves the line of contact down toward the heel.



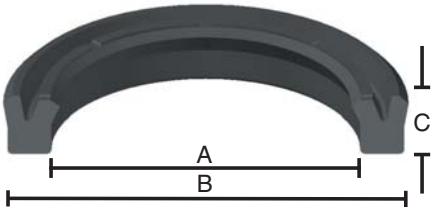
SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-50 TO +230° F
PRESSURE RANGE	0 TO 5,000 PSI
SPEED	1.5 FT/SEC
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number	ID	OD	H
MHMU-12X19X5U	12	19	5
MHMU-14X21X5U	14	21	5
MHMU-18X25X5U	18	25	5
MHMU-22X29X5U	22	29	5
MHMU-28X36X5.7U	28	36	5.7
MHMU-36X44X5.7U	36	44	5.7

Part Number	ID	OD	H
MHMU-45X53X5.7U	45	53	5.7
MHMU-56X66X6.5U	56	66	6.5
MHMU-70X80X6.5U	70	80	6.5
MHMU-90X100X6.5U	90	100	6.5
MHMU-110X125X9.6U	110	125	9.6
MHMU-140X155X9.6U	140	155	9.6

STYLE MRUN ROD U-SEALS

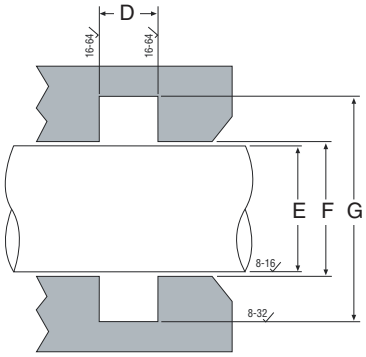
The MRUN Rod U-seal is designed with improved oil resistance and compression set versus urethane seals. The addition of a u-seal back-up ring will increase the pressure range of the seal from 2,000 psi to 3,000 psi.



PART NUMBERS

MRUN - 20 X 28 X 5

Type of Seal | Rod Diameter | Groove Diameter | Height



SEAL INFORMATION	
MATERIAL	NITRILE
TEMPERATURE RANGE	-8° F TO +212° F
PRESSURE RANGE	0 TO 2,000 psi W/O BACK-UP 0 TO 3,000 psi W/ BACK-UP
SPEED	3 ft/sec
SUFFIX	LT = LOW TEMPERATURE NITRILE (-67° F TO +176° F)

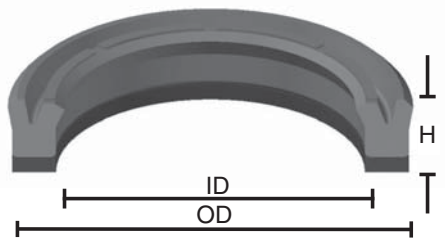
Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Throat Diameter	G Housing Diameter
MRUN-20X28X5-LT	20	28	5	5.7 ±0.20	20 -0.020 -0.053	20 +0.052 -0.000	28 +0.00 -0.20
MRUN-22.4X30.4X5	22.4	30.4	5	5.7 ±0.20	22.4 -0.020 -0.053	22.4 +0.052 -0.000	30.4 +0.00 -0.20
MRUN-30X40X6	30	40	6	7.0 ±0.20	30 -0.020 -0.053	30 +0.052 -0.000	40 +0.00 -0.20
MRUN-32X42X6	32	42	6	7.0 ±0.20	32 -0.025 -0.064	32 +0.062 -0.000	42 +0.00 -0.20
MRUN-40X50X7	40	50	7	8.0 ±0.20	40 -0.025 -0.064	40 +0.062 -0.000	50 +0.00 -0.20
MRUN-40X50X8	40	50	8	9.0 ±0.20	40 -0.025 -0.064	40 +0.062 -0.000	50 +0.00 -0.20
MRUN-45X55X7	45	55	7	8.0 ±0.20	45 -0.025 -0.064	45 +0.062 -0.000	55 +0.00 -0.20
MRUN-45X56X7	45	56	7	8.0 ±0.20	45 -0.025 -0.064	45 +0.062 -0.000	56 +0.00 -0.20
MRUN-50X63X8	50	63	8	9.0 ±0.20	50 -0.025 -0.064	50 +0.062 -0.000	63 +0.00 -0.20
MRUN-50X63X10	50	63	10	11.0 ±0.20	50 -0.025 -0.064	50 +0.062 -0.000	63 +0.00 -0.20
MRUN-55X68X10	55	68	10	11.0 ±0.20	55 -0.030 -0.076	55 +0.074 -0.000	68 +0.00 -0.20
MRUN-60X73X10	60	73	10	11.0 ±0.20	60 -0.030 -0.076	60 +0.074 -0.000	73 +0.00 -0.20
MRUN-65X78X10	65	78	10	11.0 ±0.20	65 -0.030 -0.076	65 +0.074 -0.000	78 +0.00 -0.20
MRUN-70X83X10	70	83	10	11.0 ±0.20	70 -0.030 -0.076	70 +0.074 -0.000	83 +0.00 -0.20
MRUN-75X88X10	75	88	10	11.0 ±0.20	75 -0.030 -0.076	75 +0.074 -0.000	88 +0.00 -0.20
MRUN-80X93X10	80	93	10	11.0 ±0.20	80 -0.030 -0.076	80 +0.074 -0.000	93 +0.00 -0.20
MRUN-80X95X8	80	95	8	9.0 ±0.20	80 -0.030 -0.076	80 +0.074 -0.000	95 +0.00 -0.20
MRUN-85X100X10	85	100	10	11.0 ±0.20	85 -0.036 -0.090	85 +0.087 -0.000	100 +0.00 -0.20

STYLE MRUN ROD U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Throat Diameter	G Housing Diameter
MRUN-90X105X9	90	105	9	10.0 ±0.20	90 -0.036 -0.090	105 +0.00 -0.20	105 +0.00 -0.20
MRUN-90X105X10	90	105	10	11.0 ±0.20	90 -0.036 -0.090	90 +0.087 -0.000	105 +0.00 -0.20
MRUN-90X110X12	90	110	12	13.0 ±0.20	90 -0.036 -0.090	90 +0.087 -0.000	110 +0.00 -0.20
MRUN-95X110X9	95	110	9	10.0 ±0.20	95 -0.036 -0.090	90 +0.087 -0.000	110 +0.00 -0.20
MRUN-95X110X10.5	95	110	10.5	11.5 ±0.20	95 -0.036 -0.090	95 +0.087 -0.000	110 +0.00 -0.20
MRUN-95X115X12	95	115	12	13.0 ±0.20	95 -0.036 -0.090	95 +0.087 -0.000	115 +0.00 -0.20
MRUN-100X115X10	100	115	10	11.0 ±0.20	100 -0.036 -0.090	100 +0.087 -0.000	115 +0.00 -0.20
MRUN-105X120X9	105	120	9	11.0 ±0.20	100 -0.036 -0.090	100 +0.087 -0.000	115 +0.00 -0.20
MRUN-105X125X12	105	125	12	13.0 ±0.20	105 -0.036 -0.090	105 +0.087 -0.000	125 +0.00 -0.20
MRUN-105X125X15	105	125	15	13.0 ±0.20	105 -0.036 -0.090	105 +0.087 -0.000	125 +0.00 -0.20
MRUN-110X130X10	110	130	10	11.0 ±0.20	110 -0.036 -0.090	110 +0.087 -0.000	130 +0.00 -0.20
MRUN-115X130X10	115	130	10	11.0 ±0.20	115 -0.036 -0.090	115 +0.087 -0.000	130 +0.00 -0.20
MRUN-115X130X10-LT	115	130	10	11.0 ±0.20	115 -0.036 -0.090	115 +0.087 -0.000	130 +0.00 -0.20
MRUN-120X140X10	120	140	10	11.0 ±0.20	120 -0.036 -0.090	120 +0.087 -0.000	140 +0.00 -0.20
MRUN-125X145X12	125	145	12	13.0 ±0.20	125 -0.043 -0.106	125 +0.100 -0.000	145 +0.00 -0.20
MRUN-130X145X10	130	145	10	11.0 ±0.20	130 -0.043 -0.106	130 +0.100 -0.000	145 +0.00 -0.20
MRUN-130X150X12	130	150	12	13.0 ±0.20	130 -0.043 -0.106	130 +0.100 -0.000	150 +0.00 -0.20
MRUN-140X160X12	140	160	12	13.0 ±0.20	140 -0.043 -0.106	140 +0.100 -0.000	160 +0.00 -0.20
MRUN-180X205X15.5	180	205	15.5	16.5 ±0.20	180 -0.043 -0.106	180 +0.100 -0.000	205 +0.00 -0.20

STYLE MRUNB ROD U-SEAL WITH BACK-UP RINGS

The MRUNB Rod U-seal is designed to prevent extrusion damage. The addition of the u-seal back-up ring increases the pressure range of the seal from 2,000 psi to 3,000 psi.



SEAL INFORMATION	
MATERIAL	NITRILE AND PTFE
TEMPERATURE RANGE	-8° F TO +212° F
PRESSURE RANGE	0 TO 3,000 PSI
SPEED	3 FT/SEC
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MRUNB-20X28X7-LT
MRUNB-40X50X10
MRUNB-45X55X10
MRUNB-45X56X10
MRUNB-50X63X13

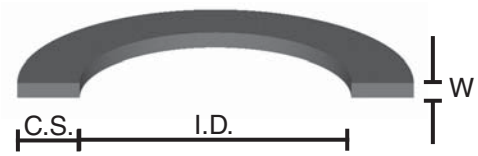
Part Number
MRUNB-55X68X13
MRUNB-60X73X13
MRUNB-65X78X13
MRUNB-70X83X13
MRUNB-75X88X13

Part Number
MRUNB-80X93X13
MRUNB-85X100X13
MRUNB-90X105X13
MRUNB-95X110X13.5
MRUNB-100X115X13

Part Number
MRUNB-110X130X13
MRUNB-120X140X14
MRUNB-130X150X16
MRUNB-140X160X16

STYLE MBN U-SEAL BACK-UP RINGS

Hard nylon back-up rings for use with U-seals.



SEAL INFORMATION	
MATERIAL	NYLON
TEMPERATURE RANGE	-67° TO +212° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (ID) X (CS) X (W)

Part Number
MBN-75X2.5X2.5
MBN-28X3.7X1.5
MBN-40X4X1.4
MBN-42X4X1.5
MBN-25X5X2
MBN-30X5X3
MBN-35X5X1.8
MBN-40X5X1.5
MBN-40X5X2.5
MBN-50X5X1.6
MBN-130X5X2
MBN-60X8X3
MBN-75X5X3
MBN-120X5X2
MBN-132X5X4
MBN-145X5X4

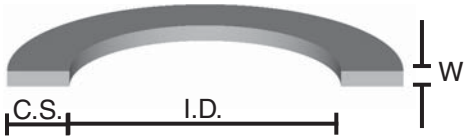
Part Number
MBN-155X5X4
MBN-45X5.5X2.5
MBN-63X6X1.5
MBN-50X6.5X3
MBN-60X6.5X3
MBN-65X6.5X3
MBN-70X6.5X3
MBN-75X6.5X3
MBN-80X6.5X3
MBN-40X7.5X3
MBN-45X7.5X3
MBN-50X7.5X2.5
MBN-50X7.5X3
MBN-60X7.5X2.5
MBN-65X7.5X3
MBN-70X7.5X1.6

Part Number
MBN-70X7.5X3
MBN-75X7.5X3
MBN-80X7.5X3
MBN-85X7.5X1.9
MBN-85X7.5X3
MBN-90X7.5X3
MBN-95X7.5X3
MBN-100X7.5X3
MBN-105X7.5X3
MBN-110X7.5X3
MBN-120X7.5X3
MBN-140X7.5X3
MBN-55X8X3
MBN-60X10X3
MBN-70X10X3
MBN-75X10X3

Part Number
MBN-80X10X3
MBN-85X10X3
MBN-90X10X3
MBN-95X10X3
MBN-100X10X3
MBN-105X10X3
MBN-110X10X3
MBN-120X10X3
MBN-125X10X3
MBN-130X10X3
MBN-140X10X3
MBN-160X12.5X3
MBN-160X12.5X3.5
MBN-170X12.5X3
MBN-180X12.5X3.5

STYLE MBT U-SEAL BACK-UP RINGS

Filled PTFE back-up rings primarily used with U-seals.



SUFFIX:
S = SPLIT RING
B = BRONZE FILLED PTFE
G = GLASS FILLED PTFE
M = MOLY FILLED PTFE

SEAL INFORMATION	
MATERIAL	FILLED PTFE
TEMPERATURE RANGE	-100° TO +500° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (ID) X (CS) X (W)

Part Number
MBT-8X5X2SB
MBT-10X5X2SB
MBT-12X3.15X1.5
MBT-14X3.15X1.5
MBT-14X5X2SB
MBT-16X4X2SB
MBT-16X5X2SB
MBT-18X3.5X1.5
MBT-18X4X2SB
MBT-18X5X2SB
MBT-20X1X.85GM
MBT-20X5X2SB
MBT-22X3.5X1.5
MBT-22X4X1SG
MBT-22.4X5.3X2SB
MBT-23.5X4X2SB
MBT-25X4X1SG
MBT-25X4X2SB
MBT-25X5X2SB
MBT-25X6.5X2SB
MBT-26X2X2.5SG
MBT-27X6.5X3SB
MBT-28X3.75X3SB
MBT-28X4X1.5
MBT-28X6X3SB
MBT-28X6.5X3SB
MBT-29.5X3X1.25
MBT-30X5X1.5SG
MBT-30X5X1.9SB
MBT-30X5X3SB
MBT-30X6.5X3SB
MBT-31.5X6.5X3SB

Part Number
MBT-32X4X1SG
MBT-32X4.8X1.5SG
MBT-32X5X2SG
MBT-32X8X3B
MBT-34X8X3SB
MBT-35X5X1.5SG
MBT-35X5X2SG
MBT-35X5X3SB
MBT-35X7.5X3SB
MBT-35.5X4.75X3SB
MBT-35.5X7.5X3SB
MBT-36X4X1.5
MBT-38X5X3SB
MBT-40X5X0.5
MBT-40X5X1.5
MBT-40X5X2SG
MBT-40X5X3SB
MBT-40X6.5X2SG
MBT-40X7.5X3SB
MBT-40X7.5X3SB
MBT-40X7.5X3SB
MBT-40X8X3SB
MBT-42X6.5X2SG
MBT-45X4X1.5
MBT-45X5X1.5SG
MBT-45X5X2SGM
MBT-45X5X3SGM
MBT-45X5.5X0.5
MBT-45X5.5X3SB
MBT-45X7.5X3
MBT-45X8X3SB
MBT-45X10X3B

Part Number
MBT-56X5X1.5
MBT-48X7.5X2SG
MBT-48X7.5X3SB
MBT-50X5X1.5SG
MBT-50X5X1.9
MBT-50X5X3SB
MBT-50X6.5X2SG
MBT-50X6.5X3SB
MBT-50X7.5X0.6
MBT-50X7.5X2SG
MBT-50X7.5X3
MBT-50X8X3G
MBT-50X10X3SB
MBT-50.4X7.3X3SB
MBT-53X5X2SG
MBT-55X5X1.5SG
MBT-55X5X3SB
MBT-55X6.5X3SB
MBT-55X7.5X2SG
MBT-55X7.5X3SB
MBT-55X8X3SB
MBT-55X10X3SB
MBT-56X5X3SB
MBT-60X5X1.5SG
MBT-60X5X3SB
MBT-60X5.5X3SB
MBT-60X6.5X3SB
MBT-60X7.5X0.5
MBT-60X7.5X3SB
MBT-60X10X3SB
MBT-63X5X3SB
MBT-63.5X3.8X4.3SB

Part Number
MBT-64X8X3SB
MBT-65X5X1.5SG
MBT-65X5X3SB
MBT-65X6.5X3SB
MBT-65X7.5X2SG
MBT-65X7.5X3SB
MBT-65X10X3
MBT-66X6.5X3SB
MBT-67X5X3SB
MBT-70X5X1.5
MBT-70X5X1.5SG
MBT-70X5X3SB
MBT-70X6.5X3SB
MBT-70X7.5X2SG
MBT-70X7.5X3SB
MBT-70X10X3C
MBT-71X4.5X3SB
MBT-71X5X3SB
MBT-71X10X3SB
MBT-75X5X1.5SG
MBT-75X5X2SG
MBT-75X5X3SB
MBT-75X6.5X3SB
MBT-75X7.5X2SG
MBT-75X7.5X3SB
MBT-75X10X2C
MBT-75X10X3SB
MBT-76X6.9X3SB
MBT-80X5X3SB
MBT-80X6.5X3SB
MBT-80X7.5X3SB
MBT-84X10X2.5SG

STYLE MBT U-SEAL BACK-UP RINGS

Part Number
MBT-85X7.5X2SG
MBT-85X7.5X3SB
MBT-85X10X3SB
MBT-90X5X1.9
MBT-90X5X2SG
MBT-90X7.5X2SG
MBT-90X7.5X3SB
MBT-90X10X3
MBT-95X7.5X2SG
MBT-95X7.5X3SB
MBT-95X10X3
MBT-100X7.5X1.5
MBT-100X7.5X3SB
MBT-100X10X3SB
MBT-105X7.5X2SG

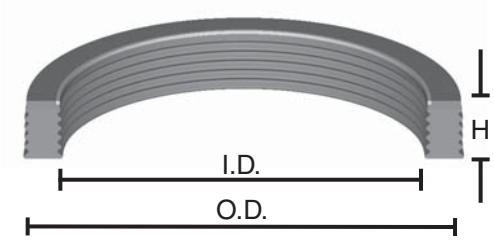
Part Number
MBT-105X7.5X3SB
MBT-105X10X3SB
MBT-110X7.5X3SB
MBT-110X10X3SB
MBT-112X6.5X3SB
MBT-115X7.5X2G
MBT-115X7.5X3SB
MBT-115X8.5X3SB
MBT-115X10X3SB
MBT-120X7.5X3SB
MBT-120X10X3SB
MBT-125X7.5X3SB
MBT-125X12.5X3SB
MBT-130X7.5X3SB
MBT-130X10X3SB

Part Number
MBT-135X7.5X3SB
MBT-135X10X3SB
MBT-135X12.5X3SB
MBT-136X7X3SB
MBT-140X7.5X3SB
MBT-140X10X3SB
MBT-140X10X4SB
MBT-140X12.5X3SB
MBT-145X7.5X3SB
MBT-145X10X3SB
MBT-150X7.5X3SB
MBT-150X10X3SB
MBT-155X7.5X4SB
MBT-155X10X4SB
MBT-155X12.5X4SB

Part Number
MBT-160X7.5X4SB
MBT-160X10X3SB
MBT-160X10X4SB
MBT-165X7.5X4SB
MBT-170X4.5X1.9
MBT-170X5X4SB
MBT-170X7.5X4SB
MBT-170X10X4SB
MBT-170X15X4SB
MBT-175X7.5X4SB
MBT-175X12.5X4SB
MBT-190X4.5X1.9
MBT-200X12.5X4SB
MBT-280X12.5X4SB

STYLE MSMR ROD SEAL W/BACK-UP RINGS

With redundant nitrile lips and an acetal back-up, this seal features high sealability and extrusion resistance.



SEAL INFORMATION	
MATERIAL	NBR SEAL ACETAL BACK-UP HEADER OF URETHANE, ACETAL, OR FABRIC - REINFORCED RUBBER
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 10,000 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MSMR-25X37X21.5
MSMR-32X47X22.5
MSMR-35X45X24.5
MSMR-35X47X21
MSMR-40X50X17.3
MSMR-40X52X22.5
MSMR-40X55X22.5
MSMR-40X60X28.5
MSMR-45X60X22.5
MSMR-45X65X28
MSMR-45X80X43
MSMR-50X63X20

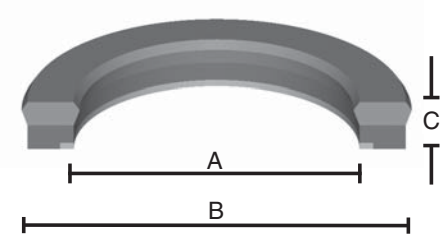
Part Number
MSMR-50X65X21
MSMR-50X65X22.5
MSMR-50X65X24.5
MSMR-55X70X21
MSMR-55X70X22.5
MSMR-55X70X25
MSMR-56X71X24
MSMR-60X75X22.5
MSMR-60X80X30
MSMR-60X80X31
MSMR-63X83X25
MSMR-63X83X27

Part Number
MSMR-63X83X30
MSMR-65X85X29
MSMR-70X83X25
MSMR-70X85X22.5
MSMR-70X90X28
MSMR-70X90X30
MSMR-75X95X30
MSMR-80X95X22.5
MSMR-80X100X30
MSMR-90X110X30
MSMR-95X110X21.5
MSMR-95X115X26

Part Number
MSMR-100X120X29
MSMR-100X120X30
MSMR-105X125X30
MSMR-115X130X21
MSMR-125X140X21
MSMR-125X145X28
MSMR-130X155X25.5
MSMR-140X160X30
MSMR-160X180X26.5
MSMR-180X205X33
MSMR-200X225X34

STYLE MUFN-EI ROD U-SEALS W/BACK-UP RINGS

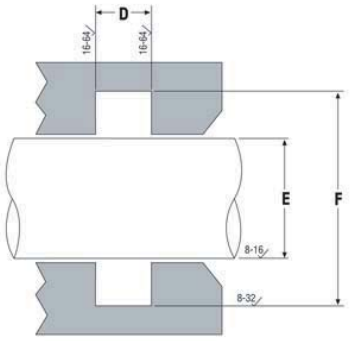
Incorporating a rubber seal lip, a rubberized fabric heel, and an acetal back-up ring, this seal provides excellent sealability and high extrusion resistance.



PART NUMBERS

MUFN - 16 X 24 X 6.5EI

Type of Seal | I.D. | O.D. | Height



SEAL INFORMATION	
MATERIAL	NBR 80 DURO SEAL NEO-FAB HEEL ACETAL ANTI-EXTRUSION RING
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 6,000 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter
MUFN-16X24X6.5EI	16	24	6.5	7.5 +0.200 0.000	16 -0.016 -0.043	24 ±0.042
MUFN-20X28X6.5EI	20	28	6.5	7.5 +0.200 0.000	20 -0.020 -0.053	28 ±0.042
MUFN-22X30X6.5EI	22	30	6.5	7.5 +0.200 0.000	22 -0.020 -0.053	30 ±0.042
MUFN-22X35X9.5EI	22	35	9.5	10.5 +0.200 0.000	22 -0.020 -0.053	35 ±0.050
MUFN-25X33X6EI	25	33	6	7 +0.200 0.000	25 -0.020 -0.053	33 ±0.050
MUFN-25X33X6.5EI	25	33	6.5	7.5 +0.200 0.000	25 -0.020 -0.053	33 ±0.050
MUFN-25X33X7EI	25	33	7	8 +0.200 0.000	25 -0.020 -0.053	33 ±0.050
MUFN-25X35X7.5EI	25	35	7.5	8.5 +0.200 0.000	25 -0.020 -0.053	35 ±0.050
MUFN-25X35X8EI	25	35	8	9 +0.200 0.000	25 -0.020 -0.053	35 ±0.050
MUFN-25X37X10EI	25	37	10	11 +0.200 0.000	25 -0.020 -0.053	37 ±0.050
MUFN-25X38X9.5EI	25	38	9.5	10.5 +0.200 0.000	25 -0.020 -0.053	38 ±0.050
MUFN-28X38X7.5EI	28	38	7.5	8.5 +0.200 0.000	28 -0.020 -0.053	38 ±0.050
MUFN-28X38X8EI	28	38	8	9 +0.200 0.000	28 -0.020 -0.053	38 ±0.050
MUFN-28X40X9EI	28	40	9	10 +0.200 0.000	28 -0.020 -0.053	40 ±0.050
MUFN-30X38X6EI	30	38	6	7 +0.200 0.000	30 -0.020 -0.053	38 ±0.050
MUFN-30X40X7EI	30	40	7	8 +0.200 0.000	30 -0.020 -0.053	40 ±0.050
MUFN-30X40X10EI	30	40	10	11 +0.200 0.000	30 -0.020 -0.053	40 ±0.050
MUFN-30X45X10.5EI	30	45	10.5	11.5 +0.200 0.000	30 -0.020 -0.053	45 ±0.050

STYLE MUFN-EI ROD U-SEALS W/BACK-UP RINGS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter
MUFN-32X40X8.5EI	32	40	8.5	9.5 +0.200 0.000	32 -0.025 -0.064	40 ±0.050
MUFN-32X42X8EI	32	42	8	9 +0.200 0.000	32 -0.025 -0.064	42 ±0.050
MUFN-32X45X9.5EI	32	45	9.5	10.5 +0.200 0.000	32 -0.025 -0.064	45 ±0.050
MUFN-35X43X6EI	35	43	6	7 +0.200 0.000	35 -0.025 -0.064	43 ±0.050
MUFN-35X45X6.5EI	35	45	6.5	7.5 +0.200 0.000	35 -0.025 -0.064	45 ±0.050
MUFN-35X45X7.5EI	35	45	7.5	8.5 +0.200 0.000	35 -0.025 -0.064	45 ±0.050
MUFN-35X45X10EI	35	45	10	11 +0.200 0.000	35 -0.025 -0.064	45 ±0.050
MUFN-35X50X10.5EI	35	50	10.5	11.5 +0.200 0.000	35 -0.025 -0.064	50 ±0.050
MUFN-36X43X6EI	36	43	6	7 +0.200 0.000	36 -0.025 -0.064	43 ±0.050
MUFN-36X46X8EI	36	46	8	9 +0.200 0.000	36 -0.025 -0.064	46 ±0.050
MUFN-36X48X9EI	36	48	9	10 +0.200 0.000	36 -0.025 -0.064	48 ±0.050
MUFN-40X48X6EI	40	48	6	7 +0.200 0.000	40 -0.025 -0.064	48 ±0.050
MUFN-40X50X7.5EI	40	50	7.5	8.5 +0.200 0.000	40 -0.025 -0.064	50 ±0.050
MUFN-40X50X10EI	40	50	10	11 +0.200 0.000	40 -0.025 -0.064	50 ±0.050
MUFN-40X50X10.5EI	40	50	10.5	11.5 +0.200 0.000	40 -0.025 -0.064	50 ±0.050
MUFN-40X52X10.5EI	40	52	10.5	11.5 +0.200 0.000	40 -0.025 -0.064	52 ±0.060
MUFN-40X55X10.5EI	40	55	10.5	11.5 +0.200 0.000	40 -0.025 -0.064	55 ±0.060
MUFN-45X53X8EI	45	53	8	9 +0.200 0.000	45 -0.025 -0.064	53 ±0.060
MUFN-45X53X10.5EI	45	53	10.5	11.5 +0.200 0.000	45 -0.025 -0.064	53 ±0.060
MUFN-45X55X7EI	45	55	7	8 +0.200 0.000	45 -0.025 -0.064	55 ±0.060
MUFN-45X55X7.5EI	45	55	7.5	8.5 +0.200 0.000	45 -0.025 -0.064	55 ±0.060
MUFN-45X55X10.5EI	45	55	10.5	11.5 +0.200 0.000	45 -0.025 -0.064	55 ±0.060
MUFN-45X60X10EI	45	60	10	11 +0.200 0.000	45 -0.025 -0.064	60 ±0.060
MUFN-45X60X10.5EI	45	60	10.5	11.5 +0.200 0.000	45 -0.025 -0.064	60 ±0.060
MUFN-45X65X14EI	45	65	14	15 +0.200 0.000	45 -0.025 -0.064	65 ±0.060
MUFN-48X60X10.5EI	48	60	10.5	11.5 +0.200 0.000	48 -0.025 -0.064	60 ±0.060

STYLE MUFN-EI ROD U-SEALS W/BACK-UP RINGS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter
MUFN-50X60X7.5EI	50	60	7.5	8.5 +0.200 0.000	50 -0.025 -0.064	60 ±0.060
MUFN-50X60X9.5EI	50	60	9.5	10.5 +0.200 0.000	50 -0.025 -0.064	60 ±0.060
MUFN-50X60X10EI	50	60	10	11 +0.200 0.000	50 -0.025 -0.064	60 ±0.060
MUFN-50X62X9EI	50	62	9	10 +0.200 0.000	50 -0.025 -0.064	62 ±0.060
MUFN-50X62X9.5EI	50	62	9.5	10.5 +0.200 0.000	50 -0.025 -0.064	62 ±0.060
MUFN-50X65X10.5EI	50	65	10.5	11.5 +0.200 0.000	50 -0.025 -0.064	65 ±0.060
MUFN-50X65X11EI	50	65	11	12 +0.200 0.000	50 -0.025 -0.064	65 ±0.060
MUFN-50X70X13.5EI	50	70	13.5	14.5 +0.200 0.000	50 -0.025 -0.064	70 ±0.060
MUFN-50X70X14EI	50	70	14	15 +0.200 0.000	50 -0.025 -0.064	70 ±0.060
MUFN-55X65X7.5EI	55	65	7.5	8.5 +0.200 0.000	55 -0.030 -0.076	65 ±0.060
MUFN-55X65X10.5EI	55	65	10.5	11.5 +0.200 0.000	55 -0.030 -0.076	65 ±0.060
MUFN-55X70X10EI	55	70	10	11 +0.200 0.000	55 -0.030 -0.076	70 ±0.060
MUFN-56X71X10EI	56	71	10	11 +0.200 0.000	56 -0.030 -0.076	71 ±0.060
MUFN-56X71X12EI	56	71	12	13 +0.200 0.000	56 -0.030 -0.076	71 ±0.060
MUFN-60X70X7.5EI	60	70	7.5	8.5 +0.200 0.000	60 -0.030 -0.076	70 ±0.060
MUFN-60X70X9.5EI	60	70	9.5	10.5 +0.200 0.000	60 -0.030 -0.076	70 ±0.060
MUFN-60X70X10.5EI	60	70	10.5	11.5 +0.200 0.000	60 -0.030 -0.076	70 ±0.060
MUFN-60X70X12.5EI	60	70	12.5	13.5 +0.200 0.000	60 -0.030 -0.076	70 ±0.060
MUFN-60X72X9.5EI	60	72	9.5	10.5 +0.200 0.000	60 -0.030 -0.076	72 ±0.060
MUFN-60X75X12.5EI	60	75	12.5	13.5 +0.200 0.000	60 -0.030 -0.076	75 ±0.060
MUFN-63X75X10EI	63	75	10	11 +0.200 0.000	63 -0.030 -0.076	75 ±0.060
MUFN-63X78X12.5EI	63	78	12.5	13.5 +0.200 0.000	63 -0.030 -0.076	78 ±0.060
MUFN-65X75X13EI	65	75	13	14 +0.200 0.000	65 -0.030 -0.076	75 ±0.060
MUFN-65X85X14EI	65	85	14	15 +0.200 0.000	65 -0.030 -0.076	85 ±0.070
MUFN-70X80X12.5EI	70	80	12.5	13.5 +0.200 0.000	70 -0.030 -0.076	80 ±0.060
MUFN-70X84X12EI	70	84	12	13 +0.200 0.000	70 -0.030 -0.076	84 ±0.070

STYLE MUFN-EI ROD U-SEALS W/BACK-UP RINGS

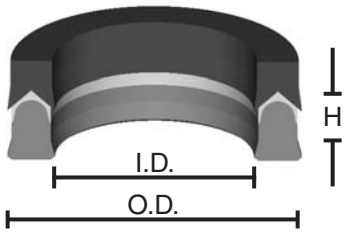
Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter
MUFN-70X85X12EI	70	85	12	13 +0.200 0.000	70 -0.030 -0.076	85 ±0.070
MUFN-70X90X14EI	70	90	14	15 +0.200 0.000	70 -0.030 -0.076	90 ±0.070
MUFN-75X85X12EI	75	85	12	13 +0.200 0.000	75 -0.030 -0.076	85 ±0.070
MUFN-80X95X10EI	80	95	10	11 +0.200 0.000	80 -0.030 -0.076	95 ±0.070
MUFN-80X95X12.5EI	80	95	12.5	13.5 +0.200 0.000	80 -0.030 -0.076	95 ±0.070
MUFN-80X96X10EI	80	96	10	11 +0.200 0.000	80 -0.030 -0.076	96 ±0.070
MUFN-80X100X12EI	80	100	12	13 +0.200 0.000	80 -0.030 -0.076	100 ±0.070
MUFN-80X100X14EI	80	100	14	15 +0.200 0.000	80 -0.030 -0.076	100 ±0.070
MUFN-85X100X12EI	85	100	12	13 +0.200 0.000	85 -0.036 -0.090	100 ±0.070
MUFN-90X100X10.5EI	90	100	10.5	11.5 +0.200 0.000	90 -0.036 -0.090	100 ±0.070
MUFN-90X105X12EI	90	105	12	13 +0.200 0.000	90 -0.036 -0.090	105 ±0.070
MUFN-90X110X12EI	90	110	12	13 +0.200 0.000	90 -0.036 -0.090	110 ±0.070
MUFN-90X110X14EI	90	110	14	15 +0.200 0.000	90 -0.036 -0.090	110 ±0.070
MUFN-95X110X12EI	95	110	12	13 +0.200 0.000	95 -0.036 -0.090	110 ±0.070
MUFN-100X115X12EI	100	115	12	13 +0.200 0.000	100 -0.036 -0.090	115 ±0.070
MUFN-100X120X11.5EI	100	120	11.5	12.5 +0.200 0.000	100 -0.036 -0.090	120 ±0.070
MUFN-100X120X12EI	100	120	12	13 +0.200 0.000	100 -0.036 -0.090	120 ±0.070
MUFN-100X120X14EI	100	120	14	15 +0.200 0.000	100 -0.036 -0.090	120 ±0.070
MUFN-105X115X10.5EI	105	115	10.5	11.5 +0.200 0.000	105 -0.036 -0.090	115 ±0.070
MUFN-105X120X13EI	105	120	13	14 +0.200 0.000	105 -0.036 -0.090	120 ±0.070
MUFN-110X125X11.5EI	110	125	11.5	12.5 +0.200 0.000	110 -0.036 -0.090	125 ±0.080
MUFN-110X130X12EI	110	130	12	13 +0.200 0.000	110 -0.036 -0.090	130 ±0.080
MUFN-110X135X18.8EI	110	135	18.8	20 +0.200 0.000	110 -0.036 -0.090	135 ±0.080
MUFN-125X150X14EI	125	150	14	15 +0.200 0.000	125 -0.043 -0.106	150 ±0.080
MUFN-130X145X9EI	130	145	9	10 +0.200 0.000	130 -0.043 -0.106	145 ±0.080
MUFN-140X155X12EI	140	155	12	13 +0.200 0.000	140 -0.043 -0.106	155 ±0.080

STYLE MUFN-EI ROD U-SEALS W/BACK-UP RINGS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter
MUFN-140X160X11EI	140	160	11	12 +0.200 0.000	140 -0.043 -0.106	160 ±0.080
MUFN-140X160X12EI	140	160	12	13 +0.200 0.000	140 -0.043 -0.106	160 ±0.080
MUFN-145X157.7X9EI	145	157.7	9	10 +0.200 0.000	145 -0.043 -0.106	157.7 ±0.080
MUFN-150X170X13.5EI	150	170	13.5	14.5 +0.200 0.000	150 -0.043 -0.106	170 ±0.080
MUFN-151X164X12EI	151	164	12	13 +0.200 0.000	151 -0.043 -0.106	164 ±0.080
MUFN-160X175X15EI	160	175	15	16 +0.200 0.000	160 -0.043 -0.106	175 ±0.080
MUFN-160X180X14.5EI	160	180	14.5	15.5 +0.200 0.000	160 -0.043 -0.106	180 ±0.080
MUFN-170X182.7X9EI	170	182.7	9	10 +0.200 0.000	170 -0.043 -0.106	182.7 ±0.092
MUFN-170X185X15EI	170	185	15	16 +0.200 0.000	170 -0.043 -0.106	185 ±0.092
MUFN-180X200X14EI	180	200	14	15 +0.200 0.000	180 -0.043 -0.106	200 ±0.092
MUFN-200X220X16EI	200	220	16	17 +0.200 0.000	200 -0.050 -0.122	220 ±0.092

STYLE MUFN-BR ROD U-SEALS W/HEADERS

This is a single-acting rod seal designed for low and high pressure sealing and is commonly found in telescopic cylinders. The seal consists of a molded rubber sealing lip, rubberized fabric heel, and a polyester header for improved extrustion resistance.



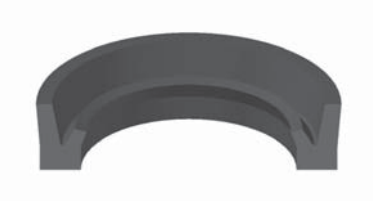
SEAL INFORMATION	
MATERIAL	RUBBER, FABRIC, POLYESTER ELASTOMER
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	1.64 FPS / 3600 PSI 0.49 FPS / 5800 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number	I.D.	O.D.	H.
MUFN-78X88X12BR-M-F	78	88	12
MUFN-98X108X12BR-M-F	98	108	12
MUFN-117X127X14BR-M-F	117	127	14
MUFN-136X146X14BR-M-F	136	146	14

Part Number	I.D.	O.D.	H.
MUFN-155X165X14BR-M-F	155	165	14
MUFN-176X188X16BR-M-F	176	188	16
MUFN-198X210X17.5BR-M-F	198	210	17.5

STYLE MUKRN ROD U-SEALS

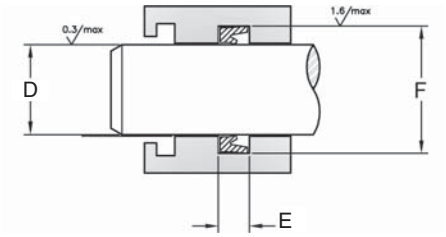
MUKRN is an asymmetrical single-acting pneumatic rod seal. Molded in Nitrile, this seal is resistant to water and most oils while maintaining good low-pressure sealing.



PART NUMBERS

MUKRN - 6 X 12 X 4

Type of Seal | Rod Diameter | Groove Diameter | Height



SEAL INFORMATION	
MATERIAL	80 A NBR
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 1,500 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Rod Diameter	E Groove Width	F Housing Diameter
MUKRN-6X12X4	6	12	4	6 -0.010 -0.028	4.5 +0.200 0.000	12 +0.043 0.000
MUKRN-8X14X4	8	14	4	8 -0.013 -0.035	4.5 +0.200 0.000	14 +0.043 0.000
MUKRN-8X16X5.5	8	16	5.5	8 -0.013 -0.035	6 +0.200 0.000	16 +0.043 0.000
MUKRN-8X18X8	8	18	8	8 -0.013 -0.035	8.5 +0.200 0.000	18 +0.043 0.000
MUKRN-10X15X3.5	10	15	3.5	10 -0.013 -0.035	4 +0.200 0.000	15 +0.043 0.000
MUKRN-10X16X4.5	10	16	4.5	10 -0.013 -0.035	5 +0.200 0.000	16 +0.043 0.000
MUKRN-10X18X5.5	10	18	5.5	10 -0.013 -0.035	6 +0.200 0.000	18 +0.043 0.000
MUKRN-12X20X5.5	12	20	5.5	12 -0.016 -0.043	6 +0.200 0.000	20 +0.052 0.000
MUKRN-12X22X5	12	22	5	12 -0.016 -0.043	5.5 +0.200 0.000	22 +0.052 0.000
MUKRN-12X22X7.5	12	22	7.5	12 -0.016 -0.043	8 +0.200 0.000	22 +0.052 0.000
MUKRN-14X24X5	14	24	5	14 -0.016 -0.043	5.5 +0.200 0.000	24 +0.052 0.000
MUKRN-16X22X5	16	22	5	16 -0.016 -0.043	5.5 +0.200 0.000	22 +0.052 0.000
MUKRN-16X24X5.5	16	24	5.5	16 -0.016 -0.043	6 +0.200 0.000	24 +0.052 0.000
MUKRN-18X25X4.5	18	25	4.5	18 -0.016 -0.043	5 +0.200 0.000	25 +0.052 0.000
MUKRN-18X25X5.5	18	25	5.5	18 -0.016 -0.043	6 +0.200 0.000	25 +0.052 0.000
MUKRN-18X26X5.5	18	26	5.5	18 -0.016 -0.043	6 +0.200 0.000	26 +0.052 0.000
MUKRN-18X30X8.5	18	30	8.5	18 -0.016 -0.043	9.5 +0.200 0.000	30 +0.052 0.000

STYLE MUKRN ROD U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Rod Diameter	E Groove Width	F Housing Diameter
MUKRN-20X26X5	20	26	5	20 -0.020 -0.053	5.5 +0.200 0.000	26 +0.052 0.000
MUKRN-20X28X5.5	20	28	5.5	20 -0.020 -0.053	6 +0.200 0.000	28 +0.052 0.000
MUKRN-20X30X6	20	30	6	20 -0.020 -0.053	6.5 +0.200 0.000	30 +0.052 0.000
MUKRN-22X30X5.5	22	30	5.5	22 -0.020 -0.053	6 +0.200 0.000	30 +0.052 0.000
MUKRN-23X31X5.5	23	31	5.5	23 -0.020 -0.053	6 +0.200 0.000	31 +0.062 0.000
MUKRN-25X33X8	25	33	8	25 -0.020 -0.053	8.5 +0.200 0.000	33 +0.062 0.000
MUKRN-25X35X6	25	35	6	25 -0.020 -0.053	6.5 +0.200 0.000	35 +0.062 0.000
MUKRN-25X35X7	25	35	7	25 -0.020 -0.053	7.5 +0.200 0.000	35 +0.062 0.000
MUKRN-25X35X7.5	25	35	7.5	25 -0.020 -0.053	8 +0.200 0.000	35 +0.062 0.000
MUKRN-25X37X6	25	37	6	25 -0.020 -0.053	6.5 +0.200 0.000	37 +0.062 0.000
MUKRN-28X36X5.5	28	36	5.5	28 -0.020 -0.053	6 +0.200 0.000	36 +0.062 0.000
MUKRN-30X40X7	30	40	7	30 -0.020 -0.053	7.5 +0.200 0.000	40 +0.062 0.000
MUKRN-30X42X8.5	30	42	8.5	30 -0.020 -0.053	9.5 +0.200 0.000	42 +0.062 0.000
MUKRN-32X40X5.5	32	40	5.5	32 -0.025 -0.064	6 +0.200 0.000	40 +0.062 0.000
MUKRN-32X42X7	32	42	7	32 -0.025 -0.064	7.5 +0.200 0.000	42 +0.062 0.000
MUKRN-35X43X8	35	43	8	35 -0.025 -0.064	8.5 +0.200 0.000	43 +0.062 0.000
MUKRN-35X44X12	35	44	12	35 -0.025 -0.064	13 +0.200 0.000	44 +0.062 0.000
MUKRN-35X45X7	35	45	7	35 -0.025 -0.064	7.5 +0.200 0.000	45 +0.062 0.000
MUKRN-36X46X7	36	46	7	36 -0.025 -0.064	7.5 +0.200 0.000	46 +0.062 0.000
MUKRN-38X48X7	38	48	7	38 -0.025 -0.064	7.5 +0.200 0.000	48 +0.062 0.000
MUKRN-40X48X5.5	40	48	5.5	40 -0.025 -0.064	6 +0.200 0.000	48 +0.062 0.000
MUKRN-40X48X8	40	48	8	40 -0.025 -0.064	8.5 +0.200 0.000	48 +0.062 0.000
MUKRN-40X52X8.5	40	52	8.5	40 -0.025 -0.064	9.5 +0.200 0.000	52 +0.074 0.000
MUKRN-40X56X12	40	56	12	40 -0.025 -0.064	13 +0.200 0.000	56 +0.074 0.000
MUKRN-42X52X7	42	52	7	42 -0.025 -0.064	7.5 +0.200 0.000	52 +0.074 0.000

STYLE MUKRN ROD U-SEALS

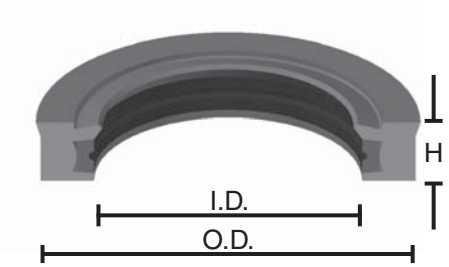
Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Rod Diameter	E Groove Width	F Housing Diameter
MUKRN-44X54X7	44	54	7	44 -0.025 -0.064	7.5 +0.200 0.000	54 +0.074 0.000
MUKRN-45X53X8	45	53	8	45 -0.025 -0.064	8.5 +0.200 0.000	53 +0.074 0.000
MUKRN-45X55X7	45	55	7	45 -0.025 -0.064	7.5 +0.200 0.000	55 +0.074 0.000
MUKRN-45X65X15	45	65	15	45 -0.025 -0.064	16 +0.200 0.000	65 +0.074 0.000
MUKRN-48X60X6	48	60	6	48 -0.025 -0.064	6.5 +0.200 0.000	60 +0.074 0.000
MUKRN-50X58X8	50	58	8	50 -0.025 -0.064	8.5 +0.200 0.000	58 +0.074 0.000
MUKRN-50X60X7	50	60	7	50 -0.025 -0.064	7.5 +0.200 0.000	60 +0.074 0.000
MUKRN-50X60X12	50	60	12	50 -0.025 -0.064	13 +0.200 0.000	60 +0.074 0.000
MUKRN-50X66X12	50	66	12	50 -0.025 -0.064	13 +0.200 0.000	66 +0.074 0.000
MUKRN-56X66X7	56	66	7	56 -0.030 -0.076	7.5 +0.200 0.000	66 +0.074 0.000
MUKRN-60X72X8.5	60	72	8.5	60 -0.030 -0.076	9.5 +0.200 0.000	72 +0.074 0.000
MUKRN-63X75X8.5	63	75	8.5	63 -0.030 -0.076	9.5 +0.200 0.000	75 +0.074 0.000
MUKRN-65X77X8.5	65	77	8.5	65 -0.030 -0.076	9.5 +0.200 0.000	77 +0.074 0.000
MUKRN-70X82X8.5	70	82	8.5	70 -0.030 -0.076	9.5 +0.200 0.000	82 +0.087 0.000
MUKRN-70X85X11.5	70	85	11.5	70 -0.030 -0.076	12.5 +0.200 0.000	85 +0.087 0.000
MUKRN-70X90X15	70	90	15	70 -0.030 -0.076	16 +0.200 0.000	90 +0.087 0.000
MUKRN-75X87X8.5	75	87	8.5	75 -0.030 -0.076	9.5 +0.200 0.000	87 +0.087 0.000
MUKRN-80X92X8.5	80	92	8.5	80 -0.030 -0.076	9.5 +0.200 0.000	92 +0.087 0.000
MUKRN-85X100X10	85	100	10	85 -0.036 -0.090	11 +0.200 0.000	100 +0.087 0.000
MUKRN-88X100X8.5	88	100	8.5	88 -0.036 -0.090	9.5 +0.200 0.000	100 +0.087 0.000
MUKRN-90X100X9	90	100	9	90 -0.036 -0.090	10 +0.200 0.000	100 +0.087 0.000
MUKRN-95X107X8.5	95	107	8.5	95 -0.036 -0.090	9.5 +0.200 0.000	107 +0.087 0.000
MUKRN-100X115X10	100	115	10	100 -0.036 -0.090	11 +0.200 0.000	115 +0.087 0.000
MUKRN-105X120X10	105	120	10	105 -0.036 -0.090	11 +0.200 0.000	120 +0.087 0.000
MUKRN-110X125X10	110	125	10	110 -0.036 -0.090	11 +0.200 0.000	125 +0.100 0.000

STYLE MUKRN ROD U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Rod Diameter	E Groove Width	F Housing Diameter
MUKRN-120X135X10	120	135	10	120 -0.036 -0.090	11 +0.200 0.000	135 +0.100 0.000
MUKRN-120X140X15	120	140	15	120 -0.036 -0.090	16 +0.200 0.000	140 +0.100 0.000
MUKRN-130X145X10	130	145	10	130 -0.043 -0.106	11 +0.200 0.000	145 +0.100 0.000
MUKRN-135X150X10	135	150	10	135 -0.043 -0.106	11 +0.200 0.000	150 +0.100 0.000
MUKRN-140X160X14	140	160	14	140 -0.043 -0.106	15 +0.200 0.000	160 +0.100 0.000
MUKRN-150X170X14	150	170	14	150 -0.043 -0.106	15 +0.200 0.000	170 +0.100 0.000
MUKRN-155X165X7.5	155	165	7.5	155 -0.043 -0.106	8 +0.200 0.000	165 +0.100 0.000

STYLE PU-TDI ROD U-SEALS

The PU-TDI tandem seal has a urethane sealing lip with a PTFE insert secondary sealing lip. Under increasing pressure, the outer seal acts to compress the PTFE slide ring onto the rod. This action creates a high force sealing edge of low-frictional resistance. These are genuine Hunger® parts.



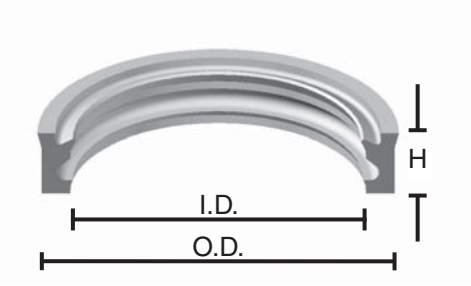
SEAL INFORMATION	
MATERIAL	URETHANE BRONZE - FILLED PTFE
TEMPERATURE RANGE	-31° TO +212° F
PRESSURE RANGE	0 TO 6,500 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number	ID	OD	HT
PU-TDI 22X30X7	22	30	7
PU-TDI 25X33X7	25	33	7
PU-TDI 28X36X7	28	36	7
PU-TDI 30X38X7	30	38	7
PU-TDI 32X40X7	32	40	7
PU-TDI 35X43X7	35	43	7
PU-TDI 36X44X8	36	44	8
PU-TDI 40X48X8	40	48	8
PU-TDI 45X55X10	45	55	10
PU-TDI 50X60X10	50	60	10
PU-TDI 55X65X10	55	65	10
PU-TDI 56X71X12	56	71	12
PU-TDI 60X75X12	60	75	12
PU-TDI 63X78X12	63	78	12
PU-TDI 70X85X12	70	85	12
PU-TDI 80X95X12	80	95	12
PU-TDI 85X100X12	85	100	12
PU-TDI 90X105X12	90	105	12
PU-TDI 95X110X12	95	110	12
PU-TDI 100X115X12	100	115	12
PU-TDI 105X120X12	105	120	12
PU-TDI 110X125X12	110	125	12
PU-TDI 115X130X12	115	130	12

Part Number	ID	OD	HT
PU-TDI 120X140X16	120	140	16
PU-TDI 125X145X16	125	145	16
PU-TDI 130X150X16	130	150	16
PU-TDI 135X155X16	135	155	16
PU-TDI 140X160X16	140	160	16
PU-TDI 140X155X17	140	155	17
PU-TDI 145X165X16	145	165	16
PU-TDI 150X170X16	150	170	16
PU-TDI 155X175X16	155	175	16
PU-TDI 160X180X16	160	180	16
PU-TDI 170X190X16	170	190	16
PU-TDI 175X195X16	175	195	16
PU-TDI 180X200X16	180	200	16
PU-TDI 180X200X20	180	200	20
PU-TDI 190X210X16	190	210	16
PU-TDI 200X220X16	200	220	16
PU-TDI 220X240X16	220	240	16
PU-TDI 240X260X16	240	260	16
PU-TDI 260X280X16	260	280	16
PU-TDI 290X310X16	290	310	16
PU-TDI 300X320X16	300	320	16
PU-TDI 320X350X20	320	350	20

STYLE PU-TDT ROD U-SEALS

The PU-TDT tandem seal is a twin-lip urethane seal designed for telescopic cylinder applications. The simple and compact construction is ideal for use in telescopic stages in companion with FI type bearings. These are genuine Hunger® parts.



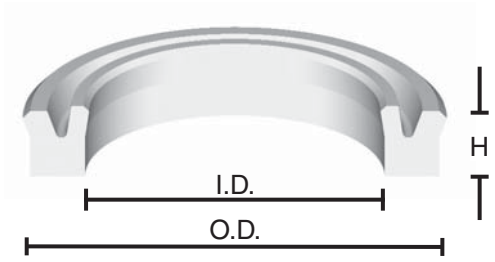
SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-31° TO +212° F
PRESSURE RANGE	0 TO 5,200 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number	ID	OD	HT
PU-TDT 75X83X11.5	75	83	11.5
PU-TDT 80X88X11.5	80	88	11.5
PU-TDT 90X98X11.5	90	98	11.5
PU-TDT 95X103X11.5	95	103	11.5

Part Number	ID	OD	HT
PU-TDT 110X118X11.5	110	118	11.5
PU-TDT 113X121X11.5	113	121	11.5
PU-TDT 120X128X11.5	120	128	11.5
PU-TDT 125X133X11.5	125	133	11.5

STYLE MPU PISTON SEALS

Molded from high quality urethane, the MPU is designed specifically for piston applications.



SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MPU-15X25X8.2
MPU-17X25X5.7
MPU-24X32X5.7
MPU-25X35X7.3
MPU-21X37X11.8
MPU-30X40X7.3
MPU-35X45X6
MPU-35X45X7
MPU-32X50X10
MPU-40X50X6
MPU-40X50X7.3
MPU-45X55X6
MPU-45X55X7.3
MPU-45X60X10

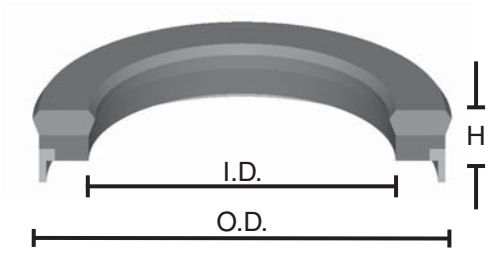
Part Number
MPU-50X60X6
MPU-50X60X7
MPU-48X63X11.4
MPU-53X63X7
MPU-53X63X7.3
MPU-53X63X12
MPU-50X65X10
MPU-50X70X12
MPU-50X70X15
MPU-55X70X9
MPU-55X70X10
MPU-60X70X6
MPU-61X71X6
MPU-57X73X10

Part Number
MPU-65X75X6
MPU-67X75X8.8
MPU-62X78X10
MPU-60X80X12
MPU-65X80X9
MPU-65X80X11.4
MPU-65X80X12
MPU-70X80X6
MPU-70X80X6.8
MPU-70X80X7
MPU-70X90X12
MPU-75X90X9
MPU-80X90X6
MPU-80X100X12

Part Number
MPU-85X100X9
MPU-85X100X11.4
MPU-90X100X6.8
MPU-85X105X15
MPU-90X110X12
MPU-100X110X8
MPU-105X125X14.5
MPU-115X125X15
MPU-130X150X14.5
MPU-140X150X13.6
MPU-140X160X18.2
MPU-180X200X14.5

STYLE MUFN-PWO PISTON SEALS

Constructed of a rubber seal lip with a rubberized fabric heel, these seals feature a polyacetal bearing ring. These seals offer excellent sealing ability and high pressure capability. The solid lip area increases the radial interference for improved low-pressure sealing. They are commonly used with our MSR retainer rings.



SEAL INFORMATION	
MATERIAL	NITRILE / FABRIC BASE ACETAL BEARING
TEMPERATURE RANGE	-22° TO +220° F
PRESSURE RANGE	0 TO 6,000 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

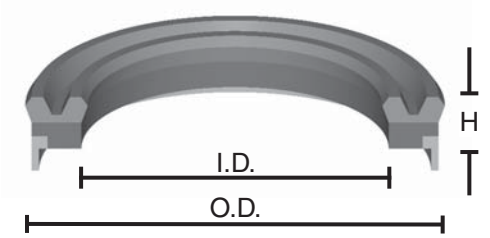
Part Number
MUFN-30X50X14PWO
MUFN-40X60X14PWO
MUFN-45X60X10.5PWO
MUFN-50X70X14PWO

Part Number
MUFN-60X80X14PWO
MUFN-70X90X14PWO
MUFN-80X100X14PWO
MUFN-85X104.5X12.8PWO

Part Number
MUFN-85X105X14PWO
MUFN-90X110X12.5PWO
MUFN-120X140X12PWO

STYLE MUFN-UWO PISTON SEALS

Constructed of a rubber seal lip with a rubberized fabric heel, these seals feature a polyacetal bearing ring. These seals offer excellent sealing ability and high pressure capability. They are commonly with MSR retention rings.



SEAL INFORMATION	
MATERIAL	NITRILE / FABRIC BASE ACETAL BEARING
TEMPERATURE RANGE	-22° TO +220° F
PRESSURE RANGE	0 TO 6,000 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

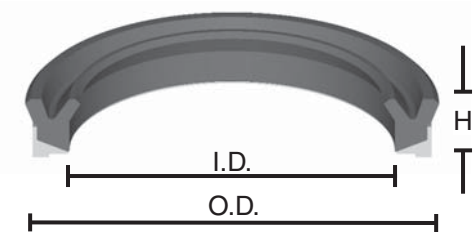
Part Number
MUFN-26X40X9UWO
MUFN-40X50X10UWO
MUFN-40X55X10.5UWO

Part Number
MUFN-50X63X10UWO
MUFN-60X80X14UWO
MUFN-65X80X12UWO

Part Number
MUFN-70X90X14UWO
MUFN-80X100X14UWO

STYLE MHP26 TWO PIECE PISTON SEALS

Molded from 70A nitrile for high sealability, they employ a hard nylon anti-extrusion ring as a companion piece.



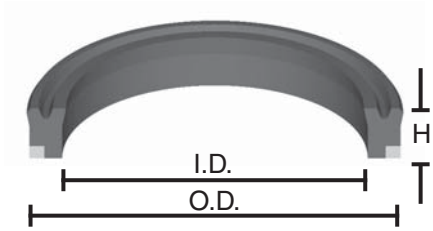
SEAL INFORMATION	
MATERIAL	70A NITRILE NYLON BACK-UP
TEMPERATURE RANGE	-20° TO +220° F
PRESSURE RANGE	0 TO 3,000 PSI
PART NUMBER	(PREFIX) - (OD)

Part Number	ID	OD	H
MHP26-045	27	45	12.1
MHP26-050	32	50	12.1
MHP26-055	37	55	12.1
MHP26-060	42	60	12.1
MHP26-065	47	65	12.1
MHP26-070	48	70	14.5
MHP26-080	58	80	14.5
MHP26-090	68	90	14.5
MHP26-100	78	100	14.5
MHP26-110	88	110	14.5
MHP26-115	93	115	14.5

Part Number	ID	OD	H
MHP26-120	98	120	14.5
MHP26-125	103	125	14.5
MHP26-130	108	130	14.5
MHP26-140	118	140	14.5
MHP26-150	128	150	14.5
MHP26-160	138	160	14.5
MHP26-170	148	170	14.5
MHP26-180	158	180	14.5
MHP26-190	168	190	14.5
MHP26-200	178	200	14.5

STYLE MHP27 U-TYPE PISTON SEALS

Molded from 70A nitrile for high sealability, they employ a hard acetal anti-extrusion ring as a companion piece.

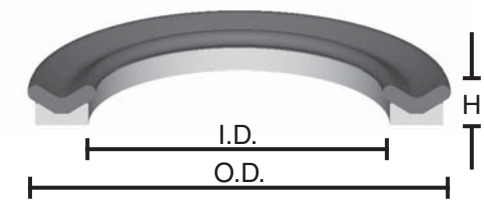


Part Number	ID	OD	H
MHP27-040	25	40	12
MHP27-050	35	50	12
MHP27-060	35	60	15.5
MHP27-070	45	70	15.5
MHP27-090	65	90	18

SEAL INFORMATION	
MATERIAL	70A NITRILE ACETAL BACK-UP
TEMPERATURE RANGE	-20° TO +220° F
PRESSURE RANGE	0 TO 4,000 PSI
PART NUMBER	(PREFIX) - (OD)

STYLE MHP28 U-TYPE PISTON SEALS

Molded from 70A nitrile for high sealability, they employ a hard nylon anti-extrusion ring as a companion piece.

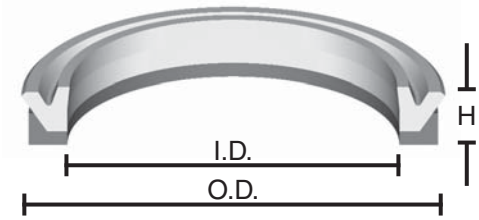


Part Number	ID	OD	H
MHP28-070	40	70	12

SEAL INFORMATION	
MATERIAL	70A NITRILE NYLON BACK-UP
TEMPERATURE RANGE	-20° TO +220° F
PRESSURE RANGE	0 TO 3,000 PSI
PART NUMBER	(PREFIX) - (OD)

STYLE MHP29 U-TYPE PISTON SEALS

Molded from urethane for resistance to extrusion and abrasion; they employ a hard nylon anti-extrusion ring.



Part Number	ID	OD	H
MHP29-070	55	70	12
MHP29-085	70	85	12

SEAL INFORMATION	
MATERIAL	URETHANE SEAL NYLON BACK-UP
TEMPERATURE RANGE	-40° TO +200° F
PRESSURE RANGE	0 TO 3,000 PSI
PART NUMBER	(PREFIX) - (OD)

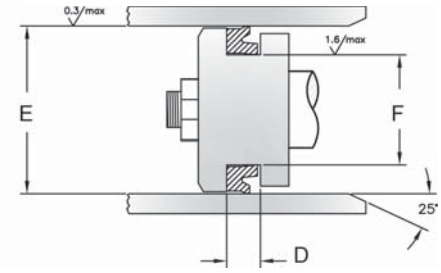
STYLE MUKPN U-TYPE PISTON SEALS

MUKPN is an asymmetrical single-acting pneumatic piston seal. Molded in Nitrile, this seal is resistant to water and most oils while maintaining good low-pressure sealing.

PART NUMBERS

MUKPN - 8 X 5 X 4

Type of Seal | Rod Diameter | Groove Diameter | Height



SEAL INFORMATION	
MATERIAL	80 A NBR
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 1,500
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Bore Diameter	F Groove Diameter
MUKPN-8X5X4	5	8	4	4.5 +0.200 0.000	8 +0.090 0.000	5 0.000 -0.030
MUKPN-10X5X3.5	5	10	3.5	4 +0.200 0.000	10 +0.090 0.000	5 0.000 -0.030
MUKPN-11X6X4	6	11	4	4.5 +0.200 0.000	11 +0.110 0.000	6 0.000 -0.030
MUKPN-12X6X4	6	12	4	4.5 +0.200 0.000	12 +0.110 0.000	6 0.000 -0.030
MUKPN-13X7X4	7	13	4	4.5 +0.200 0.000	13 +0.110 0.000	7 0.000 -0.036
MUKPN-15X7X5.5	7	15	5.5	6 +0.200 0.000	15 +0.110 0.000	7 0.000 -0.036
MUKPN-16X8X5.5	8	16	5.5	6 +0.200 0.000	16 +0.110 0.000	8 0.000 -0.036
MUKPN-16X10X4	10	16	4	4.5 +0.200 0.000	16 +0.110 0.000	10 0.000 -0.036
MUKPN-18X10X5.5	10	18	5.5	6 +0.200 0.000	18 +0.110 0.000	10 0.000 -0.036
MUKPN-20X12X5.5	12	20	5.5	6 +0.200 0.000	20 +0.130 0.000	12 0.000 -0.043
MUKPN-20X14X6	14	20	6	6.5 +0.200 0.000	20 +0.130 0.000	14 0.000 -0.043
MUKPN-24X16X5.5	16	24	5.5	6 +0.200 0.000	24 +0.130 0.000	16 0.000 -0.043
MUKPN-25X15X5	15	25	5	5.5 +0.200 0.000	25 +0.130 0.000	15 0.000 -0.043
MUKPN-28X16X9	16	28	9	10 +0.200 0.000	28 +0.130 0.000	16 0.000 -0.043
MUKPN-28X20X5.5	20	28	5.5	6 +0.200 0.000	28 +0.130 0.000	20 0.000 -0.052
MUKPN-30X15X10	15	30	10	11 +0.200 0.000	30 +0.130 0.000	15 0.000 -0.043
MUKPN-30X20X7	20	30	7	7.5 +0.200 0.000	30 +0.130 0.000	20 0.000 -0.052

STYLE MUKPN U-TYPE PISTON SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Bore Diameter	F Groove Diameter
MUKPN-30X22X5.5	22	30	5.5	6 +0.200 0.000	30 +0.130 0.000	22 0.000 -0.052
MUKPN-32X22X7	22	32	7	7.5 +0.200 0.000	32 +0.160 0.000	22 0.000 -0.052
MUKPN-32X24X5.5	24	32	5.5	6 +0.200 0.000	32 +0.160 0.000	24 0.000 -0.052
MUKPN-35X22X8	22	35	8	8.5 +0.200 0.000	35 +0.160 0.000	22 0.000 -0.052
MUKPN-36X24X9	24	36	9	10 +0.200 0.000	36 +0.160 0.000	24 0.000 -0.052
MUKPN-36X26X7	26	36	7	7.5 +0.200 0.000	36 +0.160 0.000	26 0.000 -0.052
MUKPN-38X26X10	26	38	10	11 +0.200 0.000	38 +0.160 0.000	26 0.000 -0.052
MUKPN-40X28X6	28	40	6	6.5 +0.200 0.000	40 +0.160 0.000	28 0.000 -0.052
MUKPN-40X28X9	28	40	9	10 +0.200 0.000	40 +0.160 0.000	28 0.000 -0.052
MUKPN-40X30X7	30	40	7	7.5 +0.200 0.000	40 +0.160 0.000	30 0.000 -0.052
MUKPN-40X32X3.25	32	40	3.25	3.75 +0.200 0.000	40 +0.160 0.000	32 0.000 -0.062
MUKPN-44X28X12	28	44	12	13 +0.200 0.000	44 +0.160 0.000	28 0.000 -0.052
MUKPN-45X33X9	33	45	9	10 +0.200 0.000	45 +0.160 0.000	33 0.000 -0.062
MUKPN-45X37X6	37	45	6	6.5 +0.200 0.000	45 +0.160 0.000	37 0.000 -0.062
MUKPN-48X40X5.5	40	48	5.5	6 +0.200 0.000	48 +0.160 0.000	40 0.000 -0.062
MUKPN-50X30X15	30	50	15	16 +0.200 0.000	50 +0.160 0.000	30 0.000 -0.052
MUKPN-50X38X6	38	50	6	6.5 +0.200 0.000	50 +0.160 0.000	38 0.000 -0.062
MUKPN-50X40X7.2	40	50	7.2	7.7 +0.200 0.000	50 +0.160 0.000	40 0.000 -0.062
MUKPN-50X42X3.25	42	50	3.25	3.75 +0.200 0.000	50 +0.160 0.000	42 0.000 -0.062
MUKPN-50X42X8	42	50	8	8.5 +0.200 0.000	50 +0.160 0.000	42 0.000 -0.062
MUKPN-52X36X12	36	52	12	13 +0.200 0.000	52 +0.190 0.000	36 0.000 -0.062
MUKPN-54X46X8	46	54	8	8.5 +0.200 0.000	54 +0.190 0.000	46 0.000 -0.062
MUKPN-55X45X7.5	45	55	7.5	8 +0.200 0.000	55 +0.190 0.000	45 0.000 -0.062
MUKPN-60X40X12	40	60	12	13 +0.200 0.000	60 +0.190 0.000	40 0.000 -0.062
MUKPN-60X44X12	44	60	12	13 +0.200 0.000	60 +0.190 0.000	44 0.000 -0.062

STYLE MUKPN U-TYPE PISTON SEALS

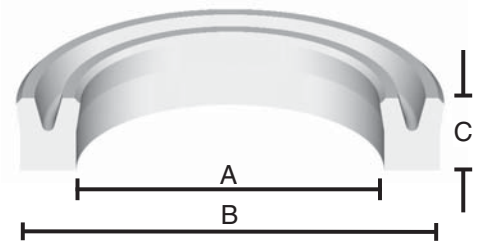
Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Bore Diameter	F Groove Diameter
MUKPN-60X48X7.5	48	60	7.5	8 +0.200 0.000	60 +0.190 0.000	48 0.000 -0.062
MUKPN-60X48X9	48	60	9	10 +0.200 0.000	60 +0.190 0.000	48 0.000 -0.062
MUKPN-60X50X7	50	60	7	7.5 +0.200 0.000	60 +0.190 0.000	50 0.000 -0.062
MUKPN-60X50X10.5	50	60	10.5	11.5 +0.200 0.000	60 +0.190 0.000	50 0.000 -0.062
MUKPN-62X46X12	46	62	12	13 +0.200 0.000	62 +0.190 0.000	46 0.000 -0.062
MUKPN-65X49X12	49	65	12	13 +0.200 0.000	65 +0.190 0.000	49 0.000 -0.062
MUKPN-65X53X10	53	65	10	11 +0.200 0.000	65 +0.190 0.000	53 0.000 -0.074
MUKPN-65X55X12	55	65	12	13 +0.200 0.000	65 +0.190 0.000	55 0.000 -0.074
MUKPN-70X54X8	54	70	8	8.5 +0.200 0.000	70 +0.190 0.000	54 0.000 -0.074
MUKPN-70X54X12	54	70	12	13 +0.200 0.000	70 +0.190 0.000	54 0.000 -0.074
MUKPN-70X58X8.5	58	70	8.5	9.5 +0.200 0.000	70 +0.190 0.000	58 0.000 -0.074
MUKPN-75X55X12	55	75	12	13 +0.200 0.000	75 +0.190 0.000	55 0.000 -0.074
MUKPN-75X59X12	59	75	12	13 +0.200 0.000	75 +0.190 0.000	59 0.000 -0.074
MUKPN-75X63X8.5	63	75	8.5	9.5 +0.200 0.000	75 +0.190 0.000	63 0.000 -0.074
MUKPN-80X60X14	60	80	14	15 +0.200 0.000	80 +0.190 0.000	60 0.000 -0.074
MUKPN-80X64X12	64	80	12	13 +0.200 0.000	80 +0.190 0.000	64 0.000 -0.074
MUKPN-80X68X8.5	68	80	8.5	9.5 +0.200 0.000	80 +0.190 0.000	68 0.000 -0.074
MUKPN-80X72X12	72	80	12	13 +0.200 0.000	80 +0.190 0.000	72 0.000 -0.074
MUKPN-85X73X8.2	73	85	8.2	9.2 +0.200 0.000	85 +0.220 0.000	73 0.000 -0.074
MUKPN-90X78X8.5	78	90	8.5	9.5 +0.200 0.000	90 +0.220 0.000	78 0.000 -0.074
MUKPN-100X82X13.5	82	100	13.5	14.5 +0.200 0.000	100 +0.220 0.000	82 0.000 -0.087
MUKPN-100X84X8	84	100	8	8.5 +0.200 0.000	100 +0.220 0.000	84 0.000 -0.087
MUKPN-100X88X8.5	88	100	8.5	9.5 +0.200 0.000	100 +0.220 0.000	88 0.000 -0.087
MUKPN-105X85X15	85	105	15	16 +0.200 0.000	105 +0.220 0.000	85 0.000 -0.087
MUKPN-110X90X15	90	110	15	16 +0.200 0.000	110 +0.220 0.000	90 0.000 -0.087

STYLE MUKPN U-TYPE PISTON SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Bore Diameter	F Groove Diameter
MUKPN-110X95X10.4	95	110	10.4	11.4 +0.200 0.000	110 +0.220 0.000	95 0.000 -0.087
MUKPN-115X95X15	95	115	15	16 +0.200 0.000	115 +0.220 0.000	95 0.000 -0.087
MUKPN-115X100X10	100	115	10	11 +0.200 0.000	115 +0.220 0.000	100 0.000 -0.087
MUKPN-120X100X15	100	120	15	16 +0.200 0.000	120 +0.220 0.000	100 0.000 -0.087
MUKPN-120X105X10	105	120	10	11 +0.200 0.000	120 +0.220 0.000	105 0.000 -0.087
MUKPN-120X106X14	106	120	14	15 +0.200 0.000	120 +0.220 0.000	106 0.000 -0.087
MUKPN-125X103X16	103	125	16	17 +0.200 0.000	125 +0.250 0.000	103 0.000 -0.087
MUKPN-125X110X10	110	125	10	11 +0.200 0.000	125 +0.250 0.000	110 0.000 -0.087
MUKPN-130X110X15	110	130	15	16 +0.200 0.000	130 +0.250 0.000	110 0.000 -0.087
MUKPN-136X116X14	116	136	14	15 +0.200 0.000	136 +0.250 0.000	116 0.000 -0.087
MUKPN-140X120X14	120	140	14	15 +0.200 0.000	140 +0.250 0.000	120 0.000 -0.087
MUKPN-140X125X10	125	140	10	11 +0.200 0.000	140 +0.250 0.000	125 0.000 -0.100
MUKPN-150X135X10	135	150	10	11 +0.200 0.000	150 +0.250 0.000	135 0.000 -0.100
MUKPN-155X130X18	130	155	18	19 +0.200 0.000	155 +0.250 0.000	130 0.000 -0.100
MUKPN-160X144X16	144	160	16	17 +0.200 0.000	160 +0.250 0.000	144 0.000 -0.100
MUKPN-160X145X10	145	160	10	11 +0.200 0.000	160 +0.250 0.000	145 0.000 -0.100
MUKPN-175X145X18	145	175	18	19 +0.200 0.000	175 +0.250 0.000	145 0.000 -0.100
MUKPN-195X170X14	170	195	14	15 +0.200 0.000	195 +0.290 0.000	170 0.000 -0.100
MUKPN-200X180X8.25	180	200	8.25	9.25 +0.200 0.000	200 +0.290 0.000	180 0.000 -0.100
MUKPN-200X180X14	180	200	14	15 +0.200 0.000	200 +0.290 0.000	180 0.000 -0.100
MUKPN-250X230X14	230	250	14	15 +0.200 0.000	250 +0.290 0.000	230 0.000 -0.115

STYLE MUU SYMMETRICAL U-SEALS

Utilizing tough polyurethane, these seals possess excellent wear and abrasion resistance. Symmetrical in design, they can be used in rod or piston applications. E= European Urethane.

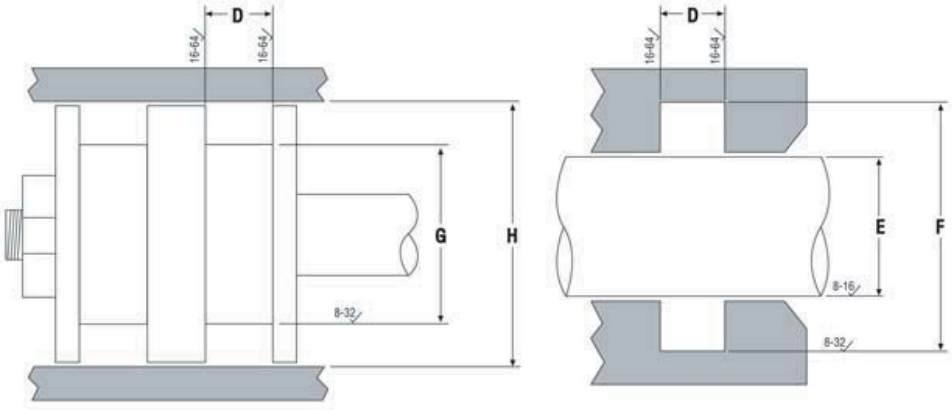


PART NUMBERS

MUU - 4 X 10 X 4

Style Prefix | I.D. | O.D. | Height

SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)



Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter	G Groove Diameter	H Bore Diameter
MUU-4X10X4	4	10	4	4.5 +0.300 0.000	4 -0.010 -0.028	10 0.000 -0.200	4 0.000 -0.048	10 +0.036 0.000
MUU-4X10X4.5	4	10	4.5	5 +0.300 0.000	4 -0.010 -0.028	10 0.000 -0.200	4 0.000 -0.048	10 +0.036 0.000
MUU-5X11X5	5	11	5	5.7 +0.300 0.000	5 -0.010 -0.028	11 0.000 -0.200	5 0.000 -0.048	11 +0.043 0.000
MUU-5X12X6	5	12	6	7 +0.300 0.000	5 -0.010 -0.028	12 0.000 -0.200	5 0.000 -0.048	12 +0.043 0.000
MUU-5X15X8	5	15	8	9 +0.300 0.000	5 -0.010 -0.028	15 0.000 -0.200	5 0.000 -0.048	15 +0.043 0.000
MUU-6X12X4	6	12	4	5 +0.300 0.000	6 -0.010 -0.028	12 0.000 -0.200	6 0.000 -0.048	12 +0.043 0.000
MUU-6X12X6	6	12	6	7 +0.300 0.000	6 -0.010 -0.028	12 0.000 -0.200	6 0.000 -0.048	12 +0.043 0.000
MUU-6X12X8	6	12	8	9 +0.300 0.000	6 -0.010 -0.028	12 0.000 -0.200	6 0.000 -0.048	12 +0.043 0.000
MUU-8X14X6	8	14	6	7 +0.300 0.000	8 -0.013 -0.035	14 0.000 -0.200	8 0.000 -0.058	14 +0.043 0.000
MUU-8X15X8	8	15	8	9 +0.300 0.000	8 -0.013 -0.035	15 0.000 -0.200	8 0.000 -0.058	15 +0.043 0.000

STYLE MUU SYMMETRICAL U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter	G Groove Diameter	H Bore Diameter
MUU-8X16X5.7	8	16	5.7	6.3 +0.300 0.000	8 -0.013 -0.035	16 0.000 -0.200	8 0.000 -0.058	16 +0.043 0.000
MUU-10X16X4	10	16	4	4.5 +0.300 0.000	10 -0.013 -0.035	16 0.000 -0.200	10 0.000 -0.058	16 +0.043 0.000
MUU-10X16X6	10	16	6	7 +0.300 0.000	10 -0.013 -0.035	16 0.000 -0.200	10 0.000 -0.058	16 +0.043 0.000
MUU-10X18X5.5	10	18	5.5	6.5 +0.300 0.000	10 -0.013 -0.035	18 0.000 -0.200	10 0.000 -0.058	18 +0.043 0.000
MUU-10X18X6	10	18	6	7 +0.300 0.000	10 -0.013 -0.035	18 0.000 -0.200	10 0.000 -0.058	18 +0.043 0.000
MUU-10X20X8	10	20	8	9 +0.300 0.000	10 -0.013 -0.035	20 0.000 -0.200	10 0.000 -0.058	20 +0.052 0.000
MUU-11.2X19.2X5	11.2	19.2	5	5.7 +0.300 0.000	11.2 -0.016 -0.043	19.2 0.000 -0.200	11.2 0.000 -0.070	19.2 +0.052 0.000
MUU-11.2X21.2X8	11.2	21.2	8	9 +0.300 0.000	11.2 -0.016 -0.043	21.2 0.000 -0.200	11.2 0.000 -0.070	21.2 +0.052 0.000
MUU-12X18X4.8	12	18	4.8	5.3 +0.300 0.000	12 -0.016 -0.043	18 0.000 -0.200	12 0.000 -0.070	18 +0.043 0.000
MUU-12X18X6	12	18	6	7 +0.300 0.000	12 -0.016 -0.043	18 0.000 -0.200	12 0.000 -0.070	18 +0.043 0.000
MUU-12X20X8	12	20	8	9 +0.300 0.000	12 -0.016 -0.043	20 0.000 -0.200	12 0.000 -0.070	20 +0.052 0.000
MUU-12X22X5	12	22	5	5.7 +0.300 0.000	12 -0.016 -0.043	22 0.000 -0.200	12 0.000 -0.070	22 +0.052 0.000
MUU-12X22X7	12	22	7	8 +0.300 0.000	12 -0.016 -0.043	22 0.000 -0.200	12 0.000 -0.070	22 +0.052 0.000
MUU-12X22X8	12	22	8	9 +0.300 0.000	12 -0.016 -0.043	22 0.000 -0.200	12 0.000 -0.070	22 +0.052 0.000
MUU-14X20X4.8	14	20	4.8	5.3 +0.300 0.000	14 -0.016 -0.043	20 0.000 -0.200	14 0.000 -0.070	20 +0.052 0.000
MUU-14X22X5	14	22	5	5.7 +0.300 0.000	14 -0.016 -0.043	22 0.000 -0.200	14 0.000 -0.070	22 +0.052 0.000
MUU-14X22X6	14	22	6	7 +0.300 0.000	14 -0.016 -0.043	22 0.000 -0.200	14 0.000 -0.070	22 +0.052 0.000
MUU-14X24X8	14	24	8	9 +0.300 0.000	14 -0.016 -0.043	24 0.000 -0.200	14 0.000 -0.070	24 +0.052 0.000
MUU-15X25X5	15	25	5	5.7 +0.300 0.000	15 -0.016 -0.043	25 0.000 -0.200	15 0.000 -0.070	25 +0.052 0.000
MUU-15X25X8	15	25	8	9 +0.300 0.000	15 -0.016 -0.043	25 0.000 -0.200	15 0.000 -0.070	25 +0.052 0.000
MUU-16X22X4	16	22	4	4.5 +0.300 0.000	16 -0.016 -0.043	22 0.000 -0.200	16 0.000 -0.070	22 +0.052 0.000
MUU-16X22X5	16	22	5	5.7 +0.300 0.000	16 -0.016 -0.043	22 0.000 -0.200	16 0.000 -0.070	22 +0.052 0.000
MUU-16X24X5	16	24	5	5.7 +0.300 0.000	16 -0.016 -0.043	24 0.000 -0.200	16 0.000 -0.070	24 +0.052 0.000
MUU-16X25X7.1	16	25	7.1	8.25 +0.300 0.000	16 -0.016 -0.043	25 0.000 -0.200	16 0.000 -0.070	25 +0.052 0.000
MUU-16X26X5	16	26	5	5.7 +0.300 0.000	16 -0.016 -0.043	26 0.000 -0.200	16 0.000 -0.070	26 +0.052 0.000

STYLE MUU SYMMETRICAL U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter	G Groove Diameter	H Bore Diameter
MUU-16X26X8	16	26	8	9 +0.300 0.000	16 -0.016 -0.043	26 0.000 -0.200	16 0.000 -0.070	26 +0.052 0.000
MUU-17X25X10	17	25	10	11 +0.300 0.000	17 -0.016 -0.043	25 0.000 -0.200	17 0.000 -0.070	25 +0.052 0.000
MUU-18X25X5	18	25	5	5.7 +0.300 0.000	18 -0.016 -0.043	25 0.000 -0.200	18 0.000 -0.070	25 +0.052 0.000
MUU-18X26X5	18	26	5	5.7 +0.300 0.000	18 -0.016 -0.043	26 0.000 -0.200	18 0.000 -0.070	26 +0.052 0.000
MUU-18X26X6.5	18	26	6.5	7.5 +0.300 0.000	18 -0.016 -0.043	26 0.000 -0.200	18 0.000 -0.070	26 +0.052 0.000
MUU-18X26X8	18	26	8	9 +0.300 0.000	18 -0.016 -0.043	26 0.000 -0.200	18 0.000 -0.070	26 +0.052 0.000
MUU-18X28X8	18	28	8	9 +0.300 0.000	18 -0.016 -0.043	28 0.000 -0.200	18 0.000 -0.070	28 +0.052 0.000
MUU-18X30X8	18	30	8	9 +0.300 0.000	18 -0.016 -0.043	30 0.000 -0.200	18 0.000 -0.070	30 +0.052 0.000
MUU-18X34X8	18	34	8	9 +0.300 0.000	18 -0.016 -0.043	34 0.000 -0.200	18 0.000 -0.070	34 +0.062 0.000
MUU-20X28X4	20	28	4	4.5 +0.300 0.000	20 -0.020 -0.053	28 0.000 -0.200	20 0.000 -0.084	28 +0.052 0.000
MUU-20X28X5	20	28	5	5.7 +0.300 0.000	20 -0.020 -0.053	28 0.000 -0.200	20 0.000 -0.084	28 +0.052 0.000
MUU-20X28X8	20	28	8	9 +0.300 0.000	20 -0.020 -0.053	28 0.000 -0.200	20 0.000 -0.084	28 +0.052 0.000
MUU-20X30X8	20	30	8	9 +0.300 0.000	20 -0.020 -0.053	30 0.000 -0.200	20 0.000 -0.084	30 +0.052 0.000
MUU-20X30X10	20	30	10	11 +0.300 0.000	20 -0.020 -0.053	30 0.000 -0.200	20 0.000 -0.084	30 +0.052 0.000
MUU-20X32X7.5	20	32	7.5	8.5 +0.300 0.000	20 -0.020 -0.053	32 0.000 -0.200	20 0.000 -0.084	32 +0.062 0.000
MUU-20X35X12	20	35	12	13 +0.300 0.000	20 -0.020 -0.053	35 0.000 -0.200	20 0.000 -0.084	35 +0.062 0.000
MUU-20X40X10	20	40	10	11 +0.300 0.000	20 -0.020 -0.053	40 0.000 -0.200	20 0.000 -0.084	40 +0.062 0.000
MUU-20X40X12	20	40	12	13 +0.300 0.000	20 -0.020 -0.053	40 0.000 -0.200	20 0.000 -0.084	40 +0.062 0.000
MUU-22X28X8	22	28	8	9 +0.300 0.000	22 -0.020 -0.053	28 0.000 -0.200	22 0.000 -0.084	28 +0.052 0.000
MUU-22X30X6	22	30	6	7 +0.300 0.000	22 -0.020 -0.053	30 0.000 -0.200	22 0.000 -0.084	30 +0.052 0.000
MUU-22X30X7	22	30	7	8 +0.300 0.000	22 -0.020 -0.053	30 0.000 -0.200	22 0.000 -0.084	30 +0.052 0.000
MUU-22X30X10	22	30	10	11 +0.300 0.000	22 -0.020 -0.053	30 0.000 -0.200	22 0.000 -0.084	30 +0.052 0.000
MUU-22X32X8	22	32	8	9 +0.300 0.000	22 -0.020 -0.053	32 0.000 -0.200	22 0.000 -0.084	32 +0.062 0.000
MUU-22X35X10	22	35	10	11 +0.300 0.000	22 -0.020 -0.053	35 0.000 -0.200	22 0.000 -0.084	35 +0.062 0.000
MUU-22.4X30X5	22.4	30	5	5.7 +0.300 0.000	22.4 -0.020 -0.053	30 0.000 -0.200	22.4 0.000 -0.084	30 +0.052 0.000

STYLE MUU SYMMETRICAL U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter	G Groove Diameter	H Bore Diameter
MUU-23.5X31.5X5	23.5	31.5	5	5.7 +0.300 0.000	23.5 -0.020 -0.053	31.5 0.000 -0.200	23.5 0.000 -0.084	31.5 +0.062 0.000
MUU-24X32X7	24	32	7	8 +0.300 0.000	24 -0.020 -0.053	32 0.000 -0.200	24 0.000 -0.084	32 +0.062 0.000
MUU-24X40X8	24	40	8	9 +0.300 0.000	24 -0.020 -0.053	40 0.000 -0.200	24 0.000 -0.084	40 +0.062 0.000
MUU-25X30X8	25	30	8	9 +0.300 0.000	25 -0.020 -0.053	30 0.000 -0.200	25 0.000 -0.084	30 +0.052 0.000
MUU-25X33X5	25	33	5	5.7 +0.300 0.000	25 -0.020 -0.053	33 0.000 -0.200	25 0.000 -0.084	33 +0.062 0.000
MUU-25X33X5.7	25	33	5.7	6.3 +0.300 0.000	25 -0.020 -0.053	33 0.000 -0.200	25 0.000 -0.084	33 +0.062 0.000
MUU-25X33X8	25	33	8	9 +0.300 0.000	25 -0.020 -0.053	33 0.000 -0.200	25 0.000 -0.084	33 +0.062 0.000
MUU-25X35X5	25	35	5	5.7 +0.300 0.000	25 -0.020 -0.053	35 0.000 -0.200	25 0.000 -0.084	35 +0.062 0.000
MUU-25X35X6	25	35	6	7 +0.300 0.000	25 -0.020 -0.053	35 0.000 -0.200	25 0.000 -0.084	35 +0.062 0.000
MUU-25X35X8	25	35	8	9 +0.300 0.000	25 -0.020 -0.053	35 0.000 -0.200	25 0.000 -0.084	35 +0.062 0.000
MUU-25X35X10	25	35	10	11 +0.300 0.000	25 -0.020 -0.053	35 0.000 -0.200	25 0.000 -0.084	35 +0.062 0.000
MUU-25X38X10	25	38	10	11 +0.300 0.000	25 -0.020 -0.053	38 0.000 -0.200	25 0.000 -0.084	38 +0.062 0.000
MUU-25X40X10	25	40	10	11 +0.300 0.000	25 -0.020 -0.053	40 0.000 -0.200	25 0.000 -0.084	40 +0.062 0.000
MUU-25X45X10	25	45	10	11 +0.300 0.000	25 -0.020 -0.053	45 0.000 -0.200	25 0.000 -0.084	45 +0.062 0.000
MUU-25X50X12	25	50	12	13 +0.300 0.000	25 -0.020 -0.053	50 0.000 -0.200	25 0.000 -0.084	50 +0.062 0.000
MUU-26X34X6	26	34	6	7 +0.300 0.000	26 -0.020 -0.053	34 0.000 -0.200	26 0.000 -0.084	34 +0.062 0.000
MUU-26X38X8	26	38	8	9 +0.300 0.000	26 -0.020 -0.053	38 0.000 -0.200	26 0.000 -0.084	38 +0.062 0.000
MUU-28X35X5	28	35	5	5.7 +0.300 0.000	28 -0.020 -0.053	35 0.000 -0.200	28 0.000 -0.084	35 +0.062 0.000
MUU-28X35.5X5	28	35.5	5	5.7 +0.300 0.000	28 -0.020 -0.053	35.5 0.000 -0.200	28 0.000 -0.084	35.5 +0.062 0.000
MUU-28X36X5	28	36	5	5.7 +0.300 0.000	28 -0.020 -0.053	36 0.000 -0.200	28 0.000 -0.084	36 +0.062 0.000
MUU-28X36X6.5	28	36	6.5	7.5 +0.300 0.000	28 -0.020 -0.053	36 0.000 -0.200	28 0.000 -0.084	36 +0.062 0.000
MUU-28X38X7	28	38	7	8 +0.300 0.000	28 -0.020 -0.053	38 0.000 -0.200	28 0.000 -0.084	38 +0.062 0.000
MUU-28X38X8	28	38	8	9 +0.300 0.000	28 -0.020 -0.053	38 0.000 -0.200	28 0.000 -0.084	38 +0.062 0.000
MUU-28X38X10	28	38	10	11 +0.300 0.000	28 -0.020 -0.053	38 0.000 -0.200	28 0.000 -0.084	38 +0.062 0.000
MUU-28X40X8	28	40	8	9 +0.300 0.000	28 -0.020 -0.053	40 0.000 -0.200	28 0.000 -0.084	40 +0.062 0.000

STYLE MUU SYMMETRICAL U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter	G Groove Diameter	H Bore Diameter
MUU-28X40X10	28	40	10	11 +0.300 0.000	28 -0.020 -0.053	40 0.000 -0.200	28 0.000 -0.084	40 +0.062 0.000
MUU-28X43X10	28	43	10	11 +0.300 0.000	28 -0.020 -0.053	43 0.000 -0.200	28 0.000 -0.084	43 +0.062 0.000
MUU-28X44X8	28	44	8	9 +0.300 0.000	28 -0.020 -0.053	44 0.000 -0.200	28 0.000 -0.084	44 +0.062 0.000
MUU-30X38X5	30	38	5	5.7 +0.300 0.000	30 -0.020 -0.053	38 0.000 -0.200	30 0.000 -0.084	38 +0.062 0.000
MUU-30X38X5.5	30	38	5.5	6.5 +0.300 0.000	30 -0.020 -0.053	38 0.000 -0.200	30 0.000 -0.084	38 +0.062 0.000
MUU-30X38X5.8	30	38	5.8	6.5 +0.300 0.000	30 -0.020 -0.053	38 0.000 -0.200	30 0.000 -0.084	38 +0.062 0.000
MUU-30X38X6	30	38	6	7 +0.300 0.000	30 -0.020 -0.053	38 0.000 -0.200	30 0.000 -0.084	38 +0.062 0.000
MUU-30X38X7	30	38	7	8 +0.300 0.000	30 -0.020 -0.053	38 0.000 -0.200	30 0.000 -0.084	38 +0.062 0.000
MUU-30X40X5	30	40	5	5.7 +0.300 0.000	30 -0.020 -0.053	40 0.000 -0.200	30 0.000 -0.084	40 +0.062 0.000
MUU-30X40X6	30	40	6	7 +0.300 0.000	30 -0.020 -0.053	40 0.000 -0.200	30 0.000 -0.084	40 +0.062 0.000
MUU-30X40X6.5	30	40	6.5	7.5 +0.300 0.000	30 -0.020 -0.053	40 0.000 -0.200	30 0.000 -0.084	40 +0.062 0.000
MUU-30X40X7	30	40	7	8 +0.300 0.000	30 -0.020 -0.053	40 0.000 -0.200	30 0.000 -0.084	40 +0.062 0.000
MUU-30X40X10	30	40	10	11 +0.300 0.000	30 -0.020 -0.053	40 0.000 -0.200	30 0.000 -0.084	40 +0.062 0.000
MUU-30X42X9	30	42	9	10 +0.300 0.000	30 -0.020 -0.053	42 0.000 -0.200	30 0.000 -0.084	42 +0.062 0.000
MUU-30X42X10	30	42	10	11 +0.300 0.000	30 -0.020 -0.053	42 0.000 -0.200	30 0.000 -0.084	42 +0.062 0.000
MUU-30X45X10	30	45	10	11 +0.300 0.000	30 -0.020 -0.053	45 0.000 -0.200	30 0.000 -0.084	45 +0.062 0.000
MUU-30X50X10	30	50	10	11 +0.300 0.000	30 -0.020 -0.053	50 0.000 -0.200	30 0.000 -0.084	50 +0.062 0.000
MUU-31.5X41.5X6	31.5	41.5	6	7 +0.300 0.000	31.5 -0.025 -0.064	41.5 0.000 -0.200	31.5 0.000 -0.100	41.5 +0.062 0.000
MUU-32X40X5	32	40	5	5.7 +0.300 0.000	32 -0.025 -0.064	40 0.000 -0.200	32 0.000 -0.100	40 +0.062 0.000
MUU-32X40X5.5	32	40	5.5	6.5 +0.300 0.000	32 -0.025 -0.064	40 0.000 -0.200	32 0.000 -0.100	40 +0.062 0.000
MUU-32X40X5.7	32	40	5.7	6.7 +0.300 0.000	32 -0.025 -0.064	40 0.000 -0.200	32 0.000 -0.100	40 +0.062 0.000
MUU-32X40X6	32	40	6	7 +0.300 0.000	32 -0.025 -0.064	40 0.000 -0.200	32 0.000 -0.100	40 +0.062 0.000
MUU-32X40X8	32	40	8	9 +0.300 0.000	32 -0.025 -0.064	40 0.000 -0.200	32 0.000 -0.100	40 +0.062 0.000
MUU-32X40X10	32	40	10	11 +0.300 0.000	32 -0.025 -0.064	40 0.000 -0.200	32 0.000 -0.100	40 +0.062 0.000
MUU-32X42X5.6	32	42	5.6	6.6 +0.300 0.000	32 -0.025 -0.064	42 0.000 -0.200	32 0.000 -0.100	42 +0.062 0.000

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Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter	G Groove Diameter	H Bore Diameter
MUU-32X42X5.8	32	42	5.8	6.8 +0.300 0.000	32 -0.025 -0.064	42 0.000 -0.200	32 0.000 -0.100	42 +0.062 0.000
MUU-32X42X10	32	42	10	11 +0.300 0.000	32 -0.025 -0.064	42 0.000 -0.200	32 0.000 -0.100	42 +0.062 0.000
MUU-32X45X10	32	45	10	11 +0.300 0.000	32 -0.025 -0.064	45 0.000 -0.200	32 0.000 -0.100	45 +0.062 0.000
MUU-32X46X10	32	46	10	11 +0.300 0.000	32 -0.025 -0.064	46 0.000 -0.200	32 0.000 -0.100	46 +0.062 0.000
MUU-32X47X10	32	47	10	11 +0.300 0.000	32 -0.025 -0.064	47 0.000 -0.200	32 0.000 -0.100	47 +0.062 0.000
MUU-35X42X8	35	42	8	9 +0.300 0.000	35 -0.025 -0.064	42 0.000 -0.200	35 0.000 -0.100	42 +0.062 0.000
MUU-35X43X6	35	43	6	7 +0.300 0.000	35 -0.025 -0.064	43 0.000 -0.200	35 0.000 -0.100	43 +0.062 0.000
MUU-35X45X5	35	45	5	5.7 +0.300 0.000	35 -0.025 -0.064	45 0.000 -0.200	35 0.000 -0.100	45 +0.062 0.000
MUU-35X45X6	35	45	6	7 +0.300 0.000	35 -0.025 -0.064	45 0.000 -0.200	35 0.000 -0.100	45 +0.062 0.000
MUU-35X45X7	35	45	7	8 +0.300 0.000	35 -0.025 -0.064	45 0.000 -0.200	35 0.000 -0.100	45 +0.062 0.000
MUU-35X45X8	35	45	8	9 +0.300 0.000	35 -0.025 -0.064	45 0.000 -0.200	35 0.000 -0.100	45 +0.062 0.000
MUU-35X45X10	35	45	10	11 +0.300 0.000	35 -0.025 -0.064	45 0.000 -0.200	35 0.000 -0.100	45 +0.062 0.000
MUU-35X48X10	35	48	10	11 +0.300 0.000	35 -0.025 -0.064	48 0.000 -0.200	35 0.000 -0.100	48 +0.062 0.000
MUU-35X50X8	35	50	8	9 +0.300 0.000	35 -0.025 -0.064	50 0.000 -0.200	35 0.000 -0.100	50 +0.062 0.000
MUU-35X50X10	35	50	10	11 +0.300 0.000	35 -0.025 -0.064	50 0.000 -0.200	35 0.000 -0.100	50 +0.062 0.000
MUU-35X55X10	35	55	10	11 +0.300 0.000	35 -0.025 -0.064	55 0.000 -0.200	35 0.000 -0.100	55 +0.074 0.000
MUU-35.5X45X6	35.5	45	6	7 +0.300 0.000	35.5 -0.025 -0.064	45 0.000 -0.200	35.5 0.000 -0.100	45 +0.062 0.000
MUU-36X45X10	36	45	10	11 +0.300 0.000	36 -0.025 -0.064	45 0.000 -0.200	36 0.000 -0.100	45 +0.062 0.000
MUU-36X46X7	36	46	7	8 +0.300 0.000	36 -0.025 -0.064	46 0.000 -0.200	36 0.000 -0.100	46 +0.062 0.000
MUU-36X46X7.5	36	46	7.5	8.5 +0.300 0.000	36 -0.025 -0.064	46 0.000 -0.200	36 0.000 -0.100	46 +0.062 0.000
MUU-36X46X10	36	46	10	11 +0.300 0.000	36 -0.025 -0.064	46 0.000 -0.200	36 0.000 -0.100	46 +0.062 0.000
MUU-38X45X5	38	45	5	5.7 +0.300 0.000	38 -0.025 -0.064	45 0.000 -0.200	38 0.000 -0.100	45 +0.062 0.000
MUU-38X48X6	38	48	6	7 +0.300 0.000	38 -0.025 -0.064	48 0.000 -0.200	38 0.000 -0.100	48 +0.062 0.000
MUU-38X50X9	38	50	9	10 +0.300 0.000	38 -0.025 -0.064	50 0.000 -0.200	38 0.000 -0.100	50 +0.062 0.000
MUU-38X50X10	38	50	10	11 +0.300 0.000	38 -0.025 -0.064	50 0.000 -0.200	38 0.000 -0.100	50 +0.062 0.000

STYLE MUU SYMMETRICAL U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter	G Groove Diameter	H Bore Diameter
MUU-38X58X10	38	58	10	11 +0.300 0.000	38 -0.025 -0.064	58 0.000 -0.200	38 0.000 -0.100	58 +0.074 0.000
MUU-40X48X8	40	48	8	9 +0.300 0.000	40 -0.025 -0.064	48 0.000 -0.200	40 0.000 -0.100	48 +0.062 0.000
MUU-40X50X5	40	50	5	5.7 +0.300 0.000	40 -0.025 -0.064	50 0.000 -0.200	40 0.000 -0.100	50 +0.062 0.000
MUU-40X50X6	40	50	6	7 +0.300 0.000	40 -0.025 -0.064	50 0.000 -0.200	40 0.000 -0.100	50 +0.062 0.000
MUU-40X50X6.5	40	50	6.5	7.5 +0.300 0.000	40 -0.025 -0.064	50 0.000 -0.200	40 0.000 -0.100	50 +0.062 0.000
MUU-40X50X8	40	50	8	9 +0.300 0.000	40 -0.025 -0.064	50 0.000 -0.200	40 0.000 -0.100	50 +0.062 0.000
MUU-40X50X10	40	50	10	11 +0.300 0.000	40 -0.025 -0.064	50 0.000 -0.200	40 0.000 -0.100	50 +0.062 0.000
MUU-40X52X6	40	52	6	7 +0.300 0.000	40 -0.025 -0.064	52 0.000 -0.200	40 0.000 -0.100	52 +0.074 0.000
MUU-40X52X9	40	52	9	10 +0.300 0.000	40 -0.025 -0.064	52 0.000 -0.200	40 0.000 -0.100	52 +0.074 0.000
MUU-40X55X10	40	55	10	11 +0.300 0.000	40 -0.025 -0.064	55 0.000 -0.200	40 0.000 -0.100	55 +0.074 0.000
MUU-40X56X8	40	56	8	9 +0.300 0.000	40 -0.025 -0.064	56 0.000 -0.200	40 0.000 -0.100	56 +0.074 0.000
MUU-40X56X10	40	56	10	11 +0.300 0.000	40 -0.025 -0.064	56 0.000 -0.200	40 0.000 -0.100	56 +0.074 0.000
MUU-40X60X10	40	60	10	11 +0.300 0.000	40 -0.025 -0.064	60 0.000 -0.200	40 0.000 -0.100	60 +0.074 0.000
MUU-40X60X12	40	60	12	13 +0.300 0.000	40 -0.025 -0.064	60 0.000 -0.200	40 0.000 -0.100	60 +0.074 0.000
MUU-40X60X13	40	60	13	14 +0.300 0.000	40 -0.025 -0.064	60 0.000 -0.200	40 0.000 -0.100	60 +0.074 0.000
MUU-40X60X18	40	60	18	19 +0.300 0.000	40 -0.025 -0.064	60 0.000 -0.200	40 0.000 -0.100	60 +0.074 0.000
MUU-40X65X12	40	65	12	13 +0.300 0.000	40 -0.025 -0.064	65 0.000 -0.200	40 0.000 -0.100	65 +0.074 0.000
MUU-42X50X8	42	50	8	9 +0.300 0.000	42 -0.025 -0.064	50 0.000 -0.200	42 0.000 -0.100	50 +0.062 0.000
MUU-42X52X6	42	52	6	7 +0.300 0.000	42 -0.025 -0.064	52 0.000 -0.200	42 0.000 -0.100	52 +0.074 0.000
MUU-42X52X9	42	52	9	10 +0.300 0.000	42 -0.025 -0.064	52 0.000 -0.200	42 0.000 -0.100	52 +0.074 0.000
MUU-43X63X10	43	63	10	11 +0.300 0.000	43 -0.025 -0.064	63 0.000 -0.200	43 0.000 -0.100	63 +0.074 0.000
MUU-45X55X6	45	55	6	7 +0.300 0.000	45 -0.025 -0.064	55 0.000 -0.200	45 0.000 -0.100	55 +0.074 0.000
MUU-45X55X6.5	45	55	6.5	7.5 +0.300 0.000	45 -0.025 -0.064	55 0.000 -0.200	45 0.000 -0.100	55 +0.074 0.000
MUU-45X55X10	45	55	10	11 +0.300 0.000	45 -0.025 -0.064	55 0.000 -0.200	45 0.000 -0.100	55 +0.074 0.000
MUU-45X56X7	45	56	7	8 +0.300 0.000	45 -0.025 -0.064	56 0.000 -0.200	45 0.000 -0.100	56 +0.074 0.000

STYLE MUU SYMMETRICAL U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter	G Groove Diameter	H Bore Diameter
MUU-45X58X10	45	58	10	11 +0.300 0.000	45 -0.025 -0.064	58 0.000 -0.200	45 0.000 -0.100	58 +0.074 0.000
MUU-45X58X12	45	58	12	13 +0.300 0.000	45 -0.025 -0.064	58 0.000 -0.200	45 0.000 -0.100	58 +0.074 0.000
MUU-45X60X7.5	45	60	7.5	8.5 +0.300 0.000	45 -0.025 -0.064	60 0.000 -0.200	45 0.000 -0.100	60 +0.074 0.000
MUU-45X60X10	45	60	10	11 +0.300 0.000	45 -0.025 -0.064	60 0.000 -0.200	45 0.000 -0.100	60 +0.074 0.000
MUU-45X60X11	45	60	11	12 +0.300 0.000	45 -0.025 -0.064	60 0.000 -0.200	45 0.000 -0.100	60 +0.074 0.000
MUU-45X63X10	45	63	10	11 +0.300 0.000	45 -0.025 -0.064	63 0.000 -0.200	45 0.000 -0.100	63 +0.074 0.000
MUU-45X65X10	45	65	10	11 +0.300 0.000	45 -0.025 -0.064	65 0.000 -0.200	45 0.000 -0.100	65 +0.074 0.000
MUU-45X65X12	45	65	12	13 +0.300 0.000	45 -0.025 -0.064	65 0.000 -0.200	45 0.000 -0.100	65 +0.074 0.000
MUU-45X70X12	45	70	12	13 +0.300 0.000	45 -0.025 -0.064	70 0.000 -0.200	45 0.000 -0.100	70 +0.074 0.000
MUU-48X58X10	48	58	10	11 +0.300 0.000	48 -0.025 -0.064	58 0.000 -0.200	48 0.000 -0.100	58 +0.074 0.000
MUU-48X63X10	48	63	10	11 +0.300 0.000	48 -0.025 -0.064	63 0.000 -0.200	48 0.000 -0.100	63 +0.074 0.000
MUU-50X60X5	50	60	5	5.7 +0.300 0.000	50 -0.025 -0.064	60 0.000 -0.200	50 0.000 -0.100	60 +0.074 0.000
MUU-50X60X6	50	60	6	7 +0.300 0.000	50 -0.025 -0.064	60 0.000 -0.200	50 0.000 -0.100	60 +0.074 0.000
MUU-50X60X10	50	60	10	11 +0.300 0.000	50 -0.025 -0.064	60 0.000 -0.200	50 0.000 -0.100	60 +0.074 0.000
MUU-50X62X9	50	62	9	10 +0.300 0.000	50 -0.025 -0.064	62 0.000 -0.200	50 0.000 -0.100	62 +0.074 0.000
MUU-50X63X6	50	63	6	7 +0.300 0.000	50 -0.025 -0.064	63 0.000 -0.200	50 0.000 -0.100	63 +0.074 0.000
MUU-50X63X10	50	63	10	11 +0.300 0.000	50 -0.025 -0.064	63 0.000 -0.200	50 0.000 -0.100	63 +0.074 0.000
MUU-50X65X7.5	50	65	7.5	8.5 +0.300 0.000	50 -0.025 -0.064	65 0.000 -0.200	50 0.000 -0.100	65 +0.074 0.000
MUU-50X65X10	50	65	10	11 +0.300 0.000	50 -0.025 -0.064	65 0.000 -0.200	50 0.000 -0.100	65 +0.074 0.000
MUU-50X65X11	50	65	11	12 +0.300 0.000	50 -0.025 -0.064	65 0.000 -0.200	50 0.000 -0.100	65 +0.074 0.000
MUU-50X70X10	50	70	10	11 +0.300 0.000	50 -0.025 -0.064	70 0.000 -0.200	50 0.000 -0.100	70 +0.074 0.000
MUU-50X70X12	50	70	12	13 +0.300 0.000	50 -0.025 -0.064	70 0.000 -0.200	50 0.000 -0.100	70 +0.074 0.000
MUU-50X75X12	50	75	12	13 +0.300 0.000	50 -0.025 -0.064	75 0.000 -0.200	50 0.000 -0.100	75 +0.074 0.000
MUU-52X62X12	52	62	12	13 +0.300 0.000	52 -0.030 -0.076	62 0.000 -0.200	52 0.000 -0.120	62 +0.074 0.000
MUU-53X63X5	53	63	5	5.7 +0.300 0.000	53 -0.030 -0.076	63 0.000 -0.200	53 0.000 -0.120	63 +0.074 0.000

STYLE MUU SYMMETRICAL U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter	G Groove Diameter	H Bore Diameter
MUU-53X63X6	53	63	6	7 +0.300 0.000	53 -0.030 -0.076	63 0.000 -0.200	53 0.000 -0.120	63 +0.074 0.000
MUU-53X63X6.5	53	63	6.5	7.5 +0.300 0.000	53 -0.030 -0.076	63 0.000 -0.200	53 0.000 -0.120	63 +0.074 0.000
MUU-55X63X5	55	63	5	5.7 +0.300 0.000	55 -0.030 -0.076	63 0.000 -0.200	55 0.000 -0.120	63 +0.074 0.000
MUU-55X65X5	55	65	5	5.7 +0.300 0.000	55 -0.030 -0.076	65 0.000 -0.200	55 0.000 -0.120	65 +0.074 0.000
MUU-55X65X6	55	65	6	7 +0.300 0.000	55 -0.030 -0.076	65 0.000 -0.200	55 0.000 -0.120	65 +0.074 0.000
MUU-55X65X10	55	65	10	11 +0.300 0.000	55 -0.030 -0.076	65 0.000 -0.200	55 0.000 -0.120	65 +0.074 0.000
MUU-55X65X12	55	65	12	13 +0.300 0.000	55 -0.030 -0.076	65 0.000 -0.200	55 0.000 -0.120	65 +0.074 0.000
MUU-55X70X10	55	70	10	11 +0.300 0.000	55 -0.030 -0.076	70 0.000 -0.200	55 0.000 -0.120	70 +0.074 0.000
MUU-55X70X12	55	70	12	13 +0.300 0.000	55 -0.030 -0.076	70 0.000 -0.200	55 0.000 -0.120	70 +0.074 0.000
MUU-55X75X10	55	75	10	11 +0.300 0.000	55 -0.030 -0.076	75 0.000 -0.200	55 0.000 -0.120	75 +0.074 0.000
MUU-55X75X12	55	75	12	13 +0.300 0.000	55 -0.030 -0.076	75 0.000 -0.200	55 0.000 -0.120	75 +0.074 0.000
MUU-55X75X18	55	75	18	19 +0.300 0.000	55 -0.030 -0.076	75 0.000 -0.200	55 0.000 -0.120	75 +0.074 0.000
MUU-56X66X6	56	66	6	7 +0.300 0.000	56 -0.030 -0.076	66 0.000 -0.200	56 0.000 -0.120	66 +0.074 0.000
MUU-56X71X11	56	71	11	12 +0.300 0.000	56 -0.030 -0.076	71 0.000 -0.200	56 0.000 -0.120	71 +0.074 0.000
MUU-58X68X6	58	68	6	7 +0.300 0.000	58 -0.030 -0.076	68 0.000 -0.200	58 0.000 -0.120	68 +0.074 0.000
MUU-60X68X8	60	68	8	9 +0.300 0.000	60 -0.030 -0.076	68 0.000 -0.200	60 0.000 -0.120	68 +0.074 0.000
MUU-60X68X10	60	68	10	11 +0.300 0.000	60 -0.030 -0.076	68 0.000 -0.200	60 0.000 -0.120	68 +0.074 0.000
MUU-60X70X5	60	70	5	5.7 +0.300 0.000	60 -0.030 -0.076	70 0.000 -0.200	60 0.000 -0.120	70 +0.074 0.000
MUU-60X70X6	60	70	6	7 +0.300 0.000	60 -0.030 -0.076	70 0.000 -0.200	60 0.000 -0.120	70 +0.074 0.000
MUU-60X70X7.5	60	70	7.5	8.5 +0.300 0.000	60 -0.030 -0.076	70 0.000 -0.200	60 0.000 -0.120	70 +0.074 0.000
MUU-60X70X8	60	70	8	9 +0.300 0.000	60 -0.030 -0.076	70 0.000 -0.200	60 0.000 -0.120	70 +0.074 0.000
MUU-60X70X10	60	70	10	11 +0.300 0.000	60 -0.030 -0.076	70 0.000 -0.200	60 0.000 -0.120	70 +0.074 0.000
MUU-60X70X12	60	70	12	13 +0.300 0.000	60 -0.030 -0.076	70 0.000 -0.200	60 0.000 -0.120	70 +0.074 0.000
MUU-60X75X10	60	75	10	11 +0.300 0.000	60 -0.030 -0.076	75 0.000 -0.200	60 0.000 -0.120	75 +0.074 0.000
MUU-60X75X12	60	75	12	13 +0.300 0.000	60 -0.030 -0.076	75 0.000 -0.200	60 0.000 -0.120	75 +0.074 0.000

STYLE MUU SYMMETRICAL U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter	G Groove Diameter	H Bore Diameter
MUU-60X80X10	60	80	10	11 +0.300 0.000	60 -0.030 -0.076	80 0.000 -0.200	60 0.000 -0.120	80 +0.074 0.000
MUU-60X80X12	60	80	12	13 +0.300 0.000	60 -0.030 -0.076	80 0.000 -0.200	60 0.000 -0.120	80 +0.074 0.000
MUU-60X80X18	60	80	18	19 +0.300 0.000	60 -0.030 -0.076	80 0.000 -0.200	60 0.000 -0.120	80 +0.074 0.000
MUU-63X73X6	63	73	6	7 +0.300 0.000	63 -0.030 -0.076	73 0.000 -0.200	63 0.000 -0.120	73 +0.074 0.000
MUU-63X73X7.5	63	73	7.5	8.5 +0.300 0.000	63 -0.030 -0.076	73 0.000 -0.200	63 0.000 -0.120	73 +0.074 0.000
MUU-63X75X10	63	75	10	11 +0.300 0.000	63 -0.030 -0.076	75 0.000 -0.200	63 0.000 -0.120	75 +0.074 0.000
MUU-63X78X10	63	78	10	11 +0.300 0.000	63 -0.030 -0.076	78 0.000 -0.200	63 0.000 -0.120	78 +0.074 0.000
MUU-63X78X11	63	78	11	12 +0.300 0.000	63 -0.030 -0.076	78 0.000 -0.200	63 0.000 -0.120	78 +0.074 0.000
MUU-63X80X9	63	80	9	10 +0.300 0.000	63 -0.030 -0.076	80 0.000 -0.200	63 0.000 -0.120	80 +0.074 0.000
MUU-63X80X10	63	80	10	11 +0.300 0.000	63 -0.030 -0.076	80 0.000 -0.200	63 0.000 -0.120	80 +0.074 0.000
MUU-65X75X6	65	75	6	7 +0.300 0.000	65 -0.030 -0.076	75 0.000 -0.200	65 0.000 -0.120	75 +0.074 0.000
MUU-65X80X7.5	65	80	7.5	8.5 +0.300 0.000	65 -0.030 -0.076	80 0.000 -0.200	65 0.000 -0.120	80 +0.074 0.000
MUU-65X80X11	65	80	11	12 +0.300 0.000	65 -0.030 -0.076	80 0.000 -0.200	65 0.000 -0.120	80 +0.074 0.000
MUU-65X80X12	65	80	12	13 +0.300 0.000	65 -0.030 -0.076	80 0.000 -0.200	65 0.000 -0.120	80 +0.074 0.000
MUU-65X85X10	65	85	10	11 +0.300 0.000	65 -0.030 -0.076	85 0.000 -0.200	65 0.000 -0.120	85 +0.087 0.000
MUU-65X85X12	65	85	12	13 +0.300 0.000	65 -0.030 -0.076	85 0.000 -0.200	65 0.000 -0.120	85 +0.087 0.000
MUU-65X90X18.5	65	90	18.5	19.5 +0.300 0.000	65 -0.030 -0.076	90 0.000 -0.200	65 0.000 -0.120	90 +0.087 0.000
MUU-66X80X10	66	80	10	11 +0.300 0.000	66 -0.030 -0.076	80 0.000 -0.200	66 0.000 -0.120	80 +0.074 0.000
MUU-66X80X13	66	80	13	14 +0.300 0.000	66 -0.030 -0.076	80 0.000 -0.200	66 0.000 -0.120	80 +0.074 0.000
MUU-67X77X6	67	77	6	7 +0.300 0.000	67 -0.030 -0.076	77 0.000 -0.200	67 0.000 -0.120	77 +0.074 0.000
MUU-70X80X5	70	80	5	5.7 +0.300 0.000	70 -0.030 -0.076	80 0.000 -0.200	70 0.000 -0.120	80 +0.074 0.000
MUU-70X80X6	70	80	6	7 +0.300 0.000	70 -0.030 -0.076	80 0.000 -0.200	70 0.000 -0.120	80 +0.074 0.000
MUU-70X80X8	70	80	8	9 +0.300 0.000	70 -0.030 -0.076	80 0.000 -0.200	70 0.000 -0.120	80 +0.074 0.000
MUU-70X80X10	70	80	10	11 +0.300 0.000	70 -0.030 -0.076	80 0.000 -0.200	70 0.000 -0.120	80 +0.074 0.000
MUU-70X80X12	70	80	12	13 +0.300 0.000	70 -0.030 -0.076	80 0.000 -0.200	70 0.000 -0.120	80 +0.074 0.000

STYLE MUU SYMMETRICAL U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter	G Groove Diameter	H Bore Diameter
MUU-70X82X9	70	82	9	10 +0.300 0.000	70 -0.030 -0.076	82 0.000 -0.200	70 0.000 -0.120	82 +0.087 0.000
MUU-70X85X8.4	70	85	8.4	9.5 +0.300 0.000	70 -0.030 -0.076	85 0.000 -0.200	70 0.000 -0.120	85 +0.087 0.000
MUU-70X85X12	70	85	12	13 +0.300 0.000	70 -0.030 -0.076	85 0.000 -0.200	70 0.000 -0.120	85 +0.087 0.000
MUU-70X90X10	70	90	10	11 +0.300 0.000	70 -0.030 -0.076	90 0.000 -0.200	70 0.000 -0.120	90 +0.087 0.000
MUU-70X90X12	70	90	12	13 +0.300 0.000	70 -0.030 -0.076	90 0.000 -0.200	70 0.000 -0.120	90 +0.087 0.000
MUU-70X90X18	70	90	18	19 +0.300 0.000	70 -0.030 -0.076	90 0.000 -0.200	70 0.000 -0.120	90 +0.087 0.000
MUU-70X95X10	70	95	10	11 +0.300 0.000	70 -0.030 -0.076	95 0.000 -0.200	70 0.000 -0.120	95 +0.087 0.000
MUU-70X95X12	70	95	12	13 +0.300 0.000	70 -0.030 -0.076	95 0.000 -0.200	70 0.000 -0.120	95 +0.087 0.000
MUU-71X80X6	71	80	6	7 +0.300 0.000	71 -0.030 -0.076	80 0.000 -0.200	71 0.000 -0.120	80 +0.074 0.000
MUU-75X85X6	75	85	6	7 +0.300 0.000	75 -0.030 -0.076	85 0.000 -0.200	75 0.000 -0.120	85 +0.087 0.000
MUU-75X85X10	75	85	10	11 +0.300 0.000	75 -0.030 -0.076	85 0.000 -0.200	75 0.000 -0.120	85 +0.087 0.000
MUU-75X85X12	75	85	12	13 +0.300 0.000	75 -0.030 -0.076	85 0.000 -0.200	75 0.000 -0.120	85 +0.087 0.000
MUU-75X90X7.5	75	90	7.5	8.5 +0.300 0.000	75 -0.030 -0.076	90 0.000 -0.200	75 0.000 -0.120	90 +0.087 0.000
MUU-75X90X10	75	90	10	11 +0.300 0.000	75 -0.030 -0.076	90 0.000 -0.200	75 0.000 -0.120	90 +0.087 0.000
MUU-75X90X12	75	90	12	13 +0.300 0.000	75 -0.030 -0.076	90 0.000 -0.200	75 0.000 -0.120	90 +0.087 0.000
MUU-75X95X10	75	95	10	11 +0.300 0.000	75 -0.030 -0.076	95 0.000 -0.200	75 0.000 -0.120	95 +0.087 0.000
MUU-75X95X12	75	95	12	13 +0.300 0.000	75 -0.030 -0.076	95 0.000 -0.200	75 0.000 -0.120	95 +0.087 0.000
MUU-80X90X5	80	90	5	5.7 +0.300 0.000	80 -0.030 -0.076	90 0.000 -0.200	80 0.000 -0.120	90 +0.087 0.000
MUU-80X90X6	80	90	6	7 +0.300 0.000	80 -0.030 -0.076	90 0.000 -0.200	80 0.000 -0.120	90 +0.087 0.000
MUU-80X90X8	80	90	8	9 +0.300 0.000	80 -0.030 -0.076	90 0.000 -0.200	80 0.000 -0.120	90 +0.087 0.000
MUU-80X90X10	80	90	10	11 +0.300 0.000	80 -0.030 -0.076	90 0.000 -0.200	80 0.000 -0.120	90 +0.087 0.000
MUU-80X90X12	80	90	12	13 +0.300 0.000	80 -0.030 -0.076	90 0.000 -0.200	80 0.000 -0.120	90 +0.087 0.000
MUU-80X90X13.5	80	90	13.5	14.5 +0.300 0.000	80 -0.030 -0.076	90 0.000 -0.200	80 0.000 -0.120	90 +0.087 0.000
MUU-80X95X7.5	80	95	7.5	8.5 +0.300 0.000	80 -0.030 -0.076	95 0.000 -0.200	80 0.000 -0.120	95 +0.087 0.000
MUU-80X95X8.4	80	95	8.4	9.5 +0.300 0.000	80 -0.030 -0.076	95 0.000 -0.200	80 0.000 -0.120	95 +0.087 0.000

STYLE MUU SYMMETRICAL U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter	G Groove Diameter	H Bore Diameter
MUU-80X95X9	80	95	9	10 +0.300 0.000	80 -0.030 -0.076	95 0.000 -0.200	80 0.000 -0.120	95 +0.087 0.000
MUU-80X95X10	80	95	10	11 +0.300 0.000	80 -0.030 -0.076	95 0.000 -0.200	80 0.000 -0.120	95 +0.087 0.000
MUU-80X95X12	80	95	12	13 +0.300 0.000	80 -0.030 -0.076	95 0.000 -0.200	80 0.000 -0.120	95 +0.087 0.000
MUU-80X100X10	80	100	10	11 +0.300 0.000	80 -0.030 -0.076	100 0.000 -0.200	80 0.000 -0.120	100 +0.087 0.000
MUU-80X100X12	80	100	12	13 +0.300 0.000	80 -0.030 -0.076	100 0.000 -0.200	80 0.000 -0.120	100 +0.087 0.000
MUU-80X100X13.5	80	100	13.5	14.5 +0.300 0.000	80 -0.030 -0.076	100 0.000 -0.200	80 0.000 -0.120	100 +0.087 0.000
MUU-80X100X18	80	100	18	19 +0.300 0.000	80 -0.030 -0.076	100 0.000 -0.200	80 0.000 -0.120	100 +0.087 0.000
MUU-84X104X12	84	104	12	13 +0.300 0.000	84 -0.036 -0.090	104 0.000 -0.200	84 0.000 -0.140	104 +0.087 0.000
MUU-85X95X8.5	85	95	8.5	9.5 +0.300 0.000	85 -0.036 -0.090	95 0.000 -0.200	85 0.000 -0.140	95 +0.087 0.000
MUU-85X95X12	85	95	12	13 +0.300 0.000	85 -0.036 -0.090	95 0.000 -0.200	85 0.000 -0.140	95 +0.087 0.000
MUU-85X100X7.5	85	100	7.5	8.5 +0.300 0.000	85 -0.036 -0.090	100 0.000 -0.200	85 0.000 -0.140	100 +0.087 0.000
MUU-85X100X9	85	100	9	10 +0.300 0.000	85 -0.036 -0.090	100 0.000 -0.200	85 0.000 -0.140	100 +0.087 0.000
MUU-85X100X11	85	100	11	12 +0.300 0.000	85 -0.036 -0.090	100 0.000 -0.200	85 0.000 -0.140	100 +0.087 0.000
MUU-85X100X12	85	100	12	13 +0.300 0.000	85 -0.036 -0.090	100 0.000 -0.200	85 0.000 -0.140	100 +0.087 0.000
MUU-85X105X10	85	105	10	11 +0.300 0.000	85 -0.036 -0.090	105 0.000 -0.200	85 0.000 -0.140	105 +0.087 0.000
MUU-85X105X12	85	105	12	13 +0.300 0.000	85 -0.036 -0.090	105 0.000 -0.200	85 0.000 -0.140	105 +0.087 0.000
MUU-90X100X7	90	100	7	8 +0.300 0.000	90 -0.036 -0.090	100 0.000 -0.200	90 0.000 -0.140	100 +0.087 0.000
MUU-90X100X8	90	100	8	9 +0.300 0.000	90 -0.036 -0.090	100 0.000 -0.200	90 0.000 -0.140	100 +0.087 0.000
MUU-90X100X12	90	100	12	13 +0.300 0.000	90 -0.036 -0.090	100 0.000 -0.200	90 0.000 -0.140	100 +0.087 0.000
MUU-90X105X9	90	105	9	10 +0.300 0.000	90 -0.036 -0.090	105 0.000 -0.200	90 0.000 -0.140	105 +0.087 0.000
MUU-90X105X12	90	105	12	13 +0.300 0.000	90 -0.036 -0.090	105 0.000 -0.200	90 0.000 -0.140	105 +0.087 0.000
MUU-90X110X10	90	110	10	11 +0.300 0.000	90 -0.036 -0.090	110 0.000 -0.200	90 0.000 -0.140	110 +0.087 0.000
MUU-90X110X12	90	110	12	13 +0.300 0.000	90 -0.036 -0.090	110 0.000 -0.200	90 0.000 -0.140	110 +0.087 0.000
MUU-90X110X13	90	110	13	14 +0.300 0.000	90 -0.036 -0.090	110 0.000 -0.200	90 0.000 -0.140	110 +0.087 0.000
MUU-90X115X15	90	115	15	16 +0.300 0.000	90 -0.036 -0.090	115 0.000 -0.200	90 0.000 -0.140	115 +0.087 0.000

STYLE MUU SYMMETRICAL U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter	G Groove Diameter	H Bore Diameter
MUU-95X110X9	95	110	9	10 +0.300 0.000	95 -0.036 -0.090	110 0.000 -0.200	95 0.000 -0.140	110 +0.087 0.000
MUU-95X110X10	95	110	10	11 +0.300 0.000	95 -0.036 -0.090	110 0.000 -0.200	95 0.000 -0.140	110 +0.087 0.000
MUU-95X110X12	95	110	12	13 +0.300 0.000	95 -0.036 -0.090	110 0.000 -0.200	95 0.000 -0.140	110 +0.087 0.000
MUU-95X115X12	95	115	12	13 +0.300 0.000	95 -0.036 -0.090	115 0.000 -0.200	95 0.000 -0.140	115 +0.087 0.000
MUU-98X112X9	98	112	9	10 +0.300 0.000	98 -0.036 -0.090	112 0.000 -0.200	98 0.000 -0.140	112 +0.087 0.000
MUU-100X110X5	100	110	5	5.7 +0.300 0.000	100 -0.036 -0.090	110 0.000 -0.200	100 0.000 -0.140	110 +0.087 0.000
MUU-100X110X8	100	110	8	9 +0.300 0.000	100 -0.036 -0.090	110 0.000 -0.200	100 0.000 -0.140	110 +0.087 0.000
MUU-100X115X9	100	115	9	10 +0.300 0.000	100 -0.036 -0.090	115 0.000 -0.200	100 0.000 -0.140	115 +0.087 0.000
MUU-100X115X12	100	115	12	13 +0.300 0.000	100 -0.036 -0.090	115 0.000 -0.200	100 0.000 -0.140	115 +0.087 0.000
MUU-100X120X12	100	120	12	13 +0.300 0.000	100 -0.036 -0.090	120 0.000 -0.200	100 0.000 -0.140	120 +0.087 0.000
MUU-100X120X13.5	100	120	13.5	14.5 +0.300 0.000	100 -0.036 -0.090	120 0.000 -0.200	100 0.000 -0.140	120 +0.087 0.000
MUU-100X120X15	100	120	15	16 +0.300 0.000	100 -0.036 -0.090	120 0.000 -0.200	100 0.000 -0.140	120 +0.087 0.000
MUU-100X125X15	100	125	15	16 +0.300 0.000	100 -0.036 -0.090	125 0.000 -0.200	100 0.000 -0.140	125 +0.100 0.000
MUU-105X120X8	105	120	8	9 +0.300 0.000	105 -0.036 -0.090	120 0.000 -0.200	105 0.000 -0.140	120 +0.087 0.000
MUU-105X120X15	105	120	15	16 +0.300 0.000	105 -0.036 -0.090	120 0.000 -0.200	105 0.000 -0.140	120 +0.087 0.000
MUU-105X125X11.4	105	125	11.4	12.5 +0.300 0.000	105 -0.036 -0.090	125 0.000 -0.200	105 0.000 -0.140	125 +0.100 0.000
MUU-105X125X12	105	125	12	13 +0.300 0.000	105 -0.036 -0.090	125 0.000 -0.200	105 0.000 -0.140	125 +0.100 0.000
MUU-105X125X15	105	125	15	16 +0.300 0.000	105 -0.036 -0.090	125 0.000 -0.200	105 0.000 -0.140	125 +0.100 0.000
MUU-105X125X16	105	125	16	17 +0.300 0.000	105 -0.036 -0.090	125 0.000 -0.200	105 0.000 -0.140	125 +0.100 0.000
MUU-105X130X12	105	130	12	13 +0.300 0.000	105 -0.036 -0.090	130 0.000 -0.200	105 0.000 -0.140	130 +0.100 0.000
MUU-106X120X8.5	106	120	8.5	9.5 +0.300 0.000	106 -0.036 -0.090	120 0.000 -0.200	106 0.000 -0.140	120 +0.087 0.000
MUU-110X125X12	110	125	12	13 +0.300 0.000	110 -0.036 -0.090	125 0.000 -0.200	110 0.000 -0.140	125 +0.100 0.000
MUU-110X125X15	110	125	15	16 +0.300 0.000	110 -0.036 -0.090	125 0.000 -0.200	110 0.000 -0.140	125 +0.100 0.000
MUU-110X130X10	110	130	10	11 +0.300 0.000	110 -0.036 -0.090	130 0.000 -0.200	110 0.000 -0.140	130 +0.100 0.000
MUU-110X130X15	110	130	15	16 +0.300 0.000	110 -0.036 -0.090	130 0.000 -0.200	110 0.000 -0.140	130 +0.100 0.000

STYLE MUU SYMMETRICAL U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter	G Groove Diameter	H Bore Diameter
MUU-112X125X9	112	125	9	10 +0.300 0.000	112 -0.036 -0.090	125 0.000 -0.200	112 0.000 -0.140	125 +0.100 0.000
MUU-115X125X12	115	125	12	13 +0.300 0.000	115 -0.036 -0.090	125 0.000 -0.200	115 0.000 -0.140	125 +0.100 0.000
MUU-115X130X11	115	130	11	12 +0.300 0.000	115 -0.036 -0.090	130 0.000 -0.200	115 0.000 -0.140	130 +0.100 0.000
MUU-115X135X15	115	135	15	16 +0.300 0.000	115 -0.036 -0.090	135 0.000 -0.200	115 0.000 -0.140	135 +0.100 0.000
MUU-115X140X22	115	140	22	23 +0.300 0.000	115 -0.036 -0.090	140 0.000 -0.200	115 0.000 -0.140	140 +0.100 0.000
MUU-120X130X14	120	130	14	15 +0.300 0.000	120 -0.036 -0.090	130 0.000 -0.200	120 0.000 -0.140	130 +0.100 0.000
MUU-120X140X10	120	140	10	11 +0.300 0.000	120 -0.036 -0.090	140 0.000 -0.200	120 0.000 -0.140	140 +0.100 0.000
MUU-120X140X12	120	140	12	13 +0.300 0.000	120 -0.036 -0.090	140 0.000 -0.200	120 0.000 -0.140	140 +0.100 0.000
MUU-120X140X15	120	140	15	16 +0.300 0.000	120 -0.036 -0.090	140 0.000 -0.200	120 0.000 -0.140	140 +0.100 0.000
MUU-125X140X11	125	140	11	12 +0.300 0.000	125 -0.043 -0.106	140 0.000 -0.200	125 0.000 -0.160	140 +0.100 0.000
MUU-125X140X12	125	140	12	13 +0.300 0.000	125 -0.043 -0.106	140 0.000 -0.200	125 0.000 -0.160	140 +0.100 0.000
MUU-125X145X15	125	145	15	16 +0.300 0.000	125 -0.043 -0.106	145 0.000 -0.200	125 0.000 -0.160	145 +0.100 0.000
MUU-125X150X12	125	150	12	13 +0.300 0.000	125 -0.043 -0.106	150 0.000 -0.200	125 0.000 -0.160	150 +0.100 0.000
MUU-125X150X18	125	150	18	19 +0.300 0.000	125 -0.043 -0.106	150 0.000 -0.200	125 0.000 -0.160	150 +0.100 0.000
MUU-125X155X15	125	155	15	16 +0.300 0.000	125 -0.043 -0.106	155 0.000 -0.200	125 0.000 -0.160	155 +0.100 0.000
MUU-135X150X15	135	150	15	16 +0.300 0.000	135 -0.043 -0.106	150 0.000 -0.200	135 0.000 -0.160	150 +0.100 0.000
MUU-135X155X15	135	155	15	16 +0.300 0.000	135 -0.043 -0.106	155 0.000 -0.200	135 0.000 -0.160	155 +0.100 0.000
MUU-136X150X9	136	150	9	10 +0.300 0.000	136 -0.043 -0.106	150 0.000 -0.200	136 0.000 -0.160	150 +0.100 0.000
MUU-140X155X8.9	140	155	8.9	10 +0.300 0.000	140 -0.043 -0.106	155 0.000 -0.200	140 0.000 -0.160	155 +0.100 0.000
MUU-140X155X9	140	155	9	10 +0.300 0.000	140 -0.043 -0.106	155 0.000 -0.200	140 0.000 -0.160	155 +0.100 0.000
MUU-140X160X15	140	160	15	16 +0.300 0.000	140 -0.043 -0.106	160 0.000 -0.200	140 0.000 -0.160	160 +0.100 0.000
MUU-140X165X15	140	165	15	16 +0.300 0.000	140 -0.043 -0.106	165 0.000 -0.200	140 0.000 -0.160	165 +0.100 0.000
MUU-145X160X9	145	160	9	10 +0.300 0.000	145 -0.043 -0.106	160 0.000 -0.200	145 0.000 -0.160	160 +0.100 0.000
MUU-145X165X15	145	165	15	16 +0.300 0.000	145 -0.043 -0.106	165 0.000 -0.200	145 0.000 -0.160	165 +0.100 0.000
MUU-150X165X8.9	150	165	8.9	10 +0.300 0.000	150 -0.043 -0.106	165 0.000 -0.200	150 0.000 -0.160	165 +0.100 0.000

STYLE MUU SYMMETRICAL U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter	G Groove Diameter	H Bore Diameter
MUU-150X170X15	150	170	15	16 +0.300 0.000	150 -0.043 -0.106	170 0.000 -0.200	150 0.000 -0.160	170 +0.100 0.000
MUU-150X180X13.5	150	180	13.5	14.5 +0.300 0.000	150 -0.043 -0.106	180 0.000 -0.200	150 0.000 -0.160	180 +0.100 0.000
MUU-155X170X10	155	170	10	11 +0.300 0.000	155 -0.043 -0.106	170 0.000 -0.200	155 0.000 -0.160	170 +0.100 0.000
MUU-155X180X15	155	180	15	16 +0.300 0.000	155 -0.043 -0.106	180 0.000 -0.200	155 0.000 -0.160	180 +0.100 0.000
MUU-160X175X9	160	175	9	10 +0.300 0.000	160 -0.043 -0.106	175 0.000 -0.200	160 0.000 -0.160	175 +0.100 0.000
MUU-160X180X10	160	180	10	11 +0.300 0.000	160 -0.043 -0.106	180 0.000 -0.200	160 0.000 -0.160	180 +0.100 0.000
MUU-160X180X14.5-E	160	180	14.5	16 +0.300 0.000	160 -0.043 -0.106	180 0.000 -0.200	160 0.000 -0.160	180 +0.100 0.000
MUU-160X185X15	160	185	15	16 +0.300 0.000	160 -0.043 -0.106	185 0.000 -0.200	160 0.000 -0.160	185 +0.115 0.000
MUU-160X190X22	160	190	22	23 +0.300 0.000	160 -0.043 -0.106	190 0.000 -0.200	160 0.000 -0.160	190 +0.115 0.000
MUU-165X180X9	165	180	9	10 +0.300 0.000	165 -0.043 -0.106	180 0.000 -0.200	165 0.000 -0.160	180 +0.100 0.000
MUU-165X180X9.5	165	180	9.5	10.5 +0.300 0.000	165 -0.043 -0.106	180 0.000 -0.200	165 0.000 -0.160	180 +0.100 0.000
MUU-165X190X15	165	190	15	16 +0.300 0.000	165 -0.043 -0.106	190 0.000 -0.200	165 0.000 -0.160	190 +0.115 0.000
MUU-165X195X7.6	165	195	7.6	8.5 +0.300 0.000	165 -0.043 -0.106	195 0.000 -0.200	165 0.000 -0.160	195 +0.115 0.000
MUU-170X190X15	170	190	15	16 +0.300 0.000	170 -0.043 -0.106	190 0.000 -0.200	170 0.000 -0.160	190 +0.115 0.000
MUU-170X195X15	170	195	15	16 +0.300 0.000	170 -0.043 -0.106	195 0.000 -0.200	170 0.000 -0.160	195 +0.115 0.000
MUU-170X200X18	170	200	18	19 +0.300 0.000	170 -0.043 -0.106	200 0.000 -0.200	170 0.000 -0.160	200 +0.115 0.000
MUU-170X200X22	170	200	22	23 +0.300 0.000	170 -0.043 -0.106	200 0.000 -0.200	170 0.000 -0.160	200 +0.115 0.000
MUU-175X200X15	175	200	15	16 +0.300 0.000	175 -0.043 -0.106	200 0.000 -0.200	175 0.000 -0.160	200 +0.115 0.000
MUU-180X200X18	180	200	18	19 +0.300 0.000	180 -0.043 -0.106	200 0.000 -0.200	180 0.000 -0.160	200 +0.115 0.000
MUU-180X205X15	180	205	15	16 +0.300 0.000	180 -0.043 -0.106	205 0.000 -0.200	180 0.000 -0.160	205 +0.115 0.000
MUU-180X210X15	180	210	15	16 +0.300 0.000	180 -0.043 -0.106	210 0.000 -0.200	180 0.000 -0.160	210 +0.115 0.000
MUU-180X210X22	180	210	22	23 +0.300 0.000	180 -0.043 -0.106	210 0.000 -0.200	180 0.000 -0.160	210 +0.115 0.000
MUU-180X220X20	180	220	20	21 +0.300 0.000	180 -0.043 -0.106	220 0.000 -0.200	180 0.000 -0.160	220 +0.115 0.000
MUU-190X210X12	190	210	12	13 +0.300 0.000	190 -0.050 -0.122	210 0.000 -0.200	190 0.000 -0.185	210 +0.115 0.000
MUU-190X210X15	190	210	15	16 +0.300 0.000	190 -0.050 -0.122	210 0.000 -0.200	190 0.000 -0.185	210 +0.115 0.000

STYLE MUU SYMMETRICAL U-SEALS

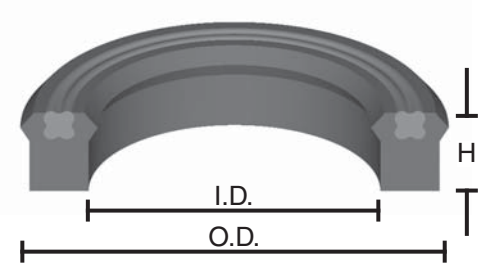
Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter	G Groove Diameter	H Bore Diameter
MUU-190X215X15	190	215	15	16 +0.300 0.000	190 -0.050 -0.122	215 0.000 -0.200	190 0.000 -0.185	215 +0.115 0.000
MUU-190X220X26	190	220	25	26 +0.300 0.000	190 -0.050 -0.122	220 0.000 -0.200	190 0.000 -0.185	220 +0.115 0.000
MUU-200X220X12	200	220	12	13 +0.300 0.000	200 -0.050 -0.122	220 0.000 -0.200	200 0.000 -0.185	220 +0.115 0.000
MUU-200X225X15	200	225	15	16 +0.300 0.000	200 -0.050 -0.122	225 0.000 -0.200	200 0.000 -0.185	225 +0.115 0.000
MUU-200X225X18	200	225	18	19 +0.300 0.000	200 -0.050 -0.122	225 0.000 -0.200	200 0.000 -0.185	225 +0.115 0.000
MUU-200X230X18	200	230	18	19 +0.300 0.000	200 -0.050 -0.122	230 0.000 -0.200	200 0.000 -0.185	230 +0.115 0.000
MUU-210X235X18	210	235	18	20 +0.300 0.000	210 -0.050 -0.122	235 0.000 -0.200	210 0.000 -0.185	235 +0.115 0.000
MUU-210X240X18	210	240	18	19 +0.300 0.000	210 -0.050 -0.122	240 0.000 -0.200	210 0.000 -0.185	240 +0.115 0.000
MUU-210X250X20	210	250	20	21 +0.300 0.000	210 -0.050 -0.122	250 0.000 -0.200	210 0.000 -0.185	250 +0.115 0.000
MUU-220X240X12	220	240	12	13 +0.300 0.000	220 -0.050 -0.122	240 0.000 -0.200	220 0.000 -0.185	240 +0.115 0.000
MUU-220X240X15	220	240	15	16 +0.300 0.000	220 -0.050 -0.122	240 0.000 -0.200	220 0.000 -0.185	240 +0.115 0.000
MUU-220X250X15	220	250	15	16 +0.300 0.000	220 -0.050 -0.122	250 0.000 -0.200	220 0.000 -0.185	250 +0.115 0.000
MUU-220X250X17	220	250	17	19.2 +0.300 0.000	220 -0.050 -0.122	250 0.000 -0.200	220 0.000 -0.185	250 +0.115 0.000
MUU-220X250X18	220	250	18	19 +0.300 0.000	220 -0.050 -0.122	250 0.000 -0.200	220 0.000 -0.185	250 +0.115 0.000
MUU-220X250X20	220	250	20	21 +0.300 0.000	220 -0.050 -0.122	250 0.000 -0.200	220 0.000 -0.185	250 +0.115 0.000
MUU-220X260X20	220	260	20	21 +0.300 0.000	220 -0.050 -0.122	260 0.000 -0.200	220 0.000 -0.185	260 +0.130 0.000
MUU-225X245X15	225	245	15	16 +0.300 0.000	225 -0.050 -0.122	245 0.000 -0.200	225 0.000 -0.185	245 +0.115 0.000
MUU-230X250X12	230	250	12	13 +0.300 0.000	230 -0.050 -0.122	250 0.000 -0.200	230 0.000 -0.185	250 +0.115 0.000
MUU-230X250X15	230	250	15	16 +0.300 0.000	230 -0.050 -0.122	250 0.000 -0.200	230 0.000 -0.185	250 +0.115 0.000
MUU-240X260X16	240	260	16	17 +0.300 0.000	240 -0.050 -0.122	260 0.000 -0.200	240 0.000 -0.185	260 +0.130 0.000
MUU-240X270X18	240	270	18	19 +0.300 0.000	240 -0.050 -0.122	270 0.000 -0.200	240 0.000 -0.185	270 +0.130 0.000
MUU-245X270X15	245	270	15	16 +0.300 0.000	245 -0.050 -0.122	270 0.000 -0.200	245 0.000 -0.185	270 +0.130 0.000
MUU-250X270X15	250	270	15	16 +0.300 0.000	250 -0.050 -0.122	270 0.000 -0.200	250 0.000 -0.185	270 +0.130 0.000
MUU-250X275X18	250	275	18	20 +0.300 0.000	250 -0.050 -0.122	275 0.000 -0.200	250 0.000 -0.185	275 +0.130 0.000
MUU-250X280X18	250	280	18	19 +0.300 0.000	250 -0.050 -0.122	280 0.000 -0.200	250 0.000 -0.185	280 +0.130 0.000

STYLE MUU SYMMETRICAL U-SEALS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	D Groove Width	E Rod Diameter	F Housing Diameter	G Groove Diameter	H Bore Diameter
MUU-260X290X18	260	290	18	19 +0.300 0.000	260 -0.056 -0.137	290 0.000 -0.200	260 0.000 -0.210	290 +0.130 0.000
MUU-265X290X17	265	290	17	18 +0.300 0.000	265 -0.056 -0.137	290 0.000 -0.200	265 0.000 -0.210	290 +0.130 0.000
MUU-270X290X17	270	290	17	18 +0.300 0.000	270 -0.056 -0.137	290 0.000 -0.200	270 0.000 -0.210	290 +0.130 0.000
MUU-280X300X15	280	300	15	16 +0.300 0.000	280 -0.056 -0.137	300 0.000 -0.200	280 0.000 -0.210	300 +0.130 0.000
MUU-320X340X15	320	340	15	16 +0.300 0.000	320 -0.062 -0.151	340 0.000 -0.200	320 0.000 -0.230	340 +0.140 0.000

STYLE MUUL LOADED SYMMETRICAL U-SEALS

Molded from tough polyurethane material, these seals offer high resistance to wear and abrasion. Energized with a four-lobed ring, they have greatly increased low pressure performance.



SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-40° TO +200° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MUUL-9X19X8
MUUL-10X16X6
MUUL-10X20X8
MUUL-12X18X6
MUUL-12X22X7.7
MUUL-12.5X22.5X8
MUUL-14X22X5
MUUL-14X24X8
MUUL-15X25X8
MUUL-16X24X5
MUUL-16X26X8
MUUL-18X26X5
MUUL-18X28X8
MUUL-20X26X5
MUUL-20X28X5
MUUL-20X30X8
MUUL-20X35X10
MUUL-20X35X12
MUUL-20X40X12
MUUL-22X30X5
MUUL-22X30X5.7
MUUL-22X30X6
MUUL-22X30X7
MUUL-22X32X8
MUUL-22X35X8
MUUL-22X35X10
MUUL-22X40X12
MUUL-22.4X30X5
MUUL-22.4X32.4X8

Part Number
MUUL-25X33X5
MUUL-25X33X8
MUUL-25X35X8
MUUL-25X35X10
MUUL-25X40X10
MUUL-28X35.5X5
MUUL-28X38X7.3
MUUL-28X38X8
MUUL-28X40X10
MUUL-28X43X10
MUUL-30X38X6.3
MUUL-30X38X8
MUUL-30X40X6
MUUL-30X40X7
MUUL-30X40X7.3
MUUL-30X40X10
MUUL-30X42X9
MUUL-30X42X10
MUUL-30X45X10
MUUL-30X50X10
MUUL-31.5X41.5X6
MUUL-32X40X5.7
MUUL-32X40X8
MUUL-32X42X7.3
MUUL-32X42X10
MUUL-32X47X10
MUUL-32X48X10
MUUL-35X43X6.4
MUUL-35X43X8

Part Number
MUUL-35X45X6
MUUL-35X45X7.3
MUUL-35X45X8
MUUL-35X45X10
MUUL-35X50X10
MUUL-35X55X10
MUUL-36X44X6
MUUL-36X46X10
MUUL-40X48X6
MUUL-40X48X8
MUUL-40X50X6
MUUL-40X50X6.5
MUUL-40X50X7.3
MUUL-40X50X7.3HT
MUUL-40X50X8
MUUL-40X50X10
MUUL-40X53X8
MUUL-40X55X9
MUUL-40X55X10
MUUL-40X60X12
MUUL-42X50X6
MUUL-42X55X7
MUUL-45X53X8
MUUL-45X53X8HT
MUUL-45X55X6
MUUL-45X55X7.3
MUUL-45X55X10
MUUL-45X56X7
MUUL-45X60X9

Part Number
MUUL-45X60X10
MUUL-45X65X12
MUUL-50X60X6
MUUL-50X60X7.3
MUUL-50X60X10
MUUL-50X63X10
MUUL-50X65X9
MUUL-50X65X10
MUUL-50X65X11.4
MUUL-50X70X12
MUUL-53X63X6
MUUL-55X65X6
MUUL-55X65X10
MUUL-55X65X12
MUUL-55X70X9
MUUL-55X70X12
MUUL-55X75X12
MUUL-56X66X6
MUUL-56X66X10
MUUL-56X71X11.4
MUUL-60X70X6
MUUL-60X70X8
MUUL-60X70X10
MUUL-60X70X12
MUUL-60X71X7
MUUL-60X73X10
MUUL-60X75X9
MUUL-60X75X11
MUUL-60X80X12

STYLE MUUL LOADED SYMMETRICAL U-SEALS

Part Number
MUUL-63X75X8.7
MUUL-63X78X10.6HT
MUUL-63X78X11.4
MUUL-63X83X15
MUUL-65X75X6
MUUL-65X75X12
MUUL-65X78X10
MUUL-65X80X9
MUUL-65X80X11.4
MUUL-65X80X12
MUUL-65X85X12
MUUL-70X80X6
MUUL-70X80X10
MUUL-70X80X12
MUUL-70X83X10
MUUL-70X85X9
MUUL-70X85X10
MUUL-70X85X11.4
MUUL-70X90X12
MUUL-71X80X6
MUUL-75X85X6
MUUL-75X85X12
MUUL-75X88X10
MUUL-75X90X9
MUUL-75X95X12
MUUL-80X90X6

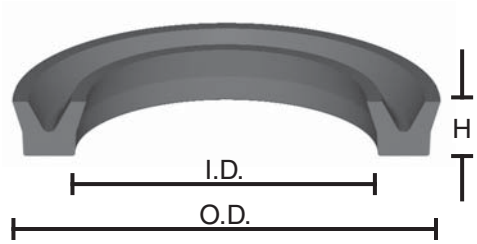
Part Number
MUUL-80X90X8
MUUL-80X90X10
MUUL-80X93X10
MUUL-80X95X9
MUUL-80X95X10
MUUL-80X95X11
MUUL-80X95X11.4
MUUL-80X100X12
MUUL-85X100X9
MUUL-85X100X10
MUUL-85X100X12.5
MUUL-85X105X12
MUUL-90X100X6
MUUL-90X105X9
MUUL-90X105X10
MUUL-90X110X12
MUUL-95X110X10
MUUL-95X115X12
MUUL-100X115X9
MUUL-100X115X10
MUUL-100X115X12
MUUL-100X120X12
MUUL-105X120X9
MUUL-105X120X10
MUUL-105X125X12
MUUL-105X125X15

Part Number
MUUL-110X125X9
MUUL-110X125X10
MUUL-110X125X12
MUUL-110X130X10
MUUL-110X130X12
MUUL-110X130X14.5
MUUL-110X130X15
MUUL-112X125X9
MUUL-115X130X9
MUUL-115X135X12
MUUL-120X140X10
MUUL-120X140X12
MUUL-120X140X14.5
MUUL-120X140X15
MUUL-125X140X9
MUUL-125X145X15
MUUL-125X150X18
MUUL-130X150X12
MUUL-130X150X13
MUUL-130X150X15
MUUL-130X150X16
MUUL-135X150X9
MUUL-135X155X15
MUUL-136X150X9
MUUL-140X155X9
MUUL-140X160X12

Part Number
MUUL-140X160X15
MUUL-140X165X18.2
MUUL-145X160X9
MUUL-150X165X9
MUUL-150X170X15
MUUL-150X170X16
MUUL-150X180X18
MUUL-155X180X16
MUUL-160X175X9
MUUL-160X180X15
MUUL-160X185X16
MUUL-165X180X9.5
MUUL-170X190X15
MUUL-175X200X15
MUUL-180X200X12.5
MUUL-180X205X16
MUUL-190X210X12
MUUL-190X215X16
MUUL-200X220X12.5
MUUL-200X225X16
MUUL-200X225X18
MUUL-205X235X18
MUUL-240X265X18

STYLE MUSN SYMMETRICAL U-SEALS

Molded from 90A nitrile, this seal provides high sealability in a symmetrical design suitable for rods or pistons.



SEAL INFORMATION	
MATERIAL	90A NITRILE
TEMPERATURE RANGE	-13° TO +212° F
PRESSURE RANGE	0 TO 2,000 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MUSN-6.3X16.3X8
MUSN-7.1X17.1X8
MUSN-8X18X8
MUSN-9X19X8
MUSN-10X20X8
MUSN-11.2X21.2X8
MUSN-12.5X22.5X8
MUSN-14X24X8
MUSN-15X25X8
MUSN-16X24X5
MUSN-16X26X8
MUSN-18X26X5
MUSN-18X28X8
MUSN-20X28X5
MUSN-20X30X8
MUSN-22X30X5
MUSN-22.4X30X5
MUSN-22.4X32.4X8
MUSN-23.5X31.5X5
MUSN-25X33X5
MUSN-25X35X8
MUSN-28X35.5X5
MUSN-28X43X10
MUSN-30X40X6
MUSN-30X45X10
MUSN-31.5X41.5X6
MUSN-31.5X44.5X10

Part Number
MUSN-35X45X6
MUSN-35X50X10
MUSN-35.5X45X6
MUSN-35.5X50.5X10
MUSN-36X46X6
MUSN-40X50X6
MUSN-40X53X9
MUSN-40X55X5
MUSN-40X55X10
MUSN-40X60X12
MUSN-45X55X6
MUSN-45X56X7
MUSN-45X60X10
MUSN-48X63X10
MUSN-50X60X6
MUSN-50X65X10
MUSN-53X63X6
MUSN-53X73X12
MUSN-55X65X6
MUSN-55X75X12
MUSN-56X66X6
MUSN-60X70X6
MUSN-60X71X7
MUSN-60X80X12
MUSN-63X73X6
MUSN-63X83X12
MUSN-64X80X12

Part Number
MUSN-65X75X6
MUSN-65X85X10
MUSN-65X85X12
MUSN-67X77X6
MUSN-67X87X12
MUSN-70X80X6
MUSN-70X90X12
MUSN-71X80X6
MUSN-71X91X12
MUSN-75X85X6
MUSN-75X95X10
MUSN-75X95X12
MUSN-80X90X6
MUSN-80X100X12
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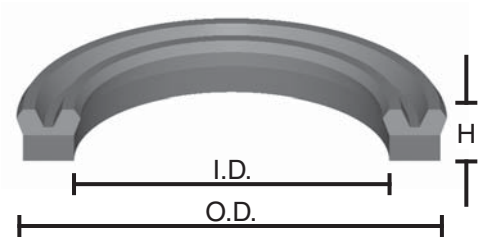
MUSN-90X100X6
MUSN-90X105X9
MUSN-90X110X12
MUSN-95X110X9
MUSN-95X115X12
MUSN-98X112X9
MUSN-100X115X9
MUSN-100X120X12
MUSN-105X120X9
MUSN-105X125X15

Part Number
MUSN-106X126X15
MUSN-110X130X15
MUSN-110X135X12
MUSN-112X125X9
MUSN-112X132X15
MUSN-115X130X9
MUSN-118X138X15
MUSN-120X140X10
MUSN-120X140X15
MUSN-125X140X9
MUSN-125X145X15
MUSN-125X150X15
MUSN-130X150X15
MUSN-136X150X9
MUSN-140X160X15
MUSN-145X160X9
MUSN-150X165X9
MUSN-150X170X15
MUSN-160X175X9
MUSN-165X180X9
MUSN-180X200X12
MUSN-200X220X12
MUSN-204X224X12
MUSN-230X250X12

STYLE MUFN-U SYMMETRICAL U-SEALS

Incorporating a rubber U-cup shape and a rubberized fabric heel, this seal provides excellent sealability and high strength. The 'U' shape design decreases the radial interference for lower lip friction.

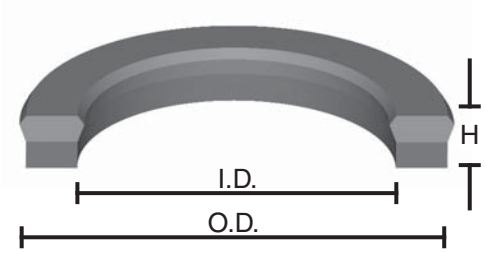


SEAL INFORMATION	
MATERIAL	NITRILE / FABRIC BASE
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 2,900 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MUFN-56X71X9.5U
MUFN-63X78X9.5U

STYLE MUFN-P SYMMETRICAL SEALS

Incorporating a rubber seal lip and a rubberized fabric heel, this seal provides excellent sealability and high strength.



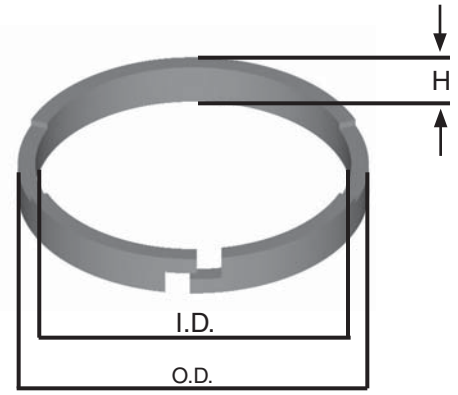
SEAL INFORMATION	
MATERIAL	NITRILE / FABRIC BASE
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 2,900
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MUFN-12X19X6P
MUFN-12X20X6.3P
MUFN-14X22X6P
MUFN-15X23X5.8P
MUFN-16X24X6P
MUFN-18X24X5P
MUFN-18X25X6.5P
MUFN-18X26X6P
MUFN-18X28X5.8P
MUFN-20X26X5P
MUFN-20X28X5.8P
MUFN-20X28X6.5P
MUFN-20X30X8P
MUFN-22X30X6.5P
MUFN-22X30X7P
MUFN-25X32X6P
MUFN-25X33X6P
MUFN-25X35X8P
MUFN-28X36X6P
MUFN-30X38X6P
MUFN-30X38X7P
MUFN-30X40X7P
MUFN-32X40X6P
MUFN-32X47X10.5P
MUFN-35X43X6P
MUFN-35X45X7.5P
MUFN-35X50X10.5P
MUFN-35X50X11P
MUFN-36X44X6P

Part Number
MUFN-36X44X8P
MUFN-36X46X7.5P
MUFN-36X48X9P
MUFN-36X51X11P
MUFN-38X50X9P
MUFN-40X48X6P
MUFN-40X48X8P
MUFN-40X50X7P
MUFN-40X50X10P
MUFN-40X50X10.5P
MUFN-40X55X11P
MUFN-40X60X14P
MUFN-42X50X6P
MUFN-45X55X7.5P
MUFN-45X55X10P
MUFN-45X55X10.5P
MUFN-45X60X10P
MUFN-45X60X11P
MUFN-50X58X8P
MUFN-50X60X7.5P
MUFN-50X62X12P
MUFN-50X65X10.5P
MUFN-50X65X11P
MUFN-50X70X14P
MUFN-50X80X25P
MUFN-55X65X7.5P
MUFN-56X66X7.5P
MUFN-56X76X14P
MUFN-60X70X7.5P

Part Number
MUFN-60X72X9.5P
MUFN-60X80X11.5P
MUFN-60X80X14P
MUFN-63X75X9P
MUFN-65X77X9P
MUFN-65X80X11P
MUFN-65X80X12P
MUFN-70X78X6P
MUFN-70X80X7.5P
MUFN-70X82X9P
MUFN-70X82X10P
MUFN-70X84X12P
MUFN-70X90X13.5P
MUFN-70X90X14P
MUFN-80X92X9P
MUFN-80X100X14P
MUFN-85X100X12P
MUFN-85X110X20P
MUFN-90X102X9P
MUFN-90X105X12P
MUFN-95X110X11.5P
MUFN-100X115X12P
MUFN-100X120X14P
MUFN-110X125X11P
MUFN-120X132.7X9.5P
MUFN-160X180X15P
MUFN-180X200X15P

STYLE MRT CUSHION SEALS



N = Nylon
P = Reinforced Phenolic

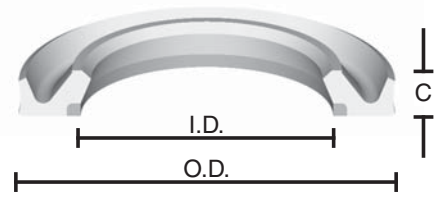
SEAL INFORMATION	
MATERIAL	NYLON OR REINFORCED PHENOLIC
TEMPERATURE RANGE	N = -67° TO +212° F P = -67° TO +248° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number	ID	OD	H	Material
MRT-30A	25.80	30.00	5	P
MRT-30B	24.80	30.00	5	P
MRT-38	33.00	38.00	6	P
MRT-38B	31.76	38.00	6	N
MRT-38C	31.80	38.00	6	P
MRT-40	33.65	38.85	6	N
MRT-46	41.00	46.00	6	N
MRT-46B	39.80	46.00	6	N
MRT-52	46.00	52.00	6	P
MRT-55A	48.50	54.42	6	P
MRT-65	60.00	65.00	6	N
MRT-65A	58.80	65.00	6	P
MRT-65B	61.05	64.00	6	N
MRT-70	65.00	70.00	6	N
MRT-70A	63.00	69.00	6	P
MRT-72A	64.80	70.80	6	P
MRT-75	70.00	75.00	6	N
MRT-75A	68.00	74.00	6	P
MRT-75C	68.80	75.00	6	P
MRT-80	75.00	80.00	6	N
MRT-80A	68.85	78.85	8	P
MRT-80C	73.80	80.00	6	P
MRT-85	80.00	85.00	6	N
MRT-85A	74.00	84.00	8	P

Part Number	ID	OD	H	Material
MRT-85B	78.76	85.00	6	N
MRT-85C	75.00	85.00	10	P
MRT-89	84.00	89.00	6	P
MRT-90	85.00	90.00	6	N
MRT-90A	79.00	89.00	8	P
MRT-90C	83.80	90.00	6	P
MRT-95	90.00	95.00	6	N
MRT-95A	83.70	93.70	8	P
MRT-95B	88.80	95.0	6	N
MRT-100	95.00	100.00	6	N
MRT-100A	88.85	98.85	8	P
MRT-104A	95.00	105.00	10	P
MRT-105	100.00	105.00	6	P
MRT-105A	93.50	103.50	8	P
MRT-107	101.80	107.00	6	P
MRT-110BZ	104.80	110.00	6	B
MRT-110C	100.00	110.00	10	P
MRT-111BBZ	103.30	109.60	6	B
MRT-115	109.80	115.00	6	P
MRT-120	114.80	120.00	6	P
MRT-120A	108.50	118.50	8	P
MRT-120BZ	114.80	120.00	6	B
MRT-128A	116.00	128.00	10	P
MRT-134A	122.00	134.00	10	P

STYLE MYR BUFFER SEALS

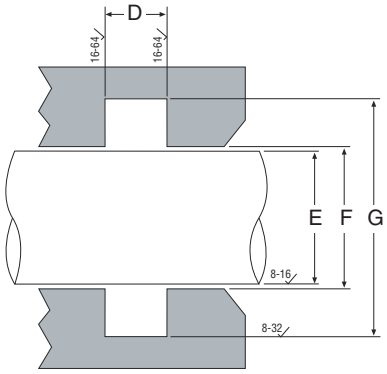
Molded in urethane and employing a back-up, this seal absorbs the shock of pressure spikes to protect the rod seal. The unique design relieves back pressure between the buffer and the rod seal.



PART NUMBERS

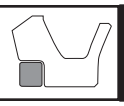
MYR - 40 X 50.7 X 3.9

Type of Seal — Rod Diameter — Groove Diameter — Height



SEAL INFORMATION	
MATERIAL	URETHANE BUFFER NYLON BACK-UP
TEMPERATURE RANGE	-30° TO +220° F
PRESSURE RANGE	0 TO 7,000 PSI

Part Number	C Nom. Ht.	D Groove Width	E Rod Diameter	F Throat Diameter	G Housing Diameter
MYR-40X50.7X3.9	3.9	4.2 +0.20 -0.00	40 -0.025 -0.064	40 +0.062 -0.000	50.70 +0.20 -0.00
MYR-40X55.5X5.9	5.9	6.3 +0.20 -0.00	40 -0.025 -0.064	40 +0.062 -0.000	55.50 +0.20 -0.00
MYR-45X55.7X3.9	3.9	4.2 +0.20 -0.00	45 -0.025 -0.064	45 +0.062 -0.000	55.70 +0.20 -0.00
MYR-45X60.5X5.9	5.9	6.3 +0.20 -0.00	45 -0.025 -0.064	45 +0.062 -0.000	60.50 +0.20 -0.00
MYR-50X65.5X5.9	5.9	6.3 +0.20 -0.00	50 -0.025 -0.064	50 +0.062 -0.000	65.50 +0.20 -0.00
MYR-55X70.5X5.9	5.9	6.3 +0.20 -0.00	55 -0.030 -0.076	55 +0.074 -0.000	70.50 +0.20 -0.00
MYR-56X71.5X5.9	5.9	6.3 +0.20 -0.00	56 -0.030 -0.076	56 +0.074 -0.000	71.50 +0.20 -0.00
MYR-60X75.5X5.9	5.9	6.3 +0.20 -0.00	60 -0.030 -0.076	60 +0.074 -0.000	75.50 +0.20 -0.00
MYR-63X78.5X5.9	5.9	6.3 +0.20 -0.00	63 -0.030 -0.076	63 +0.074 -0.000	78.50 +0.20 -0.00
MYR-65X80.5X5.9	5.9	6.3 +0.20 -0.00	65 -0.030 -0.076	65 +0.074 -0.000	80.50 +0.20 -0.00
MYR-70X85.5X5.9	5.9	6.3 +0.20 -0.00	70 -0.030 -0.076	70 +0.074 -0.000	85.50 +0.20 -0.00
MYR-75X90.5X5.9	5.9	6.3 +0.20 -0.00	75 -0.030 -0.076	75 +0.074 -0.000	90.50 +0.20 -0.00
MYR-80X95.5X5.9	5.9	6.3 +0.20 -0.00	80 -0.030 -0.076	80 +0.074 -0.000	95.50 +0.20 -0.00
MYR-85X100.5X5.9	5.9	6.3 +0.20 -0.00	85 -0.036 -0.090	85 +0.087 -0.000	100.50 +0.20 -0.00
MYR-90X105.5X5.9	5.9	6.3 +0.20 -0.00	90 -0.036 -0.090	90 +0.087 -0.000	105.50 +0.20 -0.00
MYR-95X110.5X5.9	5.9	6.3 +0.20 -0.00	95 -0.036 -0.090	95 +0.087 -0.000	110.50 +0.20 -0.00
MYR-100X115.5X5.9	5.9	6.3 +0.20 -0.00	100 -0.036 -0.090	100 +0.087 -0.000	115.50 +0.20 -0.00
MYR-105X120.5X5.9	5.9	6.3 +0.20 -0.00	105 -0.036 -0.090	105 +0.087 -0.000	120.50 +0.20 -0.00

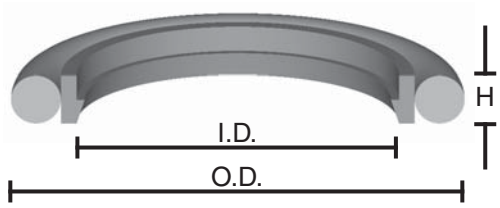


STYLE MYR BUFFER SEALS

Part Number	C Nom. Ht.	D Groove Width	E Rod Diameter	F Throat Diameter	G Housing Diameter
MYR-110X125.5X5.9	5.9	6.3 +0.20 -0.00	110 -0.036 -0.090	110 +0.087 -0.000	125.50 +0.20 -0.00
MYR-115X130.5X5.9	5.9	6.3 +0.20 -0.00	115 -0.036 -0.090	115 +0.087 -0.000	130.50 +0.20 -0.00
MYR-120X135.5X5.9	5.9	6.3 +0.20 -0.00	120 -0.036 -0.090	120 +0.087 -0.000	135.50 +0.20 -0.00
MYR-125X140.5X5.9	5.9	6.3 +0.20 -0.00	125 -0.043 -0.106	125 +0.100 -0.000	140.50 +0.20 -0.00
MYR-130X145.5X5.9	5.9	6.3 +0.20 -0.00	130 -0.043 -0.106	130 +0.100 -0.000	145.50 +0.20 -0.00
MYR-140X155.5X5.9	5.9	6.3 +0.20 -0.00	140 -0.043 -0.106	140 +0.100 -0.000	155.50 +0.20 -0.00
MYR-150X165.5X5.9	5.9	6.3 +0.20 -0.00	150 -0.043 -0.106	150 +0.100 -0.000	165.50 +0.20 -0.00
MYR-155X170.5X5.9	5.9	6.3 +0.20 -0.00	155 -0.043 -0.106	155 +0.100 -0.000	170.50 +0.20 -0.00
MYR-160X175.5X5.9	5.9	6.3 +0.20 -0.00	160 -0.043 -0.106	160 +0.100 -0.000	175.50 +0.20 -0.00
MYR-165X180.5X5.9	5.9	6.3 +0.20 -0.00	165 -0.043 -0.106	165 +0.100 -0.000	180.50 +0.20 -0.00
MYR-170X185.5X5.9	5.9	6.3 +0.20 -0.00	170 -0.043 -0.106	170 +0.100 -0.000	185.50 +0.20 -0.00
MYR-180X195.5X5.9	5.9	6.3 +0.20 -0.00	180 -0.043 -0.106	180 +0.100 -0.000	195.50 +0.20 -0.00
MYR-190X205.5X5.9	5.9	6.3 +0.20 -0.00	190 -0.050 -0.122	190 +0.115 -0.000	205.50 +0.20 -0.00

STYLE MKR BUFFER SEALS

Molded in PTFE with a rubber energizer, this seal absorbs the shock of pressure spikes to protect the rod seal.



SEAL INFORMATION	
MATERIAL	FILLED PTFE BUFFER 70A NITRILE ENERGIZER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MKR-06X11X2
MKR-08X13X2
MKR-08X15.5X3
MKR-12X17X2
MKR-12X19.5X3
MKR-14X21.5X3
MKR-15X22.5X3
MKR-16X23.5X3
MKR-18X23X2
MKR-18X25.5X3
MKR-20X27.5X3
MKR-20X31X4
MKR-22X29.5X3
MKR-22X33X4
MKR-25X32.5X3

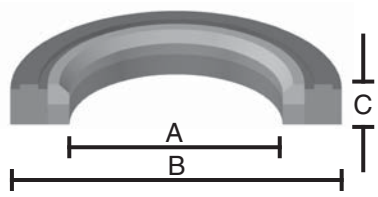
Part Number
MKR-25X35.7X4
MKR-30X40.7X3.9
MKR-32X39.5X3
MKR-32X43X4
MKR-35X42.5X3
MKR-35X46X4
MKR-36X43.5X3
MKR-36X47X4
MKR-40X51X4
MKR-40X52.6X4
MKR-40X55.5X5.9
MKR-45X56X4
MKR-45X57.6X4
MKR-45X60.5X5.9
MKR-50X60X4.5

Part Number
MKR-50X61X4
MKR-50X62.6X4
MKR-50X65.5X5.9
MKR-55X70.5X5.9
MKR-56X68.6X4
MKR-56X71.5X5.9
MKR-60X71X4
MKR-60X75.5X5.9
MKR-63X78.5X5.9
MKR-65X80.5X5.9
MKR-70X81X4
MKR-70X85.5X5.9
MKR-75X90.5X5.9
MKR-80X95.5X5.9
MKR-85X100.5X5.9

Part Number
MKR-90X105.5X5.9
MKR-95X110.5X5.9
MKR-100X115.5X5.9
MKR-105X120.5X5.9
MKR-110X125.5X5.9
MKR-115X130.5X5.9
MKR-120X135.5X5.9
MKR-125X140.5X5.9
MKR-130X145.5X5.9
MKR-150X165.5X5.9
MKR-160X175.5X5.9
MKR-170X185.5X5.9

STYLE MNBR BUFFER SEALS

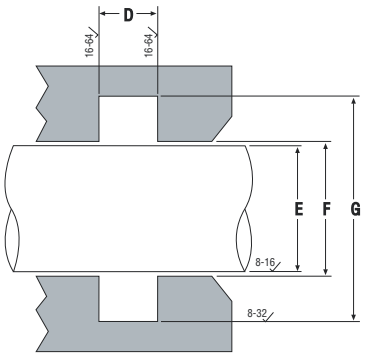
Molded in PTFE with a rubber energizer and nylon anti-extrusion ring, this seal absorbs the shock of pressure spikes to protect the rod seal.



PART NUMBERS

MNBR - 55 X 70.5 X 5.9

Type of Seal | I.D. | O.D. | Height

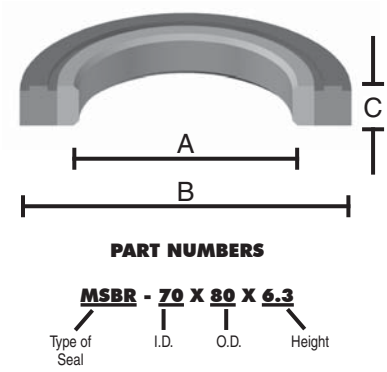


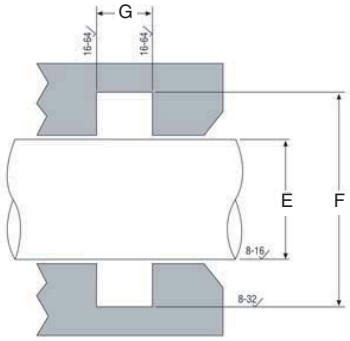
SEAL INFORMATION	
MATERIAL	PTFE BUFFER 70A NBR ENERGIZER NYLON BACK-UP
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	E Rod Diameter	F Housing Diameter	G Groove Width
MNBR-55X70.5X5.9	55	70.5	5.9	55 -0.030 -0.076	70.5 +0.074 0.000	6.3 +0.200 0.000
MNBR-60X75.5X5.9	60	75.5	5.9	60 -0.030 -0.076	75.5 +0.074 0.000	6.3 +0.200 0.000
MNBR-65X80.5X5.9	65	80.5	5.9	65 -0.030 -0.076	80.5 +0.087 0.000	6.3 +0.200 0.000
MNBR-70X85.5X5.9	70	85.5	5.9	70 -0.030 -0.076	85.5 +0.087 0.000	6.3 +0.200 0.000
MNBR-75X90.5X5.9	75	90.5	5.9	75 -0.030 -0.076	90.5 +0.087 0.000	6.3 +0.200 0.000
MNBR-80X95.5X5.9	80	95.5	5.9	80 -0.030 -0.076	95.5 +0.087 0.000	6.3 +0.200 0.000
MNBR-85X100.5X5.9	85	100.5	5.9	85 -0.036 -0.090	100.5 +0.087 0.000	6.3 +0.200 0.000
MNBR-90X105.5X5.9	90	105.5	5.9	90 -0.036 -0.090	105.5 +0.087 0.000	6.3 +0.200 0.000
MNBR-95X110.5X5.9	95	110.5	5.9	95 -0.036 -0.090	110.5 +0.087 0.000	6.3 +0.200 0.000
MNBR-100X115.5X5.9	100	115.5	5.9	100 -0.036 -0.090	115.5 +0.087 0.000	6.3 +0.200 0.000
MNBR-105X120.5X5.9	105	120.5	5.9	105 -0.036 -0.090	120.5 +0.100 0.000	6.3 +0.200 0.000
MNBR-110X125.5X5.9	110	125.5	5.9	110 -0.036 -0.090	125.5 +0.100 0.000	6.3 +0.200 0.000
MNBR-115X130.5X5.9	115	130.5	5.9	115 -0.036 -0.090	130.5 +0.100 0.000	6.3 +0.200 0.000
MNBR-120X135.5X5.9	120	135.5	5.9	120 -0.036 -0.090	135.5 +0.100 0.000	6.3 +0.200 0.000
MNBR-125X140.5X5.9	125	140.5	5.9	125 -0.043 -0.106	140.5 +0.100 0.000	6.3 +0.200 0.000

STYLE MSBR BUFFER SEALS

Molded in Nylon with a rubber energizer, this seal absorbs the shock of pressure spikes and relieves back pressure by way of slots on the pressure side of the energizer.



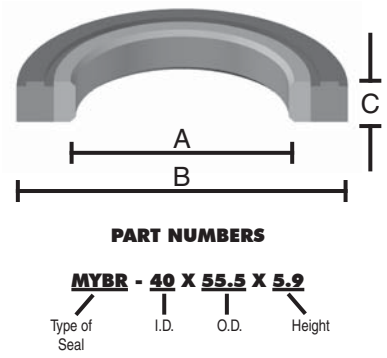


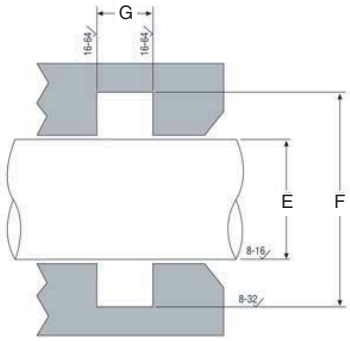
SEAL INFORMATION	
MATERIAL	NYLON BUFFER 70A NITRILE ENER-GIZER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	E Rod Diameter	F Housing Diameter	G Groove Width
MSBR-70X80X6.3	70	80	5.9	70 -0.030 -0.076	80 +0.074 0.000	6.3 +0.200 0.000
MSBR-75X85X6.3	75	85	5.9	75 -0.030 -0.076	85 +0.087 0.000	6.3 +0.200 0.000
MSBR-80X90X6.3	80	90	5.9	80 -0.030 -0.076	90 +0.087 0.000	6.3 +0.200 0.000
MSBR-85X95X6.3	85	95	5.9	85 -0.036 -0.090	95 +0.087 0.000	6.3 +0.200 0.000
MSBR-90X100X6.3	90	100	5.9	90 -0.036 -0.090	100 +0.087 0.000	6.3 +0.200 0.000
MSBR-95X105X6.3	95	105	5.9	95 -0.036 -0.090	105 +0.087 0.000	6.3 +0.200 0.000
MSBR-100X110X6.3	100	110	5.9	100 -0.036 -0.090	110 +0.087 0.000	6.3 +0.200 0.000
MSBR-110X120X6.3	110	120	5.9	110 -0.036 -0.090	120 +0.087 0.000	6.3 +0.200 0.000

STYLE MYBR BUFFER SEALS

Molded in PTFE with a rubber energizer, this seal absorbs the shock of pressure spikes to protect the rod seal. This style relieves back pressure by way of slots on the pressure side of the energizer.





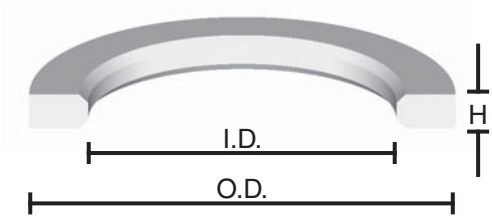
SEAL INFORMATION	
MATERIAL	FILLED PTFE BUFFER 70A NITRILE ENERGIZER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Ht.	E Rod Diameter	F Housing Diameter	G Groove Width
MYBR-40X55.5X5.9	40	55.5	5.9	40 -0.025 -0.064	55.5 +0.074 0.000	6.3 +0.200 0.000
MYBR-45X60.5X5.9	45	60.5	5.9	45 -0.025 -0.064	60.5 +0.074 0.000	6.3 +0.200 0.000
MYBR-55X70.5X5.9	55	70.5	5.9	55 -0.030 -0.076	70.5 +0.074 0.000	6.3 +0.200 0.000
MYBR-60X75.5X5.9	60	75.5	5.9	60 -0.030 -0.076	75.5 +0.074 0.000	6.3 +0.200 0.000
MYBR-65X80.5X5.9	65	80.5	5.9	65 -0.030 -0.076	80.5 +0.087 0.000	6.3 +0.200 0.000
MYBR-70X85.5X5.9	70	85.5	5.9	70 -0.030 -0.076	85.5 +0.087 0.000	6.3 +0.200 0.000
MYBR-75X90.5X5.9	75	90.5	5.9	75 -0.030 -0.076	90.5 +0.087 0.000	6.3 +0.200 0.000
MYBR-80X95.5X5.9	80	95.5	5.9	80 -0.030 -0.076	95.5 +0.087 0.000	6.3 +0.200 0.000
MYBR-85X100.5X5.9	85	100.5	5.9	85 -0.036 -0.090	100.5 +0.087 0.000	6.3 +0.200 0.000
MYBR-90X105.5X5.9	90	105.5	5.9	90 -0.036 -0.090	105.5 +0.087 0.000	6.3 +0.200 0.000
MYBR-95X110.5X5.9	95	110.5	5.9	95 -0.036 -0.090	110.5 +0.087 0.000	6.3 +0.200 0.000
MYBR-100X115.5X5.9	100	115.5	5.9	100 -0.036 -0.090	115.5 +0.087 0.000	6.3 +0.200 0.000
MYBR-105X120.5X5.9	105	120.5	5.9	105 -0.036 -0.090	120.5 +0.100 0.000	6.3 +0.200 0.000
MYBR-110X125.5X5.9	110	125.5	5.9	110 -0.036 -0.090	125.5 +0.100 0.000	6.3 +0.200 0.000
MYBR-115X130.5X5.9	115	130.5	5.9	115 -0.036 -0.090	130.5 +0.100 0.000	6.3 +0.200 0.000
MYBR-120X135.5X5.9	120	135.5	5.9	120 -0.036 -0.090	135.5 +0.100 0.000	6.3 +0.200 0.000
MYBR-130X145.5X5.9	130	145.5	5.9	130 -0.043 -0.106	145.5 +0.100 0.000	6.3 +0.200 0.000

STYLE MIR BUFFER SEALS

Molded in polyurethane, this buffer seal is a simple flat, washer-like profile.

G2 = Glass / PTFE



SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-40° TO +200° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MIR-25X33.6X2.3
MIR-30X41X2.9
MIR-35X46X2.9
MIR-35X48X3
MIR-40X48X3
MIR-50X55.5X3.4-G2

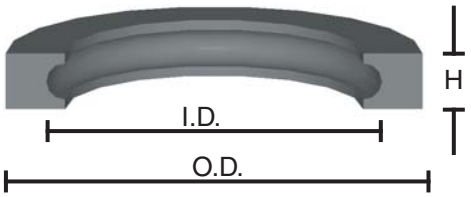
Part Number
MIR-50X58X2.9
MIR-50X62X3
MIR-50X62.6X4
MIR-56X68.6X4
MIR-56X70X3
MIR-56X73X4.8

Part Number
MIR-63X80X4.7
MIR-65X78X4
MIR-70X83X4
MIR-70X83.5X3
MIR-70X84X3
MIR-75X88X4

Part Number
MIR-80X93X4
MIR-90X104X4
MIR-100X113X4

STYLE MUSW SWIVEL SEALS

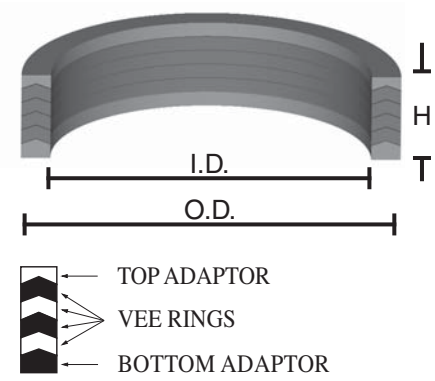
Molded in polyurethane, these rotary pressure seals are specifically designed for use in hydraulic swivel joints.



SEAL INFORMATION	
MATERIAL	92A URETHANE
TEMPERATURE RANGE	-50° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number	ID	OD	H
MUSW-70X80X5	70	80	5
MUSW-80X90X4.8	80	90	4.8
MUSW-90X100X4.8	90	100	4.8
MUSW-95X105X4.8	95	105	4.8
MUSW-100X110X4.8	100	110	4.8
MUSW-110X120X5	110	120	5
MUSW-115X125X5	115	125	5
MUSW-120X130X5	120	130	5

STYLE MVS VEE PACKING



Suffix:
EI = Top adapter has an internal anti-extrusion ring.

DR = Dry-rod application. Pre-loaded male adapter.

Construction Code Example: 1-5-1

1 - 1 **T**op Adaptor
5 - 5 **V**ee Rings
1 - 1 **B**ottom Adaptor

SEAL INFORMATION	
MATERIAL	FABRIC / RUBBER VEE RINGS FABRIC / RUBBER OR ACETAL ADAPTORS
TEMPERATURE RANGE	-35° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

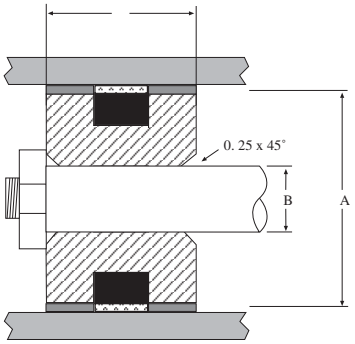
Part Number	Code
MVS-10X20X11	1-3-1
MVS-20X30X18.5	1-5-1
MVS-20X31.5X17.5	1-3-1
MVS-20X32X20	1-2-1
MVS-20X32X22.5	1-5-1
MVS-25X37X22.5	1-5-1
MVS-25X40X11	1-1-1
MVS-28X40X22.5	1-5-1
MVS-30X42X22.5	1-5-1
MVS-30X45X22.5	1-3-1
MVS-32X44X22.5	1-5-1
MVS-35X45X17.5	1-3-1
MVS-35X47X22.5	1-5-1
MVS-35X50X11	1-1-1
MVS-35X50X22.5	1-3-1
MVS-36X48X22.5	1-5-1
MVS-36X51X22.5	1-5-1
MVS-40X50X17.3	1-3-1
MVS-40X50X20	1-5-1
MVS-40X52X22.5	1-5-1
MVS-40X55X22.6	1-3-1
MVS-40X56X17.6	1-3-1
MVS-42X54X22.5	1-5-1
MVS-45X60X22.5	1-5-1
MVS-45X65X28	1-3-1
MVS-48X63X12.5	1-1-1
MVS-50X65X16	0-3-1

Part Number	Code
MVS-50X65X22.5	1-3-1
MVS-50X65X24.6	1-3-1
MVS-50X70X30	1-3-1
MVS-50X70X35	1-3-1
MVS-55X70X22.5	1-3-1
MVS-55X70X26.5	1-3-1
MVS-55X75X26	1-3-1
MVS-56X71X16	0-3-1
MVS-56X71X22.5	1-3-1
MVS-56X76X33	1-3-1
MVS-60X75X22.5	1-5-1
MVS-60X80X14.6	1-1-1
MVS-60X80X37	1-5-1
MVS-63X78X16	0-3-1
MVS-63X78X22.5	1-5-1
MVS-63X83X30DR	1-2-1
MVS-65X80X22.5	1-3-1
MVS-70X85X22.5	1-5-1
MVS-70X90X30	1-3-1
MVS-70X90X35	1-3-1
MVS-70X90X40	1-5-1
MVS-75X90X22.5	1-5-1
MVS-75X95X30DR	1-2-1
MVS-75X95X40	1-5-1
MVS-80X95X22.5	1-3-1
MVS-80X100X20.5	1-1-1
MVS-80X100X40	1-5-1

Part Number	Code
MVS-85X100X25	1-3-1
MVS-85X105X40	1-5-1
MVS-90X105X22.5	1-3-1
MVS-90X110X30	1-2-1
MVS-90X110X40	1-5-1
MVS-95X120X33	1-3-1
MVS-100X115X30	1-3-1
MVS-100X120X21.5EI	1-1-1
MVS-100X120X30DR	1-3-1
MVS-100X120X40	1-5-1
MVS-100X125X25.8	1-1-1
MVS-110X125X30	1-3-1
MVS-110X130X30DR	1-3-1
MVS-115X140X25	1-1-1
MVS-120X145X46	1-5-1
MVS-125X140X34	1-5-1
MVS-140X155X34	1-5-1
MVS-140X165X46	1-5-1
MVS-150X170X30	1-3-1
MVS-150X180X32.5	1-1-1
MVS-150X180X60	1-5-1
MVS-160X190X60	1-5-1
MVS-180X210X60	1-5-1
MVS-190X220X60	1-5-1
MVS-200X230X60	1-5-1

UNITIZED PISTONS FOR JOHN DEERE & NEW HOLLAND

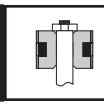
The John Deere and New Holland Unitized Pistons are designed to handle a broad range of application parameters. The piston body is machined to exact dimensions and is constructed using four components: a high strength steel body, a non-metallic bearing, a rubber loading ring, and a filled PTFE seal ring. The non-metallic bearing is molded to the piston using a special proprietary process.



SEAL INFORMATION	
MATERIAL	STEEL, NYLON, NBR, PTFE
TEMPERATURE RANGE	-40° TO +230° F
PRESSURE RANGE	0 TO 5,000 PSI

Part Number	A Bore Diameter	B Hole Diameter	C Piston Width
JD-AH138200	50	16.56	31.24
JD-AH174930	50	20.55	31.24
JD-AH135785	56	16.59	31.24
JD-AH166138	63	22.58	31.24
JD-AH137177	63	22.58	31.24
JD-AH142159	63	20.57	31.24
JD-AH160647	63	22.58	31.24
JD-AH228448	63	24.56	31.24
JD-RE29383	63	22.20	31.24
JD-AH165962	70	27.58	36.25
JD-AH158623	70	24.56	36.25
JD-AH172352	70	22.58	36.25
JD-RE34084	70	24.56	36.25
JD-AH227867	70	27.58	36.25
JD-AH139078	80	24.56	29.08
NH-87432513	80	24.26	29.08
NH-83962807	80	24.26	29.08
JD-RE34085	80	27.58	40.74
JD-AH165826	80	27.58	40.74
JD-AH173410	80	30.58	40.74
JD-RE33968	80	27.58	40.74
NH-85800981	90	24.26	29.08
JD-AH136453	90	27.58	45.75
JD-AH169436	90	30.58	45.75
JD-AH169827	90	26.09	45.75

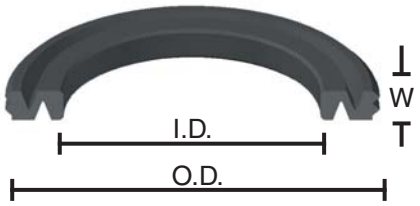
UNITIZED PISTONS FOR JOHN DEERE & NEW HOLLAND



Part Number	A Bore Diameter	B Hole Diameter	C Piston Width
JD-AH141183	90	30.58	45.75
JD-AH205062	90	30.58	45.75
NH-85800982	100	30.78	41.28
JD-AH166637	100	33.63	45.75
JD-AH159034	100	30.58	45.75
JD-AH164620	100	33.83	45.75
JD-AH169826	100	26.09	45.75
NH-81875232	110	30.25	45.09
NH-85800983	115	33.76	40.31
JD-AH168884	115	36.63	45.75
JD-AH167446	125	36.63	55.25

STYLE MPK54 PISTON SEALS

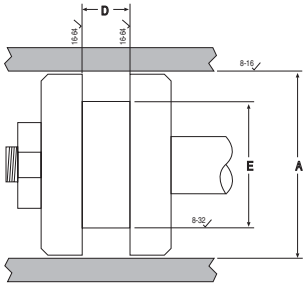
MPK54 is designed as a piston seal suitable for pneumatic cylinders and valves. MPK54 seals are useful in short stroke applications because of its ease of assembly and low friction capabilities.



PART NUMBERS

MPK54 - 012

Type of Seal — O.D.



SEAL INFORMATION	
MATERIAL	70A NBR
TEMPERATURE RANGE	-20° TO +220° F
MAXIMUM PRESSURE	175 PSI
SPEED	1.5 FT/SEC
PART NUMBER	(Prefix) - (Bore)

Part Number	OD	ID	W	A - Bore Diameter	D - Groove Width Tol. +0.2/-0	E - Groove Dia. Tol. +0.1/-0
MPK54-012	12	7	2	12	2.5	7
MPK54-016	16	9	2.1	16	2.5	9
MPK54-020	20	13	2.1	20	2.5	13
MPK54-020A	20	13	2.1	20	2.5	13
MPK54-025	25	18	2.1	25	2.5	18
MPK54-028	28	19	2.5	28	3.0	19
MPK54-030	30	21	2.5	30	3.0	21
MPK54-032	32	23	2.5	32	3.0	23
MPK54-035	35	26	2.5	35	3.0	26
MPK54-040	40	31	2.5	40	3.0	31
MPK54-045	45	36	2.5	45	3.0	36
MPK54-050	50	41	2.5	50	3.0	41
MPK54-060	60	44	3.4	60	4.0	44
MPK54-063	63	51	3.4	63	4.0	51
MPK54-070	70	58	3.4	70	4.0	58
MPK54-080	80	68	3.4	80	4.0	68
MPK54-100	100	88	3.4	100	4.0	88
MPK54-125	125	110	4.4	125	5.0	110

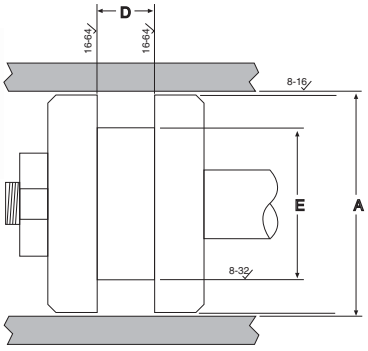
STYLE MPK62 PISTON SEALS

MPK62 is a double-acting pneumatic piston seal designed to work in low axial height housings. The solid body molded in 70 durometer Nitrile provides superior low-pressuring sealing.

PART NUMBERS

MPK62 - 012

Style Prefix — Bore Diameter

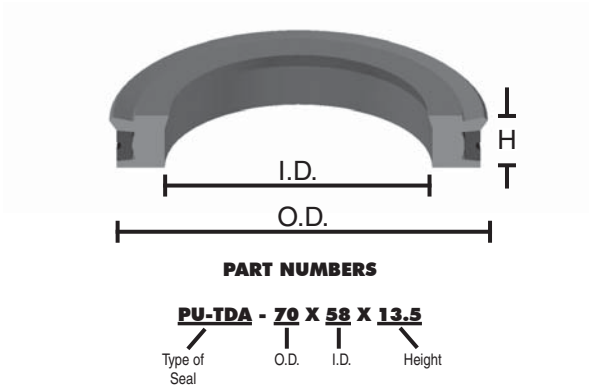


SEAL INFORMATION	
MATERIAL	70A NBR
TEMPERATURE RANGE	-20° TO +220° F
PRESSURE RANGE	0 TO 175 PSI
PART NUMBER	(Prefix) - (Bore Diameter)

Part Number	A Bore Diameter	D Groove Width	E Groove Diameter
MPK62-032	32 +0.160 0.000	3.2 +0.200 0.000	24 0.000 -0.052
MPK62-040	40 +0.160 0.000	3.2 +0.200 0.000	32 0.000 -0.062
MPK62-050	50 +0.160 0.000	4 +0.200 0.000	40 0.000 -0.062
MPK62-063	63 +0.190 0.000	4 +0.200 0.000	53 0.000 -0.074
MPK62-080	80 +0.190 0.000	6 +0.200 0.000	65 0.000 -0.074
MPK62-100	100 +0.220 0.000	6 +0.200 0.000	85 0.000 -0.087

STYLE PU-TDA PISTON SEALS

The PU-TDA tandem seal has a urethane sealing lip with a PTFE insert secondary sealing lip. Under increasing pressure, the inner seal acts to compress the PTFE slide ring onto the cylinder bore. This action creates a high force sealing edge of low-frictional resistance. These are genuine Hunger® parts.



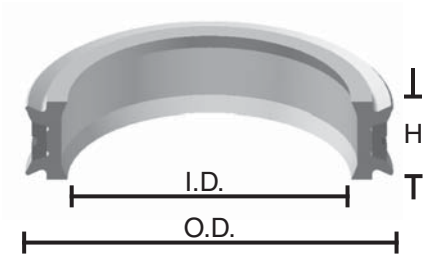
SEAL INFORMATION	
MATERIAL	URETHANE BRONZE-FILLED PTFE
TEMPERATURE RANGE	-31° TO +212° F
MAXIMUM PRESSURE	0 TO 6,500 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (HT)

Part Number	ID	OD	HT
PU-TDA 70X58X13.5	58	70	13.5
PU-TDA 80X65X12	65	80	12
PU-TDA 105X90X12	90	105	12
PU-TDA 115X130X12	130	115	12
PU-TDA 125X110X12	110	125	12

Part Number	ID	OD	HT
PU-TDA 180X160X16	160	180	16
PU-TDA 200X180X16	180	200	16
PU-TDA 220X200X16	200	220	16
PU-TDA 250X230X16	230	250	16
PU-TDA 280X260X16	260	280	16

STYLE PU-TDMA PISTON SEALS

The PU-TDMA double-acting tandem seal has two urethane sealing lips with a PTFE insert as a center sealing ring. Due to good dry-running properties, it can be used in multi-fluid sealing applications. These are genuine Hunger® parts.



PART NUMBERS

PU-TDMA - 63 X 53 X 15

Type of Seal — O.D. — I.D. — Height

SEAL INFORMATION	
MATERIAL	BRONZE-FILLED PTFE AND URETHANE
TEMPERATURE RANGE	-31° TO +212° F
PRESSURE RANGE	0 TO 3,600 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (HT)

Part Number	ID	OD	HT
PU-TDMA 63X53X15	53	63	15
PU-TDMA 90X80X15	80	90	15

Part Number	ID	OD	HT
PU-TDMA 100X90X15	90	100	15
PU-TDMA 125X113X15	113	125	15

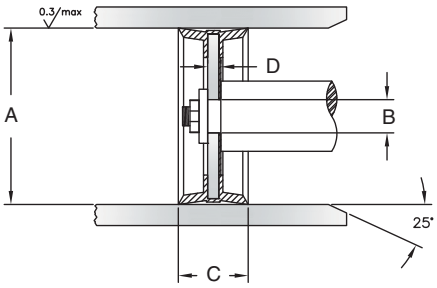
STYLE MDPC PISTON SEALS

MDPC is a complete double-acting piston constructed of a steel plate vulcanized with Nitrile rubber sealing lips. Pneumatic applications to 230 psi pressure.

PART NUMBERS

MDPC - 020

Type of Seal — Bore Diameter



SEAL INFORMATION	
MATERIAL	75A NBR
TEMPERATURE RANGE	-22° TO +220° F
PRESSURE RANGE	0 TO 230 PSI
PART NUMBER	(Prefix) - (OD)

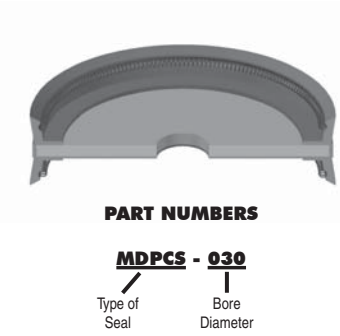
Part Number	A Bore Diameter	B Stub Diameter	C Total Height	D Center Height
MDPC-020	20 +0.130 0.000	5.2 0.000 -0.030	8	3
MDPC-025	25 +0.130 0.000	8 0.000 -0.036	12	4
MDPC-032	32 +0.160 0.000	8 0.000 -0.036	15	4
MDPC-040	40 +0.160 0.000	10 0.000 -0.036	18	5
MDPC-050	50 +0.160 0.000	10 0.000 -0.036	18	5
MDPC-050A	50 +0.160 0.000	16 0.000 -0.043	20.5	4
MDPC-063	63 +0.190 0.000	12 0.000 -0.043	22	6
MDPC-070	70 +0.190 0.000	12 0.000 -0.043	22	6
MDPC-080	80 +0.190 0.000	16 0.000 -0.043	22.5	5
MDPC-080A	80 +0.190 0.000	16 0.000 -0.043	25	6.5
MDPC-090	90 +0.220 0.000	16 0.000 -0.043	25	6.5
MDPC-100	100 +0.220 0.000	16 0.000 -0.043	25	6.5
MDPC-100A	100 +0.220 0.000	20 0.000 -0.052	25	5
MDPC-102	102 +0.220 0.000	16 0.000 -0.043	25	5
MDPC-110	110 +0.220 0.000	18 0.000 -0.043	25	7.5
MDPC-125	125 +0.250 0.000	20 0.000 -0.052	30	10
MDPC-150	150 +0.250 0.000	20 0.000 -0.052	30	12

STYLE MDPC PISTON SEALS

Part Number	A Bore Diameter	B Stub Diameter	C Total Height	D Center Height
MDPC-160	160 +0.250 0.000	27 0.000 -0.052	31	12
MDPC-180	180 +0.250 0.000	27 0.000 -0.052	31	12
MDPC-190	190 +0.290 0.000	20 0.000 -0.052	30	12
MDPC-200	200 +0.290 0.000	20 0.000 -0.052	35	12
MDPC-200B	200 +0.290 0.000	27 0.000 -0.052	35	15
MDPC-250	250 +0.290 0.000	30 0.000 -0.052	35	16.5

STYLE MDPCS PISTON SEALS

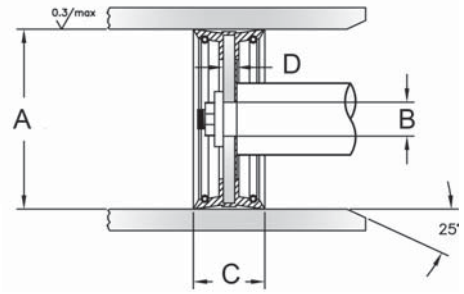
MDPCS is a double-acting complete piston seal constructed of a steel plate vulcanized with Nitrile rubber sealing lips and spring energized for low-pressure sealing. Pneumatic applications to 230 psi pressure. Hydraulic pressure limits range from 175 to 870 psi, depending on size.



PART NUMBERS

MDPCS - 030

Type of Seal — Bore Diameter



SEAL INFORMATION	
MATERIAL	90A NBR
TEMPERATURE RANGE	- 22° TO +220° F
PRESSURE RANGE	MAX 175 TO 870 PSI
PART NUMBER	NEED DATA

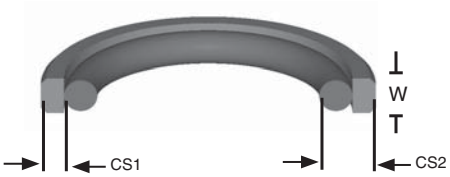
Part Number	A Bore Diameter	B Stub Diameter	C Total Height	D Center Height
MDPCS-030	30 +0.130 0.000	8 0.000 -0.036	22	3.5
MDPCS-032	32 +0.160 0.000	8 0.000 -0.036	25	3.5
MDPCS-035	35 +0.160 0.000	8 0.000 -0.036	18	3
MDPCS-038	38 +0.160 0.000	8 0.000 -0.036	25	3.5
MDPCS-040A	40 +0.160 0.000	10 0.000 -0.036	25	3.5
MDPCS-040	40 +0.160 0.000	14 0.000 -0.043	23	3
MDPCS-045	45 +0.160 0.000	10 0.000 -0.036	25	4.5
MDPCS-050	50 +0.160 0.000	10 0.000 -0.036	25	4.5
MDPCS-050A	50 +0.160 0.000	16 0.000 -0.043	23	4
MDPCS-055	55 +0.190 0.000	10 0.000 -0.036	25	4.5
MDPCS-060A	60 +0.190 0.000	12 0.000 -0.043	27	4
MDPCS-060C	60 +0.190 0.000	21 0.000 -0.052	26	4
MDPCS-063A	63 +0.190 0.000	12 0.000 -0.043	25	4.5
MDPCS-065	65 +0.190 0.000	12 0.000 -0.043	25	4.5
MDPCS-070	70 +0.190 0.000	12 0.000 -0.043	30	5.9
MDPCS-075	75 +0.190 0.000	12 0.000 -0.043	30	5.9
MDPCS-080	80 +0.190 0.000	12 0.000 -0.043	30	5.9
MDPCS-085	85 +0.220 0.000	12 0.000 -0.043	35	7.1

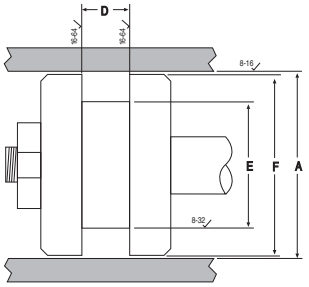
STYLE MDPCS PISTON SEALS

Part Number	A Bore Diameter	B Stub Diameter	C Total Height	D Center Height
MDPCS-090	90 +0.220 0.000	12 0.000 -0.043	35	7.1
MDPCS-100	100 +0.220 0.000	12 0.000 -0.043	35	7.1
MDPCS-110	110 +0.220 0.000	12 0.000 -0.043	40	7
MDPCS-120	120 +0.220 0.000	20 0.000 -0.052	8	9
MDPCS-125	125 +0.250 0.000	20 0.000 -0.052	40	9
MDPCS-125A	125 +0.250 0.000	30 0.000 -0.052	40	8
MDPCS-130	130 +0.250 0.000	20 0.000 -0.052	40	9
MDPCS-140	140 +0.250 0.000	20 0.000 -0.052	30	11
MDPCS-145	145 +0.250 0.000	20 0.000 -0.052	45	11
MDPCS-150	150 +0.250 0.000	20 0.000 -0.052	40	11
MDPCS-160	160 +0.250 0.000	20 0.000 -0.052	40	11
MDPCS-175	175 +0.250 0.000	20 0.000 -0.052	40	11
MDPCS-180	180 +0.250 0.000	20 0.000 -0.052	40	11
MDPCS-200	200 +0.290 0.000	20 0.000 -0.052	40	11
MDPCS-230	230 +0.290 0.000	30 0.000 -0.052	40	13
MDPCS-250	250 +0.290 0.000	30 0.000 -0.052	40	13

STYLE MPS TWO PIECE PISTON SEALS

Molded from filled PTFE and machined to close tolerances, these seals feature low friction and excellent wear characteristics. Nitrile o-rings are used for energizers.





SEAL INFORMATION	
MATERIAL	PTFE PISTON SEAL 70A NITRILE ENERGIZER
TEMPERATURE RANGE	-40° TO +230° F
PRESSURE RANGE	0 TO 5,000 psi
PART NUMBER	(Prefix) - (OD) X (W) X (CS1)

Part Number	A - Bore Diameter	W - Seal Width	CS1 - Seal Cross Section	D - Groove Width - Tol. +0.2/-0	E - Groove Diameter	F - Piston Diameter
MPS-12X2X1-B5	12 +0.043/-0	2.0	1.0	2.2	7.1 +0/-0.036	12 -0.016/-0.043
MPS-15X3X2-B5	15 +0.043/-0	3.0	2.0	3.2	7.5 +0/-0.036	15 -0.016/-0.043
MPS-16X2X1-B5	16 +0.043/-0	2.0	1.0	2.2	11.1 +0/-0.043	16 -0.016/-0.043
MPS-20X3X2-B5	20 +0.052/-0	3.0	2.0	3.2	12.5 +0/-0.043	20 -0.020/-0.053
MPS-22X3X2-B5	22 +0.052/-0	3.0	2.0	3.2	14.5 +0/-0.043	22 -0.020/-0.053
MPS-25X3X2-B5	25 +0.052/-0	3.0	2.0	3.2	17.5 +0/-0.043	25 -0.020/-0.053
MPS-28X3X2-B5	28 +0.052/-0	3.0	2.0	3.2	20.5 +0/-0.052	28 -0.020/-0.053
MPS-30X2X1-B5	30 +0.052/-0	2.0	1.0	2.2	25.1 +0/-0.052	30 -0.020/-0.053
MPS-30X3X2-B5	30 +0.052/-0	3.0	2.0	3.2	22.5 +0/-0.052	30 -0.020/-0.053
MPS-32X2X1-B5	32 +0.062/-0	2.0	1.0	2.2	27.1 +0/-0.052	32 -0.025/-0.064
MPS-32X3X2	32 +0.062/-0	3.0	2.0	3.2	24.5 +0/-0.052	32 -0.025/-0.064
MPS-35X3X2-B5	35 +0.062/-0	3.0	2.0	3.2	27.5 +0/-0.052	35 -0.025/-0.064
MPS-35X25.5X4.5	35 +0.062/-0	4.3	1.8	4.5	25.5 +0/-0.052	35 -0.025/-0.064
MPS-36X3X2-B5	36 +0.062/-0	3.0	2.0	3.2	28.5 +0/-0.052	36 -0.025/-0.064
MPS-40X3X2-B5	40 +0.062/-0	3.0	2.0	3.2	32.5 +0/-0.062	40 -0.025/-0.064
MPS-40X4X2.9-B5	40 +0.062/-0	4.0	2.9	4.2	29.0 +0/-0.052	40 -0.025/-0.064
MPS-40X6X3.5-B5	40 +0.062/-0	6.0	3.5	6.3	24.5 +0/-0.052	40 -0.025/-0.064
MPS-42X4X2.9-B5	42 +0.062/-0	4.0	2.0	4.2	31.0 +0/-0.062	42 -0.025/-0.064
MPS-45X3.8X1.5	45 +0.062/-0	3.8	1.5	4.2	36.4 +0/-0.062	45 -0.025/-0.064
MPS-45X4X2.9-B5	45 +0.062/-0	4.0	2.9	4.2	34.0 +0/-0.062	45 -0.025/-0.064
MPS-45X4.3X2	45 +0.062/-0	4.3	2.0	4.5	35.0 +0/-0.062	45 -0.025/-0.064
MPS-45X4.4X1.2	45 +0.062/-0	4.4	1.2	4.6	37.1 +0/-0.062	45 -0.025/-0.064
MPS-48X4X2.9-B5	48 +0.062/-0	4.0	2.9	4.2	37.0 +0/-0.062	48 -0.025/-0.064
MPS-50X2.7X2.5	50 +0.062/-0	2.7	2.5	2.9	41.3 +0/-0.062	50 -0.025/-0.064
MPS-50X3X2-B5	50 +0.062/-0	3.0	2.0	3.2	42.2 +0/-0.062	50 -0.025/-0.064
MPS-50X3.8X1.5	50 +0.062/-0	3.8	1.5	4.2	41.5 +0/-0.062	50 -0.025/-0.064

STYLE MPS TWO PIECE PISTON SEALS

Part Number	A - Bore Diameter	W - Seal Width	CS1 - Seal Cross Section	D - Groove Width - Tol. +0.2/-0	E - Groove Diameter	F - Piston Diameter
MPS-50X4X2.9-B5	50 +0.062/-0	4.0	2.9	4.2	39.0 +0/-0.062	50 -0.025/-0.064
MPS-50X4.3X2	50 +0.062/-0	4.3	2.0	4.5	40.0 +0/-0.062	50 -0.025/-0.064
MPS-50X4.4X1.2	50 +0.062/-0	4.4	1.2	4.6	42.1 +0/-0.062	50 -0.025/-0.064
MPS-50X6X3.5	50 +0.062/-0	6.0	3.5	6.3	34.5 +0/-0.062	50 -0.025/-0.064
MPS-52X4X2.9-B5	52 +0.074/-0	4.0	2.9	4.2	41.0 +0/-0.062	52 -0.030/-0.076
MPS-53X4X2.5	53 +0.074/-0	4.0	2.5	4.2	42.5 +0/-0.062	53 -0.030/-0.076
MPS-55X4X2.9-B5	55 +0.074/-0	4.0	2.9	4.2	44.0 +0/-0.062	55 -0.030/-0.076
MPS-55X4.3X2	55 +0.074/-0	4.3	2.0	4.5	45.0 +0/-0.062	55 -0.030/-0.076
MPS-55X6X3.5	55 +0.074/-0	6.0	3.4	6.3	39.5 +0/-0.062	55 -0.030/-0.076
MPS-56X4X2.9-B5	56 +0.074/-0	4.0	2.9	4.2	45.5 +0/-0.062	56 -0.030/-0.076
MPS-60X3.8X2	60 +0.074/-0	3.8	2.0	4.2	51.1 +0/-0.062	60 -0.030/-0.076
MPS-60X4X2.9-B5	60 +0.074/-0	3.9	2.5	4.2	49.0 +0/-0.062	60 -0.030/-0.076
MPS-60X4.4X1.3	60 +0.074/-0	4.4	1.3	4.6	52.5 +0/-0.074	60 -0.030/-0.076
MPS-60X4.9X2.5	60 +0.074/-0	4.9	2.5	5.1	49.5 +0/-0.062	60 -0.030/-0.076
MPS-60X6X3.5	60 +0.074/-0	6.0	3.5	6.3	44.5 +0/-0.062	60 -0.030/-0.076
MPS-60X7X2.5	60 +0.074/-0	7.0	2.5	7.2	45.8 +0/-0.062	60 -0.030/-0.076
MPS-63X4X2.9-B5	63 +0.074/-0	4.0	2.9	4.2	52.0 +0/-0.074	63 -0.030/-0.076
MPS-63X5X1	63 +0.074/-0	5.0	1.0	5.2	51.8 +0/-0.074	63 -0.030/-0.076
MPS-63X6X3.5	63 +0.074/-0	6.0	3.5	6.3	47.5 +0/-0.062	63 -0.030/-0.076
MPS-63X7.3X2.5	63 +0.074/-0	7.3	2.5	7.5	48.0 +0/-0.062	63 -0.030/-0.076
MPS-65X4X2.9-B5	65 +0.074/-0	4.0	2.9	4.2	54.0 +0/-0.074	65 -0.030/-0.076
MPS-65X6X3.5	65 +0.074/-0	6.0	3.5	6.3	49.5 +0/-0.062	65 -0.030/-0.076
MPS-65X7.3X2.5	65 +0.074/-0	7.3	2.5	7.5	50.0 +0/-0.062	65 -0.030/-0.076
MPS-70X4X1.8	70 +0.074/-0	4.0	1.8	4.2	61.7 +0/-0.074	70 -0.030/-0.076
MPS-70X4X2.5	70 +0.074/-0	4.0	2.5	4.2	60.0 +0/-0.074	70 -0.030/-0.076
MPS-70X4X2.9	70 +0.074/-0	4.0	2.9	4.2	59.0 +0/-0.074	70 -0.030/-0.076
MPS-70X6X3.5	70 +0.074/-0	6.0	3.5	6.3	54.5 +0/-0.074	70 -0.030/-0.076
MPS-70X6.2X2.5	70 +0.074/-0	6.2	2.5	6.5	55.9 +0/-0.074	70 -0.030/-0.076
MPS-70X7X2.5	70 +0.074/-0	7.0	2.5	7.2	56.4 +0/-0.074	70 -0.030/-0.076
MPS-71X7.3X2.5	71 +0.074/-0	7.3	2.5	7.5	56.0 +0/-0.074	71 -0.030/-0.076
MPS-75X4X2.9-B5	75 +0.074/-0	4.0	2.9	4.2	64.0 +0/-0.074	75 -0.030/-0.076
MPS-75X6X3.5	75 +0.074/-0	6.0	3.5	6.3	59.0 +0/-0.074	75 -0.030/-0.076
MPS-75X6.2X2.5	75 +0.074/-0	6.2	2.5	6.5	60.9 +0/-0.074	75 -0.030/-0.076
MPS-75X7.3X2.5	75 +0.074/-0	7.3	2.5	7.5	60.0 +0/-0.074	75 -0.030/-0.076
MPS-80X4X2.9-B5	80 +0.074/-0	4.0	2.9	4.2	69.0 +0/-0.074	80 -0.030/-0.076
MPS-80X6X3.5	80 +0.074/-0	6.0	3.5	6.3	64.5 +0/-0.074	80 -0.030/-0.076
MPS-80X6.2X2.5	80 +0.074/-0	6.2	2.5	6.5	65.9 +0/-0.074	80 -0.030/-0.076
MPS-80X7X2.5	80 +0.074/-0	7.0	2.5	7.2	65.8 +0/-0.074	80 -0.030/-0.076
MPS-80X7.3X2.5	80 +0.074/-0	7.3	2.5	7.5	66.0 +0/-0.074	80 -0.030/-0.076

STYLE MPS TWO PIECE PISTON SEALS

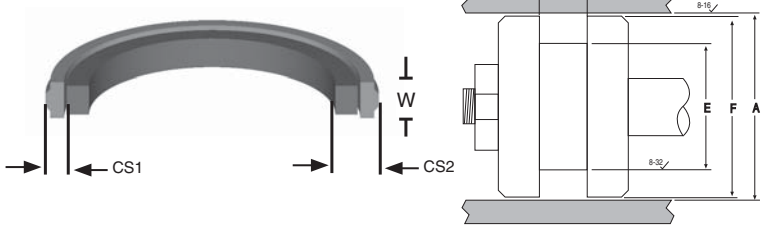
Part Number	A - Bore Diameter	W - Seal Width	CS1 - Seal Cross Section	D - Groove Width - Tol. +0.2/-0	E - Groove Diameter	F - Piston Diameter
MPS-80X7.9X5	80 +0.074/-0	7.9	5.0	8.1	59.0 +0/-0.074	80 -0.030/-0.076
MPS-85X6X3.5	85 +0.087/-0	6.0	3.5	6.3	69.5 +0/-0.074	85 -0.036/-0.090
MPS-85X7.9X5	85 +0.087/-0	7.9	5.0	8.1	64.0 +0/-0.074	85 -0.036/-0.090
MPS-90X6X3.5	90 +0.087/-0	6.0	3.5	6.3	74.5 +0/-0.074	90 -0.036/-0.090
MPS-90X7X2.5	90 +0.087/-0	7.0	2.5	7.2	75.8 +0/-0.074	90 -0.036/-0.090
MPS-90X7.3X2.5	90 +0.087/-0	7.3	2.5	7.5	75.0 +0/-0.074	90 -0.036/-0.090
MPS-90X7.9X5	90 +0.087/-0	7.9	5.0	8.1	69.0 +0/-0.074	90 -0.036/-0.090
MPS-95X6X3.5	95 +0.087/-0	6.0	3.5	6.3	79.5 +0/-0.074	95 -0.036/-0.090
MPS-95X7.9X5	95 +0.087/-0	7.9	5.0	8.1	74.0 +0/-0.074	95 -0.036/-0.090
MPS-100X6X3.5	100 +0.087/-0	6.0	3.5	6.3	84.5 +0/-0.087	100 -0.036/-0.090
MPS-100X7X2.5	100 +0.087/-0	7.0	2.5	7.2	86.6 +0/-0.087	100 -0.036/-0.090
MPS-100X7.9X5	100 +0.087/-0	7.9	5.0	8.1	79.0 +0/-0.074	100 -0.036/-0.090
MPS-100X85X7.5	100 +0.087/-0	7.3	2.5	7.5	85.0 +0/-0.087	100 -0.036/-0.090
MPS-105X6X3.5	105 +0.087/-0	6.0	3.5	6.3	89.5 +0/-0.087	105 -0.036/-0.090
MPS-105X7.9X5	105 +0.087/-0	7.9	5.0	8.1	84.0 +0/-0.087	105 -0.036/-0.090
MPS-110X6X3.5	110 +0.087/-0	6.0	3.5	6.3	94.5 +0/-0.087	110 -0.036/-0.090
MPS-110X7X2.5	110 +0.087/-0	7.0	2.5	7.2	95.8 +0/-0.087	110 -0.036/-0.090
MPS-110X7.9X5	110 +0.087/-0	7.9	5.0	8.1	89.0 +0/-0.087	110 -0.036/-0.090
MPS-115X6X3.5	115 +0.087/-0	6.0	3.5	6.3	99.5 +0/-0.087	115 -0.036/-0.090
MPS-115X7X2.5	115 +0.087/-0	7.0	2.5	7.2	100.8 +0/-0.087	115 -0.036/-0.090
MPS-115X7.9X5	115 +0.087/-0	7.9	5.0	8.1	94.0 +0/-0.087	115 -0.036/-0.090
MPS-120X6X3.5	120 +0.087/-0	6.0	3.5	6.3	104.5 +0/-0.087	120 -0.036/-0.090
MPS-120X7.9X5	120 +0.087/-0	7.9	5.0	8.1	99.0 +0/-0.087	120 -0.036/-0.090
MPS-125X6X3.5	125 +0.100/-0	6.0	3.5	6.3	109.5 +0/-0.087	125 -0.043/-0.106
MPS-125X7X2.5	125 +0.100/-0	7.0	2.5	7.2	110.8 +0/-0.087	125 -0.043/-0.106
MPS-125X7.9X5	125 +0.100/-0	7.9	5.0	8.1	104.0 +0/-0.087	125 -0.043/-0.106
MPS-130X6X3.5	130 +0.100/-0	6.0	3.5	6.3	114.5 +0/-0.087	130 -0.043/-0.106
MPS-130X7.9X5	130 +0.100/-0	7.9	5.0	8.1	109.0 +0/-0.087	130 -0.043/-0.106
MPS-135X7.9X5	135 +0.100/-0	7.9	5.0	8.1	114.0 +0/-0.087	135 -0.043/-0.106
MPS-140X7.9X5	140 +0.100/-0	7.9	5.0	8.1	119.0 +0/-0.087	140 -0.043/-0.106
MPS-145X7.9X5	145 +0.100/-0	7.9	5.0	8.1	124.0 +0/-0.100	145 -0.043/-0.106
MPS-150X7.9X5	150 +0.100/-0	7.9	5.0	8.1	129.0 +0/-0.100	150 -0.043/-0.106
MPS-155X7.9X5	155 +0.100/-0	7.9	5.0	8.1	134.0 +0/-0.100	155 -0.043/-0.106
MPS-160X7.9X5	160 +0.100/-0	7.9	5.0	8.1	139.0 +0/-0.100	160 -0.043/-0.106
MPS-160X8.9X3.5	160 +0.100/-0	8.9	3.5	9.1	140.5 +0/-0.100	160 -0.043/-0.106
MPS-165X7.9X5	165 +0.100/-0	7.9	5.0	8.1	144.0 +0/-0.100	165 -0.043/-0.106
MPS-170X7.9X5	170 +0.100/-0	7.9	5.0	8.1	149.0 +0/-0.100	170 -0.043/-0.106
MPS-180X7.9X5	180 +0.100/-0	7.9	5.0	8.1	159.0 +0/-0.100	180 -0.043/-0.106
MPS-190X7.9X5	190 +0.115/-0	7.9	5.0	8.1	169.0 +0/-0.100	190 -0.050/-0.122

STYLE MPS TWO PIECE PISTON SEALS

Part Number	A - Bore Diameter	W - Seal Width	CS1 - Seal Cross Section	D - Groove Width - Tol. +0.2/-0	E - Groove Diameter	F - Piston Diameter
MPS-200X7.9X5	200 +0.115/-0	7.9	5.0	8.1	179.0 +0/-0.100	200 -0.050/-0.122
MPS-215X7.9X5	215 +0.115/-0	7.9	5.0	8.1	194.0 +0/-0.115	215 -0.050/-0.122
MPS-220X7.9X5-B5	220 +0.115/-0	7.9	5.0	8.1	199.0 +0/-0.115	220 -0.050/-0.122
MPS-225X7.9X5	225 +0.115/-0	7.9	5.0	8.1	204.0 +0/-0.115	225 -0.050/-0.122
MPS-240X7.9X5	240 +0.115/-0	7.9	5.0	8.1	219.0 +0/-0.115	240 -0.050/-0.122
MPS-250X7.9X5	250 +0.115/-0	7.9	5.0	8.1	229.0 +0/-0.115	250 -0.050/-0.122

STYLE MPSU TWO PIECE PISTON SEALS

Molded from tough, wear resistant polyester with additives of 5% glass fiber and 5% PTFE, these seals are totally interchangeable with style MPS seals of the same dimensions. Nitrile o-rings are used as energizers.



SEAL INFORMATION	
MATERIAL	GLASS/PTFE FILLED POLYESTER SEAL, RUBBER ENERGIZER
TEMPERATURE RANGE	-40 TO +230° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (OD) X (W) X (CS1)

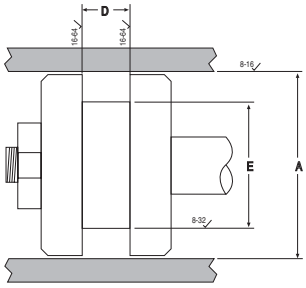
Part Number	A - Bore Diameter	W - Seal Width	CS1- Seal Cross Section	D - Groove Width - Tol. +0.2/-0	E - Groove Diameter	F - Piston Diameter
MPSU-25X3X2	25 +0.052/-0	3.0	2.0	3.2	17.5 +0/-0.043	25 -0.020/-0.053
MPSU-30X3X2	30 +0.052/-0	3.0	2.0	3.2	22.5 +0/-0.052	30 -0.020/-0.053
MPSU-40X4X2.9	40 +0.062/-0	4.0	2.9	4.2	29.0 +0/-0.052	40 -0.025/-0.064
MPSU-40X6.3X2.5	40 +0.062/-0	6.0	2.5	6.3	27.0 +0/-0.052	40 -0.025/-0.064
MPSU-45X4X2.9	45 +0.062/-0	4.0	2.9	4.2	34.0 +0/-0.062	45 -0.025/-0.064
MPSU-50X4X2.9	50 +0.062/-0	4.0	2.9	4.2	39.0 +0/-0.062	50 -0.025/-0.064
MPSU-55X6X2.5	55 +0.074/-0	6.0	2.5	6.3	39.5 +0/-0.062	55 -0.030/-0.076
MPSU-60X4X2.9	60 +0.074/-0	4.0	2.9	4.2	49.0 +0/-0.062	60 -0.030/-0.076
MPSU-63X4X2.9	63 +0.074/-0	4.0	2.9	4.2	52.0 +0/-0.074	63 -0.030/-0.076
MPSU-63X6X2.4	63 +0.074/-0	6.0	2.4	6.3	50.0 +0/-0.062	63 -0.030/-0.076
MPSU-70X4X2.9	70 +0.074/-0	4.0	2.9	4.2	59.0 +0/-0.074	70 -0.030/-0.076
MPSU-70X5.9X2.5	70 +0.074/-0	5.9	2.5	6.3	54.0 +0/-0.074	70 -0.030/-0.076
MPSU-70X6X2.8	70 +0.074/-0	6.0	2.8	6.3	57.0 +0/-0.074	70 -0.030/-0.076
MPSU-75X4X2.9	75 +0.074/-0	4.0	2.9	4.2	64.0 +0/-0.074	75 -0.030/-0.076
MPSU-80X6X3.5	80 +0.074/-0	6.0	3.5	6.3	64.5 +0/-0.074	80 -0.030/-0.076
MPSU-90X6X2.5	90 +0.074/-0	6.0	2.5	6.3	74.5 +0/-0.074	90 -0.030/-0.076
MPSU-90X6X3.5	90 +0.087/-0	6.0	3.5	6.3	74.5 +0/-0.074	90 -0.036/-0.090
MPSU-90X7.3X2.5	90 +0.087/-0	7.3	2.5	7.5	75.0 +0/-0.074	90 -0.036/-0.090
MPSU-95X6X2.5	95 +0.087/-0	6.0	2.5	6.3	79.5 +0/-0.074	95 -0.036/-0.090
MPSU-100X6X3.5	100 +0.100/-0	6.0	3.5	6.3	84.5 +0/-0.087	100 -0.036/-0.090
MPSU-120X10X4	120 +0.087/-0	10.0	4.0	10.5	99.0 +0/-0.087	120 -0.036/-0.090
MPSU-125X6X3.5	125 +0.100/-0	6.0	3.5	6.3	109.5 +0/-0.087	125 -0.043/-0.106
MPSU-125X7.9X5	125 +0.100/-0	7.9	5	8.1	104.0 +0/-0.087	125 -0.043/-0.106
MPSU-130X6X3.5	130 +0.100/-0	6.0	3.5	6.3	114.5 +0/-0.087	130 -0.043/-0.106
MPSU-140X7.9X5	140 +0.100/-0	7.9	5.0	8.1	119.0 +0/-0.087	140 -0.043/-0.106
MPSU-140X10X4	140 +0.100/-0	10.0	4.0	10.5	119.0 +0/-0.087	140 -0.043/-0.106
MPSU-150X7.9X5	150 +0.100/-0	7.9	5.0	8.1	129.0 +0/-0.100	150 -0.043/-0.106
MPSU-150X10X4	150 +0.100/-0	10.0	4.0	10.5	129.0 +0/-0.100	150 -0.043/-0.106
MPSU-160X7.9X5	160 +0.100/-0	7.9	5.0	8.1	139.0 +0/-0.100	160 -0.043/-0.106

STYLE MPSU TWO PIECE PISTON SEALS

Part Number	A - Bore Diameter	W - Seal Width	CS1- Seal Cross Section	D - Groove Width - Tol. +0.2/-0	E - Groove Diameter	F - Piston Diameter
MPSU-170X7.9X5	170 +0.100/-0	7.9	5.0	8.1	149.0 +0/-0.100	170 -0.043/-0.106
MPSU-180X7.9X5	180 +0.100/-0	7.9	5.0	8.1	159.0 +0/-0.100	180 -0.043/-0.106
MPSU-210X7.9X5	210 +0.115/-0	7.9	5.0	8.1	189.0 +0/-0.115	210 -0.050/-0.122

STYLE MKPD TWO PIECE PISTON SEALS

A double acting piston seal with many features: Two compact seal edges to concentrate the load against the dynamic surface, a cavity between the two external seal edges to retain fluid (reducing friction and wear), side grooves to allow pressure to load the energizer in all working conditions, high sealing performance at low pressure, excellent wear-resistance, and high resistance against extrusion.



SEAL INFORMATION

MATERIAL	97A URETHANE SEAL 70A NITRILE EXPANDER
TEMPERATURE RANGE	-22° TO +210° F
PRESSURE RANGE	0 TO 5,800 PSI
SPEED	1.6 FT/SEC
PART NUMBER	(Prefix) - (OD) X (ID) X (W)

MAXIMUM EXTRUSION GAP

Pressure (psi)	725	1450	2900	4350	5800
Max Diametrical Gap (inches)	0.047	0.031	0.016	0.010	0.007

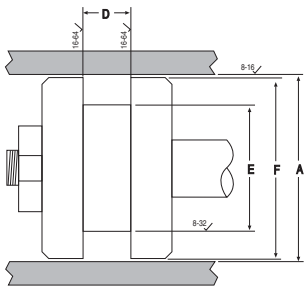
Part Number	A - Bore Diameter	E - Groove Dia. Tol. +0.1/-0	D - Groove Width Tol. +0.2/-0
MKPD-25X14X4.2	25 +0.084/-0	14.0	4.2
MKPD-25X17.5X3.2	25 +0.084/-0	17.5	3.2
MKPD-30X22.5X3.2	30 +0.084/-0	22.5	3.2
MKPD-32X21X4.2	32 +0.100/-0	21.0	4.2
MKPD-32X24.5X3.2	32 +0.100/-0	24.5	3.2
MKPD-35X27.5X3.2	35 +0.100/-0	27.5	3.2
MKPD-38X30.5X3.2	38 +0.100/-0	30.5	3.2
MKPD-40X24.5X6.3	40 +0.100/-0	24.5	6.3
MKPD-40X29X4.2	40 +0.100/-0	29.0	4.2
MKPD-40X32.5X3.2	40 +0.100/-0	32.5	3.2
MKPD-40X32.5X3.2	40 +0.100/-0	32.5	3.2
MKPD-45X29.5X6.3	45 +0.100/-0	29.5	6.3
MKPD-45X34X4.2	45 +0.100/-0	34.0	4.2
MKPD-50X34.5X6.3	50 +0.120/-0	34.5	6.3
MKPD-50X39X4.2	50 +0.120/-0	39.0	4.2
MKPD-55X39.5X6.3	55 +0.120/-0	39.5	6.3
MKPD-55X44X4.2	55 +0.120/-0	44.0	4.2
MKPD-60X44.5X6.3	60 +0.120/-0	44.5	6.3

STYLE MKPD TWO PIECE PISTON SEALS

Part Number	A - Bore Diameter	E - Groove Dia. Tol. +0.1/-0	D - Groove Width Tol. +0.2/-0
MKPD-60X49X4.2	60 +0.120/-0	49.0	4.2
MKPD-63X47.5X6.3	63 +0.120/-0	47.5	6.3
MKPD-63X52X4.2	63 +0.120/-0	52.0	4.2
MKPD-65X49.5X6.3	65 +0.120/-0	49.5	6.3
MKPD-65X54X4.2	65 +0.120/-0	54.0	4.2
MKPD-70X54.5X6.3	70 +0.120/-0	54.5	6.3
MKPD-70X59X4.2	70 +0.120/-0	59.0	4.2
MKPD-75X59.5X6.3	75 +0.120/-0	59.5	6.3
MKPD-75X64X4.2	75 +0.120/-0	64.0	4.2
MKPD-80X64.5X6.3	80 +0.120/-0	64.5	6.3
MKPD-80X69X4.2	80 +0.120/-0	69.0	4.2
MKPD-85X69.5X6.3	85 +0.140/-0	69.5	6.3
MKPD-90X74.5X6.3	90 +0.140/-0	74.5	6.3
MKPD-95X79.5X6.3	95 +0.140/-0	79.5	6.3
MKPD-100X84.5X6.3	100 +0.140/-0	84.5	6.3
MKPD-100X86.5X6.3	100 +0.140/-0	86.5	6.3
MKPD-110X94.5X6.3	110 +0.140/-0	94.5	6.3
MKPD-120X104.5X6.3	120 +0.140/-0	104.5	6.3
MKPD-125X109.5X6.3	125 +0.160/-0	109.5	6.3
MKPD-130X114.5X6.3	130 +0.160/-0	114.5	6.3
MKPD-140X119X8.1	140 +0.160/-0	119.0	8.1
MKPD-150X129X8.1	150 +0.160/-0	129.0	8.1
MKPD-160X139X8.1	160 +0.160/-0	139.0	8.1
MKPD-170X149X8.1	170 +0.160/-0	149.0	8.1
MKPD-180X159X8.1	180 +0.160/-0	159.0	8.1
MKPD-200X179X8.1	200 +0.185/-0	179.0	8.1
MKPD-250X229X8.1	250 +0.185/-0	229.0	8.1

STYLE MPS2000 NYLON STEP CUT PISTON SEALS

The MPS2000 double acting piston seal is designed for heavy duty hydraulic applications. The small profile is resistant to shock loads and has high abrasion and extrusion resistance. Its split design allows simple installation on a solid piston.

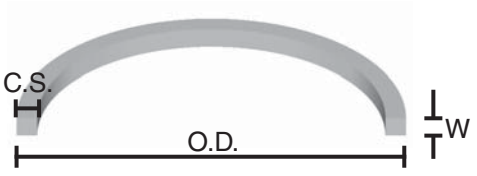


SEAL INFORMATION	
MATERIAL	NYLON SEAL WITH NITRILE ENERGIZER
TEMPERATURE RANGE	-22° F TO +230° F
PRESSURE RANGE	0 TO 7250 PSI
SPEED	3 FT/SEC
PART NUMBER	(Prefix) - (Bore Size)

Part Number	A - Bore Diameter	D - Groove Width +0.20/-0	E - Groove Diameter	F - Piston Diameter
MPS2000-50	50 +0.062/-0	6.3	34.5 +0/-0.062	49.0
MPS2000-63	63 +0.074/-0	6.3	47.5 +0/-0.062	62.0
MPS2000-80	80 +0.074/-0	6.3	64.5 +0/-0.074	79.0
MPS2000-90	90 +0.087/-0	8.1	69.0 +0/-0.074	89.0
MPS2000-100	100 +0.087/-0	8.1	79.0 +0/-0.074	99.0
MPS2000-100/1	100 +0.087/-0	6.3	84.5 +0/-0.087	99.0
MPS2000-105	105 +0.087/-0	8.1	84.0 +0/-0.087	103.8
MPS2000-110	110 +0.087/-0	8.1	89.0 +0/-0.087	108.8
MPS2000-115	115 +0.087/-0	8.1	94.0 +0/-0.087	113.8
MPS2000-120	120 +0.087/-0	8.1	99.0 +0/-0.087	118.8
MPS2000-125	125 +0.100/-0	8.1	104.0 +0/-0.087	123.8
MPS2000-125/1	125 +0.100/-0	6.3	109.5 +0/-0.087	123.8
MPS2000-130	130 +0.100/-0	8.1	109.0 +0/-0.087	128.8
MPS2000-135	135 +0.100/-0	8.1	114.0 +0/-0.087	133.8
MPS2000-140	140 +0.100/-0	8.1	119.0 +0/-0.087	138.8
MPS2000-150	150 +0.100/-0	8.1	129.0 +0/-0.100	148.8
MPS2000-160	160 +0.100/-0	8.1	139.0 +0/-0.100	158.8
MPS2000-165	165 +0.100/-0	8.1	144.0 +0/-0.100	163.8
MPS2000-170	170 +0.100/-0	8.1	149.0 +0/-0.100	168.8
MPS2000-180	180 +0.100/-0	8.1	159.0 +0/-0.100	178.8
MPS2000-190	190 +0.115/-0	8.1	169.0 +0/-0.100	188.8
MPS2000-200	200 +0.115/-0	8.1	179.0 +0/-0.100	198.8
MPS2000-210	210 +0.115/-0	8.1	189.0 +0/-0.115	208.8
MPS2000-220	220 +0.115/-0	8.1	199.0 +0/-0.115	218.8
MPS2000-220A	220 +0.115/-0	8.1	205.0 +0/-0.115	218.8
MPS2000-230	230 +0.115/-0	8.1	209.0 +0/-0.115	228.8
MPS2000-235	235 +0.115/-0	8.1	214.0 +0/-0.115	233.8
MPS2000-250	250 +0.115/-0	8.1	229.0 +0/-0.115	248.8
MPS2000-260	260 +0.130/-0	8.1	239.0 +0/-0.115	258.8

STYLE MBNP PISTON SEAL ANTI-EXTRUSION RINGS

Placed in adjacent grooves on each side of style MPS piston seals, they prevent cold flow or extrusion at high pressures.



SEAL INFORMATION	
MATERIAL	NYLON
TEMPERATURE RANGE	-65° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
PART NUMBER	(Prefix) - (OD) X (CS) X (W)

Part Number
MBNP-95X2.5X2.5
MBNP-100X2.5X2.5
MBNP-105X2.5X2.5
MBNP-110X2.5X2.5
MBNP-110X3X3

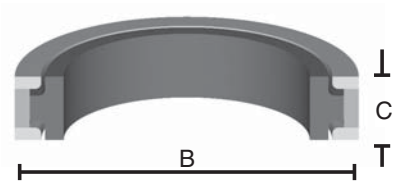
Part Number
MBNP-115X2.5X2.5
MBNP-115X3X3
MBNP-120X3X3
MBNP-125X3X3
MBNP-130X3X3

Part Number
MBNP-135X3X3
MBNP-140X3X3
MBNP-145X3X3
MBNP-150X3X3
MBNP-160X3X3

Part Number
MBNP-170X3X3
MBNP-180X3X3
MBNP-190X3X3

STYLE MCPS FOUR PIECE PISTON SEALS

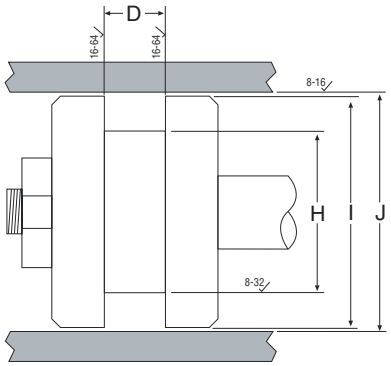
This capped piston seal consists of a filled PTFE cap, a T-shaped NBR energizer, and two split nylon backup rings. It exhibits low friction, high sealability, and excellent resistance to extrusion and wear.



PART NUMBERS

MCPS - 50 X 36 X 8.5

Type of Seal | Bore Diameter | Groove Diameter | Height



SEAL INFORMATION	
MATERIAL	PTFE PISTON SEAL NYLON BACK-UP NITRILE ENERGIZER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 6,000 psi
SUFFIX	BR = BRONZE FILLED PTFE CAP

Part Number	B Nom. O.D.	C Nom. Ht.	D Groove Width	H Groove Diameter	I Piston Diameter	J Bore Diameter
MCPS-50X36X8.5	50	8.5	9.0 +0.20 -0.00	36.00 +0.000 -0.062	50.00 -0.025 -0.064	50.00 +0.062 -0.000
MCPS-50X40X7.5	50	7.5	8.0 +0.20 -0.00	40.00 +0.000 -0.062	50.00 -0.025 -0.064	50.00 +0.062 -0.000
MCPS-55X41X8.5	55	8.5	9.0 +0.20 -0.00	41.00 +0.000 -0.062	55.00 -0.030 -0.076	55.00 +0.074 -0.000
MCPS-56X45X8	56	8.0	8.5 +0.20 -0.00	45.00 +0.000 -0.062	56.00 -0.030 -0.076	56.00 +0.074 -0.000
MCPS-60X46X8.5	60	8.5	9.0 +0.20 -0.00	46.00 +0.000 -0.062	60.00 -0.030 -0.076	60.00 +0.074 -0.000
MCPS-63X48X10.5	63	10.5	11.0 +0.20 -0.00	48.00 +0.000 -0.062	63.00 -0.030 -0.076	63.00 +0.074 -0.000
MCPS-63X53X7.5	63	7.5	8.0 +0.20 -0.00	53.00 +0.000 -0.074	63.00 -0.030 -0.076	63.00 +0.074 -0.000
MCPS-65X50X10.5	65	10.5	11.0 +0.20 -0.00	50.00 +0.000 -0.074	65.00 -0.030 -0.076	65.00 +0.074 -0.000
MCPS-65X51X8.5	65	8.5	9.0 +0.20 -0.00	51.00 +0.000 -0.074	65.00 -0.030 -0.076	65.00 +0.074 -0.000
MCPS-70X55X10.5	70	10.5	11.0 +0.20 -0.00	55.00 +0.000 -0.074	70.00 -0.030 -0.076	70.00 +0.074 -0.000
MCPS-70X55X12	70	12.0	12.5 +0.20 -0.00	55.00 +0.000 -0.074	70.00 -0.030 -0.076	70.00 +0.074 -0.000
MCPS-70X60X7.5	70	7.5	8.0 +0.20 -0.00	60.00 +0.000 -0.074	70.00 -0.030 -0.076	70.00 +0.074 -0.000
MCPS-75X60X10.5	75	10.5	11.0 +0.20 -0.00	60.00 +0.000 -0.074	75.00 -0.030 -0.076	75.00 +0.074 -0.000
MCPS-75X63X8.6	75	8.6	9.1 +0.20 -0.00	63.00 +0.000 -0.074	75.00 -0.030 -0.076	75.00 +0.074 -0.000
MCPS-80X65X10.5	80	10.5	11.0 +0.20 -0.00	65.00 +0.000 -0.074	80.00 -0.030 -0.076	80.00 +0.074 -0.000
MCPS-80X65X11.5	80	11.5	12.0 +0.20 -0.00	65.00 +0.000 -0.074	80.00 -0.030 -0.076	80.00 +0.074 -0.000
MCPS-85X70X10.5	85	10.5	11.0 +0.20 -0.00	70.00 +0.000 -0.074	85.00 -0.036 -0.090	85.00 +0.087 -0.000
MCPS-90X75X10.5	90	10.5	11.0 +0.20 -0.00	75.00 +0.000 -0.074	90.00 -0.036 -0.090	90.00 +0.087 -0.000
MCPS-90X75X11.5	90	11.5	12.0 +0.20 -0.00	75.00 +0.000 -0.074	90.00 -0.036 -0.090	90.00 +0.087 -0.000
MCPS-90X75X12.5	90	12.5	13.0 +0.20 -0.00	75.00 +0.000 -0.074	90.00 -0.036 -0.090	90.00 +0.087 -0.000

STYLE MCPS FOUR PIECE PISTON SEALS

Part Number	B Nom. O.D.	C Nom. Ht.	D Groove Width	H Groove Diameter	I Piston Diameter	J Bore Diameter
MCPS-95X80X10.5	95	10.5	11.0 +0.20 -0.00	80.00 +0.000 -0.074	95.00 -0.036 -0.090	95.00 +0.087 -0.000
MCPS-95X80X12	95	12	12.5 +0.20 -0.00	80.00 +0.000 -0.074	95.00 -0.036 -0.090	95.00 +0.087 -0.000
MCPS-100X85X12	100	12.0	12.5 +0.20 -0.00	85.00 +0.000 -0.087	100.00 -0.036 -0.090	100.00 +0.087 -0.000
MCPS-105X90X12	105	12.0	12.5 +0.20 -0.00	90.00 +0.000 -0.087	105.00 -0.036 -0.090	105.00 +0.087 -0.000
MCPS-110X95X12	110	12.0	12.5 +0.20 -0.00	95.00 +0.000 -0.087	110.00 -0.036 -0.090	110.00 +0.087 -0.000
MCPS-115X100X12	115	12.0	12.5 +0.20 -0.00	100.00 +0.000 -0.087	115.00 -0.036 -0.090	115.00 +0.087 -0.000
MCPS-120X100X15.5	120	15.5	16.0 +0.20 -0.00	100.00 +0.000 -0.087	120.00 -0.036 -0.090	120.00 +0.087 -0.000
MCPS-120X105X12	120	12.0	12.5 +0.20 -0.00	105.00 +0.000 -0.087	120.00 -0.036 -0.090	120.00 +0.087 -0.000
MCPS-125X102X15.5	125	15.5	16.0 +0.20 -0.00	102.00 +0.000 -0.087	125.00 -0.043 -0.106	125.00 +0.100 -0.000
MCPS-125X105X15.5	125	15.5	16.0 +0.20 -0.00	105.00 +0.000 -0.087	125.00 -0.043 -0.106	125.00 +0.100 -0.000
MCPS-125X110X12.5	125	12.0	12.5 +0.20 -0.00	110.00 +0.000 -0.087	125.00 -0.043 -0.106	125.00 +0.100 -0.000
MCPS-130X107X15.5	130	15.5	16.0 +0.20 -0.00	107.00 +0.000 -0.087	130.00 -0.043 -0.106	130.00 +0.100 -0.000
MCPS-130X110X15.5	130	15.5	16.0 +0.20 -0.00	110.00 +0.000 -0.087	130.00 -0.043 -0.106	130.00 +0.100 -0.000
MCPS-130X115X12.5	130	12.5	13.0 +0.20 -0.00	115.00 +0.000 -0.087	130.00 -0.043 -0.106	130.00 +0.100 -0.000
MCPS-135X112X15.5	135	15.5	16.0 +0.20 -0.00	112.00 +0.000 -0.087	135.00 -0.043 -0.106	135.00 +0.100 -0.000
MCPS-140X117X15.5	140	15.5	16.0 +0.20 -0.00	117.00 +0.000 -0.087	140.00 -0.043 -0.106	140.00 +0.100 -0.000
MCPS-140X120X15.5	140	15.5	16.0 +0.20 -0.00	120.00 +0.000 -0.087	140.00 -0.043 -0.106	140.00 +0.100 -0.000
MCPS-140X120X18.5	140	18.5	19.0 +0.20 -0.00	120.00 +0.000 -0.087	140.00 -0.043 -0.106	140.00 +0.100 -0.000
MCPS-145X122X15.5	145	15.5	16.0 +0.20 -0.00	122.00 +0.000 -0.100	145.00 -0.043 -0.106	145.00 +0.100 -0.000
MCPS-150X127X15.5	150	15.5	16.0 +0.20 -0.00	127.00 +0.000 -0.100	150.00 -0.043 -0.106	150.00 +0.100 -0.000
MCPS-150X130X18.5	150	18.5	19.0 +0.20 -0.00	130.00 +0.000 -0.100	150.00 -0.043 -0.106	150.00 +0.100 -0.000
MCPS-155X132X15.5	155	15.5	16.0 +0.20 -0.00	132.00 +0.000 -0.100	155.00 -0.043 -0.106	155.00 +0.100 -0.000
MCPS-160X137X15.5	160	15.5	16.0 +0.20 -0.00	137.00 +0.000 -0.100	160.00 -0.043 -0.106	160.00 +0.100 -0.000
MCPS-160X140X15.5	160	15.5	16.0 +0.20 -0.00	140.00 +0.000 -0.100	160.00 -0.043 -0.106	160.00 +0.100 -0.000
MCPS-160X140X18.5	160	18.5	19.0 +0.20 -0.00	140.00 +0.000 -0.100	160.00 -0.043 -0.106	160.00 +0.100 -0.000
MCPS-160X145X12.5	160	12.5	13.0 +0.20 -0.00	145.00 +0.000 -0.100	160.00 -0.043 -0.106	160.00 +0.100 -0.000
MCPS-165X142X15.5	165	15.5	16.0 +0.20 -0.00	142.00 +0.000 -0.100	165.00 -0.043 -0.106	165.00 +0.100 -0.000
MCPS-170X147X15.5	170	15.5	16.0 +0.20 -0.00	147.00 +0.000 -0.100	170.00 -0.043 -0.106	170.00 +0.100 -0.000
MCPS-175X152X15.5	175	15.5	16.0 +0.20 -0.00	152.00 +0.000 -0.100	175.00 -0.043 -0.106	175.00 +0.100 -0.000

STYLE MCPS FOUR PIECE PISTON SEALS

Part Number	B Nom. O.D.	C Nom. Ht.	D Groove Width	H Groove Diameter	I Piston Diameter	J Bore Diameter
MCPS-180X157X15.5	180	15.5	16.0 +0.20 -0.00	157.00 +0.000 -0.100	180.00 -0.043 -0.106	180.00 +0.100 -0.000
MCPS-180X160X15.5	180	15.5	16.0 +0.20 -0.00	160.00 +0.000 -0.100	180.00 -0.043 -0.106	180.00 +0.100 -0.000
MCPS-185X162X15.5	185	15.5	16.0 +0.20 -0.00	162.00 +0.000 -0.100	185.00 -0.050 -0.122	185.00 +0.115 -0.000
MCPS-190X167X15.5	190	15.5	16.0 +0.20 -0.00	167.00 +0.000 -0.100	190.00 -0.050 -0.122	190.00 +0.115 -0.000
MCPS-190X175X12.5	190	12.5	13.0 +0.20 -0.00	175.00 +0.000 -0.100	190.00 -0.050 -0.122	190.00 +0.115 -0.000
MCPS-195X172X15.5	195	15.5	16.0 +0.20 -0.00	172.00 +0.000 -0.100	195.00 -0.050 -0.122	195.00 +0.115 -0.000
MCPS-200X177X15.5BR	200	15.5	16.0 +0.20 -0.00	177.00 +0.000 -0.100	200.00 -0.050 -0.122	200.00 +0.115 -0.000
MCPS-200X180X18.5	200	18.5	19.0 +0.20 -0.00	180.00 +0.000 -0.100	200.00 -0.050 -0.122	200.00 +0.115 -0.000
MCPS-210X187X15.5	210	15.5	16.0 +0.20 -0.00	187.00 +0.000 -0.115	210.00 -0.050 -0.122	210.00 +0.115 -0.000
MCPS-220X197X15.5	220	15.5	16.0 +0.20 -0.00	197.00 +0.000 -0.115	220.00 -0.050 -0.122	220.00 +0.115 -0.000
MCPS-225X202X15.5	225	15.5	16.0 +0.20 -0.00	202.00 +0.000 -0.115	225.00 -0.050 -0.122	225.00 +0.115 -0.000
MCPS-230X207X15.5	230	15.5	16.0 +0.20 -0.00	207.00 +0.000 -0.115	230.00 -0.050 -0.122	230.00 +0.115 -0.000
MCPS-230X210X16	230	16.0	16.5 +0.20 -0.00	210.00 +0.000 -0.115	230.00 -0.050 -0.122	230.00 +0.115 -0.000
MCPS-240X217X15.5	240	15.5	16.0 +0.20 -0.00	217.00 +0.000 -0.115	240.00 -0.050 -0.122	240.00 +0.115 -0.000
MCPS-250X222X17	250	17.0	17.5 +0.20 -0.00	222.00 +0.000 -0.115	250.00 -0.050 -0.122	250.00 +0.115 -0.000
MCPS-260X232X17	260	17.0	17.5 +0.20 -0.00	232.00 +0.000 -0.115	260.00 -0.056 -0.137	260.00 +0.130 -0.000
MCPS-260X240X16	260	16.0	16.5 +0.20 -0.00	240.00 +0.000 -0.115	260.00 -0.056 -0.137	260.00 +0.130 -0.000
MCPS-280X252X17	280	17.0	17.5 +0.20 -0.00	252.00 +0.000 -0.130	280.00 -0.056 -0.137	280.00 +0.130 -0.000
MCPS-300X272X17	300	17.0	17.5 +0.20 -0.00	272.00 +0.000 -0.130	300.00 -0.056 -0.137	300.00 +0.130 -0.000

REPLACEMENT SPECIFIC PISTON SEALS FOR CATERPILLAR® EQUIPMENT

These seals are specials for certain Caterpillar® cylinders. **NOTE:** Caterpillar® part numbers are used as a reference only. We do not imply that these parts are original equipment parts.

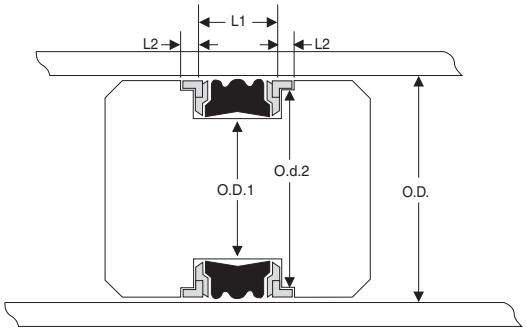
PISTON SEAL TYPE	MATERIAL	TEMPERATURE RANGE	PRESSURE RANGE	
2 PIECE PISTON SEAL	PTFE PISTON SEAL 70A NITRILE ENERGIZER	-40° TO 220° F	0 TO 5,000 PSI	
2 PIECE STEP CUT PISTON SEAL	NYLON SEAL 70 A NITRILE ENERGIZER	-40° TO 220° F	0 TO 5,000 PSI	
4 PIECE PISTON SEAL	PTFE PISTON SEAL NYLON BACK-UP BUNA-N ENERGIZER	-40° TO +220° F	0 TO 6,000 PSI	
5 PIECE PISTON SEAL	70A NBR / FABRIC SEAL PTFE BACK-UP NYLON BEARING	-20° TO 190° F	0 TO 5,000 PSI	

Part Number	Application	Bore
CTC-1200890	2-Piece Piston Seal	75
CTC-1841687	2-Piece Step Cut Piston Seal	85
CTC-1846970	2-Piece Step Cut Piston Seal	75
CTC-9X7298	2-Piece Step Cut Piston Seal	100
CTC-9X7301	2-Piece Step Cut Piston Seal	110
CTC-9X3589	2-Piece Step Cut Piston Seal	115
CTC-9X3592	2-Piece Step Cut Piston Seal	120
CTC-9X3595	2-Piece Step Cut Piston Seal	130
CTC-2371934	2-Piece Step Cut Piston Seal	135
CTC-9X3598	2-Piece Step Cut Piston Seal	140
CTC-9X3601	2-Piece Step Cut Piston Seal	150
CTC-9X3604	2-Piece Step Cut Piston Seal	160

Part Number	Application	Bore
CTC-9X3607	2-Piece Step Cut Piston Seal	170
CTC-9X3610	2-Piece Step Cut Piston Seal	180
CTC-1251286	2-Piece Step Cut Piston Seal	190
CTC-0996998	4-Piece Piston Seal	80
CTC-0996973	4-Piece Piston Seal	90
CTC-5I5928	4-Piece Piston Seal	100
CTC-0996922	4-Piece Piston Seal	110
CTC-A04601713	4-Piece Piston Seal	110
CTC-A04601719	4-Piece Piston Seal	160
CTC-A04601215	5-Piece Piston Seal	110
CTC-A04601216	5-Piece Piston Seal	120

STYLE MPSA FIVE PIECE PISTON SEALS

Designed to fit on one or two piece pistons, this piston seal employs a nitrile seal for high sealability, nylon split back-ups for extrusion resistance, and two split bearing rings. No further support bearings are required.



SEAL INFORMATION	
MATERIAL	70A NBR SEAL NYLON BACK-UP & BEARING
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 6,000 PSI

Part Number	OD	OD1	Od2	L1	L2
MPSA-020	20	11	17	13.5	2.1
MPSA-025	25	15	22	12.5	4
MPSA-025A	25	15	21.4	16.4	6.35
MPSA-025B	25	16	22	13.5	2.1
MPSA-028	28	19	25	13.5	2.1
MPSA-030A	30	21	27	13.5	2.1
MPSA-032	32	22	27.4	16.3	6.35
MPSA-032A	32	22	27.4	12.5	4
MPSA-032C	32	22	28	15.5	2.6
MPSA-032D	32	24	28	15.5	3.2
MPSA-035	35	25	31.4	16.4	6.35
MPSA-035A	35	25	31	15.5	2.6
MPSA-040D	40	26	36	15.5	2.6
MPSA-040E	40	30	35.4	16.4	6.35
MPSA-040F	40	30	37	12.5	4
MPSA-040G	40	32	36	15.5	3.2
MPSA-040H	40	32	37	10	4
MPSA-045	45	35	40.4	16.4	6.35
MPSA-045A	45	29	40.4	18.4	6.35
MPSA-045B	45	31	41	15.5	2.6
MPSA-050	50	34	45.4	18.4	6.35
MPSA-050A	50	38	46	20.5	4.2
MPSA-050B	50	40	47	12.5	4
MPSA-050D	50	34	46	20.5	3.1
MPSA-055	55	39	50.4	18.4	6.4
MPSA-055B	55	39	51	20.5	3.1
MPSA-060	60	44	55.4	18.4	6.35
MPSA-060B	60	48	56	20.5	4.2
MPSA-060C	60	44	56	20.5	3.1
MPSA-063	63	47	58.4	19.4	6.35

Part Number	OD	OD1	Od2	L1	L2
MPSA-063A	63	51	59	20.15	4.2
MPSA-063B	63	53	60	12.5	4
MPSA-063C	63	47	59	20.5	3.1
MPSA-063E	63	47	58.4	18.4	6.35
MPSA-065	65	50	60.4	18.4	6.35
MPSA-065A	65	49	61	20.5	3.1
MPSA-070	70	50	64.2	22.4	6.35
MPSA-070A	70	58	66	20.15	4.2
MPSA-070B	70	54	66	20.5	3.1
MPSA-070C	70	55	66	20	5
MPSA-075	75	55	69.2	22.4	6.35
MPSA-075A	75	59	71	20.5	3.1
MPSA-080	80	60	74.2	22.4	6.35
MPSA-080A	80	66	76	22.5	5.2
MPSA-080B	80	65	76	20	5
MPSA-080C	80	62	76	22.5	3.6
MPSA-080D	80	60	75	25	6.35
MPSA-085	85	65	79.2	22.4	6.35
MPSA-090	90	70	84.2	22.4	6.35
MPSA-090B	90	76	86	22.5	5.2
MPSA-090C	90	72	86	22.5	3.6
MPSA-092	92	82	88	12.5	6.35
MPSA-095	95	75	89.15	22.4	6.35
MPSA-100	100	75	93.2	22.4	6.35
MPSA-100A	100	85	96	20	5
MPSA-100B	100	80	94.15	25	6.3
MPSA-100E	100	82	96	22.5	3.6
MPSA-100F	100	86	96	22.5	5.2
MPSA-105	105	80	98.1	22.5	6.35
MPSA-105A	105	92.5	98.8	14.3	6.35

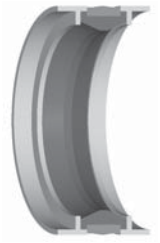
STYLE MPSA FIVE PIECE PISTON SEALS

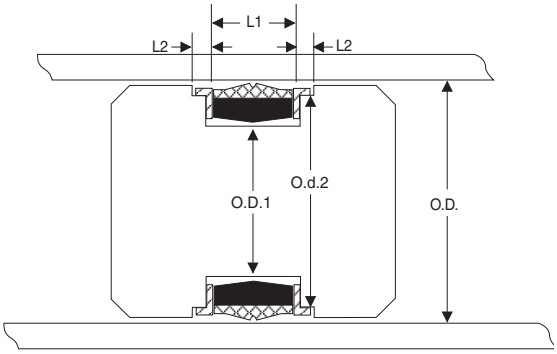
Part Number	OD	OD1	Od2	L1	L2
MPSA-110	110	85	103.1	22.4	6.35
MPSA-110A	110	85	103	25	6.35
MPSA-110B	110	96	106	22.5	5.2
MPSA-110C	110	90	104.1	25.3	6.4
MPSA-110D	110	92	106	22.5	3.6
MPSA-110E	110	95	105	20	5
MPSA-115	115	90	108.1	22.4	6.35
MPSA-115B	115	97	111	22.5	3.6
MPSA-120	120	95	113.1	22.4	6.35
MPSA-120B	120	106	116	22.5	5.2
MPSA-125	125	100	118	25.4	6.35
MPSA-125A	125	105	120	24.5	6.35
MPSA-125E	125	103	121	26.5	5.1
MPSA-125F	125	108	121	26.5	7.2
MPSA-125G	125	100	116.8	45	12.7
MPSA-130	130	105	122.6	25.4	9.52
MPSA-135	135	110	128.1	25.4	6.35
MPSA-140	140	115	132.6	25.4	9.52
MPSA-140A	140	115	131.7	45	12.7
MPSA-140B	140	115	133	25.4	6.35
MPSA-140C	140	120	135	25	6.35
MPSA-140E	140	118	136	26.5	5.1
MPSA-140F	140	123	136	26.5	7.2
MPSA-145	145	120	137.6	25.4	9.52
MPSA-150	150	125	142.6	25.4	9.52
MPSA-150A	150	125	141.7	45	12.7
MPSA-150B	150	128	146	26.5	5.1
MPSA-150C	150	133	146	26.5	7.2
MPSA-150D	150	125	143	25.5	6.35
MPSA-160	160	135	152.6	25.4	9.5
MPSA-160A	160	130	153	25.4	6.35
MPSA-160B	160	140	155	25	6.35

Part Number	OD	OD1	Od2	L1	L2
MPSA-160D	160	138	156	26.5	5.1
MPSA-160F	160	130	153	25.4	9.5
MPSA-160H	160	135	154	32	10
MPSA-165A	165	140	157.6	25.3	9.5
MPSA-170	170	145	161.7	25.3	12.7
MPSA-170A	170	140	163	25	6.35
MPSA-175	175	150	166.7	25	12.7
MPSA-175B	175	150	166.7	25.4	12.7
MPSA-180	180	155	171.7	25.4	12.7
MPSA-180A	180	150	173	35.4	6.35
MPSA-180B	180	158	176	26.5	5.1
MPSA-180C	180	163	176	26.5	7.2
MPSA-185	185	160	176.7	25.3	12.7
MPSA-190	190	165	181.7	25.4	12.7
MPSA-195	195	170	187.1	25.4	12.7
MPSA-200	200	175	191.6	25.4	12.7
MPSA-200A	200	170	193	35.4	6.35
MPSA-200B	200	175	191.6	45	12.7
MPSA-200D	200	170	193	36	12.7
MPSA-200F	200	180	196	31.5	9.2
MPSA-210	210	185	201.6	25.4	12.7
MPSA-220A	220	195	211.6	25.7	12.7
MPSA-225	225	200	216.6	25.4	12.7
MPSA-230	230	205	221.6	25.3	12.7
MPSA-240	240	215	231.6	25.3	12.7
MPSA-250A	250	225	246	31.5	6.6
MPSA-250B	250	230	249.4	31.5	9.2
MPSA-250C	250	220	243	35.3	6.4
MPSA-250D	250	225	241.6	25.3	12.7
MPSA-260	260	235	252.9	35.1	12.7
MPSA-280	280	250	273	36.3	10
MPSA-320	320	290	312	36	12.7

STYLE MPSB THREE PIECE PISTON SEALS

Incorporating a nitrile / fabric seal with two split bearings, this assembly affords low friction and high strength for one or two piece pistons.





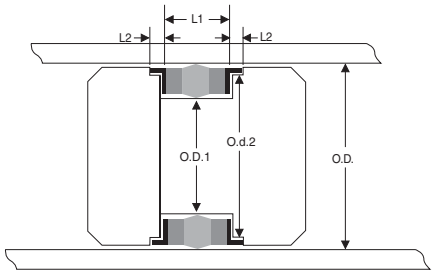
SEAL INFORMATION	
MATERIAL	70A NBR / FABRIC SEAL OD 70A NBR SEAL ID ACETAL BEARING
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 5,000 PSI

Part Number	OD	OD1	Od2	L1	L2
MPSB-032B	32	24	29	10	3.2
MPSB-035	35	24	31	15.5	3.2
MPSB-045	45	34	41	15.5	3.2
MPSB-050A	50	38	46	20.5	4.2
MPSB-060B	60	48	56	20.5	4.2
MPSB-070	70	58	66	20.5	4.2
MPSB-080	80	66	76	22.5	5.2
MPSB-090B	90	76	86	22.5	5.2

Part Number	OD	OD1	Od2	L1	L2
MPSB-100F	100	86	96	22.5	5.2
MPSB-110B	110	96	106	22.5	5.2
MPSB-120B	120	106	116	22.5	5.2
MPSB-125F	125	108	121	26.5	7.2
MPSB-150	150	133	146	26.5	7.2
MPSB-160	160	143	156	26.5	7.2
MPSB-180	180	163	176	26.5	7.2

STYLE MPSA-58 THREE PIECE PISTON SEALS

With a nitrile seal bonded on each side by fabric material, this seal incorporates 2 full depth “L” bearings to form a very strong assembly. This seal requires a two piece piston.



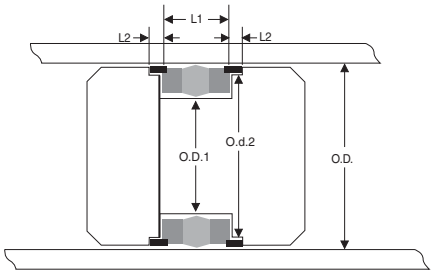
SEAL INFORMATION	
MATERIAL	70A NBR / FABRIC SEAL ACETAL BEARING / BACK-UP
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 5,000 PSI

Part Number	OD	OD1	Od2	L1	L2
MPSA-58-040	40	25	34.8	24	6
MPSA-58-050A	50	35	44.8	24	6
MPSA-58-055	55	40	49.8	24	5.9
MPSA-58-060	60	40	53.8	31	7
MPSA-58-063	63	43	56.8	31	7
MPSA-58-063B	63	48	57.8	24	6
MPSA-58-070	70	50	63.8	31	7
MPSA-58-080A	80	60	73.8	31	7
MPSA-58-090A	90	70	83.8	31	7
MPSA-58-100	100	80	93.8	31	7
MPSA-58-100C	100	86	96	22.5	5.2
MPSA-58-110	110	90	103.8	31	7
MPSA-58-115	115	95	108.9	31	7

Part Number	OD	OD1	Od2	L1	L2
MPSA-58-120	120	100	113.8	31	7
MPSA-58-125A	125	100	118.8	38	9.5
MPSA-58-125D	125	108	121	26.5	7.2
MPSA-58-140	140	120	133.8	31	7
MPSA-58-150	150	120	143.9	44	9.5
MPSA-58-160A	160	140	153.9	31	7
MPSA-58-160C	160	140	153.9	25	6.35
MPSA-58-180	180	163	176	26.5	7.2
MPSA-58-190	190	160	183.9	44	8.5
MPSA-58-200	200	170	193	35.4	6.35
MPSA-58-220	220	200	216	31.5	9.5

STYLE MPSA-59 THREE PIECE PISTON SEALS

This style is designed for two piece pistons. The seal is a molded Nitrile rubber element with bonded rubberized fabric reinforcements and two anti-extrusion polyacetal bearings.



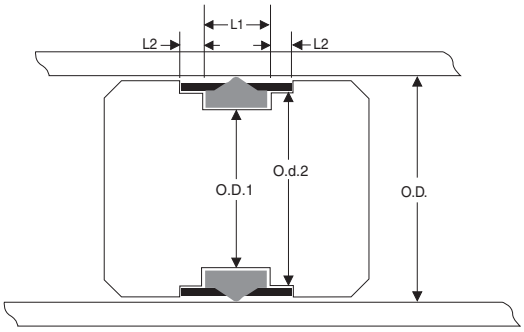
SEAL INFORMATION	
MATERIAL	70A NBR / FABRIC SEAL ACETAL BEARING / BACK-UP
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 5,000 PSI

Part Number	OD	OD1	Od2	L1	L2
MPSA-59-025	25	17.5	21.3	8.5	3
MPSA-59-030	30	17	26.5	15.4	6.35
MPSA-59-040	40	24	35.4	18	6.35
MPSA-59-050	50	34	45.4	18	6.35
MPSA-59-055	55	39	51.0	18	6.35
MPSA-59-060	60	44	55.4	18	6.35
MPSA-59-060A	60	44	56.0	20	6.35
MPSA-59-063	63	47	58.4	19	6.35
MPSA-59-065	65	50	60.4	18	6.35
MPSA-59-070	70	50	64.15	22	6.35
MPSA-59-070A	70	50	64.2	25	6.35
MPSA-59-075	75	55	69.15	22	6.35
MPSA-59-075A	75	55	69.2	25.4	6.35
MPSA-59-080	80	60	74.15	22	6.35
MPSA-59-080A	80	60	74.15	31	6.35
MPSA-59-080B	80	60	74.2	25.4	6.35
MPSA-59-085	85	65	79.15	22	6.35

Part Number	OD	OD1	Od2	L1	L2
MPSA-59-090	90	70	84.15	22	6.35
MPSA-59-100	100	80	94.15	25	6.35
MPSA-59-100A	100	75	93.15	22	6.35
MPSA-59-100C	100	80	94.2	25.4	6.35
MPSA-59-110	110	90	104.1	25	6.35
MPSA-59-120	120	100	114.1	25	6.35
MPSA-59-125	125	100	118.1	25	6.35
MPSA-59-125A	125	100	118.1	32.4	6.35
MPSA-59-130	130	105	123	25	6.35
MPSA-59-140	140	115	133	25.4	6.35
MPSA-59-145	145	120	138.3	25.4	6.35
MPSA-59-160	160	130	153	25.4	6.35
MPSA-59-170	170	140	163	25.4	6.35
MPSA-59-180	180	160	173	31.4	6.35
MPSA-59-210	210	180	202.7	32.4	6.35

STYLE MPSA-65 THREE PIECE PISTON SEALS

Consisting of a nitrile seal and two split acetal bearing, this assembly is used in light duty applications and can be installed on one or two piece pistons.



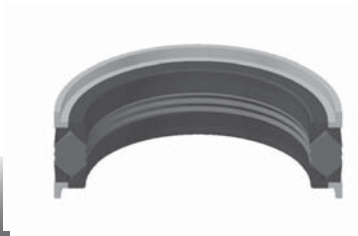
SEAL INFORMATION	
MATERIAL	NITRILE SEAL ACETAL BEARING
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 3,000 PSI

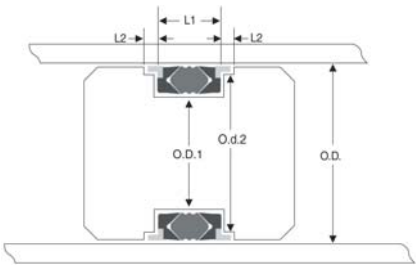
Part Number	OD	OD1	Od2	L1	L2
MPSA-65-025	25	17.5	21.3	8.5	3.25
MPSA-65-040	40	30	35.5	11	4
MPSA-65-050	50	40	45.5	11	4
MPSA-65-063	63	53	58.5	11	4

Part Number	OD	OD1	Od2	L1	L2
MPSA-65-080	80	70	75.5	11	4
MPSA-65-100	100	87	93.8	14	6
MPSA-65-125	125	112	118.8	14	6
MPSA-65-125B	125	112	107.4	14	6

STYLE MPSA-PDE PISTON SEALS

MPSDA-PDE is a double-acting piston seal designed for use on split pistons where severe vibration, shock, and high pressure exist. It consists of an NBR sealing element, two plastic support rings, and two acetal bearing rings.





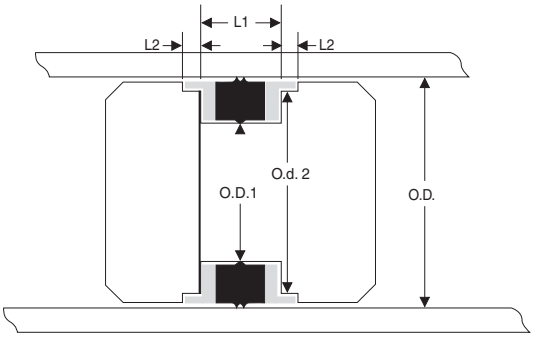
SEAL INFORMATION	
MATERIAL	NITRILE PLASTIC POM
TEMPERATURE RANGE	-22° TO +230° F
PRESSURE RANGE	0 TO 8,700 PSI

Part Number	A OD	B OD1	C Od2	D L1	E L2
MPSA-050-PDE	50	34	43.77	32	6.35
MPSA-070-PDE	70	50	62.62	35	9.52
MPSA-100-PDE	100	80	92.60	35	9.52
MPSA-110-PDE	110	85	101.82	45	12.70
MPSA-120-PDE	120	95	111.82	45	12.70
MPSA-150-PDE	150	125	141.72	45	12.70
MPSA-160-PDE	160	135	151.72	45	12.70

Part Number	A OD	B OD1	C Od2	D L1	E L2
MPSA-210-PDE	210	185	201.60	45	12.70
MPSA-220-PDE	220	195	211.60	45	12.70
MPSA-230-PDE	230	205	221.72	45	12.70
MPSA-240-PDE	240	215	231.72	45	12.70
MPSA-280-PDE	280	255	271.72	45	12.70
MPSA-300-PDE	300	275	291.72	45	12.70
MPSA-360-PDE	360	335	351.76	44.50	12.70

STYLE MNCF FIVE PIECE PISTON SEALS

For two piece pistons, this seal incorporates a nitrile / fabric seal with two split bearings.



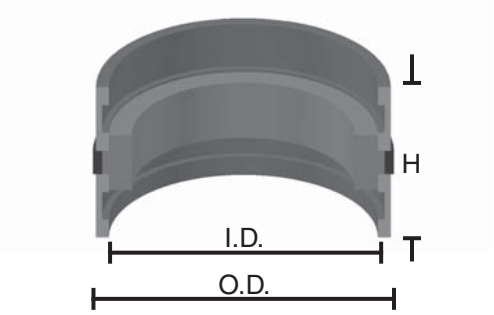
SEAL INFORMATION	
MATERIAL	NITRILE SEAL ACETAL BEARING
TEMPERATURE RANGE	-22° TO +190° F
PRESSURE RANGE	0 TO 5,000 PSI

Part Number	OD	OD1	Od2	L1	L2
MNCF-070	70	56	61.5	22	7.95
MNCF-080	80	66	71.5	22	7.95
MNCF-090	90	76	81.5	22	7.95

Part Number	OD	OD1	Od2	L1	L2
MNCF-100	100	86	91.5	22	9.95
MNCF-110	110	96	101.5	22	9.95
MNCF-120	120	106	111.5	22	9.95

STYLE PS-GKD PISTON SEALS

GKD consists of a bronze-filled PTFE cap energized by a urethane expander and guided with PTFE/bronze reinforced POM bearing rings. The standard piston construction permits use to 5200 psi pressure and the reinforced piston construction up to 9000 psi. These are genuine Hunger® parts.



PART NUMBERS

PS-GKD - 40 X 26 X 30

Type of Seal — O.D. — I.D. — Height

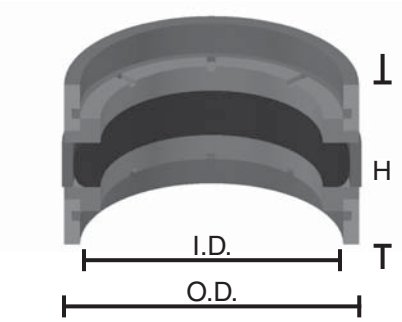
SEAL INFORMATION	
MATERIAL	BRONZE/PTFE URETHANE PTFE/ BRONZE/POM
TEMPERATURE RANGE	-22° TO +248° F
PRESSURE RANGE	0 TO 8,700 PSI

Part Number	I.D.	O.D.	H
PS-GKD 40X26X30	26	40	30
PS-GKD 45X31X30	31	45	30
PS-GKD 50X34X32	34	50	32
PS-GKD 60X44X32	44	60	32
PS-GKD 63X47X32	47	63	32
PS-GKD 65X49X32	49	65	32
PS-GKD 70X54X32	54	70	32
PS-GKD 75X59X32	59	75	32
PS-GKD 80X62X36	62	80	36
PS-GKD 85X67X36	67	85	36
PS-GKD 90X72X36	72	90	36
PS-GKD 115X97X36	97	115	36

Part Number	I.D.	O.D.	H
PS-GKD 120X102X36	102	120	36
PS-GKD 125X103X43	103	125	43
PS-GKD 130X108X43	108	130	43
PS-GKD 150X128X43	128	150	43
PS-GKD 160X138X43	138	160	43
PS-GKD 170X148X48	148	170	48
PS-GKD 180X158X48	158	180	48
PS-GKD 200X175X48	175	200	48
PS-GKD 220X195X58	195	220	58
PS-GKD 240X215X74	215	240	74
PS-GKD 250X225X74	225	250	74
PS-GKD 280X255X74	255	280	74

STYLE PS-GD1000K PISTON SEALS

PS-GD1000K consists of PTFE-bronze cap energized by a Nitrile expander, supported by plastic back-up rings and guided with PTFE/bronze reinforced POM bearing rings. The standard piston construction permits use to 5200 psi pressure and the reinforced piston construction up to 9000 psi. These are genuine Hunger® parts.



PART NUMBERS

PS-GD1000K - 40 X 26 X 32

Type of Seal | O.D. | I.D. | Height

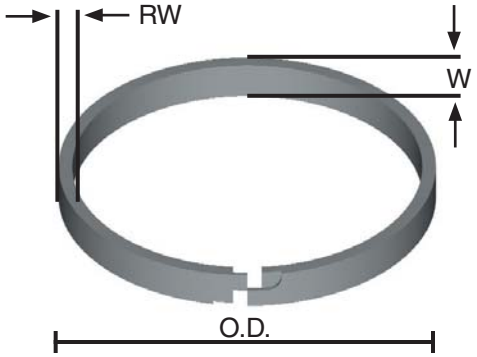
SEAL INFORMATION	
MATERIAL	BRZ-PTFE URETHANE FILLED POM
TEMPERATURE RANGE	-22° TO +248° F
PRESSURE RANGE	0 TO 9,000 PSI

Part Number	ID	OD	H
PS-GD1000K 40X26X32	26	40	32
PS-GD1000K 50X34X32	34	50	32
PS-GD1000K 50X34X39	34	50	39
PS-GD1000K 60X44X39	44	60	39
PS-GD1000K 63X47X39	47	63	39
PS-GD1000K 70X54X39	54	70	39
PS-GD1000K 70X54X32	54	70	32
PS-GD1000K 80X62X43	62	80	43
PS-GD1000K 90X72X43	72	90	43
PS-GD1000K 90X72X36	72	90	36
PS-GD1000K 100X82X36	82	100	36
PS-GD1000K 100X82X43	82	100	43
PS-GD1000K 110X92X43	92	110	43
PS-GD1000K 110X92X36	92	110	36
PS-GD1000K 115X97X43	97	115	43
PS-GD1000K 120X102X43	102	120	43
PS-GD1000K 125X103X43	103	125	43
PS-GD1000K 130X108X53	108	130	53
PS-GD1000K 140X118X53	118	140	53
PS-GD1000K 140X118X43	118	140	43
PS-GD1000K 150X128X53	128	150	53
PS-GD1000K 155X133X43	133	155	43
PS-GD1000K 160X138X43	138	160	43
PS-GD1000K 160X138X53	138	160	53

Part Number	ID	OD	H
PS-GD1000K 165X143X57	143	165	57
PS-GD1000K 170X148X57	148	170	57
PS-GD1000K 180X158X48	158	180	48
PS-GD1000K 180X158X57	158	180	57
PS-GD1000KS 185X160X48	160	185	48
PS-GD1000KS 190X165X48	165	190	48
PS-GD1000KS 200X175X48	175	200	48
PS-GD1000KS 200X175X64	175	200	64
PS-GD1000K 220X195X58	195	220	58
PS-GD1000K 220X195X71	195	220	71
PS-GD1000K 225X200X71	200	225	71
PS-GD1000K 230X205X85	205	230	85
PS-GD1000K 235X210X85	210	235	85
PS-GD1000K 240X215X85	215	240	85
PS-GD1000K 245X220X85	220	245	85
PS-GD1000K 250X225X85	225	250	85
PS-GD1000K 275X250X74	250	275	74
PS-GD1000K 280X255X85	255	280	85
PS-GD1000K 310X280X80	280	310	80
PS-GD1000K 320X290X80	290	320	80
PS-GD1000K 340X310X80	310	340	80
PS-GD1000K 350X320X80	320	350	80
PS-GD1000K 360X330X80	330	360	80

STYLE MSPR PISTON RING

Machined from iron, most employ an overlapped joint which allows the passing of ports.



SEAL INFORMATION	
MATERIAL	IRON
PART NUMBER	(Prefix) - (OD) X (W) X (RW)

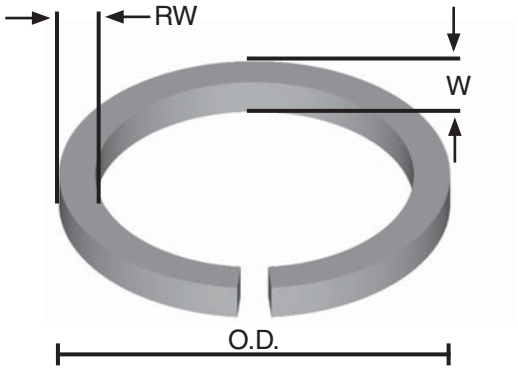
Part Number
MSPR-40X2X2
MSPR-45X2.5X2.2
MSPR-50X2X2
MSPR-50X2.5X2.3
MSPR-55X3X2.5

Part Number
MSPR-90X4X3.5
MSPR-95X4X4
MSPR-100X4X4.7
MSPR-105X4X4.4
MSPR-115X4X4.7

Part Number
MSPR-120X4X5
MSPR-130X4X5.4
MSPR-130X6.3X3.75
MSPR-135X4X5.4
MSPR-140X4X5.7

Part Number
MSPR-145X4X6
MSPR-150X4X6.3
MSPR-160X4X6.55
MSPR-170X4X7
MSPR-185X4X7.55

STYLE MBR PISTON RING

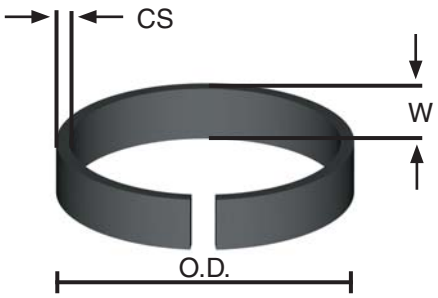


SEAL INFORMATION	
MATERIAL	BRONZE
PART NUMBER	(Prefix) - (OD) X (W) X (RW)

Part Number
MBR-70X6X6
MBR-80X6X6

STYLE MWR WEAR RINGS

This wear ring is molded from glass reinforced nylon. This style is highly recommended because of their wear rate and non-scoring properties and their ability to ingest metal chips.



Suffix:
SC = Scarf Cut Ring.

SEAL INFORMATION	
MATERIAL	NYLON
TEMPERATURE RANGE	-40° TO +275° F
COMPRESSIVE STRENGTH	26,000 PSI
TENSILE STRENGTH	25,000 PSI
PART NUMBER	(Prefix) - (OD) X (W) X (CS)

Part Number
MWR-28X10X1.5
MWR-32X4X1.5
MWR-35X8X2
MWR-35X9.5X1.5
MWR-35X15X1.5
MWR-35X15.9X1.5
MWR-38X24.4X1.53-SC
MWR-39X16X1.5
MWR-40X12X2
MWR-43X15.9X1.5
MWR-45X14.5X3
MWR-45X20X2
MWR-48X22.5X1.5
MWR-50X5X3
MWR-50X9.5X2
MWR-50X9.5X2.5
MWR-50X10X2
MWR-50X14.5X2
MWR-50X14.8X2.5
MWR-50X19X3.17
MWR-50X20X2.5
MWR-51X9.6X3
MWR-53X24.5X1.5
MWR-55X7.9X2.5
MWR-55X10.5X3
MWR-55X15.5X3
MWR-55X20X2.5
MWR-56X5X3.12
MWR-56X12.7X3
MWR-58X24.7X1.53-SC
MWR-60X12.7X3.17

Part Number
MWR-60X14.5X2.5
MWR-60X19X3.17
MWR-60X20X2.5
MWR-62X10X2
MWR-63X5X3.1
MWR-63X5.6X2.5
MWR-63X12X2-SC
MWR-63X20X2.5
MWR-65X10X2
MWR-65X10X2.5
MWR-65X15.5X3
MWR-68X25X1.5-SC
MWR-69X30X3
MWR-70X9.5X2.4-SC
MWR-70X10X2
MWR-70X10X3.12
MWR-70X14.5X3-SC
MWR-70X15.5X3
MWR-70X19.5X3
MWR-70X20X2.5
MWR-71X9.7X2.5
MWR-75X5.4X2.5-SC
MWR-75X9.5X3.15
MWR-75X10X2
MWR-75X12.7X3
MWR-75X15X2
MWR-75X25X3.15
MWR-75X29.8X3.2-SC
MWR-80X6X3.12
MWR-80X9.35X3.17-SC
MWR-80X10X2

Part Number
MWR-80X10X3.12
MWR-80X13X2.5
MWR-80X15.5X3
MWR-80X19.5X3
MWR-80X20X2.5
MWR-80X25X3
MWR-85X5.35X2.4-SC
MWR-85X6X2.5-SC
MWR-85X9.5X2.5
MWR-85X10X2-SC
MWR-85X14.5X3-SC
MWR-85X15X2.5-SC
MWR-85X25X2.5
MWR-85X25.4X3.17
MWR-85X29.9X3.25-SC
MWR-86X25X3
MWR-86X50X3
MWR-90X9.35X3.17-SC
MWR-90X10X4.5-SC
MWR-90X12.5X3
MWR-90X12.5X4.5
MWR-90X15X3.15
MWR-90X25X3
MWR-91X39.5X3
MWR-95X9.85X4.5-SC
MWR-95X12.5X4.5
MWR-95X15X2.5-SC
MWR-99X13.9X3.6-SL
MWR-100X5.9X3-SC
MWR-100X10X4.5-SC
MWR-100X15X3.15

Part Number
MWR-100X22.4X3-SC
MWR-100X25X3
MWR-100X28.3X3.24-SC
MWR-105X6X2.5-SC
MWR-105X10X4.5-SC
MWR-105X12.5X4.5
MWR-105X15X3-SC
MWR-105X24.5X3
MWR-105X25X3-SC
MWR-105X40X3
MWR-110X5.9X3-SC
MWR-110X7.9X2.5
MWR-110X7.9X3.12
MWR-110X9.5X2.5-SC
MWR-110X10X4.5-SC
MWR-110X12.5X2.75
MWR-110X12.5X4.5
MWR-110X15X3.1
MWR-110X22.4X3-SC
MWR-110X25X3
MWR-110X30X3-SC
MWR-115X5.8X4-SC
MWR-115X7.9X2.5
MWR-115X8X3.1-SC
MWR-115X9.5X2.5
MWR-115X10X4.5-SC
MWR-115X15X3
MWR-115X15X4.5
MWR-120X5.9X3-SC
MWR-120X7.9X2.5
MWR-120X10X4.5-SC

STYLE MWR WEAR RINGS

Part Number
MWR-120X15.45X3
MWR-120X15X3-SC
MWR-120X15X4.5
MWR-120X20X3.12-SC
MWR-120X22.4X3-SC
MWR-120X30X3
MWR-120X35X3-SC
MWR-120X40X3
MWR-125X7.9X2.5
MWR-125X10X3.1-SC
MWR-125X10X5-SC
MWR-125X15X3
MWR-125X15X5-SC
MWR-125X20X3
MWR-125X20X3.12
MWR-130X7.9X2.5
MWR-130X9.4X3.17-SC
MWR-130X10X5-SC
MWR-130X12X3
MWR-130X15X3.5-SC
MWR-130X15X5
MWR-130X18.1X3.5

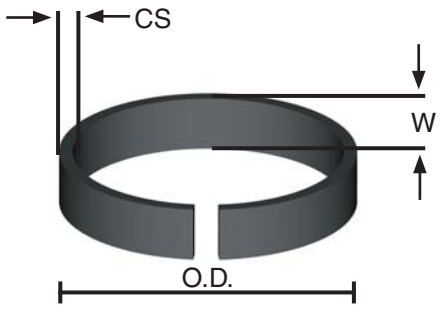
Part Number
MWR-130X30X3.5
MWR-130X40X3.5-SC
MWR-135X7.75X4-SC
MWR-135X7.9X2.5
MWR-135X9.85X3.85
MWR-135X10X5
MWR-135X14.8X3.5
MWR-135X15X5
MWR-135X18.3X3.5-SC
MWR-140X7.9X2.5
MWR-140X9.5X2.5
MWR-140X10X3.12
MWR-140X12.5X6-SC
MWR-140X17.5X6-SC
MWR-140X20X3.12
MWR-140X20.35X3.5
MWR-140X35X3.5
MWR-140X45X3.5-SC
MWR-145X9.5X2.5
MWR-145X9.7X3.85-SC
MWR-145X12.2X6-SC
MWR-145X14.8X3.5

Part Number
MWR-150X12.2X6-SC
MWR-150X14.8X3.5
MWR-150X17.5X6
MWR-150X20.9X3.5-SC
MWR-150X35X3.5
MWR-150X45X3.5-SC
MWR-160X15X6-SC
MWR-160X20X3.12
MWR-160X20X3.5
MWR-160X20X6
MWR-160X20.3X3.5-SC
MWR-160X40X3.5
MWR-160X45X3.5-SC
MWR-170X9.35X4-SC
MWR-170X20X6-SC
MWR-170X25X3.8-SC
MWR-170X50X4-SC
MWR-180X20X3
MWR-180X22.5X4
MWR-180X28.2X4-SC
MWR-180X45X4
MWR-180X55X4-SC

Part Number
MWR-185X22.5X6
WWR-190X9.2X4-SC
MWR-190X28.5X4-SC
MWR-190X45X4
MWR-190X55X4-SC
MWR-200X20X3.12
MWR-200X22X4
MWR-200X22.5X4
MWR-200X22.5X6
MWR-200X45X4
MWR-200X60X3.25-SC
MWR-220X60X3.25-SC
MWR-224X45X4
MWR-225X25X4
MWR-225X25X6
MWR-225X50X4
MWR-250X27.5X6
MWR-250X55X4
MWR-260X27.5X6
MWR-280X60X4
MWR-300X30X6

STYLE MWRB WEAR RINGS

Fabricated from fine woven fabric and phenolic resins, this wear ring is strong yet light weight with an excellent wear rate.



Suffix:
SC = Scarf Cut Ring.

SEAL INFORMATION	
MATERIAL	PHENOLIC
TEMPERATURE RANGE	-40° TO +250° F
COMPRESSIVE STRENGTH	34,000 PSI
TENSILE STRENGTH	10,600 PSI
PART NUMBER	(Prefix) - (OD) X (W) X (CS)

Part Number
MWRB-30X10X2.5-SC
MWRB-35X10X2
MWRB-35X16X1.5-SC
MWRB-36X9.5X2-SC
MWRB-36X20X2
MWRB-37X10X2.5-SC
MWRB-39X25X2
MWRB-40X5.5X2.5-SC
MWRB-40X9.5X2.5
MWRB-40X9.7X2-SC
MWRB-41X9.7X2.5-SC
MWRB-44X9.7X2
MWRB-44X40X2
MWRB-45X14.5X3
MWRB-45X15X2.5-SC
MWRB-45X20X2.5
MWRB-46X20X3
MWRB-49X8X2-SC
MWRB-49X25X2
MWRB-50X5X2.5
MWRB-50X6X2.5-SC
MWRB-50X6X5-SC
MWRB-50X6.8X2.5
MWRB-50X9X2.5
MWRB-50X9.7X2-SC
MWRB-50X9.7X2.5
MWRB-50X10X1.9-SC
MWRB-50X10X2.5
MWRB-50X12.6X3.3

Part Number
MWRB-50X14.5X2
MWRB-50X15X2.5
MWRB-50X20X2.5
MWRB-50X30X2.5-SC
MWRB-51X22.5X3
MWRB-55X7.9X2.5
MWRB-55X9.7X2.5
MWRB-55X10X2-SC
MWRB-55X14.7X2.5-SC
MWRB-55X15X2.5
MWRB-55X15.5X3
MWRB-55X20X2.5
MWRB-55X29.5X2.5-SC
MWRB-55X30X2.5-SC
MWRB-55X35X2.5-SC
MWRB-55X5.4X2.5-SC
MWRB-55X9.5X2.5-SC
MWRB-56X25X3
MWRB-58X30X4-SC
MWRB-60X7X2.5-SC
MWRB-60X9.5X2.5
MWRB-60X9.7X2.5-SC
MWRB-60X10X2-SC
MWRB-60X10X2.5
MWRB-60X12.7X3
MWRB-60X14.5X2.5-SC
MWRB-60X15X2.5-SC
MWRB-60X18X2.5-SC
MWRB-60X20X2.5

Part Number
MWRB-62X25X3
MWRB-63X5.6X2.5-SC
MWRB-63X9.7X2.5
MWRB-63X15X2.5
MWRB-65X15X2.5-SC
MWRB-65X15.5X3
MWRB-65X19.7X2.5
MWRB-65X25X2.5
MWRB-68X9.7X2.5
MWRB-68X25X2.5-SC
MWRB-69X31.5X3-SC
MWRB-70X5.3X2.5-SC
MWRB-70X6.8X2.5-SC
MWRB-70X9.5X2.5-SC
MWRB-70X10X2-SC
MWRB-70X10X2.5
MWRB-70X12X2.5
MWRB-70X12.4X3
MWRB-70X14.5X2.5
MWRB-70X15X2.5
MWRB-70X15X3-SC
MWRB-70X15.5X3
MWRB-70X19.5X3
MWRB-70X20X2.5
MWRB-70X30X2.5
MWRB-70X35X2.5-SC
MWRB-75X9.5X2.5-SC
MWRB-75X10X2.5
MWRB-75X14.5X2.5

STYLE MWRB WEAR RINGS

Part Number
MWRB-75X15X2.5
MWRB-75X19.6X3-SC
MWRB-75X20X2.5-SC
MWRB-75X30X2.5
MWRB-75X45X2.5-SC
MWRB-75X50X2.5-SC
MWRB-76X31.5X3.12-SC
MWRB-76X35X3-SC
MWRB-80X9.7X2.5-SC
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MWRB-80X15X3-SC
MWRB-80X15.5X3
MWRB-80X15.7X3-SC
MWRB-80X19.5X3
MWRB-80X20X2.5
MWRB-80X20X2.5-SC
MWRB-80X24.6X3-SC
MWRB-85X5.5X2.5
MWRB-85X9.7X2.5-SC
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MWRB-85X15X4-SC
MWRB-85X19.7X2.5
MWRB-85X20X3-SC
MWRB-85X25X2.5-SC
MWRB-85X25X3-SC
MWRB-85X35X2.5
MWRB-86X40X3
MWRB-90X5X2.5
MWRB-90X6X4-SC
MWRB-90X9.7X2.5-SC
MWRB-90X8X2.5-SC
MWRB-90X10X3
MWRB-90X12.5X3
MWRB-90X12.5X4.5
MWRB-90X15X2-SC
MWRB-90X15X2.5-SC
MWRB-90X15X4-SC

Part Number
MWRB-90X24.6X3-SC
MWRB-90X25X3
MWRB-95X6X2.5
MWRB-95X7.9X2.5
MWRB-95X9.5X2.5
MWRB-95X9.7X2.5
MWRB-95X9.7X4-SC
MWRB-95X10X2-SC
MWRB-95X12.4X3-SC
MWRB-95X12.5X3-SC
MWRB-95X14.8X2.5
MWRB-95X14.8X4-SC
MWRB-95X15X2.5
MWRB-96X29X3-SC
MWRB-100X5.9X4-SC
MWRB-100X6X2.5-SC
MWRB-100X7.9X2.5
MWRB-100X9.5X2.5
MWRB-100X9.6X2.5
MWRB-100X10X3-SC
MWRB-100X12.5X3
MWRB-100X12.5X4.5-SC
MWRB-100X12.8X2.5
MWRB-100x14.7x2.5-SC
MWRB-100X14.8X2.5
MWRB-100X14.8X3
MWRB-100X20X3-SC
MWRB-100X25X2.5-SC
MWRB-100X25X3
MWRB-100X25X3-SC
MWRB-100X30X3
MWRB-100X30X3-SC
MWRB-100X40X3.12
MWRB-101X39.5X3
MWRB-104X25X4
MWRB-105X6X2.5
MWRB-105X7.9X2.5
MWRB-105X9.5X2.5
MWRB-105X9.7X3-SC
MWRB-105X14.8X2.5
MWRB-105X15X3-SC
MWRB-105X24.5X3

Part Number
MWRB-105X24.5X4
MWRB-110X5.9X4-SC
MWRB-110X6X2.5
MWRB-110X7.9X2.5
MWRB-110X9.5X2.5
MWRB-110X12.5X3
MWRB-110X14.8X2.5
MWRB-110X15X2.5-SC
MWRB-110X15X3-SC
MWRB-110X15X4
MWRB-110X15X5-SC
MWRB-110X25X3
MWRB-110X30X3
MWRB-113X20X4-SC
MWRB-115X7.9X2.5
MWRB-115X9.5X2.5
MWRB-115X9.7X3-SC
MWRB-115X10X4.5-SC
MWRB-115X14.8X2.5
MWRB-115X15X3-SC
MWRB-115X15X4-SC
MWRB-115X15X4.5
MWRB-115X24.7X4
MWRB-118X30X4-SC
MWRB-120X5.9X4-SC
MWRB-120X7.9X2.5
MWRB-120X9.5X2.5
MWRB-120X9.7X3-SC
MWRB-120X12.4X3
MWRB-120X14.8X2.5
MWRB-120X14.8X3
MWRB-120X14.8X3.5
MWRB-120X15X4.5
MWRB-120X15X2.5
MWRB-120X15X5-SC
MWRB-120X25X2.5-SC
MWRB-120X25X3
MWRB-120X30X3
MWRB-120X30X3.5
MWRB-125X7.9X2.5
MWRB-125X9.5X2.5
MWRB-125X9.7X3-SC

STYLE MWRB WEAR RINGS

Part Number
MWRB-125X9.9X3-SC
MWRB-125X14.8X2.5
MWRB-125X14.8X3
MWRB-125X14.8X3.5
MWRB-125X15X5-SC
MWRB-125X16.8X3.5
MWRB-125X25X2.5-SC
MWRB-127X9.5X3
MWRB-128X30X4-SC
MWRB-130X7.9X2.5
MWRB-130X9.5X2.5
MWRB-130X10X3.5-SC
MWRB-130X14.8X2.5
MWRB-130X14.8X3.5
MWRB-130X15X2.5-SC
MWRB-130X15X5
MWRB-130X25X2.5-SC
MWRB-130X30X3
MWRB-130X30X3.5
MWRB-130X30X5-SC
MWRB-135X7.9X2.5
MWRB-135X9.5X2.5
MWRB-135X9.8X3.5-SC
MWRB-135X14.8X2.5
MWRB-135X14.8X3.5
MWRB-135X15X5
MWRB-140X7.9X2.5
MWRB-140X9.5X2.5
MWRB-140X9.5X2.5-SC
MWRB-140X10X3.5-SC
MWRB-140X12X3-SC
MWRB-140X14.8X2.5
MWRB-140X14.8X3.5
MWRB-140X17.5X6
MWRB-140X20X3.5
MWRB-140X20X4
MWRB-140X30X3-SC
MWRB-140X35X3.5
MWRB-140X40X3.5
MWRB-140X50X3-SC
MWRB-145X7.9X2.5
MWRB-145X9.5X2.5

Part Number
MWRB-145X9.5X3.5
MWRB-145X14.8X2.5
MWRB-145X14.8X3.5
MWRB-145X20X3.5-SC
MWRB-145X25X2.5-SC
MWRB-150X7.8X4-SC
MWRB-150X7.9X2.5
MWRB-150X9.5X2.5
MWRB-150X14.8X2.5
MWRB-150X14.8X3.5
MWRB-150X20X2.5-SC
MWRB-150X20X3-SC
MWRB-150X20X3.5-SC
MWRB-150X30X3.5-SC
MWRB-150X35X3.5
MWRB-150X40X3.5
MWRB-150X42X3-SC
MWRB-155X7.9X2.5
MWRB-155X9.5X2.5
MWRB-150X12.5X2.5-SC
MWRB-155X14.8X2.5
MWRB-158X23X5
MWRB-160X7.9X2.5
MWRB-160X9.1X4
MWRB-160X9.5X2.5
MWRB-160X12.5X2.5-SC
MWRB-160X14.8X2.5
MWRB-160X14.8X3.5
MWRB-160X20X3-SC
MWRB-160X20X3.5
MWRB-160X20X6
MWRB-160X24.5X2.5
MWRB-160X25X2.5
MWRB-160X35X2.5
MWRB-160X35X3-SC
MWRB-160X40X3.5
MWRB-160X50X3-SC
MWRB-160X24.5X2.5
MWRB-165X9.5X2.5
MWRB-165X9.7X3-SC
MWRB-165X14.8X2.5
MWRB-165X14.8X3.5

Part Number
MWRB-165X15X4
MWRB-165X20X4
MWRB-165X30X3-SC
MWRB-170X9.2X4-SC
MWRB-170X9.5X2.5
MWRB-170X9.5X3-SC
MWRB-170X14.8X2.5
MWRB-170X14.8X3.5
MWRB-170X14.8X4-SC
MWRB-170X20X3.5-SC
MWRB-170X25X4-SC
MWRB-170X40X3.5
MWRB-175X25X2.5-SC
MWRB-175X25X4-SC
MWRB-175X40X4
MWRB-180X7.9X2.5
MWRB-180X9.5X2.5
MWRB-180X14.8X2.5
MWRB-180X14.8X3.5
MWRB-180X22X4
MWRB-180X22.5X6
MWRB-180X25X2.5
MWRB-180X40X4
MWRB-180X45X4
MWRB-180X55X4
MWRB-185X20X6-SC
MWRB-185X22.5X6
MWRB-185X32X3
MWRB-186X32X3
MWRB-190X14.8X3-SC
MWRB-190X15X2.5
MWRB-190X22.5X4-SC
MWRB-190X25X4-SC
MWRB-190X25X5-SC
MWRB-200X9X4-SC
MWRB-200X9.7X2.5-SC
MWRB-200X15X4-SC
MWRB-200X22X4
MWRB-200X25X2.5
MWRB-200X25X3.5-SC
MWRB-200X45X4
MWRB-225X25X4

STYLE MWRB WEAR RINGS

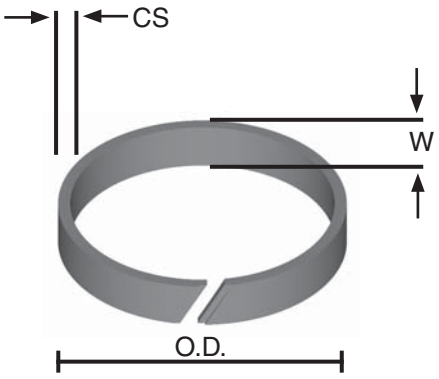
Part Number
MWRB-225X45X4
MWRB-225X50X4
MWRB-230X28X4.5-SC

Part Number
MWRB-250X9.7X4-SC
MWRB-250X25X2.5
MWRB-250X27.5X6

Part Number
MWRB-280X30X6
MWRB-300X25X2.5
MWRB-400X25X2.5

STYLE MWRT WEAR RINGS

Made from filled PTFE, these rings are suitable for light duty bearing service but are more often installed on the outboard ends of a piston to catch metal particles to protect the seal area.



SEAL INFORMATION	
MATERIAL	FILLED PTFE
TEMPERATURE RANGE	-100° TO +550° F
COMPRESSIVE STRENGTH	1,700 PSI
TENSILE STRENGTH	2,200 PSI
PART NUMBER	(Prefix) - (OD) X (W) X (CS)

Part Number
MWRT-55X11.8X4
MWRT-65X9.5X2.5
MWRT-70X5.5X2.5-B4
MWRT-70X9.6X2.5
MWRT-70X19.5X2.5
MWRT-75X11.8X4
MWRT-75X19.5X2.5
MWRT-80X4X4-SC
MWRT-80X6X4-SC
MWRT-80X11.8X4
MWRT-85X4X4-SC
MWRT-85X19.5X2.5
MWRT-90X4.4X3.8
MWRT-90X6X4
MWRT-90X10X2.5

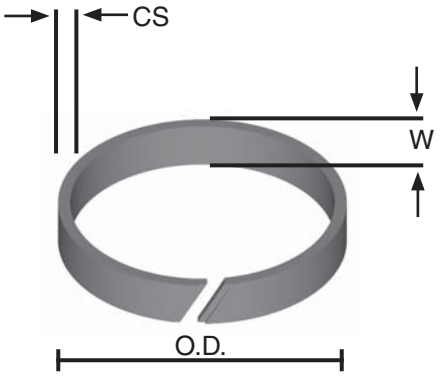
Part Number
MWRT-90X14.8X4
MWRT-95X6X4
MWRT-100X5.9X4-B4
MWRT-100X14.8X4
MWRT-105X6X4
MWRT-110X5.9X4
MWRT-110X5.9X4-B4
MWRT-110X14.8X4
MWRT-115X6X4
MWRT-115X8X4
MWRT-120X8X4
MWRT-125X6X4
MWRT-125X8X4
MWRT-125X9.7X4
MWRT-130X4.75X4

Part Number
MWRT-130X8X4
MWRT-130X11.6X2.5
MWRT-135X6X4
MWRT-135X8X4
MWRT-135X9.7X4
MWRT-140X8X4
MWRT-140X9.7X4
MWRT-145X6X4
MWRT-145X7.9X4
MWRT-145X7.9X4.5
MWRT-145X9.7X4
MWRT-150X6X4
MWRT-150X6X4-B4
MWRT-150X8X4
MWRT-150X9.7X4

Part Number
MWRT-160X6X4-B4
MWRT-160X9.7X4
MWRT-165X6X4
MWRT-165X9.7X4
MWRT-170X6X4-SC
MWRT-170X8X4-B4
MWRT-170X9.7X4
MWRT-175X6X4
MWRT-190X8X4
MWRT-190X8.9X4-B4
MWRT-190X9.7X4
MWRT-200X8.9X4-B4
MWRT-220X8.9X4-B4

STYLE MWRA SC WEAR RINGS

The style MWRA wear ring is molded from acetal and has excellent wear characteristics.



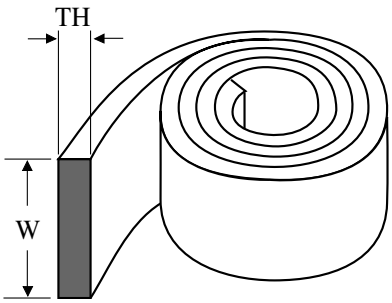
SEAL INFORMATION	
MATERIAL	ACETAL
TEMPERATURE RANGE	- 40° TO +230° F
PART NUMBER	(Prefix) - (OD) X (H) X (CS)

Part Number	O.D.	W	C/S
MWRA-29X9.5X2-SC	45	9.5	2
MWRA-45X9.5X2-SC	50	9.7	2.5
MWRA-50X9.7X2.5-SC	61	9.5	3
MWRA-61X9.5X3-SC	65	6.2	2.5
MWRA-65X6.2X2.5-SC	65	9.7	2.5
MWRA-65X9.7X2.5-SC	70	6.2	2.5

Part Number	O.D.	W	C/S
MWRA-70X6.2X2.5-SC	80	6.2	2.5
MWRA-80X6.2X2.5-SC	80	9.7	2.5
MWRA-80X9.7X2.5-SC	95	6.2	2.5
MWRA-95X6.2X2.5-SC	97	9.7	2.5
MWRA-97X9.7X2.5-SC	100	6.2	2.5
MWRA-100X6.2X2.5-SC	29	9.5	2

STYLE MGF FLEXIBLE GUIDE BEARINGS

Fabricated from woven fabric and polyester resins, this material can be cut to length to fit rod or piston grooves.



SEAL INFORMATION	
MATERIAL	FABRIC REINFORCED POLYESTER
TEMPERATURE RANGE	-30° TO +265° F
COMPRESSIVE STRENGTH	24,000 PSI
PART NUMBER	(Prefix) - (W) X (TH)

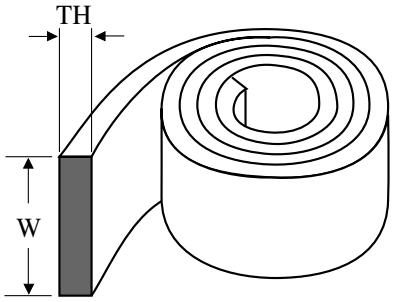
Part Number
MGF-5.6X2.5
MGF-9.7X2.5

Part Number
MGF-13X2.5
MGF-15X2.5

Part Number
MGF-20X2.5
MGF-25X2.5

STYLE MGB FLEXIBLE GUIDE BEARINGS

Manufactured to a large variety of widths and thicknesses, this material affords low friction capabilities but with low compressive strength. The material also has the capability of ingesting metal particles and keeping them from the seal area.



SEAL INFORMATION	
MATERIAL	60% BRONZE FILLED PTFE
TEMPERATURE RANGE	-50° TO +390° F
COMPRESSIVE STRENGTH	1,700 PSI
PART NUMBER	(Prefix) - (W) X (TH)

Part Number
MGB-4X2.5
MGB-5.5X2.5
MGB-6X4
MGB-6.1X2.5
MGB-7.9X2.5

Part Number
MGB-7.9X4
MGB-8X2
MGB-8.9X4*
MGB-9.5X2.5
MGB-9.5X4

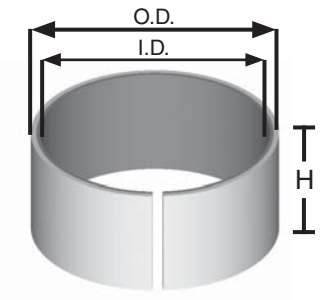
Part Number
MGB-10X2
MGB-12X4
MGB-14X3.5
MGB-14.5X4
MGB-15X2

Part Number
MGB-15X2.5
MGB-20X2
MGB-20X2.5
MGB-30X2.5
MGB-50X2

* 40% Bronze Filled PTFE.

STYLE MDU ROD BUSHINGS

With a steel body, bronze liner, and PTFE / lead overlay, these bushings possess excellent wearability and tremendous compressive strength.



Suffix:
C - Copper O.D. finish, electroplated

SEAL INFORMATION	
MATERIAL	BRONZE LINING PTFE/LEAD OVERLAY STEEL BACKING
TEMPERATURE RANGE	-325° TO +536° F
COMPRESSIVE STRENGTH	44,000 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MDU-6X8X6
MDU-16X18X15
MDU-20X23X15
MDU-20X23X25
MDU-20X23X40
MDU-22X25X20
MDU-25X28X15
MDU-25X28X20
MDU-25X28X25
MDU-25X28X30
MDU-25X28X40
MDU-30X34X12
MDU-30X34X25
MDU-30X34X40
MDU-32X36X40
MDU-35X39X25
MDU-35X39X50
MDU-38X42X32
MDU-40X44X25
MDU-40X44X30
MDU-40X44X40
MDU-40X44X50
MDU-45X50X20
MDU-45X50X30
MDU-45X50X50
MDU-50X55X12
MDU-50X55X25
MDU-50X55X30
MDU-50X55X40
MDU-50X55X50
MDU-50X55X60
MDU-55X60X12
MDU-55X60X25
MDU-55X60X30

Part Number
MDU-55X60X30-C
MDU-55X60X35-C
MDU-55X60X40
MDU-55X60X50
MDU-55X60X60
MDU-60X65X15
MDU-60X65X30
MDU-60X65X35
MDU-60X65X35-C
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MDU-60X65X50
MDU-60X65X70
MDU-65X70X15
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MDU-70X75X20
MDU-70X75X30
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MDU-75X80X40
MDU-75X80X40-C
MDU-75X80X50
MDU-75X80X60
MDU-80X85X15
MDU-80X85X30
MDU-80X85X40
MDU-80X85X40-C
MDU-80X85X50

Part Number
MDU-80X85X60
MDU-85X90X30
MDU-85X90X40
MDU-85X90X50
MDU-85X90X70
MDU-90X95X20
MDU-90X95X30
MDU-90X95X30-C
MDU-90X95X35
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MDU-90X95X40-C
MDU-90X95X45
MDU-90X95X60
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MDU-100X105X20
MDU-100X105X30
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MDU-105X110X50
MDU-105X110X60
MDU-110X115X20
MDU-110X115X35
MDU-110X115X40
MDU-110X115X45

Part Number
MDU-110X115X50-C
MDU-110X115X50
MDU-110X115X55
MDU-110X115X60
MDU-115X120X35
MDU-115X120X45
MDU-115X120X50
MDU-120X125X20
MDU-120X125X35
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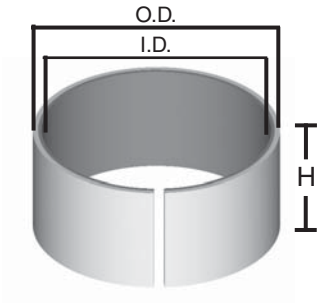
MDU-140X145X50
MDU-140X145X55
MDU-140X145X60
MDU-140X145X70
MDU-150X155X40
MDU-150X155X60
MDU-160X165X40
MDU-160X165X50
MDU-180X185X90

STYLE MRB ROD BUSHINGS

Molded from a sturdy nylon material, these bushings are found chiefly in Ford metric cylinders.

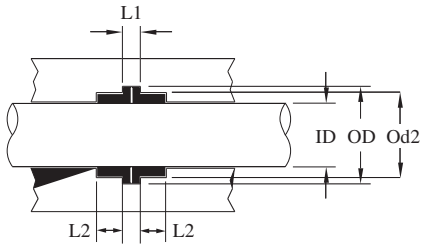


Part Number
MRB-50X56X18
MRB-50X56X28
MRB-56X62X28
MRB-63X69X28

SEAL INFORMATION	
MATERIAL	NYLON
TEMPERATURE RANGE	-40° TO +250° F
COMPRESSIVE STRENGTH	25,000 PSI
TENSILE STRENGTH	27,000 PSI
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

STYLE MWRA-L ROD BUSHINGS

Primarily a British design, this ring can be installed one or two in a groove. Excellent wear characteristics.



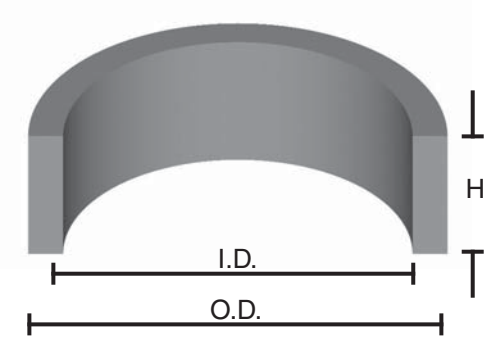
SEAL INFORMATION	
MATERIAL	ACETAL
TEMPERATURE RANGE	-40° TO +230° F
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number	ID	OD	Od2	L1	L2
MWRA-45X53X18-L	45	53	18		
MWRA-60X68X18-L	60	68	18		
MWRA-60X71X16-L	60	71	66	10	11
MWRA-75X83X18-L	75	83	18		
MWRA-78X89X16-L	78	89	84	10	11
MWRA-92X100X18-L	92	100	18		

Part Number	ID	OD	Od2	L1	L2
MWRA-99X110X16-L	99	110	105	10	11
MWRA-120X131X16-L	120	131	126	10	11
MWRA-141X152X16-L	141	152	147	10	11
MWRA-162X173X16-L	162	173	168	10	11
MWRA-183X194X16-L	183	194	189	10	11
MWRA-207X218X16-L	207	218	213	10	11

STYLE MBB PISTON BUSHINGS

Installed as 2 halves in a closed groove, these bushings are found in many Japanese lift trucks.

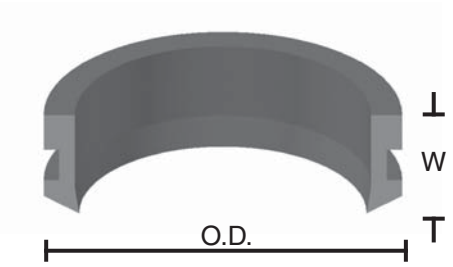


SEAL INFORMATION	
MATERIAL	660 BRONZE
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MBB-60X80X19.6
MBB-70X90X24.6
MBB-85X105X24.6

STYLE WRFAI WEAR RINGS

WRFAI split bearings are manufactured of an extremely abrasion-resistant and low-friction POM-PTFE Bronze compound. The excellent dry-running properties allow installation behind the primary rod seal. The WRFAI utilizes a scraper edge for integrated wiping function and contaminant removal. These are genuine Hunger® parts.



PART NUMBERS

WRFAI - 22 X 19

Type of Seal — Outside Diameter — Width

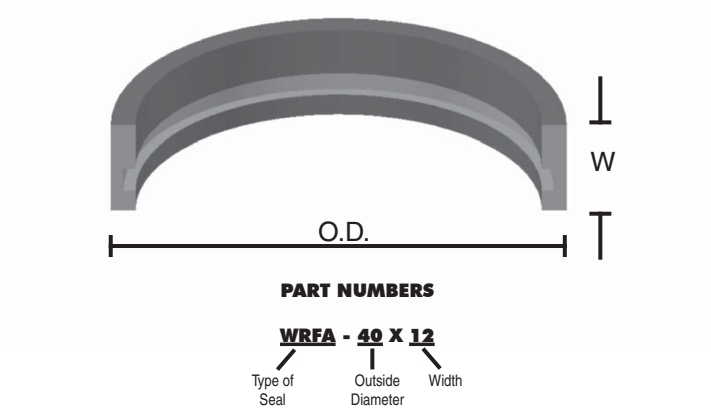
SEAL INFORMATION	
MATERIAL	POM - PTFE / BZ
TEMPERATURE RANGE	-65° TO +248° F
PART NUMBER	(Prefix) - (ID) X (W)

Part Number	OD	W
WRFAI 22X19	22	19
WRFAI 25X19	25	19
WRFAI 28X19	28	19
WRFAI 32X19	32	19
WRFAI 35X19	35	19
WRFAI 36X19	36	19
WRFAI 40X19	40	19
WRFAI 45X19	45	19
WRFAI 50X19	50	19
WRFAI 55X19	55	19
WRFAI 56X19	56	19
WRFAI 60X24	60	24
WRFAI 63X24	63	24
WRFAI 65X24	65	24
WRFAI 70X24	70	24
WRFAI 75X24	75	24
WRFAI 80X24	80	24
WRFAI 90X24	90	24
WRFAI 100X24	100	24

Part Number	OD	W
WRFAI 110X24	110	24
WRFAI 115X24	115	24
WRFAI 120X24	120	24
WRFAI 125X24	125	24
WRFAI 130X24	130	24
WRFAI 140X24	140	24
WRFAI 150X35	150	35
WRFAI 160X35	160	35
WRFAI 180X35	180	35
WRFAI 190X35	190	35
WRFAI 200X35	200	35
WRFAI 220X35	220	35
WRFAI 225X35	225	35
WRFAI 240X35	240	35
WRFAI 250X35	250	35
WRFAI 260X35	260	35
WRFAI 270X35	270	35
WRFAI 290X35	290	35

STYLE WRFA WEAR RINGS

WRFA bearings are manufactured of an extremely abrasion-resistant and low-friction POM-PTFE Bronze compound. Rings are split for easy installation and multiple rings may be arranged adjacent to each other with joints staggered. These are genuine Hunger® parts.



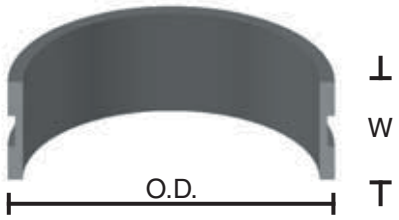
SEAL INFORMATION	
MATERIAL	POM - PTFE / BZ
TEMPERATURE RANGE	-65 TO +248° F
PART NUMBER	(Prefix) - (OD) X (W)

Part Number	OD	W
WRFA 40X12	40	12
WRFA 50X12	50	12
WRFA 60X12	60	12
WRFA 60X8.5	60	8.5
WRFA 63X12	63	12
WRFA 63X8.5	63	8.5
WRFA 70X12	70	12
WRFA 70X8.5	70	8.5
WRFA 75X12	75	12
WRFA 80X10.5	80	10.5
WRFA 80X14	80	14
WRFA 90X10.5	90	10.5
WRFA 90X14	90	14
WRFA 100X10.6	100	10.6
WRFA 100X14	100	14
WRFA 105X14	105	14
WRFA 110X10.5	110	10.5
WRFA 110X14	110	14
WRFA 115X14	115	14
WRFA 120X10.5	120	10.5
WRFA 120X14	120	14
WRFA 125X12.5	125	12.5
WRFA 125X17.5	125	17.5
WRFA 130X12.6	130	12.6
WRFA 130X17.5	130	17.5
WRFA 140X12.6	140	12.6
WRFA 140X17.5	140	17.5
WRFA 150X17.5	150	17.5
WRFA 155X17.5	155	17.5
WRFA 160X12.6	160	12.6

Part Number	OD	W
WRFA 160X17.5	160	17.5
WRFA 165X20	165	20
WRFA 170X17	170	17
WRFA 180X15.6	180	15.6
WRFA 180X20	180	20
WRFA 180X24	180	24
WRFA 190X12	190	12
WRFA 190X20	190	20
WRFA 200X12	200	12
WRFA 200X20	200	20
WRFA 220X18.5	220	18.5
WRFA 220X25	220	25
WRFA 225X18.5	225	18.5
WRFA 225X25	225	25
WRFA 230X25	230	25
WRFA 240X27.5	240	27.5
WRFA 240X33	240	33
WRFA 250X27.5	250	27.5
WRFA 250X33	250	33
WRFA 275X33	275	33
WRFA 280X27.5	280	27.5
WRFA 280X33	280	33
WRFA 300X33	300	33
WRFA 310X35	310	35
WRFA 320X35	320	35
WRFA 340X35	340	35
WRFA 380X35	380	35
WRFA 400X35	400	35
WRFA 480X35	480	35

STYLE WRFI WEAR RINGS

WRFI bearings are manufactured of an extremely abrasion-resistant and low-friction POM-PTFE Bronze compound. The excellent dry-running properties allow installation behind the primary rod-seal. These are genuine Hunger® parts.



PART NUMBERS

WRFI - 22 X 19

Type of Seal | Outside Diameter | Width

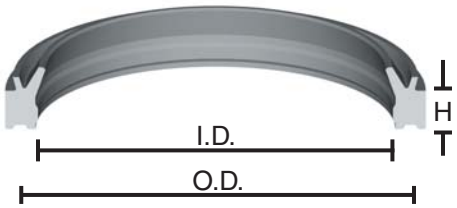
SEAL INFORMATION	
MATERIAL	POM - PTFE / BZ
TEMPERATURE RANGE	-65° TO +248° F
PART NUMBER	(Prefix) - (OD) X (W)

Part Number	OD	W
WRFI 22X19	22	19
WRFI 25X19	25	19
WRFI 28X19	28	19
WRFI 30X19	30	19
WRFI 35X19	35	19
WRFI 36X19	36	19
WRFI 40X19	40	19
WRFI 45X19	45	19
WRFI 50X19	50	19
WRFI 55X19	55	19
WRFI 56X19	56	19
WRFI 60X24	60	24
WRFI 63X24	63	24
WRFI 70X24	70	24
WRFI 80X24	80	24
WRFI 90X24	90	24
WRFI 95X24	95	24
WRFI 100X24	100	24
WRFI 105X24	105	24
WRFI 110X24	110	24

Part Number	OD	W
WRFI 115X24	115	24
WRFI 120X24	120	24
WRFI 125X24	125	24
WRFI 130X24	130	24
WRFI 140X24	140	24
WRFI 145X24	145	24
WRFI 150X35	150	35
WRFI 160X24	160	24
WRFI 160X35	160	35
WRFI 180X24	180	24
WRFI 180X35	180	35
WRFI 185X35	185	35
WRFI 190X35	190	35
WRFI 200X35	200	35
WRFI 220X35	220	35
WRFI 225X35	225	35
WRFI 240X35	240	35
WRFI 260X35	260	35
WRFI 270X35	270	35

STYLE MSWP SNAP-IN WIPERS

This wiper features a lip on top of the shoulder which makes contact with the throat of the groove. This serves to prevent contaminants from entering the groove.



SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-30° TO +220° F
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MSWP-20X28X4
MSWP-22X30X4
MSWP-25X33X4
MSWP-30X38X4
MSWP-32X40X4
MSWP-32X40X5
MSWP-35X43X4

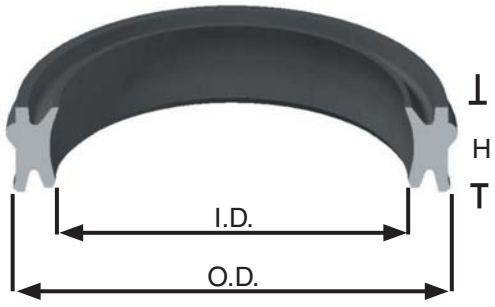
Part Number
MSWP-36X44X4
MSWP-40X48X4
MSWP-40X48X5
MSWP-45X53X4
MSWP-50X58X4
MSWP-50X58X5
MSWP-55X63X4

Part Number
MSWP-56X64X4
MSWP-60X68X4
MSWP-63X71X4
MSWP-65X73X4
MSWP-70X78X4
MSWP-70X80X6.3
MSWP-75X83X4

Part Number
MSWP-80X88X4
MSWP-80X90X6.3
MSWP-85X93X4
MSWP-90X98X4
MSWP-100X108X4
MSWP-140X152X5.5

STYLE MK51 WIPER

MK51 is a polyurethane pneumatic combo seal that is used as both a rod seal and wiper.

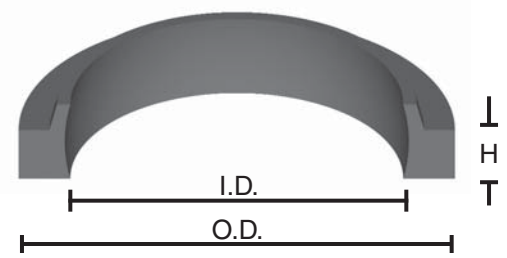


SEAL INFORMATION	
MATERIAL	92A POLYURETHANE
TEMPERATURE RANGE	-22° F, +200° F
MAXIMUM PRESSURE	230 PSI
SPEED	3 FT/SEC
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number	ID	OD	H
MK51-12X22X10.4	12	22	13
MK51-16X26X10.4	16	26	13
MK51-18X28X10.4	18	28	13
MK51-20X30X10.4	20	30	13
MK51-25X35X10.4	25	35	13
MK51-32X42X10.4	32	42	13
MK51-40X50X10.4	40	50	13
MK51-50X60X10.4	50	60	13

STYLE MSWE SNAP-IN WIPERS

Molded in urethane, this wiper is flexible enough to easily snap into a groove yet tough enough to handle difficult rod wiping applications.



SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-30° TO +200° F
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MSWE-14X20X3.8
MSWE-16X22X3
MSWE-18X24X3.5
MSWE-20X26X3
MSWE-20X28X5
MSWE-22X30X5
MSWE-25X33X5
MSWE-28X36X5
MSWE-30X38X5
MSWE-32X40X5
MSWE-35X43X5
MSWE-36X44X5
MSWE-40X48X5
MSWE-40X50X5
MSWE-40X50X7
MSWE-42X50X4
MSWE-42X50X5

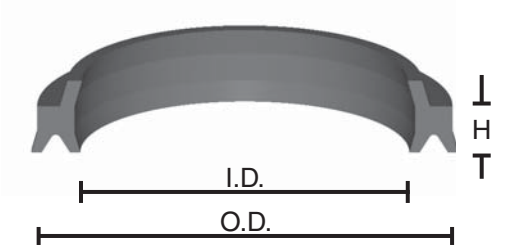
Part Number
MSWE-45X53X5
MSWE-45X55X5
MSWE-50X58X5
MSWE-50X60X5
MSWE-50X60X7
MSWE-55X63X5
MSWE-56X64X5
MSWE-56X66X6.3
MSWE-60X68X5
MSWE-60X70X7
MSWE-63X71X5
MSWE-63X73X6.3
MSWE-65X73X5
MSWE-65X75X7
MSWE-70X78X5
MSWE-70X82X7
MSWE-78X88X5

Part Number
MSWE-75X83X5
MSWE-80X88X5
MSWE-80X92X7
MSWE-85X93X5
MSWE-90X98X5
MSWE-90X100X6.3
MSWE-90X102X7
MSWE-90X102X7
MSWE-95X107X7
MSWE-99X109X5
MSWE-100X115X9.5
MSWE-105X113X5
MSWE-105X117.2X7
MSWE-110X122X7
MSWE-115X127X7
MSWE-120X128X5
MSWE-120X130X5

Part Number
MSWE-120X132X7
MSWE-125X137X7
MSWE-130X142X7
MSWE-140X148X5
MSWE-140X152X7
MSWE-141X151X5
MSWE-150X162X7
MSWE-160X168X5
MSWE-160X175X10
MSWE-160X179X9
MSWE-162X172X5
MSWE-183X193X5
MSWE-195X210X9
MSWE-200X220X10
MSWE-207X217X5
MSWE-220X235X10

STYLE MSWH SNAP-IN WIPERS

Molded in urethane, this wiper features a double lip which prevents fluid that seeps by the rod seal from exiting the cylinder.



SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-30° TO +200° F
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MSWH-12X18X3.6
MSWH-14X20X3.6

Part Number
MSWH-14X22X4.5
MSWH-16X24X4.5

Part Number
MSWH-18X24X3.6
MSWH-18X26X4.5

Part Number
MSWH-20X28X4.5
MSWH-22X28X3.6

STYLE MSWH SNAP-IN WIPERS

Part Number
MSWH-22.4X30.4X4.5
MSWH-23.5X31.5X4.5
MSWH-25X32X3.75
MSWH-25X33X4.5
MSWH-28X36X4.5
MSWH-30X38X5
MSWH-31.5X39.5X5
MSWH-32X40X5
MSWH-32X40X6
MSWH-35X43X5
MSWH-35.5X43.5X5
MSWH-35X44X3.6
MSWH-36X44X4.5
MSWH-36X44X6
MSWH-40X48X5

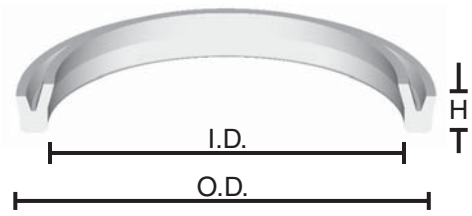
Part Number
MSWH-40X48X6
MSWH-40X50.6X4.6
MSWH-42X51X4.5
MSWH-45X53X4.5
MSWH-45X53X5
MSWH-50X58X4.5
MSWH-50X58X5
MSWH-50X58X6
MSWH-50X59X3.6
MSWH-50X60X5
MSWH-53X61X5
MSWH-55X63X5
MSWH-56X64X5
MSWH-56X66X5.3
MSWH-60X68X5

Part Number
MSWH-63X71X5
MSWH-65X73X5
MSWH-67X75X5
MSWH-70X80X5.5
MSWH-70X80X6
MSWH-71X81X6
MSWH-75X85X5.5
MSWH-75X85X6
MSWH-78X84X4.5
MSWH-80X90X6
MSWH-85X95X6
MSWH-90X100X5.3
MSWH-90X100X6
MSWH-98X108X4.5
MSWH-98X108X6

Part Number
MSWH-100X110X6
MSWH-110X125X7.5
MSWH-112X122X6
MSWH-117X127X5.5
MSWH-125X138X7
MSWH-136X146X5.5
MSWH-136X149X7
MSWH-140X153X7
MSWH-140X155X7.5
MSWH-145X158X7
MSWH-155X165X5.5
MSWH-160X174X7
MSWH-176X186X5.5
MSWH-198X208X5.5

STYLE MSW SNAP-IN WIPERS

Molded in urethane, this wiper features a lip on the outer diameter to aid in contaminant exclusion.



SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-30° TO +200° F
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MSW-20X28X4.5
MSW-25X33X4.5
MSW-25X34X4.5
MSW-30X38X5
MSW-35X43X5
MSW-40X48X4.5
MSW-40X48X5
MSW-40X50X6
MSW-45X53X5

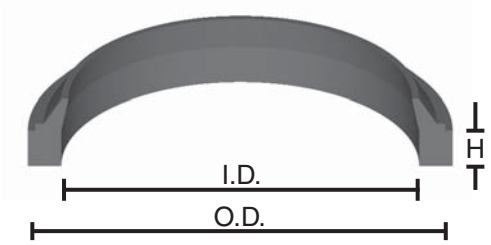
Part Number
MSW-45X55X6
MSW-50X58X5
MSW-50X60X6
MSW-55X63X5
MSW-55X65X6
MSW-60X68X5
MSW-60X73X7
MSW-65X79X7
MSW-70X80X6

Part Number
MSW-70X83X7
MSW-75X85X6
MSW-75X88X7
MSW-80X90X6
MSW-80X93X7
MSW-85X98X7
MSW-90X100X6
MSW-90X103X7
MSW-95X105X6

Part Number
MSW-95X108X7
MSW-100X110X6
MSW-100X113X7
MSW-110X120X6
MSW-110X123X7
MSW-120X130X6
MSW-120X133X7
MSW-125X138X7
MSW-140X153X7

STYLE MSWS SNAP-IN WIPERS

This light duty wiper is molded in polyurethane and features a double-stepped shoulder to fit tightly in the gland throat.



SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-30° TO +200° F
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MSWS-16X24X4
MSWS-20X28X4
MSWS-22X30X4
MSWS-25X33X4
MSWS-28X36X4
MSWS-30X38X4

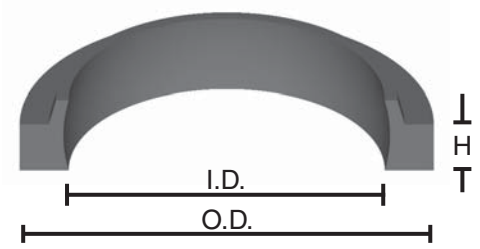
Part Number
MSWS-32X40X4
MSWS-35X43X4
MSWS-36X44X4
MSWS-40X48X4
MSWS-42X50X4
MSWS-45X53X4

Part Number
MSWS-50X58X4
MSWS-55X63X4
MSWS-56X64X4
MSWS-60X68X4
MSWS-63X71X4
MSWS-65X73X4

Part Number
MSWS-70X78X4
MSWS-80X88X4
MSWS-90X98X4
MSWS-100X108X4

STYLE MSWN SNAP-IN WIPERS

This medium duty wiper is molded in nitrile rubber



SEAL INFORMATION	
MATERIAL	NITRILE
TEMPERATURE RANGE	-22° TO +212° F
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MSWN-18X26X5
MSWN-20X28X4
MSWN-28X36X4
MSWN-30X42X6
MSWN-32X42X5
MSWN-32X44X6
MSWN-35X47X6
MSWN-36X48X6
MSWN-38X46X5

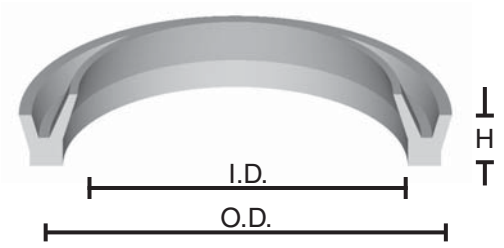
Part Number
MSWN-40X52X6
MSWN-45X57X6
MSWN-50X62X5
MSWN-50X62X6
MSWN-55X65X5
MSWN-55X67X6
MSWN-56X66X5
MSWN-60X70X5
MSWN-63X73X5

Part Number
MSWN-65X75X5
MSWN-70X80X5
MSWN-70X82X6
MSWN-70X82X7
MSWN-75X83X5
MSWN-80X90X6
MSWN-85X97X7
MSWN-90X102X7
MSWN-100X112X7

Part Number
MSWN-105X117X7
MSWN-110X122X7
MSWN-140X152X7
MSWN-140X155X10
MSWN-160X175X10
MSWN-200X220X10
MSWN-240X260X10
MSWN-245X265X10
MSWN-250X270X10

STYLE CSWM SNAP-IN WIPERS

This wiper is a heavy duty scraper molded from a hard nylon material.



SEAL INFORMATION	
MATERIAL	NYLON
TEMPERATURE RANGE	-40° TO +212° F
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
CSWM-25X38X6
CSWM-28X41X6
CSWM-30X43X6
CSWM-32X45X6
CSWM-36X49X6

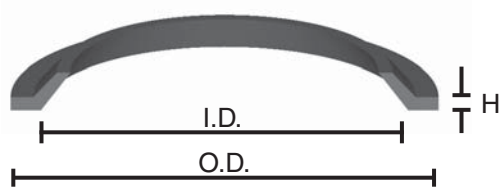
Part Number
CSWM-40X53X6
CSWM-45X58X6
CSWM-50X63X6
CSWM-55X68X6
CSWM-56X69X6

Part Number
CSWM-60X73X6
CSWM-63X76X6
CSWM-70X83X6
CSWM-75X88X6
CSWM-80X93X6

Part Number
CSWM-90X103X6
CSWM-100X113X6

STYLE MDK SNAP-IN WIPERS

Molded in nitrile, this wiper is for light duty applications.



SEAL INFORMATION	
MATERIAL	NITRILE
TEMPERATURE RANGE	-22° TO +212° F
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MDK-25X33.6X1.6U
MDK-30X37.5X1.6
MDK-32X39.5X1.6
MDK-33X40.5X1.6

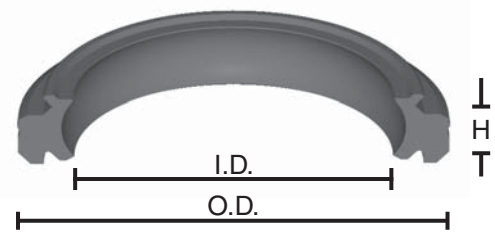
Part Number
MDK-50X60X2.15
MDK-55X65X2.15
MDK-63X73X2.15
MDK-70X80X2.15

Part Number
MDK-74X87X3.3
MDK-80X90X2.15
MDK-90X100X2.15
MDK-100X110X2.15

Part Number
MDK-140X150X2.15

STYLE MWSCK SNAP-IN WIPERS

Molded in nitrile, this double lipped wiper is common in Toyota lift trucks.



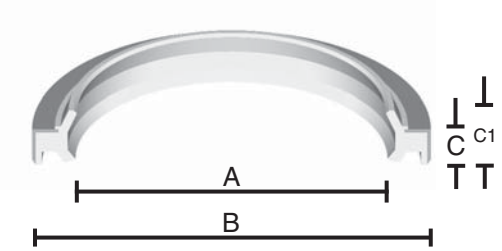
Part Number
MWSCK-25X37X6
MWSCK-30X42X6

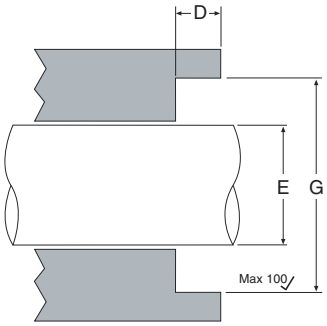
Part Number
MWSCK-35X47X7
MWSCK-50X62X7

SEAL INFORMATION	
MATERIAL	NITRILE
TEMPERATURE RANGE	-49° TO +212° F
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

STYLE MCKBI METAL CLAD WIPERS

Utilizing a double lip of urethane bonded to a carbon steel case, this wiper prevents contaminant ingression at the wiping lip and around the outer case.





PART NUMBERS

MCKBI - 20 X 32 X 6

Type of Seal | Rod Diameter | Groove Diameter | Height

SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-30° TO +200° F

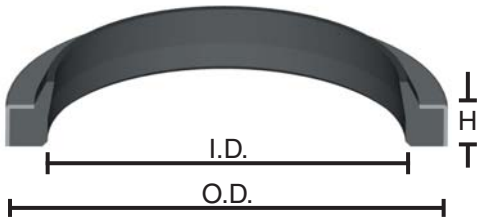
Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Base Ht.	C1 Nom. Overall Ht.	D Groove Width	E Rod Diameter	G Housing Diameter
MCKBI-20X32X6	20	32	6	9	6.30 +0.20 -0.00	20 -0.020 -0.053	32 +0.039 -0.000
MCKBI-25X37X6	25	37	6	9	6.30 +0.20 -0.00	25 -0.020 -0.053	37 +0.039 -0.000
MCKBI-30X42X6	30	42	6	9	6.30 +0.20 -0.00	30 -0.020 -0.053	42 +0.039 -0.000
MCKBI-35X47X7	35	47	7	10	7.30 +0.20 -0.00	35 -0.025 -0.064	47 +0.039 -0.000
MCKBI-40X50X7	40	50	7	10	7.30 +0.20 -0.00	40 -0.025 -0.064	50 +0.039 -0.000
MCKBI-40X52X7	40	52	7	10	7.30 +0.20 -0.00	40 -0.025 -0.064	52 +0.046 -0.000
MCKBI-45X57X7	45	57	7	10	7.30 +0.20 -0.00	45 -0.025 -0.064	57 +0.046 -0.000
MCKBI-50X62X7	50	62	7	10	7.30 +0.20 -0.00	50 -0.025 -0.064	62 +0.046 -0.000
MCKBI-55X69X8	55	69	8	11	8.40 +0.20 -0.00	55 -0.030 -0.076	69 +0.046 -0.000
MCKBI-60X74X8	60	74	8	11	8.40 +0.20 -0.00	60 -0.030 -0.076	74 +0.046 -0.000
MCKBI-65X79X8	65	79	8	11	8.40 +0.20 -0.00	65 -0.030 -0.076	79 +0.046 -0.000
MCKBI-70X82X7	70	82	7	10	7.30 +0.20 -0.00	70 -0.030 -0.076	82 +0.054 -0.000
MCKBI-70X84X8	70	84	8	11	8.40 +0.20 -0.00	70 -0.030 -0.076	84 +0.054 -0.000
MCKBI-75X87X7	75	87	7	10	7.30 +0.20 -0.00	75 -0.030 -0.076	87 +0.054 -0.000
MCKBI-75X89X8	75	89	8	11	8.40 +0.20 -0.00	75 -0.030 -0.076	89 +0.054 -0.000
MCKBI-80X92X7	80	92	7	10	7.30 +0.20 -0.00	80 -0.030 -0.076	92 +0.054 -0.000
MCKBI-80X94X8	80	94	8	11	8.40 +0.20 -0.00	80 -0.030 -0.076	94 +0.054 -0.000

STYLE MCKBI METAL CLAD WIPERS

Part Number	A Nom. I.D.	B Nom. O.D.	C Nom. Base Ht.	C1 Nom. Overall Ht.	D Groove Width	E Rod Diameter	G Housing Diameter
MCKBI-85X97X7	85	97	7	10	7.30 +0.20 -0.00	85 -0.036 -0.090	97 +0.054 -0.000
MCKBI-85X99X8	85	99	8	11	8.40 +0.20 -0.00	85 -0.036 -0.090	99 +0.054 -0.000
MCKBI-90X104X8	90	104	8	11	8.40 +0.20 -0.00	90 -0.036 -0.090	104 +0.054 -0.000
MCKBI-95X109X8	95	109	8	11	8.40 +0.20 -0.00	95 -0.036 -0.090	109 +0.054 -0.000
MCKBI-100X114X8	100	114	8	11	8.40 +0.20 -0.00	100 -0.036 -0.090	114 +0.054 -0.000
MCKBI-105X121X9	105	121	9	12	9.40 +0.20 -0.00	105 -0.036 -0.090	121 +0.063 -0.000
MCKBI-110X126X9	110	126	9	12	9.40 +0.20 -0.00	110 -0.036 -0.090	126 +0.063 -0.000
MCKBI-120X136X9	120	136	9	12	9.40 +0.20 -0.00	120 -0.036 -0.090	136 +0.063 -0.000
MCKBI-130X146X9	130	146	9	12	9.40 +0.20 -0.00	130 -0.043 -0.106	146 +0.063 -0.000
MCKBI-135X155X10	135	155	10	14	10.40 +0.20 -0.00	135 -0.043 -0.106	155 +0.063 -0.000
MCKBI-140X160X10	140	160	10	14	10.40 +0.20 -0.00	140 -0.043 -0.106	160 +0.063 -0.000
MCKBI-145X165X10	145	165	10	14	10.40 +0.20 -0.00	145 -0.043 -0.106	165 +0.063 -0.000
MCKBI-150X170X10	150	170	10	14	10.40 +0.20 -0.00	150 -0.043 -0.106	170 +0.063 -0.000
MCKBI-155X175X10	155	175	10	14	10.40 +0.20 -0.00	155 -0.043 -0.106	175 +0.063 -0.000
MCKBI-160X180X10	160	180	10	14	10.40 +0.20 -0.00	160 -0.043 -0.106	180 +0.063 -0.000
MCKBI-165X185X10	165	185	10	14	10.40 +0.20 -0.00	165 -0.043 -0.106	185 +0.072 -0.000
MCKBI-170X190X10	170	190	10	14	10.40 +0.20 -0.00	170 -0.043 -0.106	190 +0.072 -0.000
MCKBI-190X205X9	190	205	9	12	9.40 +0.20 -0.00	190 -0.050 -0.122	205 +0.072 -0.000
MCKBI-200X216X8	200	216	8	11	8.40 +0.20 -0.00	200 -0.050 -0.122	216 +0.072 -0.000

STYLE MCW METAL CLAD WIPERS

This wiper is a single lip design molded from high grade urethane and bonded to a carbon steel case.



SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-30° TO +200° F
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MCW-25X37X6
MCW-28X38X5
MCW-30X42X6
MCW-30X45X7
MCW-32X44X7
MCW-32X45X7
MCW-32X52X8
MCW-35X47X7
MCW-38X50X7

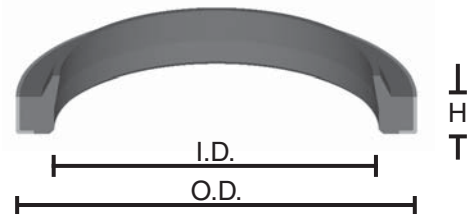
Part Number
MCW-40X52X7
MCW-45X57X7
MCW-50X62X7
MCW-55X69X8
MCW-56X70X8
MCW-60X74X8
MCW-63X77X8
MCW-65X79X8
MCW-70X84X8

Part Number
MCW-75X89X8
MCW-80X94X8
MCW-85X99X8
MCW-90X104X8
MCW-95X109X8
MCW-100X114X8
MCW-105X119X9
MCW-105X121X9
MCW-110X126X9

Part Number
MCW-115X131X9
MCW-120X136X9
MCW-130X146X9
MCW-140X160X10
MCW-150X170X10
MCW-160X180X10
MCW-180X205X12

STYLE MCWE METAL CLAD WIPERS

This wiper is molded from high grade urethane and bonded to a carbon steel case in a single lip design.



SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-40° TO +200° F
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MCWE-12X20X4
MCWE-20X28X3.5
MCWE-20X30X5
MCWE-20X30X7
MCWE-22X32X6
MCWE-25X35X7
MCWE-28X38X7
MCWE-30X40X5

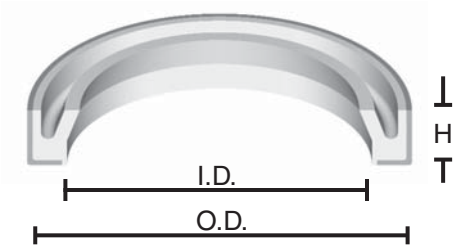
Part Number
MCWE-30X40X7
MCWE-32X42X7
MCWE-32X45X7
MCWE-35X45X7
MCWE-36X45X7
MCWE-36X46X7
MCWE-40X50X7
MCWE-42X52X7

Part Number
MCWE-45X55X7
MCWE-50X60X7
MCWE-55X65X7
MCWE-56X66X7
MCWE-60X70X7
MCWE-63X75X7
MCWE-65X75X7
MCWE-70X80X7

Part Number
MCWE-80X90X7
MCWE-85X95X7
MCWE-90X100X7
MCWE-100X110X7
MCWE-105X115X7
MCWE-110X120X7
MCWE-115X125X7
MCWE-120X130X7

STYLE MCWI METAL CLAD WIPERS

This wiper is a single lip design molded from high grade urethane and bonded to a carbon steel case.



SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-30° TO +200° F
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MCWI-35X47X7
MCWI-35X50X9
MCWI-40X52X6
MCWI-40X52X7
MCWI-40X55X9
MCWI-45X57X7
MCWI-45X60X9
MCWI-50X64X8
MCWI-50X65X7.5
MCWI-50X65X9
MCWI-55X69X8
MCWI-56X70X7.5
MCWI-56X71X9
MCWI-60X70X7

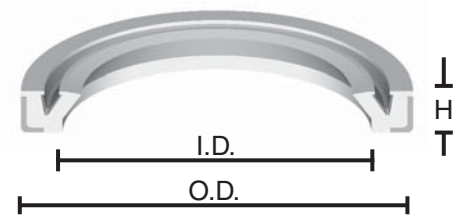
Part Number
MCWI-60X73X6
MCWI-60X74X8
MCWI-60X75X6
MCWI-60X75X7.5
MCWI-63X78X9
MCWI-65X79X8
MCWI-70X80X7
MCWI-70X84X8
MCWI-70X85X7
MCWI-70X85X7.5
MCWI-70X85X8
MCWI-75X89X8
MCWI-75X90X8
MCWI-75X95X10

Part Number
MCWI-80X90X7
MCWI-80X94X8
MCWI-80X95X8
MCWI-80X100X7
MCWI-85X99X8
MCWI-85X100X8
MCWI-90X104X8
MCWI-90X105X6
MCWI-90X105X7
MCWI-90X105X8
MCWI-90X106X8
MCWI-95X109X8
MCWI-95X110X8
MCWI-100X116X8

Part Number
MCWI-100X114X8
MCWI-100X115X7
MCWI-105X121X9
MCWI-110X125X8
MCWI-110X126X9
MCWI-110X130X8
MCWI-110X130X10
MCWI-120X135X8
MCWI-120X140X10
MCWI-125X140X8
MCWI-125X140X9
MCWI-130X146X9
MCWI-140X160X10
MCWI-150X170X10

STYLE MCWS METAL CLAD WIPERS

Molded from high grade urethane and bonded to a carbon steel case, this wiper utilizes a stainless steel finger spring to maintain a high radial force on the rod.



SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-40° TO +200° F
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

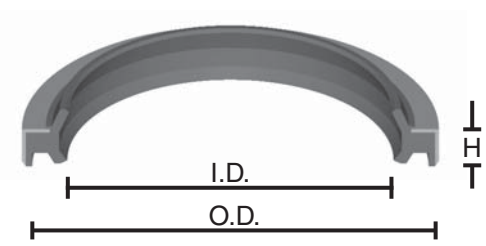
Part Number
MCWS-32X42X7
MCWS-40X50X7
MCWS-45X55X7

Part Number
MCWS-50X60X7
MCWS-56X68X7
MCWS-63X75X7

Part Number
MCWS-63X83X10
MCWS-70X90X10
MCWS-80X100X10

STYLE MCKB METAL CLAD WIPERS

Utilizing a double lip of nitrile bonded to a carbon steel case, this wiper prevents contaminant ingression at the wiping lip and around the outer case.



SEAL INFORMATION	
MATERIAL	80A NITRILE
TEMPERATURE RANGE	-20° TO +250° F
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MCKB-20X32X6
MCKB-22X32X6
MCKB-22X34X6
MCKB-25X37X6
MCKB-30X42X6
MCKB-30X45X6
MCKB-30X47X7
MCKB-32X52X8

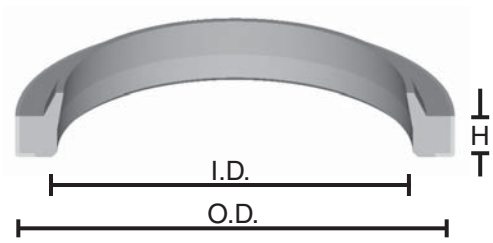
Part Number
MCKB-35X47X7
MCKB-36X48X7
MCKB-40X52X7
MCKB-40X62X8
MCKB-45X57X7
MCKB-50X62X7
MCKB-50X72X8
MCKB-55X69X8

Part Number
MCKB-60X74X8
MCKB-63X77X8
MCKB-65X79X8
MCKB-70X84X8
MCKB-75X89X8
MCKB-80X94X8
MCKB-85X99X8
MCKB-90X104X8

Part Number
MCKB-95X109X8
MCKB-105X121X9
MCKB-100X114X8
MCKB-112X128X9
MCKB-115X131X9

STYLE MCWN METAL CLAD WIPERS

This wiper is a single lip design molded from high grade nitrile and bonded to a carbon steel case.



SEAL INFORMATION	
MATERIAL	NITRILE
TEMPERATURE RANGE	-30° TO +220° F
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MCWN-10X16X3
MCWN-12X18X3.5
MCWN-12X20X4
MCWN-12X22X5
MCWN-15X25X5
MCWN-16X22X3
MCWN-16X26X5
MCWN-18X26X3
MCWN-18X28X7
MCWN-20X26X5
MCWN-20X28X3.5
MCWN-20X28X5
MCWN-20X30X4
MCWN-20X30X5
MCWN-20X30X7
MCWN-22X28X5
MCWN-22X32X5
MCWN-22X32X7
MCWN-25X33X4
MCWN-25X35X5

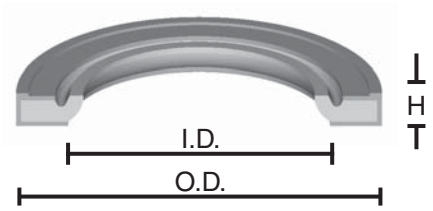
Part Number
MCWN-25X35X7
MCWN-28X38X5
MCWN-28X38X7
MCWN-28X40X7
MCWN-30X40X5
MCWN-30X40X7
MCWN-32X40X4
MCWN-32X42X5
MCWN-32X42X7
MCWN-32X45X4
MCWN-32X45X7
MCWN-33X43X7
MCWN-35X45X7
MCWN-35X47X7
MCWN-36X46X5
MCWN-38X48X7
MCWN-40X50X5
MCWN-40X50X7
MCWN-40X52X7
MCWN-42X52X7

Part Number
MCWN-45X55X5
MCWN-45X55X7
MCWN-45X57X7
MCWN-45X60X7
MCWN-50X56X5
MCWN-50X60X7
MCWN-50X60X5
MCWN-50X65X7
MCWN-52X62X7
MCWN-55X63X7
MCWN-55X65X7
MCWN-56X65X7
MCWN-56X66X7
MCWN-60X70X7
MCWN-60X75X7
MCWN-63X75X7
MCWN-65X75X7
MCWN-70X80X5
MCWN-70X80X7
MCWN-75X83X7

Part Number
MCWN-75X85X7
MCWN-78X88X7
MCWN-80X90X7
MCWN-85X95X7
MCWN-90X100X7
MCWN-95X105X7
MCWN-100X110X7
MCWN-105X115X7
MCWN-110X120X7
MCWN-115X125X7
MCWN-120X130X7
MCWN-125X140X9
MCWN-130X145X9
MCWN-140X155X9
MCWN-150X165X9
MCWN-160X175X9
MCWN-180X195X10
MCWN-200X220X12

STYLE MDS LINK PIN DUST SEALS

Molded in nitrile with a steel case, this seal is double cased and used to exclude contaminants from cylinder link pins. The “U” suffix indicates a urethane lip.



SEAL INFORMATION	
MATERIAL	NITRILE SEAL STEEL CASE
TEMPERATURE RANGE	-40° TO +220° F
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MDS-30X40X4
MDS-35X45X4
MDS-40X50X4
MDS-45X55X4
MDSU-45X55X4
MDS-50X60X4
MDS-50X63X4

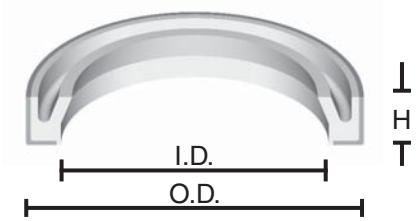
Part Number
MDS-50X65X6
MDS-55X68X4
MDS-60X75X4
MDS-65X80X4
MDS-70X80X3
MDS-70X85X4
MDS-70X85X6

Part Number
MDS-75X90X4
MDS-80X95X4
MDSU-80X95X4
MDS-80X95X6
MDS-85X100X4
MDSU-85X100X4
MDS-90X105X4

Part Number
MDS-95X110X4
MDS-100X115X4
MDS-100X120X4
MDS-110X125X4
MDS-120X135X4

STYLE MCWA METAL CLAD DUST SEALS

This seal is single cased with a urethane lip and used to exclude contaminants from cylinder link pins.



SEAL INFORMATION	
MATERIAL	URETHANE SEAL STEEL CASE
TEMPERATURE RANGE	-30° TO +200° F
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

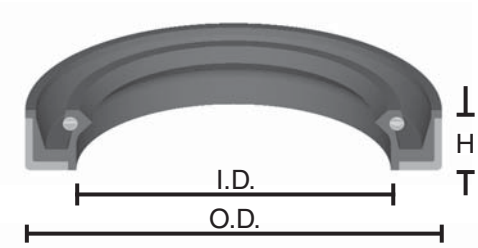
Part Number
MCWA-30X40X4
MCWA-35X45X6
MCWA-40X50X3.18
MCWA-40X50X4
MCWA-40X50X5
MCWA-45X55X3.18
MCWA-45X55X4
MCWA-45X55X6
MCWA-50X65X5

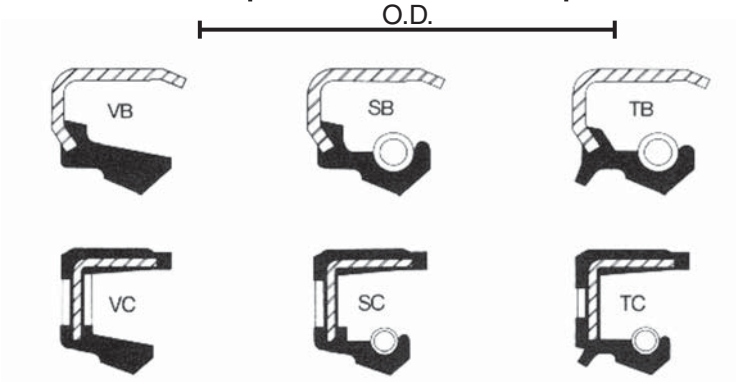
Part Number
MCWA-50X65X7.5
MCWA-55X65X3.18
MCWA-55X70X7.5
MCWA-60X75X5
MCWA-60X75X7.5
MCWA-60X75X8
MCWA-65X80X5
MCWA-70X80X5
MCWA-70X85X8

Part Number
MCWA-71X86X5
MCWA-75X90X8
MCWA-80X90X3.18
MCWA-80X90X7
MCWA-80X95X5
MCWA-80X95X6
MCWA-80X95X8
MCWA-85X100X8
MCWA-90X100X7

Part Number
MCWA-100X110X7
MCWA-100X115X8
MCWA-120X130X7
MCWA-130X140X7
MCWA-140X155X8
MCWA-160X180X8

OIL SEALS





SEAL INFORMATION	
MATERIAL	RUBBER SEAL STEEL CASE
TEMPERATURE RANGE	-40° TO +225° F
PRESSURE RANGE	10 PSI @ 1000 FPM
PART NUMBER	(Prefix) - (ID) X (OD) X (H)

Part Number
MOS-8X16X7TC
MOS-8X18X5TC
MOS-8X25X8TC
MOS-10X19X7TC
MOS-10X20X7TC
MOS-10X22X7TC
MOS-12X19X3VC
MOS-12X20X4TC
MOS-12X20X5TC
MOS-12X22X7TC
MOS-12X24X7TC
MOS-12X25X7TC
MOS-12X26X7TC
MOS-12X26X8TC
MOS-12X28X7TC
MOS-13X19X3VG
MOS-13X25X7SC
MOS-14X20X3TC
MOS-14X24X6TC
MOS-14X24X7TC
MOS-14X28X7TC
MOS-15X24X7TC
MOS-15X25X7TC
MOS-15X28X7TC
MOS-15X30X7TC

Part Number
MOS-15X32X7TC
MOS-15X35X7TC
MOS-16X20X2.5VM
MOS-16X26X6TC
MOS-16X28X7TC
MOS-16X30X7TC
MOS-16X35X7TC
MOS-17X28X7TC
MOS-17X29X7TC
MOS-17X30X6TC
MOS-17X30X7TC
MOS-17X30X8TC
MOS-17X32X7TC
MOS-17X35X8TC
MOS-17X38X7TC
MOS-18X24X3KC
MOS-18X28X4SC
MOS-18X28X7TC
MOS-18X30X7TC
MOS-18X30X8TC
MOS-18X32X7TC
MOS-18X35X7TC
MOS-19X30X7TC
MOS-19X34X7TC
MOS-19X35X7TC

Part Number
MOS-20X26X4VC
MOS-20X26X4VM
MOS-20X28X4TM
MOS-20X30X7TC
MOS-20X32X7TC
MOS-20X33X5TC
MOS-20X35X6TC
MOS-20X35X7TC
MOS-20X36X7TC
MOS-20X40X7TC
MOS-20X45X7TC
MOS-20X47X7TC
MOS-22X28X4KC
MOS-22X32X7SC
MOS-22X32X7TC
MOS-22X35X5TC
MOS-22X35X7TC
MOS-22X35X8TC
MOS-22X36X7TC
MOS-22X38X7TC
MOS-22X40X7TC
MOS-22X42X7TC
MOS-22X52X10TC
MOS-23X34X8TC
MOS-24X40X7TC

Part Number
MOS-25X35X6TC
MOS-25X35X7TC
MOS-25X35X8TC
MOS-25X36X7TC
MOS-25X40X5TC
MOS-25X40X7TC
MOS-25X40X8TC
MOS-25X40X10TC
MOS-25X42X6TC
MOS-25X42X7TC
MOS-25X45X8TC
MOS-25X45X10TC
MOS-25X52X7TC
MOS-25X52X10TC
MOS-25X62X7TC
MOS-26X37X7TC
MOS-26X40X7TC
MOS-27X43X8TC
MOS-28X38X5TC
MOS-28X38X7TC
MOS-28X40X5TC
MOS-28X40X7TC
MOS-28X42X7TC
MOS-28X42X8TC
MOS-28X47X7TC

OIL SEALS

Part Number
MOS-28X47X10TC
MOS-30X38X4SC
MOS-30X40X7SB
MOS-30X40X7TC
MOS-30X42X7TC
MOS-30X42X8TC
MOS-30X43X8TC
MOS-30X45X6TC
MOS-30X45X8TC
MOS-30X46X8TC
MOS-30X47X7TC
MOS-30X48X8TC
MOS-30X50X7TC
MOS-30X52X7TC
MOS-30X52X8TC
MOS-32X42X7TC
MOS-32X44X8TC
MOS-32X45X7TC
MOS-32X48X8TC
MOS-32X52X8TC
MOS-32X52X11TC
MOS-33X45X7SC
MOS-34X48X7TC
MOS-34X52X10SC
MOS-35X45X5VM
MOS-35X45X7TC
MOS-35X46X7TC
MOS-35X47X7TC
MOS-35X48X8TC
MOS-35X50X7TC
MOS-35X50X8TC
MOS-35X50X10TC
MOS-35X52X7TC
MOS-35X52X8TC
MOS-35X54X8TC
MOS-35X55X8TC
MOS-35X55X11TC
MOS-35X60X10SC
MOS-35X62X10TC

Part Number
MOS-35X72X8TC
MOS-38X50X7TC
MOS-38X58X10TC
MOS-40X50X5TB-H
MOS-40X50X8TC
MOS-40X52X5TC
MOS-40X52X7SC
MOS-40X52X7TC
MOS-40X54X7TC
MOS-40X55X7TC
MOS-40X55X8TC
MOS-40X56X7TC
MOS-40X58X8TC
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MOS-40X62X10TC
MOS-40X62X12TC
MOS-40X68X7TC
MOS-40X72X10TC
MOS-40X75X12TC
MOS-41X54X11DC
MOS-42X52X8TC
MOS-42X55X7TC
MOS-42X62X8TC
MOS-44X60X7TC
MOS-44X62X8TC
MOS-44X72X10TC
MOS-45X58X7TC
MOS-45X60X7TC
MOS-45X62X7TC
MOS-45X62X7VTC
MOS-45X62X8TC
MOS-45X65X7TC
MOS-45X65X8TC
MOS-45X65X12TC
MOS-45X68X8TC
MOS-45X68X10TC
MOS-45X68X12TC
MOS-45X72X8TC

Part Number
MOS-45X72X10TC
MOS-48X62X8TC
MOS-48X65X10TC
MOS-50X60X5TB-H
MOS-50X60X8TC
MOS-50X62X7TC
MOS-50X65X6TC
MOS-50X65X8TC
MOS-50X68X8TC
MOS-50X70X10TC
MOS-50X72X8TC
MOS-50X72X12TC
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MOS-54X68X10TC
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MOS-60X75X8TC
MOS-60X78X9TC
MOS-60X80X9TC
MOS-60X80X10TC
MOS-60X80X12TC
MOS-60X82X12TC
MOS-60X85X10TC
MOS-60X95X10TC
MOS-62X78X8SB
MOS-62X80X10TC
MOS-62X85X8TC
MOS-65X85X10TC
MOS-65X88X12TC
MOS-65X90X10TC
MOS-68X90X10TC

Part Number
MOS-70X80X10TC
MOS-70X85X8TC
MOS-70X90X7TC
MOS-70X90X10TC
MOS-70X90X12TC
MOS-70X95X13TC
MOS-70X100X10TC
MOS-70X110X10TC
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MOS-95X130X12TC
MOS-100X125X12TC
MOS-105X130X12TC
MOS-110X140X12TC
MOS-115X140X13TC
MOS-115X145X14TC
MOS-120X150X12TC
MOS-120X150X15TC
MOS-125X150X12VTF
MOS-130X160X12TC
MOS-140X170X13TC
MOS-150X180X15TC
MOS-200X230X13TC

O-RING SIZE CHART FOR METRIC SEALS

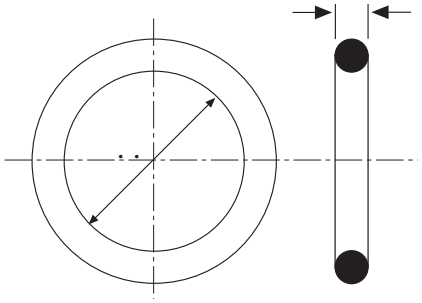
JIS B 2401	WIDTH	I.D.
P - 3	1.9 ±0.08	2.8 ±0.14
P - 4		3.8 ±0.14
P - 5		4.8 ±0.15
P - 6		5.8 ±0.15
P - 7		6.8 ±0.16
P - 8		7.8 ±0.16
P - 9		8.8 ±0.17
P - 10		9.8 ±0.17
P - 10A	2.4 ±0.09	9.8 ±0.17
P - 11		10.8 ±0.18
P - 11.2		11 ±0.18
P - 12		11.8 ±0.19
P - 12.5		12.3 ±0.19
P - 14		13.8 ±0.19
P - 15		14.8 ±0.20
P - 16		15.8 ±0.20
P - 18		17.8 ±0.21
P - 20		19.8 ±0.22
P - 21		20.8 ±0.23
P - 22		21.8 ±0.24
P - 22A	3.5 ±0.10	21.7 ±0.24
P - 22.4		22.1 ±0.24
P - 24		23.7 ±0.24
P - 25		24.7 ±0.25
P - 25.5		25.2 ±0.25
P - 26		25.7 ±0.26
P - 28		27.7 ±0.28
P - 29		28.7 ±0.29
P - 29.5		29.2 ±0.29
P - 30		29.7 ±0.29
P - 31		30.7 ±0.30
P - 31.5		31.2 ±0.31
P - 32		31.7 ±0.31
P - 34		33.7 ±0.33
P - 35		34.7 ±0.34
P - 35.5		35.2 ±0.34
P - 36		35.7 ±0.34
P - 38		37.7 ±0.37
P - 39		38.7 ±0.37
P - 40		39.7 ±0.37
P - 41		40.7 ±0.38
P - 42		41.7 ±0.39
P - 44		43.7 ±0.41
P - 45		44.7 ±0.41
P - 46		45.7 ±0.42
P - 48		47.7 ±0.44
P - 49		48.7 ±0.45
P - 50		49.7 ±0.45
P - 48A	5.7 ±1.13	47.6 ±0.45
P - 50A		49.6 ±0.45
P - 52		51.6 ±0.47
P - 53		52.6 ±0.48
P - 55		54.6 ±0.49
P - 56		55.6 ±0.50
P - 58		57.6 ±0.52
P - 60		59.6 ±0.53
P - 62		61.6 ±0.55
P - 63		62.6 ±0.56
P - 65		64.6 ±0.57
P - 67		66.6 ±0.59
P - 70		69.6 ±0.61

JIS B 2401	WIDTH	I.D.
P - 71	5.7 ±0.13	70.6 ±0.62
P - 75		74.6 ±0.65
P - 80		79.6 ±0.69
P - 85		84.6 ±0.73
P - 90		89.6 ±0.77
P - 95		94.6 ±0.81
P - 100		99.6 ±0.84
P - 102		101.6 ±0.85
P - 105		104.6 ±0.87
P - 110		109.6 ±0.91
P - 112		111.6 ±0.92
P - 115		114.6 ±0.94
P - 120		119.6 ±0.98
P - 125		124.6 ±1.01
P - 130		129.6 ±1.05
P - 132		131.6 ±1.06
P - 135		134.6 ±1.09
P - 140		139.6 ±1.12
P - 145		144.6 ±1.16
P - 150		149.6 ±1.19
P - 150A	8.4 ±0.15	149.5 ±1.19
P - 155		154.5 ±1.23
P - 160		159.5 ±1.26
P - 165		164.5 ±1.30
P - 170		169.5 ±1.33
P - 175		174.5 ±1.37
P - 180		179.5 ±1.40
P - 185		184.5 ±1.44
P - 190		189.5 ±1.48
P - 195		194.5 ±1.51
P - 200		199.5 ±1.55
P - 205		204.5 ±1.58
P - 209		208.5 ±1.61
P - 210		209.5 ±1.62
P - 215		214.5 ±1.65
P - 220		219.5 ±1.68
P - 225		224.5 ±1.71
P - 230		229.5 ±1.75
P - 235		234.5 ±1.78
P - 240		239.5 ±1.81
P - 245		244.5 ±1.84
P - 250		249.5 ±1.88
P - 255		254.5 ±1.91
P - 260		259.5 ±1.94
P - 265		264.5 ±1.97
P - 270		269.5 ±2.01
P - 275		274.5 ±2.04
P - 280		279.5 ±2.07
P - 285		284.5 ±2.10
P - 290		289.5 ±2.14
P - 295		294.5 ±2.17
P - 300		299.5 ±2.20
P - 315		314.5 ±2.30
P - 320		319.5 ±2.33
P - 335		334.5 ±2.42
P - 340		339.5 ±2.45
P - 355		354.5 ±2.54
P - 360		359.5 ±2.57
P - 375		374.5 ±2.67
P - 385		384.5 ±2.73
P - 400		399.5 ±2.82

JIS B 2401	WIDTH	I.D.
G - 25	3.1 ±0.1	24.4 ±0.25
G - 30		29.4 ±0.29
G - 35		34.4 ±0.33
G - 40		39.4 ±0.37
G - 45		44.4 ±0.41
G - 50		49.4 ±0.45
G - 55		54.4 ±0.49
G - 60		59.4 ±0.53
G - 65		64.4 ±0.57
G - 70		69.4 ±0.61
G - 75		74.4 ±0.65
G - 80		79.4 ±0.69
G - 85		84.4 ±0.73
G - 90		89.4 ±0.77
G - 95		94.4 ±0.81
G - 100		99.4 ±0.85
G - 105		104.4 ±0.87
G - 110		109.4 ±0.91
G - 115		114.4 ±0.94
G - 120		119.4 ±0.98
G - 125		124.4 ±1.01
G - 130		129.4 ±1.05
G - 135		134.4 ±1.08
G - 140		139.4 ±1.12
G - 145		144.4 ±1.16
G - 150	5.7 ±0.13	149.3 ±1.19
G - 155		154.3 ±1.23
G - 160		159.3 ±1.26
G - 165		164.3 ±1.30
G - 170		169.3 ±1.33
G - 175		174.3 ±1.37
G - 180		179.3 ±1.40
G - 185		184.3 ±1.44
G - 190		189.3 ±1.47
G - 195		194.3 ±1.51
G - 200		199.3 ±1.55
G - 205		204.3 ±1.58
G - 210		209.3 ±1.61
G - 215		214.3 ±1.64
G - 220		219.3 ±1.68
G - 225		224.3 ±1.71
G - 230		229.3 ±1.73
G - 235		234.3 ±1.77
G - 240		239.3 ±1.81
G - 245		244.3 ±1.84
G - 250		249.3 ±1.88
G - 255		254.3 ±1.91
G - 260		259.3 ±1.94
G - 265		264.3 ±1.97
G - 270		269.3 ±2.01
G - 275		274.3 ±2.04
G - 280		279.3 ±2.07
G - 285		284.3 ±2.10
G - 290		289.3 ±2.14
G - 295		294.3 ±2.17
G - 300		299.3 ±2.20
G - 305		304.3 ±2.24
G - 310		309.3 ±2.27
G - 315		314.3 ±2.30
G - 320		319.3 ±2.33
G - 325		324.3 ±2.36
G - 330		329.3 ±2.39

O-RING SIZE CHART FOR METRIC SEALS

JIS B 2401	WIDTH	I.D.
G - 335	5.7 ±0.13	334.3 ±2.42
G - 340		339.3 ±2.45
G - 345		344.3 ±2.48
G - 350		349.3 ±2.51
G - 355		354.3 ±2.54
G - 360		359.3 ±2.57
G - 365		364.3 ±2.60
G - 370		369.3 ±2.63
G - 375		374.3 ±2.67
G - 380		379.3 ±2.70
G - 385		384.3 ±2.73
G - 390		389.3 ±2.76
G - 395		394.3 ±2.79
G - 400		399.3 ±2.82
V - 15	4 ±0.10	14.5 ±0.20
V - 24		23.5 ±0.24
V - 34		33.5 ±0.33
V - 40		39.5 ±0.37
V - 55		54.5 ±0.49
V - 70		69 ±0.61
V - 85		84 ±0.72
V - 100		99 ±0.83
V - 120		119 ±0.97
V - 150		148.5 ±1.18
V - 175		173 ±1.36
V - 225	6 ±0.15	222.5 ±1.70
V - 275		272 ±2.02
V - 325		321.5 ±2.34
V - 380		376 ±2.68
V - 430		425.5 ±2.99
V - 480	10 ±0.30	475 ±3.30
V - 530		524.5 ±3.60
V - 585		579 ±3.92
V - 640		633.5 ±4.24
V - 690		683 ±4.54
V - 740		732.5 ±4.83
V - 790		782 ±5.12
V - 845		836.5 ±5.44
V - 950		940.5 ±6.06
V - 1055		1044 ±6.67

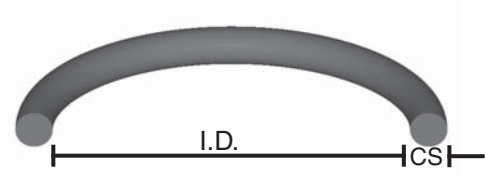


SM - O RINGS	WIDTH	I.D.
SM - 3	1.5 ±0.1	2.5 ±0.15
SM - 4		3.5 ±0.15
SM - 5		4.5 ±0.15
SM - 6		5.5 ±0.15
SM - 7		6.5 ±0.15
SM - 8		7.5 ±0.15
SM - 9		8.5 ±0.15
SM - 10		9.5 ±0.15
SM - 11.2		10.7 ±0.15
SM - 12		11.5 ±0.15
SM - 12.5		12 ±0.15
SM - 14		13.5 ±0.15
SM - 15		14.5 ±0.15
SM - 16		15.5 ±0.15
SM - 18		17.5 ±0.15
SM - 20		19.5 ±0.15
SM - 22		21.5 ±0.15
SM - 22.4	2.0 ±0.1	21.9 ±0.15
SM - 24		23.5 ±0.15
SM - 25		24.5 ±0.15
SM - 26		25.5 ±0.15
SM - 28		27.5 ±0.15
SM - 29		28.5 ±0.15
SM - 30		29.5 ±0.15
SM - 31.5		31 ±0.15
SM - 32		31.5 ±0.15
SM - 34		33.5 ±0.15
SM - 35		34.5 ±0.15
SM - 35.5		35 ±0.15
SM - 36		35.5 ±0.15
SM - 38		37.5 ±0.15
SM - 39		38.5 ±0.15
SM - 40		39.5 ±0.15
SM - 42		41.5 ±0.25
SM - 44		43.5 ±0.25
SM - 45		44.5 ±0.25
SM - 46		45.5 ±0.25
SM - 48		47.5 ±0.25
SM - 50		49.5 ±0.25
SM - 53		52.5 ±0.25
SM - 55		54.5 ±0.25
SM - 56		55.5 ±0.25
SM - 60		59.5 ±0.25
SM - 63		62.5 ±0.25
SM - 65		64.5 ±0.25
SM - 67		66.5 ±0.25
SM - 70		69.5 ±0.25
SM - 71		70.5 ±0.4
SM - 75		74.5 ±0.4
SM - 80		79.5 ±0.4
SM - 85		84.5 ±0.4
SM - 90		89.5 ±0.4
SM - 95		94.5 ±0.4
SM - 100		99.5 ±0.4
SM - 105		104.5 ±0.4
SM - 110		109.5 ±0.4
SM - 112		111.5 ±0.4
SM - 115		114.5 ±0.4
SM - 120		119.5 ±0.4
SM - 125		124.5 ±0.4
SM - 130		129.5 ±0.6
SM - 132		131.5 ±0.6

SM - O RINGS	WIDTH	I.D.
SM - 135	3.3 ±0.10	134.5 ±0.6
SM - 140		139.5 ±0.6
SM - 145		144.5 ±0.6
SM - 150		149.5 ±0.6

KS-O RINGS	WIDTH	I.D.
KS - 1	1.7 ±0.08	2.75 ±0.13
KS - 2		3.75 ±0.13
KS - 3		4.75 ±0.13
KS - 4		5.75 ±0.13
KS - 5		6.75 ±0.13
KS - 6		7.75 ±0.13
KS - 7		8.75 ±0.13
KS - 8		9.75 ±0.13
KS - 9	2.25 ±0.08	9.7 ±0.13
KS - 10		11.7 ±0.13
KS - 11		13.7 ±0.13
KS - 12		15.7 ±0.13
KS - 13		17.7 ±0.13
KS - 14		19.7 ±0.13
KS - 15	3.3 ±0.10	19.6 ±0.15
KS - 16		21.6 ±0.15
KS - 17		23.6 ±0.15
KS - 18		24.6 ±0.15
KS - 19		25.6 ±0.15
KS - 20		27.6 ±0.15
KS - 21		29.6 ±0.15
KS - 22		31.6 ±0.15
KS - 23		33.6 ±0.15
KS - 24		35.6 ±0.15
KS - 25		37.6 ±0.15
KS - 26		39.6 ±0.15

O-RINGS - 70 DURO NITRILE



SEAL INFORMATION	
MATERIAL	70A DURO NITRILE
TEMPERATURE RANGE	-40° TO +220° F
PART NUMBER	(Prefix) - (ID) X (CS)

List Number	MP
MOR-3X1	100
MOR-4X1	100
MOR-5X1	100
MOR-6X1	100
MOR-6.5X1	100
MOR-8X1	100
MOR-15X1	100
MOR-16X1	100
MOR-19X1	100
MOR-21X1	100
MOR-2.5X1.5	100
MOR-3X1.5	100
MOR-3.5X1.5	100
MOR-4X1.5	100
MOR-5X1.5	100
MOR-6X1.5	100
MOR-7X1.5	100
MOR-8X1.5	100
MOR-8.5X1.5	100
MOR-9X1.5	100
MOR-10X1.5	100
MOR-11X1.5	100
MOR-12X1.5	100
MOR-13X1.5	100
MOR-14X1.5	100
MOR-15X1.5	100
MOR-16X1.5	100
MOR-17X1.5	100
MOR-17.5X1.5	100
MOR-18X1.5	100
MOR-19X1.5	100
MOR-20X1.5	100
MOR-22X1.5	100
MOR-23X1.5	100

List Number	MP
MOR-25X1.5	100
MOR-26X1.5	100
MOR-27X1.5	100
MOR-28X1.5	100
MOR-30X1.5	50
MOR-32X1.5	50
MOR-35X1.5	50
MOR-36X1.5	50
MOR-41X1.5	50
MOR-42X1.5	25
MOR-43X1.5	25
MOR-45X1.5	25
MOR-46X1.5	25
MOR-47X1.5	25
MOR-53X1.5	20
MOR-57X1.5	20
MOR-65X1.5	20
MOR-72X1.5	20
MOR-2.2X1.6	100
MOR-3.1X1.6	100
MOR-4.1X1.6	100
MOR-5.1X1.6	100
MOR-6.1X1.6	100
MOR-7.1X1.6	25
MOR-8.1X1.6	25
MOR-9.1X1.6	25
MOR-10.1X1.6	25
MOR-11.1X1.6	20
MOR-12.1X1.6	20
MOR-13.1X1.6	20
MOR-14.1X1.6	20
MOR-15.1X1.6	20
MOR-16.1X1.6	20
MOR-17.1X1.6	20

List Number	MP
MOR-18.1X1.6	20
MOR-19.1X1.6	20
MOR-22.1X1.6	5
MOR-25.1X1.6	5
MOR-27.1X1.6	5
MOR-29.1X1.6	5
MOR-32.1X1.6	2
MOR-35.1X1.6	2
MOR-37.1X1.6	2
MOR-104.4X1.78	1
MOR-6.3X1.8	50
MOR-7.5X1.8	50
MOR-9.5X1.8	50
MOR-10.6X1.8	50
MOR-12.5X1.8	25
MOR-2.8X1.9	100
MOR-3.8X1.9	100
MOR-4.8X1.9	100
MOR-5.8X1.9	100
MOR-6.8X1.9	100
MOR-7.8X1.9	100
MOR-8.8X1.9	100
MOR-9.8X1.9	100
MOR-15.8X1.9	100
MOR-3X2	100
MOR-4X2	100
MOR-5X2	100
MOR-6X2	100
MOR-7X2	100
MOR-8X2	100
MOR-9X2	100
MOR-10X2	100
MOR-11X2	100
MOR-12X2	100

O-RINGS - 70 DURO NITRILE

List Number	MP
MOR-12.5X2	100
MOR-13X2	100
MOR-14X2	100
MOR-15X2	100
MOR-16X2	100
MOR-16.5X2	100
MOR-17X2	100
MOR-18X2	100
MOR-19X2	100
MOR-20X2	50
MOR-21X2	50
MOR-22X2	50
MOR-23X2	50
MOR-23.5X2	50
MOR-24X2	50
MOR-24.5X2	50
MOR-26X2	50
MOR-27X2	50
MOR-28X2	50
MOR-28.5X2	25
MOR-30X2	25
MOR-31X2	25
MOR-34X2	25
MOR-35X2	25
MOR-35.5X2	25
MOR-36X2	25
MOR-37X2	25
MOR-37.5X2	25
MOR-39X2	20
MOR-39.5X2	20
MOR-42X2	20
MOR-43X2	20
MOR-44X2	20
MOR-45X2	20
MOR-46X2	20
MOR-48X2	20
MOR-50X2	20
MOR-52X2	20
MOR-53X2	20
MOR-55X2	20
MOR-56X2	20
MOR-57X2	20
MOR-58X2	20
MOR-63X2	20

List Number	MP
MOR-64.5X2	20
MOR-66X2	10
MOR-67X2	10
MOR-68X2	10
MOR-69.5X2	10
MOR-70X2	10
MOR-72X2	10
MOR-73X2	10
MOR-74X2	10
MOR-74.5X2	10
MOR-76X2	10
MOR-77X2	10
MOR-78X2	10
MOR-79.5X2	10
MOR-80X2	10
MOR-84.5X2	10
MOR-85X2	10
MOR-86X2	10
MOR-90X2	10
MOR-93X2	10
MOR-100X2	10
MOR-114.5X2	5
MOR-266.9X2	1
MOR-271.5X2.5	1
MOR-3.3X2.4	100
MOR-3.6X2.4	50
MOR-4.3X2.4	50
MOR-4.6X2.4	50
MOR-5.3X2.4	50
MOR-5.6X2.4	50
MOR-6.3X2.4	50
MOR-6.6X2.4	25
MOR-7.3X2.4	25
MOR-7.6X2.4	25
MOR-8.3X2.4	25
MOR-8.6X2.4	25
MOR-9.3X2.4	20
MOR-9.6X2.4	20
MOR-9.8X2.4	100
MOR-10.3X2.4	20
MOR-10.6X2.4	20
MOR-10.8X2.4	100
MOR-11X2.4	100
MOR-11.3X2.4	20

List Number	MP
MOR-11.6X2.4	20
MOR-11.8X2.4	100
MOR-12.3X2.4	20
MOR-12.6X2.4	20
MOR-12.8X2.4	100
MOR-13.3X2.4	20
MOR-13.8X2.4	100
MOR-14.3X2.4	10
MOR-14.8X2.4	100
MOR-15.8X2.4	100
MOR-16.3X2.4	10
MOR-16.6X2.4	20
MOR-17.3X2.4	10
MOR-17.8X2.4	100
MOR-18.8X2.4	100
MOR-19.6X2.4	20
MOR-19.8X2.4	100
MOR-20.8X2.4	100
MOR-21.8X2.4	100
MOR-27.3X2.4	10
MOR-27.6X2.4	10
MOR-29.6X2.4	10
MOR-31.6X2.4	10
MOR-34.6X2.4	10
MOR-37.6X2.4	10
MOR-39.6X2.4	10
MOR-44.6X2.4	10
MOR-47.6X2.4	5
MOR-49.6X2.4	5
MOR-51.6X2.4	5
MOR-52.8X2.4	10
MOR-54.6X2.4	5
MOR-55.5X2.4	5
MOR-57.6X2.4	5
MOR-59.6X2.4	5
MOR-59.7X2.4	5
MOR-61.6X2.4	5
MOR-64.6X2.4	5
MOR-67.6X2.4	5
MOR-69.6X2.4	5
MOR-4X2.5	100
MOR-5X2.5	100
MOR-6X2.5	100
MOR-7X2.5	100

O-RINGS - 70 DURO NITRILE

List Number	MP
MOR-8X2.5	100
MOR-9X2.5	100
MOR-10X2.5	100
MOR-11X2.5	100
MOR-12X2.5	100
MOR-13X2.5	100
MOR-14X2.5	100
MOR-15X2.5	100
MOR-16X2.5	100
MOR-17X2.5	100
MOR-18X2.5	100
MOR-19X2.5	50
MOR-20X2.5	50
MOR-21X2.5	50
MOR-22X2.5	50
MOR-23X2.5	50
MOR-24X2.5	50
MOR-25X2.5	50
MOR-26X2.5	50
MOR-27X2.5	50
MOR-28X2.5	50
MOR-29X2.5	50
MOR-30X2.5	50
MOR-31X2.5	50
MOR-32X2.5	50
MOR-35X2.5	25
MOR-36X2.5	25
MOR-37X2.5	25
MOR-37.5X2.5	20
MOR-38X2.5	20
MOR-39X2.5	20
MOR-40X2.5	20
MOR-42X2.5	20
MOR-45X2.5	20
MOR-46X2.5	20
MOR-47X2.5	20
MOR-48X2.5	20
MOR-49X2.5	20
MOR-50X2.5	20
MOR-53X2.5	20
MOR-54X2.5	20
MOR-55X2.5	20
MOR-57X2.5	20
MOR-58X2.5	20

List Number	MP
MOR-59X2.5	20
MOR-60X2.5	20
MOR-63X2.5	10
MOR-65X2.5	10
MOR-67X2.5	10
MOR-69X2.5	10
MOR-70X2.5	10
MOR-72X2.5	10
MOR-73X2.5	10
MOR-75X2.5	10
MOR-76X2.5	10
MOR-80X2.5	10
MOR-85X2.5	10
MOR-90X2.5	10
MOR-94X2.5	10
MOR-100X2.5	5
MOR-110X2.5	5
MOR-116X2.5	5
MOR-120X2.5	5
MOR-140X2.5	5
MOR-14X2.65	50
MOR-15X2.65	50
MOR-16X2.65	50
MOR-18X2.65	50
MOR-25X2.65	25
MOR-30X2.65	25
MOR-5X3	100
MOR-6X3	100
MOR-8X3	100
MOR-9X3	100
MOR-9.5X3	100
MOR-10X3	100
MOR-11X3	100
MOR-12X3	100
MOR-13X3	50
MOR-14X3	50
MOR-15X3	50
MOR-16X3	50
MOR-17X3	50
MOR-18X3	50
MOR-19X3	50
MOR-19.2X3	50
MOR-20X3	50
MOR-21X3	50

List Number	MP
MOR-22X3	50
MOR-22.2X3	50
MOR-23X3	50
MOR-24X3	50
MOR-24.2X3	15
MOR-25X3	25
MOR-26X3	25
MOR-27X3	25
MOR-28X3	25
MOR-29X3	25
MOR-30X3	25
MOR-31X3	25
MOR-32X3	25
MOR-33X3	25
MOR-34X3	20
MOR-35X3	20
MOR-36X3	20
MOR-36.2X3	20
MOR-36.5X3	20
MOR-37.5X3	20
MOR-38X3	20
MOR-39X3	20
MOR-40X3	20
MOR-41.5X3	20
MOR-42X3	20
MOR-42.2X3	20
MOR-43X3	20
MOR-44X3	20
MOR-45X3	20
MOR-46X3	20
MOR-47X3	20
MOR-48X3	20
MOR-49.5X3	20
MOR-51X3	20
MOR-52X3	20
MOR-54X3	20
MOR-54.5X3	20
MOR-55X3	20
MOR-56X3	20
MOR-57X3	20
MOR-58X3	20
MOR-59X3	20
MOR-59.5X3	20
MOR-60X3	20

O-RINGS - 70 DURO NITRILE

List Number	MP
MOR-62X3	10
MOR-63X3	10
MOR-64X3	10
MOR-64.5X3	10
MOR-65X3	10
MOR-66X3	10
MOR-67X3	10
MOR-68X3	10
MOR-69X3	10
MOR-70X3	10
MOR-72X3	10
MOR-74X3	10
MOR-74.5X3	10
MOR-75X3	10
MOR-76X3	10
MOR-77X3	10
MOR-78X3	10
MOR-79X3	10
MOR-79.5X3	10
MOR-80X3	10
MOR-82X3	10
MOR-85X3	10
MOR-86X3	10
MOR-88X3	10
MOR-89X3	10
MOR-90X3	10
MOR-92X3	10
MOR-94.5X3	10
MOR-95X3	10
MOR-96X3	10
MOR-97X3	10
MOR-99X3	5
MOR-100X3	5
MOR-104X3	5
MOR-104.5X3	5
MOR-106X3	5
MOR-108X3	5
MOR-109.5X3	5
MOR-110X3	5
MOR-114.5X3	5
MOR-115X3	5
MOR-118X3	5
MOR-120X3	5
MOR-125X3	5

List Number	MP
MOR-128X3	5
MOR-130X3	5
MOR-132X3	5
MOR-135X3	5
MOR-139.5X3	5
MOR-145X3	5
MOR-149X3	5
MOR-150X3	5
MOR-155X3	5
MOR-160X3	5
MOR-170X3	5
MOR-175X3	2
MOR-180X3	2
MOR-194X3	2
MOR-205X3	2
MOR-215X3	2
MOR-220X3	2
MOR-225X3	2
MOR-240X3	2
MOR-245X3	2
MOR-260X3	1
MOR-24.4X3.1	25
MOR-29.4X3.1	20
MOR-32X3.1	20
MOR-34.4X3.1	20
MOR-39.4X3.1	20
MOR-44.4X3.1	10
MOR-49.4X3.1	10
MOR-54.4X3.1	10
MOR-57.4X3.1	10
MOR-59.4X3.1	10
MOR-64.4X3.1	10
MOR-69.4X3.1	10
MOR-74.4X3.1	5
MOR-79.4X3.1	5
MOR-84.4X3.1	5
MOR-89.4X3.1	5
MOR-94.4X3.1	5
MOR-99.4X3.1	5
MOR-104.4X3.1	5
MOR-109.4X3.1	5
MOR-114.4X3.1	5
MOR-119.4X3.1	5
MOR-124.4X3.1	5

List Number	MP
MOR-129.4X3.1	5
MOR-134.4X3.1	2
MOR-139.4X3.1	2
MOR-144.4X3.1	2
MOR-149.4X3.1	2
MOR-16.6X3.3	5
MOR-14X3.5	50
MOR-15X3.5	50
MOR-16X3.5	50
MOR-20X3.5	50
MOR-21X3.5	50
MOR-21.7X3.5	25
MOR-22X3.5	25
MOR-22.1X3.5	25
MOR-23.7X3.5	25
MOR-24.7X3.5	25
MOR-25X3.5	25
MOR-25.2X3.5	25
MOR-25.7X3.5	25
MOR-27.7X3.5	20
MOR-28.7X3.5	20
MOR-29.2X3.5	20
MOR-29.7X3.5	20
MOR-30X3.5	20
MOR-30.7X3.5	20
MOR-31.2X3.5	20
MOR-31.7X3.5	20
MOR-33.7X3.5	20
MOR-34.7X3.5	20
MOR-35.2X3.5	20
MOR-35.7X3.5	20
MOR-37X3.5	20
MOR-37.7X3.5	20
MOR-38X3.5	20
MOR-38.7X3.5	20
MOR-39.7X3.5	20
MOR-40.7X3.5	20
MOR-41.7X3.5	20
MOR-42X3.5	20
MOR-43.7X3.5	10
MOR-44.7X3.5	10
MOR-45.7X3.5	10
MOR-47.7X3.5	10
MOR-48.7X3.5	10

O-RINGS - 70 DURO NITRILE

List Number	MP
MOR-49.7X3.5	10
MOR-50X3.5	10
MOR-52X3.5	10
MOR-56X3.5	10
MOR-58X3.5	10
MOR-60X3.5	10
MOR-63X3.5	10
MOR-65X3.5	10
MOR-69X3.5	10
MOR-71X3.5	10
MOR-73X3.5	10
MOR-86X3.5	5
MOR-87X3.5	5
MOR-105X3.5	5
MOR-112X3.5	5
MOR-118X3.5	5
MOR-120X3.5	5
MOR-132X3.5	5
MOR-145X3.5	5
MOR-170X3.5	2
MOR-175X3.5	2
MOR-180X3.5	2
MOR-200X3.5	2
MOR-202X3.5	2
MOR-210X3.5	2
MOR-9X4	50
MOR-11X4	50
MOR-12X4	50
MOR-14X4	50
MOR-15X4	50
MOR-16X4	50
MOR-17X4	50
MOR-19X4	50
MOR-20X4	50
MOR-21X4	50
MOR-22X4	25
MOR-23X4	25
MOR-23.5X4	25
MOR-24X4	25
MOR-25X4	25
MOR-27X4	25
MOR-28X4	25
MOR-30X4	20
MOR-31X4	20
MOR-32X4	20

List Number	MP
MOR-33X4	20
MOR-34X4	20
MOR-35X4	20
MOR-37X4	20
MOR-38X4	20
MOR-40X4	20
MOR-41X4	20
MOR-42X4	20
MOR-44X4	20
MOR-45X4	20
MOR-47X4	10
MOR-48X4	10
MOR-50X4	10
MOR-52X4	10
MOR-54X4	10
MOR-55X4	10
MOR-56X4	10
MOR-57X4	10
MOR-58X4	10
MOR-60X4	10
MOR-62X4	10
MOR-64X4	10
MOR-65X4	10
MOR-66X4	10
MOR-67X4	10
MOR-68X4	10
MOR-70X4	10
MOR-72X4	10
MOR-75X4	10
MOR-76X4	5
MOR-78X4	5
MOR-80X4	5
MOR-82X4	5
MOR-84X4	5
MOR-86X4	5
MOR-89X4	5
MOR-90X4	5
MOR-92X4	5
MOR-95X4	5
MOR-96X4	5
MOR-98X4	5
MOR-100X4	5
MOR-102X4	5
MOR-104X4	5
MOR-105X4	5

List Number	MP
MOR-108X4	5
MOR-110X4	5
MOR-112X4	5
MOR-114X4	5
MOR-115X4	5
MOR-116X4	5
MOR-117X4	5
MOR-118X4	5
MOR-119X4	5
MOR-120X4	5
MOR-124X4	5
MOR-126X4	5
MOR-127X4	5
MOR-128X4	5
MOR-129X4	5
MOR-130X4	5
MOR-132X4	5
MOR-133X4	5
MOR-134X4	5
MOR-136X4	5
MOR-137X4	5
MOR-140X4	5
MOR-142X4	5
MOR-146X4	5
MOR-150X4	5
MOR-155X4	5
MOR-160X4	5
MOR-164X4	5
MOR-170X4	5
MOR-172X4	5
MOR-177X4	5
MOR-180X4	5
MOR-200X4	5
MOR-240X4	2
MOR-250X4	2
MOR-265X4	2
MOR-270X4	2
MOR-285X4	1
MOR-287X4	1
MOR-438X4	1
MOR-15X5	25
MOR-16X5	25
MOR-19X5	25
MOR-20X5	20
MOR-21X5	20

O-RINGS - 70 DURO NITRILE

List Number	MP
MOR-22X5	20
MOR-24X5	20
MOR-27X5	20
MOR-28X5	20
MOR-30X5	20
MOR-32X5	20
MOR-35X5	20
MOR-40X5	10
MOR-42X5	10
MOR-44X5	10
MOR-45X5	10
MOR-50X5	10
MOR-52X5	10
MOR-55X5	10
MOR-58X5	10
MOR-60X5	10
MOR-65X5	10
MOR-68X5	10
MOR-70X5	10
MOR-73X5	5
MOR-75X5	5
MOR-78X5	5
MOR-80X5	5
MOR-82X5	5
MOR-85X5	5
MOR-92X5	5
MOR-95X5	5
MOR-97X5	5
MOR-100X5	5
MOR-105X5	5
MOR-107X5	5
MOR-108X5	5
MOR-110X5	5
MOR-112X5	5
MOR-118X5	5
MOR-120X5	5
MOR-121X5	5
MOR-122X5	5
MOR-125X5	5
MOR-130X5	5
MOR-138X5	5
MOR-140X5	5
MOR-150X5	5
MOR-155X5	2
MOR-158X5	2

List Number	MP
MOR-160X5	2
MOR-165X5	2
MOR-173X5	2
MOR-175X5	2
MOR-180X5	2
MOR-195X5	2
MOR-200X5	2
MOR-205X5	2
MOR-220X5	2
MOR-225X5	2
MOR-235X5	1
MOR-240X5	1
MOR-245X5	1
MOR-250X5	1
MOR-255X5	1
MOR-265X5	1
MOR-275X5	1
MOR-290X5	1
MOR-300X5	1
MOR-330X5	1
MOR-345X5	1
MOR-375X5	1
MOR-395X5	1
MOR-40X5.3	10
MOR-45X5.3	10
MOR-50X5.3	10
MOR-58X5.3	10
MOR-150X5.3	2
MOR-170X5.3	2
MOR-47.6X5.7	5
MOR-49.6X5.7	5
MOR-51.6X5.7	5
MOR-52.6X5.7	5
MOR-54.6X5.7	5
MOR-55.6X5.7	5
MOR-57.6X5.7	5
MOR-59.2X5.7	5
MOR-59.6X5.7	2
MOR-61.6X5.7	2
MOR-62.6X5.7	2
MOR-64.6X5.7	2
MOR-66.6X5.7	2
MOR-69.6X5.7	2
MOR-70.6X5.7	2
MOR-74.3X5.7	5

List Number	MP
MOR-74.6X5.7	2
MOR-79.3X5.7	5
MOR-79.6X5.7	2
MOR-84.3X5.7	5
MOR-84.6X5.7	2
MOR-89.3X5.7	5
MOR-89.6X5.7	2
MOR-94.3X5.7	5
MOR-94.6X5.7	2
MOR-99.3X5.7	5
MOR-99.6X5.7	2
MOR-101.6X5.7	2
MOR-104.3X5.7	5
MOR-104.6X5.7	2
MOR-109.3X5.7	5
MOR-109.6X5.7	2
MOR-111.6X5.7	2
MOR-114.6X5.7	2
MOR-119.6X5.7	2
MOR-124.3X5.7	2
MOR-124.6X5.7	2
MOR-129.3X5.7	2
MOR-129.6X5.7	2
MOR-131.6X5.7	2
MOR-134.3X5.7	2
MOR-134.6X5.7	2
MOR-139.6X5.7	2
MOR-144.3X5.7	2
MOR-144.6X5.7	2
MOR-149.3X5.7	2
MOR-149.6X5.7	2
MOR-154.3X5.7	2
MOR-159.3X5.7	2
MOR-164.3X5.7	2
MOR-169.3X5.7	2
MOR-174.3X5.7	2
MOR-179.3X5.7	2
MOR-184.3X5.7	2
MOR-189.3X5.7	2
MOR-194.3X5.7	2
MOR-199.3X5.7	2
MOR-209.3X5.7	2
MOR-214.3X5.7	2
MOR-219.3X5.7	2
MOR-224.3X5.7	1

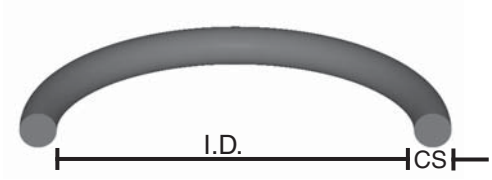
O-RINGS - 70 DURO NITRILE

List Number	MP
MOR-229.3X5.7	1
MOR-234.3X5.7	1
MOR-239.3X5.7	1
MOR-249.3X5.7	1
MOR-254.3X5.7	1
MOR-259.3X5.7	1
MOR-269.3X5.7	1
MOR-279.3X5.7	1
MOR-289.3X5.7	1
MOR-299.3X5.7	1
MOR-304.3X5.7	1
MOR-309.3X5.7	1
MOR-359.3X5.7	1
MOR-399.3X5.7	1
MOR-404.3X5.7	1
MOR-424.3X5.7	1
MOR-434.3X5.7	1
MOR-439.3X5.7	1
MOR-444.3X5.7	1
MOR-459.3X5.7	1
MOR-464.3X5.7	1
MOR-469.3X5.7	1
MOR-479.3X5.7	1
MOR-489.3X5.7	1

List Number	MP
MOR-494.3X5.7	1
MOR-499.3X5.7	1
MOR-20X6	10
MOR-25X6	10
MOR-37X6	10
MOR-46X6	10
MOR-114X6	5
MOR-160X6	2
MOR-144.1X8.4	1
MOR-149.5X8.4	1
MOR-154.5X8.4	1
MOR-159.5X8.4	1
MOR-164.1X8.4	1
MOR-164.5X8.4	1
MOR-169.5X8.4	1
MOR-174.5X8.4	1
MOR-179.5X8.4	1
MOR-184.5X8.4	1
MOR-189.5X8.4	1
MOR-194.5X8.4	1
MOR-199.5X8.4	1
MOR-204.5X8.4	1
MOR-208.5X8.4	1
MOR-209.5X8.4	1

List Number	MP
MOR-214.5X8.4	1
MOR-219.5X8.4	1
MOR-224.5X8.4	1
MOR-229.5X8.4	1
MOR-234.5X8.4	1
MOR-239.5X8.4	1
MOR-244.5X8.4	1
MOR-249.5X8.4	1
MOR-254.5X8.4	1
MOR-259.5X8.4	1
MOR-269.5X8.4	1
MOR-274.5X8.4	1
MOR-279.5X8.4	1
MOR-284.5X8.4	1
MOR-289.5X8.4	1
MOR-294.5X8.4	1
MOR-299.5X8.4	1
MOR-314.5X8.4	1
MOR-319.5X8.4	1
MOR-339.5X8.4	1
MOR-359.5X8.4	1
MOR-384.5X8.4	1
MOR-399.5X8.4	1

O-RINGS - 90 DURO NITRILE



SEAL INFORMATION	
MATERIAL	90A DURO NITRILE
TEMPERATURE RANGE	-40° TO +220° F
PART NUMBER	(Prefix) - (ID) X (CS)

List Number	MP
MOR-5X1.5-90D	50
MOR-13X1.5-90D	50
MOR-16X1.5-90D	50
MOR-2.2X1.6-90D	25
MOR-3.1X1.6-90D	25
MOR-4.1X1.6-90D	25
MOR-7.1X1.6-90D	20
MOR-9.1X1.6-90D	20
MOR-10.1X1.6-90D	20
MOR-13.1X1.6-90D	20
MOR-13.3X1.8-90D	2
MOR-2.8X1.9-90D	100
MOR-3.8X1.9-90D	100
MOR-4.8X1.9-90D	100
MOR-5.8X1.9-90D	100
MOR-6.8X1.9-90D	50
MOR-7.8X1.9-90D	50
MOR-8.8X1.9-90D	50
MOR-9X3-90D	50
MOR-9.8X1.9-90D	50
MOR-4X2-90D	100
MOR-6X2-90D	50
MOR-8X2-90D	50
MOR-9X2-90D	50
MOR-10X2-90D	50
MOR-11X2-90D	50
MOR-12X2-90D	50
MOR-14X2-90D	50
MOR-16X2-90D	50
MOR-17.5X2-90D	2
MOR-19X2-90D	50
MOR-20X2-90D	25
MOR-4.3X2.4-90D	50
MOR-5.3X2.4-90D	50
MOR-5.6X2.4-90D	50

List Number	MP
MOR-7.3X2.4-90D	25
MOR-7.6X2.4-90D	25
MOR-8.3X2.4-90D	20
MOR-8.6X2.4-90D	20
MOR-9.8X2.4-90D	25
MOR-10.8X2.4-90D	25
MOR-11X2.4-90D	25
MOR-11.8X2.4-90D	25
MOR-12.3X2.4-90D	20
MOR-12.8X2.4-90D	25
MOR-13.8X2.4-90D	20
MOR-14.8X2.4-90D	20
MOR-15.8X2.4-90D	20
MOR-16.3X2.4-90D	20
MOR-16.8X2.4-90D	20
MOR-17.8X2.4-90D	20
MOR-18.8X2.4-90D	20
MOR-19.8X2.4-90D	20
MOR-20.8X2.4-90D	20
MOR-21.8X2.4-90D	20
MOR-10X2.5-90D	50
MOR-13X2.5-90D	50
MOR-14X2.5-90D	50
MOR-15X2.5-90D	25
MOR-17X2.5-90D	25
MOR-18X2.5-90D	25
MOR-19X2.5-90D	25
MOR-14.1X2.6-90D	5
MOR-14.8X2.65-90D	5
MOR-10X3-90D	50
MOR-11X3-90D	50
MOR-17X3-90D	20
MOR-18X3-90D	10
MOR-19.2X3-90D	10
MOR-20X3-90D	10

List Number	MP
MOR-22.1X1.6-90D	20
MOR-22.2X3-90D	10
MOR-23X3-90D	10
MOR-26.2X3-90D	10
MOR-27X3-90D	10
MOR-42.2X3-90D	5
MOR-45X3-90D	5
MOR-50X3-90D	5
MOR-56X3-90D	5
MOR-57X3-90D	5
MOR-60X3-90D	5
MOR-64.5X3-90D	5
MOR-84X3-90D	1
MOR-94.3X3-90D	5
MOR-105X3-90D	1
MOR-135X3-90D	1
MOR-24.4X3.1-90D	25
MOR-29.4X3.1-90D	20
MOR-34.4X3.1-90D	20
MOR-39.4X3.1-90D	20
MOR-44.4X3.1-90D	10
MOR-49.4X3.1-90D	10
MOR-54.4X3.1-90D	10
MOR-59.4X3.1-90D	5
MOR-62.4X3.1-90D	10
MOR-64.4X3.1-90D	5
MOR-69.4X3.1-90D	5
MOR-74.4X3.1-90D	5
MOR-79.4X3.1-90D	5
MOR-84.4X3.1-90D	5
MOR-89.4X3.1-90D	5
MOR-94.4X3.1-90D	5
MOR-99.4X3.1-90D	5
MOR-104.4X3.1-90D	5
MOR-109.4X3.1-90D	5

O-RINGS - 90 DURO NITRILE

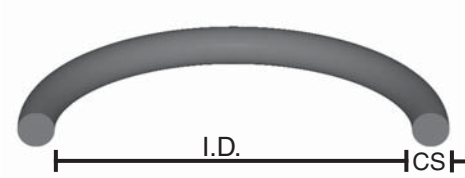
List Number	MP
MOR-110X5-90D	2
MOR-114.4X3.1-90D	5
MOR-119.4X3.1-90D	5
MOR-124.4X3.1-90D	5
MOR-129.4X3.1-90D	5
MOR-134.4X3.1-90D	2
MOR-139.4X3.1-90D	2
MOR-144.4X3.1-90D	2
MOR-21.7X3.5-90D	20
MOR-22.1X3.5-90D	20
MOR-23.7X3.5-90D	20
MOR-24.7X3.5-90D	20
MOR-25.2X3.5-90D	20
MOR-25.7X3.5-90D	10
MOR-27.7X3.5-90D	10
MOR-28.7X3.5-90D	10
MOR-29.2X3.5-90D	20
MOR-29.7X3.5-90D	10
MOR-30.7X3.5-90D	10
MOR-31.2X3.5-90D	20
MOR-31.7X3.5-90D	10
MOR-33.7X3.5-90D	10
MOR-34.7X3.5-90D	10
MOR-35.2X3.5-90D	20
MOR-35.7X3.5-90D	10
MOR-37.7X3.5-90D	10
MOR-38.7X3.5-90D	10
MOR-39.7X3.5-90D	10
MOR-40.7X3.5-90D	10
MOR-41.7X3.5-90D	10
MOR-43X3.5-90D	5
MOR-43.7X3.5-90D	5
MOR-44.7X3.5-90D	5
MOR-45.7X3.5-90D	5
MOR-47.7X3.5-90D	5
MOR-48.7X3.5-90D	5
MOR-49.7X3.5-90D	5
MOR-59X3.5-90D	5
MOR-75X5-90D	2
MOR-130X5-90D	2

List Number	MP
MOR-150X5-90D	1
MOR-170X5-90D	1
MOR-190X5-90D	1
MOR-47.6X5.7-90D	5
MOR-49.6X5.7-90D	5
MOR-52.6X5.7-90D	5
MOR-54.6X5.7-90D	5
MOR-55.6X5.7-90D	5
MOR-57.6X5.7-90D	2
MOR-59.6X5.7-90D	2
MOR-62.6X5.7-90D	2
MOR-64.6X5.7-90D	2
MOR-66.6X5.7-90D	2
MOR-69.6X5.7-90D	2
MOR-70.6X5.7-90D	2
MOR-74.6X5.7-90D	2
MOR-79.6X5.7-90D	2
MOR-84.6X5.7-90D	2
MOR-89.6X5.7-90D	2
MOR-94.6X5.7-90D	2
MOR-99.6X5.7-90D	2
MOR-101.6X5.7-90D	2
MOR-104.6X5.7-90D	2
MOR-109.6X5.7-90D	2
MOR-111.6X5.7-90D	2
MOR-114.6X5.7-90D	2
MOR-119.6X5.7-90D	2
MOR-124.6X5.7-90D	2
MOR-129.6X5.7-90D	2
MOR-131.6X5.7-90D	2
MOR-134.6X5.7-90D	2
MOR-139.6X5.7-90D	2
MOR-144.6X5.7-90D	2
MOR-149.3X5.7-90D	2
MOR-149.6X5.7-90D	2
MOR-154.3X5.7-90D	2
MOR-159.3X5.7-90D	2
MOR-164.3X5.7-90D	1
MOR-169.3X5.7-90D	1
MOR-174.3X5.7-90D	1

List Number	MP
MOR-175X6-90D	1
MOR-179.3X5.7-90D	1
MOR-184.3X5.7-90D	1
MOR-189.3X5.7-90D	1
MOR-194.3X5.7-90D	1
MOR-199.3X5.7-90D	1
MOR-204.3X5.7-90D	1
MOR-209.3X5.7-90D	1
MOR-214.3X5.7-90D	1
MOR-219.3X5.7-90D	1
MOR-229.3X5.7-90D	1
MOR-239.3X5.7-90D	1
MOR-259.3X5.7-90D	1
MOR-269.3X5.7-90D	1
MOR-274.3X5.7-90D	1
MOR-279.3X5.7-90D	1
MOR-289.3X5.7-90D	1
MOR-155X6-90D	1
MOR-257.5X6.5-90D	1
MOR-149.5X8.4-90D	1
MOR-154.5X8.4-90D	1
MOR-159.5X8.4-90D	1
MOR-164.5X8.4-90D	1
MOR-169.5X8.4-90D	1
MOR-174.5X8.4-90D	1
MOR-179.5X8.4-90D	1
MOR-184.5X8.4-90D	1
MOR-189.5X8.4-90D	1
MOR-194.5X8.4-90D	1
MOR-199.5X8.4-90D	1
MOR-208.5X8.4-90D	1
MOR-209.5X8.4-90D	1
MOR-214.5X8.4-90D	1
MOR-219.5X8.4-90D	1
MOR-224.5X8.4-90D	1
MOR-234.5X8.4-90D	1
MOR-239.5X8.4-90D	1
MOR-264.5X8.4-90D	1
MOR-299.5X8.4-90D	1
MOR-374.5X8.4-90D	1

O-RINGS - 75 DURO FLUOROCARBON

Please specify 75 or 90 Durometer when ordering. Metric o-rings are offered in minimum package quantities (MP in chart).



SEAL INFORMATION	
MATERIAL	75A DURO FLUOROCARBON
TEMPERATURE RANGE	-20° TO +400° F
PART NUMBER	(Prefix) - (ID) X (CS)

Part Number	MP
MOR-3X1V	20
MOR-4X1V	10
MOR-6X1V	20
MOR-2X1.5V	15
MOR-5X1.5V	20
MOR-7X1.5V	15
MOR-11X1.5V	10
MOR-12X1.5V	10
MOR-13X1.5V	10
MOR-17X1.5V	1
MOR-3.1X1.6V	20
MOR-4.1X1.6V	20
MOR-7.1X1.6V	10
MOR-9.1X1.6V	10
MOR-13.1X1.6V	10
MOR-4.8X1.9V	15
MOR-5.8X1.9V	15
MOR-6.8X1.9V	10
MOR-7.8X1.9V	10
MOR-8.8X1.9V	10
MOR-9.8X1.9V	10
MOR-3X2V	10
MOR-4X2V	10
MOR-5X2V	10
MOR-6X2V	10
MOR-7X2V	10
MOR-8X2V	10
MOR-9X2V	10
MOR-10X2V	10
MOR-11X2V	10
MOR-12X2V	10
MOR-13X2V	10
MOR-14X2V	5
MOR-15X2V	5
MOR-16X2V	5

Part Number	MP
MOR-17X2V	5
MOR-18X2V	5
MOR-19X2V	5
MOR-20X2V	5
MOR-22X2V	5
MOR-23.5X2V	5
MOR-25X2V	5
MOR-26X2V	5
MOR-27X2V	5
MOR-30X2V	5
MOR-32X2V	5
MOR-35X2V	5
MOR-37.5X2V	5
MOR-39.5X2V	2
MOR-44X2V	2
MOR-50X2V	2
MOR-55X2V	2
MOR-7.6X2.4V	10
MOR-8.3X2.4V	10
MOR-8.6X2.4V	10
MOR-9.8X2.4V	5
MOR-10.8X2.4V	5
MOR-11.3X2.4V	5
MOR-11.8X2.4V	5
MOR-12.3X2.4V	5
MOR-13.3X2.4V	5
MOR-13.8X2.4V	5
MOR-14.8X2.4V	5
MOR-15.8X2.4V	5
MOR-17.3X2.4V	5
MOR-17.8X2.4V	5
MOR-19.8X2.4V	5
MOR-20.8X2.4V	5
MOR-21X3V	5
MOR-21.8X2.4V	5

Part Number	MP
MOR-39.6X2.4V	2
MOR-7X2.5V	10
MOR-10X2.5V	5
MOR-11X2.5V	5
MOR-12X2.5V	5
MOR-13X2.5V	5
MOR-14X2.5V	5
MOR-15X2.5V	5
MOR-16X2.5V	5
MOR-17X2.5V	4
MOR-18X2.5V	5
MOR-19X2.5V	5
MOR-20X2.5V	5
MOR-22X2.5V	5
MOR-23X2.5V	5
MOR-28X2.5V	5
MOR-35X2.5V	2
MOR-59X2.5V	1
MOR-9X3V	5
MOR-10X3V	5
MOR-11X3V	5
MOR-13X3V	5
MOR-15X3V	5
MOR-16X3V	5
MOR-17X3V	5
MOR-19X3V	5
MOR-20X3V	5
MOR-22X3V	5
MOR-22.2X3V	5
MOR-25X3V	5
MOR-26X3V	5
MOR-27X3V	5
MOR-28X3V	2
MOR-29X3V	2
MOR-30X3V	2

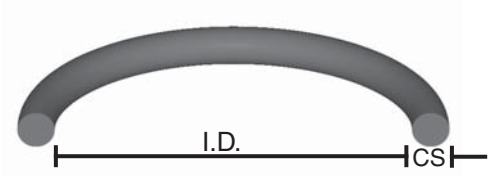
O-RINGS - 75 DURO FLUOROCARBON

Part Number	MP
MOR-32X3V	2
MOR-33X3V	2
MOR-34X3V	2
MOR-35X3V	2
MOR-36X3V	2
MOR-38X3V	2
MOR-39X3V	2
MOR-42.2X3V	2
MOR-46X3V	1
MOR-48X3V	2
MOR-49.5X3V	2
MOR-52X3V	2
MOR-57X3V	1
MOR-60X3V	1
MOR-62X3V	1
MOR-64X3V	1
MOR-65X3V	1
MOR-68X3V	1
MOR-72X3V	1
MOR-74X3V	1
MOR-78X3V	1

Part Number	MP
MOR-95X3V	1
MOR-24.4X3.1V	2
MOR-29.4X3.1V	2
MOR-39.4X3.1V	2
MOR-44.4X3.1V	1
MOR-49.4X3.1V	1
MOR-54.4X3.1V	1
MOR-59.4X3.1V	1
MOR-64.4X3.1V	1
MOR-69.4X3.1V	1
MOR-74.4X3.1V	1
MOR-79.4X3.1V	1
MOR-84.4X3.1V	1
MOR-89.4X3.1V	1
MOR-94.4X3.1V	1
MOR-99.4X3.1V	1
MOR-104.4X3.1V	1
MOR-109.4X3.1V	1
MOR-114.4X3.1V	1
MOR-119.4X3.1V	1
MOR-124.4X3.1V	1

Part Number	MP
MOR-38X4V	1
MOR-41X4V	2
MOR-44X4V	1
MOR-48X4V	1
MOR-72X4V	1
MOR-124X4V	1
MOR-52.6X5.7V	1
MOR-54.6X5.7V	1
MOR-59.6X5.7V	1
MOR-69.6X5.7V	1
MOR-79.6X5.7V	1
MOR-84.6X5.7V	1
MOR-99.6X5.7V	1
MOR-114.6X5.7V	1
MOR-119.6X5.7V	1
MOR-129.6X5.7V	1
MOR-134.6X5.7V	1
MOR-139.6X5.7V	1
MOR-154.3X5.7V	1
MOR-189.3X5.7V	1

O-RINGS - 70 DUROMETER MOR-JIS STYLE



SEAL INFORMATION	
MATERIAL	70A DURO NITRILE
TEMPERATURE RANGE	-40° TO +220° F
PART NUMBER	(Prefix) - (ID) X (CS)

List Number	MP
MOR-JIS-G025	25
MOR-JIS-G030	20
MOR-JIS-G035	20
MOR-JIS-G040	20
MOR-JIS-G045	10
MOR-JIS-G050	10
MOR-JIS-G055	10
MOR-JIS-G060	10
MOR-JIS-G065	10
MOR-JIS-G070	10
MOR-JIS-G075	5
MOR-JIS-G080	5
MOR-JIS-G085	5
MOR-JIS-G090	5
MOR-JIS-G095	5
MOR-JIS-G100	5
MOR-JIS-G105	5
MOR-JIS-G110	5
MOR-JIS-G115	5
MOR-JIS-G120	5
MOR-JIS-G125	5
MOR-JIS-G130	5
MOR-JIS-G135	2
MOR-JIS-G140	2
MOR-JIS-G145	2
MOR-JIS-G150	2
MOR-JIS-G155	2
MOR-JIS-G160	2
MOR-JIS-G165	2
MOR-JIS-G170	2

List Number	MP
MOR-JIS-G175	2
MOR-JIS-G180	2
MOR-JIS-G185	2
MOR-JIS-G190	2
MOR-JIS-G195	2
MOR-JIS-G200	2
MOR-JIS-G210	2
MOR-JIS-G215	2
MOR-JIS-G220	2
MOR-JIS-G225	1
MOR-JIS-G230	1
MOR-JIS-G235	1
MOR-JIS-G240	1
MOR-JIS-G250	1
MOR-JIS-G255	1
MOR-JIS-G260	1
MOR-JIS-G270	1
MOR-JIS-G275	1
MOR-JIS-G280	1
MOR-JIS-G290	1
MOR-JIS-G300	1
MOR-JIS-G305	1
MOR-JIS-G310	1
MOR-JIS-G340	1
MOR-JIS-G345	1
MOR-JIS-G360	1
MOR-JIS-G400	1
MOR-JIS-P003	100
MOR-JIS-P004	100
MOR-JIS-P005	100

List Number	MP
MOR-JIS-P006	100
MOR-JIS-P007	100
MOR-JIS-P008	100
MOR-JIS-P009	100
MOR-JIS-P010	100
MOR-JIS-P010A	100
MOR-JIS-P011	100
MOR-JIS-P011.2	100
MOR-JIS-P012	100
MOR-JIS-P012.5	20
MOR-JIS-P014	100
MOR-JIS-P015	100
MOR-JIS-P016	100
MOR-JIS-P018	100
MOR-JIS-P020	100
MOR-JIS-P021	100
MOR-JIS-P022	100
MOR-JIS-P022.4	25
MOR-JIS-P022A	25
MOR-JIS-P024	25
MOR-JIS-P025	25
MOR-JIS-P025.5	25
MOR-JIS-P026	25
MOR-JIS-P028	20
MOR-JIS-P029	20
MOR-JIS-P029.5	20
MOR-JIS-P030	20
MOR-JIS-P031	20
MOR-JIS-P031.5	20
MOR-JIS-P032	20

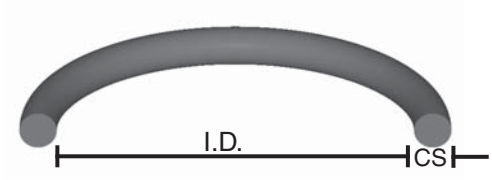
O-RINGS - 70 DUROMETER MOR-JIS STYLE

List Number	MP
MOR-JIS-P034	20
MOR-JIS-P035	20
MOR-JIS-P035.5	20
MOR-JIS-P036	20
MOR-JIS-P038	20
MOR-JIS-P039	20
MOR-JIS-P040	20
MOR-JIS-P041	20
MOR-JIS-P042	20
MOR-JIS-P044	10
MOR-JIS-P045	10
MOR-JIS-P046	10
MOR-JIS-P048	10
MOR-JIS-P048A	5
MOR-JIS-P049	10
MOR-JIS-P050	10
MOR-JIS-P050A	5
MOR-JIS-P052	5
MOR-JIS-P053	5
MOR-JIS-P055	5
MOR-JIS-P056	5
MOR-JIS-P058	5
MOR-JIS-P060	2
MOR-JIS-P062	2
MOR-JIS-P063	2
MOR-JIS-P065	2
MOR-JIS-P067	2
MOR-JIS-P070	2
MOR-JIS-P071	2
MOR-JIS-P075	2
MOR-JIS-P080	2

List Number	MP
MOR-JIS-P085	2
MOR-JIS-P090	2
MOR-JIS-P095	2
MOR-JIS-P100	2
MOR-JIS-P102	2
MOR-JIS-P105	2
MOR-JIS-P110	2
MOR-JIS-P112	2
MOR-JIS-P115	2
MOR-JIS-P120	2
MOR-JIS-P125	2
MOR-JIS-P130	2
MOR-JIS-P132	2
MOR-JIS-P135	2
MOR-JIS-P140	2
MOR-JIS-P145	2
MOR-JIS-P150	2
MOR-JIS-P150A	1
MOR-JIS-P155	1
MOR-JIS-P160	1
MOR-JIS-P165	1
MOR-JIS-P170	1
MOR-JIS-P175	1
MOR-JIS-P180	1
MOR-JIS-P185	1
MOR-JIS-P190	1
MOR-JIS-P195	1
MOR-JIS-P200	1
MOR-JIS-P205	1
MOR-JIS-P209	1
MOR-JIS-P210	1

List Number	MP
MOR-JIS-P215	1
MOR-JIS-P220	1
MOR-JIS-P225	1
MOR-JIS-P230	1
MOR-JIS-P235	1
MOR-JIS-P240	1
MOR-JIS-P245	1
MOR-JIS-P250	1
MOR-JIS-P255	1
MOR-JIS-P260	1
MOR-JIS-P265	1
MOR-JIS-P270	1
MOR-JIS-P275	1
MOR-JIS-P280	1
MOR-JIS-P285	1
MOR-JIS-P290	1
MOR-JIS-P295	1
MOR-JIS-P300	1
MOR-JIS-P315	1
MOR-JIS-P320	1
MOR-JIS-P335	1
MOR-JIS-P340	1
MOR-JIS-P355	1
MOR-JIS-P360	1
MOR-JIS-P375	1
MOR-JIS-P385	1
MOR-JIS-P400	1
MOR-JIS-V015	6
MOR-JIS-V024	25
MOR-JIS-V085	5
MOR-JIS-V120	5

O-RINGS - 90 DURO FLUOROCARBON MOR-JIS STYLE



SEAL INFORMATION	
MATERIAL	90A DURO FLOUROCARBON
TEMPERATURE RANGE	-40° TO +220° F
PART NUMBER	(Prefix) - (ID) X (CS)

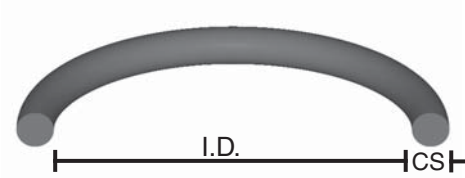
List Number	MP
MOR-JIS-G025V	2
MOR-JIS-G030V	2
MOR-JIS-G040V	2
MOR-JIS-G045V	1
MOR-JIS-G050V	1
MOR-JIS-G055V	1
MOR-JIS-G060V	1
MOR-JIS-G065V	1
MOR-JIS-G070V	1
MOR-JIS-G075V	1
MOR-JIS-G080V	1
MOR-JIS-G085V	1
MOR-JIS-G090V	1
MOR-JIS-G095V	1
MOR-JIS-G100V	1
MOR-JIS-G105V	1
MOR-JIS-G110V	1
MOR-JIS-G115V	1
MOR-JIS-G120V	1
MOR-JIS-G125V	1
MOR-JIS-G145V	1

List Number	MP
MOR-JIS-G155V	1
MOR-JIS-G190V	1
MOR-JIS-G195V	1
MOR-JIS-P005V	15
MOR-JIS-P006V	15
MOR-JIS-P007V	10
MOR-JIS-P008V	10
MOR-JIS-P009V	10
MOR-JIS-P010AV	5
MOR-JIS-P010V	10
MOR-JIS-P011V	5
MOR-JIS-P012.5V	5
MOR-JIS-P012V	5
MOR-JIS-P014V	5
MOR-JIS-P014-90DV	1
MOR-JIS-P015V	5
MOR-JIS-P016V	5
MOR-JIS-P018V	5
MOR-JIS-P020V	5
MOR-JIS-P021V	5
MOR-JIS-P022V	5

List Number	MP
MOR-JIS-P029V	1
MOR-JIS-P050AV	1
MOR-JIS-P053V	1
MOR-JIS-P055V	1
MOR-JIS-P060V	1
MOR-JIS-P065V	1
MOR-JIS-P070V	1
MOR-JIS-P080V	1
MOR-JIS-P085V	1
MOR-JIS-P090V	1
MOR-JIS-P095V	1
MOR-JIS-P100V	1
MOR-JIS-P110V	1
MOR-JIS-P115V	1
MOR-JIS-P120V	1
MOR-JIS-P130V	1
MOR-JIS-P135V	1
MOR-JIS-P140V	1

O-RINGS - 90 DURO NITRILE MOR-JIS STYLE

Please specify 75 or 90 Durometer when ordering. Metric o-rings are offered in minimum package quantities (MP in chart).



SEAL INFORMATION	
MATERIAL	90A DURO NITRILE
TEMPERATURE RANGE	-20° TO +400° F
PART NUMBER	(Prefix) - (ID) X (CS)

Part Number	MP
MOR-JIS-G025-90D	25
MOR-JIS-G030-90D	20
MOR-JIS-G035-90D	20
MOR-JIS-G040-90D	20
MOR-JIS-G045-90D	10
MOR-JIS-G050-90D	10
MOR-JIS-G055-90D	10
MOR-JIS-G060-90D	5
MOR-JIS-G065-90D	5
MOR-JIS-G070-90D	5
MOR-JIS-G075-90D	5
MOR-JIS-G080-90D	5
MOR-JIS-G085-90D	5
MOR-JIS-G090-90D	5
MOR-JIS-G095-90D	5
MOR-JIS-G100-90D	5
MOR-JIS-G105-90D	5
MOR-JIS-G110-90D	5
MOR-JIS-G115-90D	5
MOR-JIS-G120-90D	5
MOR-JIS-G125-90D	5
MOR-JIS-G130-90D	5
MOR-JIS-G135-90D	2
MOR-JIS-G140-90D	2
MOR-JIS-G145-90D	2
MOR-JIS-G150-90D	2
MOR-JIS-G155-90D	2
MOR-JIS-G160-90D	2
MOR-JIS-G165-90D	1
MOR-JIS-G170-90D	1
MOR-JIS-G175-90D	1
MOR-JIS-G180-90D	1
MOR-JIS-G185-90D	1
MOR-JIS-G190-90D	1
MOR-JIS-G195-90D	1

Part Number	MP
MOR-JIS-G200-90D	1
MOR-JIS-G205-90D	1
MOR-JIS-G210-90D	1
MOR-JIS-G215-90D	1
MOR-JIS-G220-90D	1
MOR-JIS-G225-90D	1
MOR-JIS-G230-90D	1
MOR-JIS-G235-90D	1
MOR-JIS-G240-90D	1
MOR-JIS-G250-90D	1
MOR-JIS-G255-90D	1
MOR-JIS-G260-90D	1
MOR-JIS-G270-90D	1
MOR-JIS-G275-90D	1
MOR-JIS-G280-90D	1
MOR-JIS-G290-90D	1
MOR-JIS-G300-90D	1
MOR-JIS-P003-90D	100
MOR-JIS-P004-90D	100
MOR-JIS-P005-90D	100
MOR-JIS-P006-90D	100
MOR-JIS-P007-90D	50
MOR-JIS-P008-90D	50
MOR-JIS-P009-90D	50
MOR-JIS-P010-90D	50
MOR-JIS-P010A-90D	25
MOR-JIS-P011.2-90D	25
MOR-JIS-P011-90D	25
MOR-JIS-P012.5-90D	20
MOR-JIS-P012-90D	25
MOR-JIS-P014-90D	20
MOR-JIS-P015-90D	20
MOR-JIS-P016-90D	20
MOR-JIS-P018-90D	20
MOR-JIS-P020-90D	20

Part Number	MP
MOR-JIS-P021-90D	20
MOR-JIS-P022.4-90D	20
MOR-JIS-P022-90D	20
MOR-JIS-P022A-90D	20
MOR-JIS-P024-90D	20
MOR-JIS-P025.5-90D	20
MOR-JIS-P025-90D	20
MOR-JIS-P026-90D	10
MOR-JIS-P028-90D	10
MOR-JIS-P029.5-90D	20
MOR-JIS-P029-90D	10
MOR-JIS-P030-90D	10
MOR-JIS-P031.5-90D	20
MOR-JIS-P031-90D	10
MOR-JIS-P032-90D	10
MOR-JIS-P034-90D	10
MOR-JIS-P035.5-90D	20
MOR-JIS-P035-90D	10
MOR-JIS-P036-90D	10
MOR-JIS-P038-90D	10
MOR-JIS-P039-90D	10
MOR-JIS-P040-90D	10
MOR-JIS-P041-90D	10
MOR-JIS-P042-90D	10
MOR-JIS-P044-90D	5
MOR-JIS-P045-90D	5
MOR-JIS-P046-90D	5
MOR-JIS-P048-90D	5
MOR-JIS-P048A-90D	5
MOR-JIS-P049-90D	5
MOR-JIS-P050-90D	5
MOR-JIS-P050A-90D	5
MOR-JIS-P052-90D	5
MOR-JIS-P053-90D	5
MOR-JIS-P055-90D	5

O-RINGS - 90 DURO NITRILE MOR-JIS STYLE

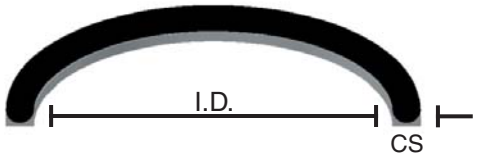
Part Number	MP
MOR-JIS-P056-90D	5
MOR-JIS-P058-90D	2
MOR-JIS-P060-90D	2
MOR-JIS-P062-90D	2
MOR-JIS-P063-90D	2
MOR-JIS-P065-90D	2
MOR-JIS-P067-90D	2
MOR-JIS-P070-90D	2
MOR-JIS-P071-90D	2
MOR-JIS-P075-90D	2
MOR-JIS-P080-90D	2
MOR-JIS-P085-90D	2
MOR-JIS-P090-90D	2
MOR-JIS-P095-90D	2
MOR-JIS-P100-90D	2
MOR-JIS-P102-90D	2
MOR-JIS-P105-90D	2
MOR-JIS-P110-90D	2
MOR-JIS-P112-90D	2
MOR-JIS-P115-90D	2
MOR-JIS-P120-90D	2
MOR-JIS-P125-90D	2
MOR-JIS-P130-90D	2

Part Number	MP
MOR-JIS-P132-90D	2
MOR-JIS-P135-90D	2
MOR-JIS-P140-90D	2
MOR-JIS-P145-90D	2
MOR-JIS-P150-90D	2
MOR-JIS-P150A-90D	1
MOR-JIS-P155-90D	1
MOR-JIS-P160-90D	1
MOR-JIS-P165-90D	1
MOR-JIS-P170-90D	1
MOR-JIS-P175-90D	1
MOR-JIS-P180-90D	1
MOR-JIS-P185-90D	1
MOR-JIS-P190-90D	1
MOR-JIS-P195-90D	1
MOR-JIS-P200-90D	1
MOR-JIS-P205-90D	1
MOR-JIS-P209-90D	1
MOR-JIS-P210-90D	1
MOR-JIS-P215-90D	1
MOR-JIS-P220-90D	1
MOR-JIS-P225-90D	1
MOR-JIS-P230-90D	1

Part Number	MP
MOR-JIS-P235-90D	1
MOR-JIS-P240-90D	1
MOR-JIS-P245-90D	1
MOR-JIS-P250-90D	1
MOR-JIS-P255-90D	1
MOR-JIS-P260-90D	1
MOR-JIS-P265-90D	1
MOR-JIS-P270-90D	1
MOR-JIS-P275-90D	1
MOR-JIS-P280-90D	1
MOR-JIS-P290-90D	1
MOR-JIS-P295-90D	1
MOR-JIS-P300-90D	1
MOR-JIS-P315-90D	1
MOR-JIS-P320-90D	1
MOR-JIS-P335-90D	1
MOR-JIS-P340-90D	1
MOR-JIS-P355-90D	1
MOR-JIS-P360-90D	1
MOR-JIS-P375-90D	1
MOR-JIS-P400-90D	1
MOR-JIS-V015-90D	2
MOR-JIS-V024-90D	2

O-RINGS - OBVD STATIC SEALS

OBVD static seals are a composite of an o-ring and a back-up ring. An 80 durometer Nitrile o-ring is permanently affixed to a 95 durometer urethane back-up ring.



SEAL INFORMATION	
MATERIAL	NITRILE URETHANE
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 7,250 PSI
PART NUMBER	(Prefix) - (ID) X (CS)

List Number	ID	CS
OBVD 35X3	35	3
OBVD 53X3.53	53	3.53
OBVD 56X3	56	3
OBVD 57X4	57	4
OBVD 60X3	60	3
OBVD 60X4	60	4
OBVD 75X3	75	3
OBVD 75X4	75	4
OBVD 82X4	82	4
OBVD 84X3	84	3
OBVD 85X3	85	3
OBVD 85X5	85	5
OBVD 87X4	87	4

List Number	ID	CS
OBVD 92X4	92	4
OBVD 94X3	94	3
OBVD 104X3	104	3
OBVD 110X4	110	4
OBVD 110X5	110	5
OBVD 115X5	115	5
OBVD 117X4	117	4
OBVD 118X4	118	4
OBVD 135X5	135	5
OBVD 140X5	140	5
OBVD 147X4	147	4
OBVD 150X5	150	5
OBVD 165X5	165	5

List Number	ID	CS
OBVD 170X5	170	5
OBVD 195X4	195	4
OBVD 196X7	196	7
OBVD 208X6	208	6
OBVD 212X6	213	6
OBVD 230X7	230	7
OBVD 240X6	240	6
OBVD 240X7	240	7
OBVD 290X8	290	8
OBVD 298X6	298	6
OBVD 380X8	380	8
OBVD 435X8	435	8
OBVD 560X8	560	8

O-RINGS - KITS

O-RING SPLICE KIT
INCH& METRIC SIZES

Part Number: MET/INCH SPLICE KIT

This kit can produce O-Rings of any standard inch size cross-section plus a wide variety of metric sizes. Each kit contains quick drying adhesive, cutting and splicing jig, razor blade, and one meter (three feet) of 70 Durometer Buna-N cord stock in each of the following sizes:

Inch cross-sections: (inch)
1/16" (.070), 3/32" (.103), 1/8" (.139),
3/16" (.210), 1/4" (.275)
Metric cross-sections: (mm)
1.6, 2.0, 2.5, 3.0, 3.5, 4.0, 5.0, 5.7, 8.4

O-RING CORD STOCK

Part Number	Actual C.S.
MORC-1.5	1.5
MORC-2.0	2
MORC-2.5	2.5
MORC-3.0	3

Part Number	Actual C.S.
MORC-4.0	4
MORC-5.0	5
MORC-5.7	5.7
MORC-8.4	8.4

O-RING KITS

COMMON JAPANESE SIZE O-RINGS IN 70 DUROMETER

Part Number: METRIC O KIT-J

This 380 piece kit contains the most popular Japanese Industrial metric O-ring sizes.

I.D.	C.S	QTY	I.D.	C.S	QTY
2.8	1.9	25	20.8	2.4	8
3.8	1.9	20	21.8	2.4	8
4.8	1.9	20	24.4	3.1	6
5.8	1.9	20	29.4	3.1	7
6.8	1.9	15	21.7	3.5	5
7.8	1.9	15	22.1	3.5	5
8.8	1.9	15	23.7	3.5	7
9.8	1.9	15	24.7	3.5	7
9.8	2.4	15	25.2	3.5	7
10.8	2.4	15	25.7	3.5	7
11.0	2.4	15	27.7	3.5	7
11.8	2.4	12	28.7	3.5	6
12.8	2.4	12	29.2	3.5	6
13.8	2.4	12	29.7	3.5	6
14.8	2.4	12	30.7	3.5	6
15.8	2.4	12	31.2	3.5	6
17.8	2.4	8	14.5	4.0	4
19.8	2.4	8	23.5	4.0	6

COMMON JAPANESE SIZE O-RINGS IN 90 DUROMETER

Part Number: METRIC O KIT-J-90D

This 380 piece kit contains the most popular Japanese Industrial metric O-ring sizes in 90 durometer NBR.

I.D.	C.S	QTY	I.D.	C.S	QTY
2.8	1.9	25	20.8	2.4	8
3.8	1.9	20	21.8	2.4	8
4.8	1.9	20	24.4	3.1	6
5.8	1.9	20	29.4	3.1	7
6.8	1.9	15	21.7	3.5	5
7.8	1.9	15	22.1	3.5	5
8.8	1.9	15	23.7	3.5	7
9.8	1.9	15	24.7	3.5	7
9.8	2.4	15	25.2	3.5	7
10.8	2.4	15	25.7	3.5	7
11.0	2.4	15	27.7	3.5	7
11.8	2.4	12	28.7	3.5	6
12.8	2.4	12	29.2	3.5	6
13.8	2.4	12	29.7	3.5	6
14.8	2.4	12	30.7	3.5	6
15.8	2.4	12	31.2	3.5	6
17.8	2.4	8	14.5	4.0	4
19.8	2.4	8	23.5	4.0	6

O-RING KITS

COMMON EUROPEAN SIZE O-RINGS IN 70 DUROMETER

Part Number: METRIC O KIT-E

This 500 piece kit contains the most popular European metric O-ring sizes.

I.D.	C.S.	QTY	I.D.	C.S.	QTY
5.0	1.5	20	19.0	2.0	10
13.0	1.5	15	20.0	2.0	10
16.0	1.5	10	4.3	2.4	15
2.2	1.6	20	5.3	2.4	15
3.1	1.6	20	5.6	2.4	15
4.1	1.6	20	7.6	2.4	15
7.1	1.6	20	8.3	2.4	15
9.1	1.6	15	8.6	2.4	15
10.1	1.6	15	10.0	2.5	10
13.1	1.6	15	13.0	2.5	10
4.0	2.0	20	14.0	2.5	10
6.0	2.0	20	15.0	2.5	10
8.0	2.0	15	17.0	2.5	10
9.0	2.0	15	18.0	2.5	10
10.0	2.0	15	19.0	2.5	10
12.0	2.0	15	9.0	3.0	10
14.0	2.0	10	10.0	3.0	10
16.0	2.0	10	11.0	3.0	10

COMMON EUROPEAN SIZE O-RINGS IN 90 DUROMETER

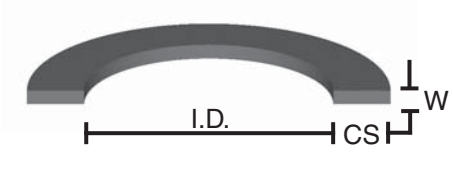
Part Number: METRIC O Kit-E-90D

This 500 piece kit contains the most popular European metric O-ring sizes.

I.D.	C.S.	QTY	I.D.	C.S.	QTY
5.0	1.5	20	19.0	2.0	10
13.0	1.5	15	20.0	2.0	10
16.0	1.5	10	4.3	2.4	15
2.2	1.6	20	5.3	2.4	15
3.1	1.6	20	5.6	2.4	15
4.1	1.6	20	7.6	2.4	15
7.1	1.6	20	8.3	2.4	15
9.1	1.6	15	8.6	2.4	15
10.1	1.6	15	10.0	2.5	10
13.1	1.6	15	13.0	2.5	10
4.0	2.0	20	14.0	2.5	10
6.0	2.0	20	15.0	2.5	10
8.0	2.0	15	17.0	2.5	10
9.0	2.0	15	18.0	2.5	10
10.0	2.0	15	19.0	2.5	10
12.0	2.0	15	9.0	3.0	10
14.0	2.0	10	10.0	3.0	10
16.0	2.0	10	11.0	3.0	10

STYLE MBT BACK-UP RINGS

Commonly used with metric o-rings, these back-up rings are made of virgin PTFE unless suffix specifies otherwise.



STANDARD IS VIRGIN PTFE.
G= GLASS FILLED PTFE
B= BRONZE FILLED PTFE
CG= CARBON GRAPHITE FILLED PTFE
S= SPLIT RING

SEAL INFORMATION	
MATERIAL	PTFE
TEMPERATURE RANGE	-100° TO +500° F
PART NUMBER	(Prefix) - (ID) X (CS) X (W)

Part Number
MBT-3X1.5X1.25
MBT-5X1.5X1.25
MBT-6X1.5X1.25
MBT-7X1.5X1.25
MBT-8X1.5X1.25
MBT-9X1.5X1.25
MBT-10X1.5X1.25
MBT-13X1.5X1
MBT-10X2X1.25
MBT-11X2X1.25
MBT-12X2X1.25
MBT-12.5X2X1.25
MBT-13X2X1.2
MBT-14X2X1.25
MBT-15X2X1.25
MBT-16X2X1.25
MBT-18X2X1.25
MBT-20X2X1.25
MBT-21X2X1.25
MBT-22X2X1.25
MBT-28X2X1.5S
MBT-47X2X1.25
MBT-53X2X1.25
MBT-11.8X2.1X1
MBT-20X2.5X1.25
MBT-25X2.5X1.25
MBT-30X2.5X1.25
MBT-32X2.5X1.5
MBT-35X2.5X1.25
MBT-40X2.5X1.25
MBT-45X2.5X1.25
MBT-50X2.5X1.25

Part Number
MBT-55X2.5X1.25
MBT-56X2.5X1.25
MBT-57X2.5X1.5
MBT-60X2.5X1.25
MBT-65X2.5X1.25
MBT-70X2.5X1.25
MBT-75X2.5X1.25
MBT-80X2.5X1.25
MBT-85X2.5X1.25
MBT-88X2.5X1.3
MBT-90X2.5X1.25
MBT-95X2.5X1.25
MBT-100X2.5X1.25
MBT-105X2.5X1.25
MBT-110X2.5X1.25
MBT-115X2.5X1.25
MBT-120X2.5X1.25
MBT-125X2.5X1.25
MBT-130X2.5X1.25
MBT-135X2.5X1.25
MBT-140X2.5X1.25
MBT-145X2.5X1.25
MBT-155X2.5X1.5
MBT-22X3X1.25
MBT-22.4X3X1.25
MBT-24X3X1.25
MBT-25X3X1.25
MBT-26X3X1.25
MBT-28X3X1.25
MBT-29X3X1.25
MBT-29.5X3X1.25
MBT-30X3X1.25

Part Number
MBT-30X3X2.3
MBT-31X3X1.25
MBT-32X3X1.25
MBT-34X3X1.25
MBT-35X3X1.25
MBT-35.5X3X1.25
MBT-36X3X1.25
MBT-38X3X1.25
MBT-39X3X1.25
MBT-40X3X1.25
MBT-41X3X1.25
MBT-42X3X1.25
MBT-44X3X1.25
MBT-45X3X1.25
MBT-46X3X1.25
MBT-48X3X1.25
MBT-49X3X1.25
MBT-50X3X1.25
MBT-62X3.5X1.1
MBT-82X3.5X1.5G
MBT-150X4X1.6
MBT-170X4.5X1.9
MBT-190X4.5X1.9
MBT-50X5X1.9
MBT-52X5X1.9
MBT-53X5X1.9
MBT-55X5X1.9
MBT-56X5X1.9
MBT-58X5X1.9
MBT-60X5X1.5SG
MBT-60X5X1.9
MBT-62X5X1.9

Part Number
MBT-63X5X1.9
MBT-65X5X1.9
MBT-67X5X1.9
MBT-70X5X1.9
MBT-71X5X1.9
MBT-75X5X1.9
MBT-80X5X1.9
MBT-85X5X1.9
MBT-90X5X1.9
MBT-95X5X1.9
MBT-100X5X1.9
MBT-105X5X1.9
MBT-110X5X1.9
MBT-112X5X1.9
MBT-115X5X1.9
MBT-120X5X1.9
MBT-125X5X1.9
MBT-130X5X1.9
MBT-132X5X1.9
MBT-135X5X1.9
MBT-140X5X1.9
MBT-145X5X1.9
MBT-150X5X1.9
MBT-155X5X1.9
MBT-160X5X1.9
MBT-165X5X1.9
MBT-170X5X1.9
MBT-180X5X1.9
MBT-180X5X2.5
MBT-185X5X1.9
MBT-185X5X1.9
MBT-190X5X1.9

STYLE MBT BACK-UP RINGS

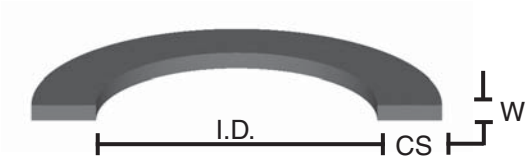
Part Number
MBT-195X5X1.9
MBT-200X5X1.9
MBT-210X5X1.9
MBT-214X5X1.9
MBT-215X5X1.9
MBT-220X5X1.9
MBT-230X5X1.9
MBT-240X5X1.9
MBT-250X5X1.9
MBT-260X5X1.9
MBT-270X5X1.9

Part Number
MBT-275X5X1.9
MBT-280X5X1.9
MBT-290X5X1.9
MBT-300X5X1.9
MBT-112X7.5X3SCG
MBT-150X7.5X2.75
MBT-155X7.5X2.75
MBT-160X7.5X2.75
MBT-165X7.5X2.75
MBT-170X7.5X2.75
MBT-175X7.5X2.75

Part Number
MBT-180X7.5X2.75
MBT-185X7.5X2.75
MBT-190X7.5X2.75
MBT-195X7.5X2.75
MBT-200X7.5X2.75
MBT-205X7.5X2.75
MBT-209X7.5X2.75
MBT-210X7.5X2.5
MBT-210X7.5X2.75
MBT-235X7.5X2.75
MBT-240X7.5X2.75

Part Number
MBT-245X7.5X2.75
MBT-255X7.5X2.75
MBT-265X7.5X2.75
MBT-275X7.5X2.75
MBT-285X7.5X2.75
MBT-300X7.5X2.75
MBT-315X7.5X2.75
MBT-55X8X3SB

STYLE MBU BACK-UP RINGS



SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-40° TO +200° F
PART NUMBER	(Prefix) - (ID) X (CS) X (W)

Part Number
MBU-6X2X1.3
MBU-14X2X1.3
MBU-16X2X1.3
MBU-25X2.5X1.3
MBU-27X2.5X1.3
MBU-30X2.5X1.3
MBU-33X2.5X1.5
MBU-35X2.5X1.3
MBU-37X2.5X1.3
MBU-40X2.5X1.3
MBU-43X2.5X1.3
MBU-45X2.5X1.3
MBU-47X2.5X1.3
MBU-50X2.5X1.3
MBU-55X2.5X1.3
MBU-58X2.5X1.3
MBU-62X2.5X1.3
MBU-65X2.5X1.3
MBU-75X2.5X1.25-70D

Part Number
MBU-70X2.5X1.3
MBU-72.5X2.5X1.3
MBU-75X2.5X1.3
MBU-80X2.5X1.3
MBU-85X2.5X1.25-70D
MBU-85X2.5X1.3
MBU-90X2.5X1.3
MBU-95X2.5X1.3
MBU-98X2.5X1.3
MBU-100X2.5X1.3
MBU-105X2.5X1.3
MBU-110X2.5X1.3
MBU-115X2.5X1.3
MBU-120X2.5X1.3
MBU-125X2.5X1.3
MBU-130X2.5X1.25-70D
MBU-130X2.5X1.3
MBU-135X2.5X1.5
MBU-140X2.5X1.3

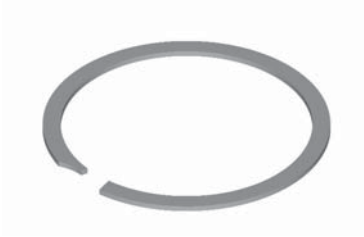
Part Number
MBU-47X3.5X1.1
MBU-56X3.5X1.25
MBU-66X3.5X1.2
MBU-72X3.5X1.25
MBU-76X3.5X1.1
MBU-53X5X1.7
MBU-55X5X1.7
MBU-60X5X1.7
MBU-75X5X1.7
MBU-78X5X1.7
MBU-85X5X1.7
MBU-90X5X1.7
MBU-95X5X1.7
MBU-100X5X1.7
MBU-110X5X1.7
MBU-115X5X1.7
MBU-120X5X1.7
MBU-130X5X1.7
MBU-140X5X1.7

Part Number
MBU-145X5X1.7
MBU-150X5X1.7
MBU-155X5X1.7
MBU-160X5X1.7
MBU-170X5X1.7
MBU-180X5X1.7
MBU-190X5X1.7
MBU-160X5X2.5-70D
MBU-180X5X2.5-70D
MBU-246X7X2.1
MBU-215X7.1X2.1
MBU-235X7.1X2.1
MBU-245X7.1X2.1
MBU-145X7.5X2.5
MBU-155X7.5X1.7
MBU-165X7.5X2.1
MBU-175X7.5X2.1
MBU-185X7.5X2.5
MBU-205X7.5X2.1

RETAINER RINGS

Spiral Type Retainer Rings

Part Number	Bore	Ring OD	Radial Wall	Thickness
MSL-32	32.0	34.5	3.0	0.80
MSL-34	34.0	36.3	2.7	0.62
MSL-54	52.0	54.8	3.0	0.80
MSL-74	74.0	74.0	3.5	1.00



Lock Wire

Part Number	Description
MLW-2	MLW - 2 mm Round Cross Section- Sold per inch
MLW-3	MLW - 3 mm Round Cross Section- Sold in 250 mm sections

Internal Retainer Rings

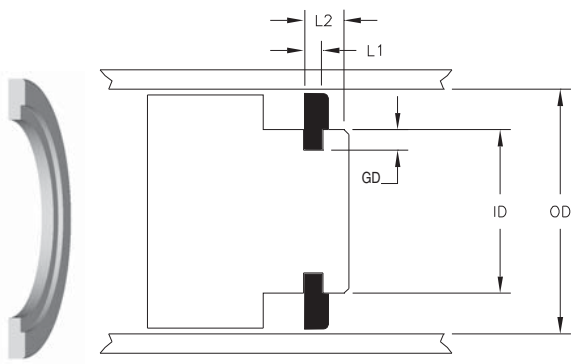
Part Number	Bore	Ring OD	Thickness
M300-30	30.0	32.1	1.20
M300-32	32.0	34.4	1.20
M300-42	42.0	45.5	1.30
M300-45	45.0	48.5	1.75
M300-47	47.0	50.5	1.75
M300-48	48.0	51.5	1.75
M300-50	50.0	54.2	2.00
M300-52	52.0	56.2	2.00
M300-55	55.0	59.2	1.50
M300-60	60.0	64.2	2.00
M300-62	62.0	66.2	2.00
M300-72	72.0	76.5	2.50
M300-80	80.0	84.5	2.50
M300-82	82.0	87.5	2.50
M300-130	130.0	137.0	4.00

External Retainer Rings

Part Number	Shaft Diam	Ring ID	Thickness
M310-13	13.0	11.9	1.00
M310-14	14.0	12.9	1.00
M310-25	25.0	23.0	1.20
M310-28	28.0	25.9	1.50
M310-30	30.0	27.9	1.50
M310-35	35.0	32.2	1.50
M310-45	45.0	41.5	1.75
M310-50	50.0	45.8	2.00
M310-60	60.0	55.8	2.00
M310-65	65.0	60.8	2.50

STYLE MSR U-SEAL RETAINER RINGS

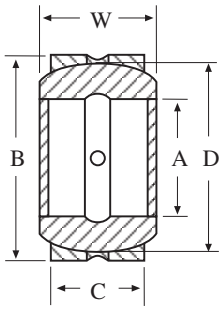
These rings are split for ease of installation and are retained in a groove. Their use is primarily to retain a single acting piston seals. Commonly are used with MUFN style piston seals.



SEAL INFORMATION	
MATERIAL	ACETAL
TEMPERATURE RANGE	-22° TO +212° F
PART NUMBER	(Prefix) - (OD) X (ID)

Part Number	ID	OD	L1	L2	Groove Depth
MSR-63X50	50	63	3.30	6.48	2.10
MSR-70X50	50	70	3.30	6.48	2.10
MSR-90X70	70	90	3.30	6.48	2.10
MSR-104.5X85	85	104.5	3.30	6.48	2.10
MSR-105X85	85	105	4.60	6.48	2.10
MSR-110X90	90	110	3.30	6.48	2.10
MSR-115X95	95	115	3.30	6.48	2.10

STYLE MHH SELF ALIGNING BEARINGS



Suffix:
2RS = Sealed Bearings

SEAL INFORMATION	
MATERIAL	CARBON CHROMIUM STEEL

Part Number	A	B	W	C	D
MHH20ES	20	35	16	12	29
MHH20ES2RS	20	35	16	12	29
MHH25ES	25	42	20	16	35.5
MHH25ES2RS	25	42	20	16	35.5
MHH30ES	30	47	22	18	40.7
MHH30ES2RS	30	47	22	18	40.7
MHH35ES	35	55	25	20	47
MHH35ES2RS	35	55	25	20	47
MHH40ES	40	62	28	22	53
MHH40ES2RS	40	62	28	22	53
MHH45ES2RS	45	68	32	25	60
MHH50ES	50	75	35	28	66
MHH50ES2RS	50	75	35	28	66
MHH60ES	60	90	44	36	80
MHH70ES	70	105	49	40	92
MHH70ES2RS	70	105	49	30	92
MHH80ES	80	120	55	45	105

STYLE MCPL COUPLINGS

50H

110H

140H

50A

Part Number	Description	Material	Aplication
MCPL-110H-AL	COUPLING - ALUM/HYT	Plastic with Aluminum	Hitachi, Kato, etc.
MCPL-140H-AL	COUPLING - ALUM/HYT	Plastic with Aluminum	Komatsu, Kobelco, Kato, etc.
MCPL-50A-AL	COUPLING - ALUM/HYT	Rubber with Aluminum	Kobelco, Mitsubishi, etc.
MCPL-50H-AL	COUPLING - ALUM/HYT	Plastic with Aluminum	Komatsu, Hitachi, Kobelco, Mitsubishi, Kato, etc.

Pre-Machined Chrome Rods

Contents

	Page
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Machined Chrome Rods	472 - 487
Mobile Cylinder Heads	488 - 491
Mobile Cylinder Pistons	492 - 493

MACHINED CHROME RODS

MACHINED CHROME ROD PROGRAM

- One end machined to fit standard pistons
- One end supplied blank for modification by customer (custom mount)

FEATURES:

- Steel Bar: 1045 steel bar, 75,000 psi minimum yield strength
- Shaft diameter is turned, ground, polished, induction hardened and chrome plated
- Surface Hardness: Induction hardened to Rc 50 minimum
  Case Depth: 0.050" minimum per SAE J423
- Plate Thickness: 0.001" minimum hard chrome-plated
- Hardness of Chrome Plate: Rc 68-72
- Surface Finish: 12 RMS maximum
- Packaging: Individually cardboard tube wrapped, inside hard plastic tubing
- Salt Spray Test: 48 hours minimum per ASTM B117
- Machined on one end to accommodate standard pistons
  Piston styles: IT, ITW, TH, and TM
- One end square cut to be modified, per application, by customer

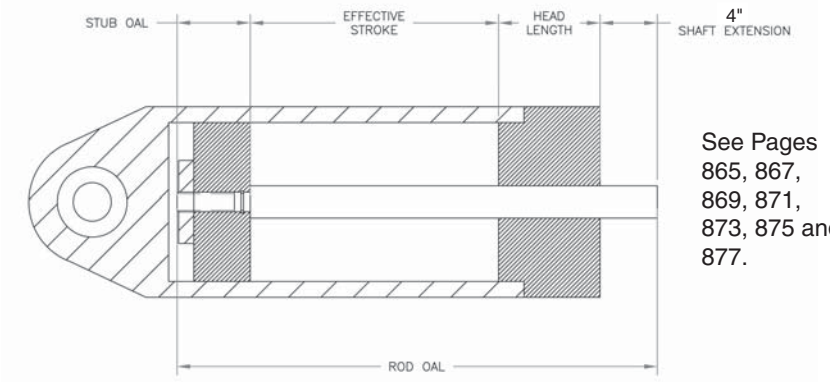
SELECTION CHART OVERVIEW

Rod Dia	Stub Dia	Part # 12" Nominal Stroke* (24" OAL)	Part # 24" Nominal Stroke* (36" OAL)	Part # 36" Nominal Stroke* (48" OAL)	Part # 48" Nominal Stroke* (60" OAL)	Part # 60" Nominal Stroke (72" OAL)
0.750	0.625	CR75I-0.75X24-0.62	CR75I-0.75X36-0.62	CR75I-0.75X48-0.62	N/A	N/A
1.000	0.750	CR75I-1.00X24-0.75	CR75I-1.00X36-0.75	CR75I-1.00X48-0.75	CR75I-1.00X60-0.75	N/A
1.125	0.750	CR75I-1.12X24-0.75	CR75I-1.12X36-0.75	CR75I-1.12X48-0.75	CR75I-1.12X60-0.75	CR75I-1.12X72-0.75
1.250	0.750	CR75I-1.25X24-0.75	CR75I-1.25X36-0.75	CR75I-1.25X48-0.75	CR75I-1.25X60-0.75	CR75I-1.25X72-0.75
1.500	0.750	CR75I-1.50X24-0.75	CR75I-1.50X36-0.75	CR75I-1.50X48-0.75	CR75I-1.50X60-0.75	CR75I-1.50X72-0.75
1.500	1.000	CR75I-1.50X24-1.00	CR75I-1.50X36-1.00	CR75I-1.50X48-1.00	CR75I-1.50X60-1.00	CR75I-1.50X72-1.00
1.750	1.000	CR75I-1.75X24-1.00	CR75I-1.75X36-1.00	CR75I-1.75X48-1.00	CR75I-1.75X60-1.00	CR75I-1.75X72-1.00
2.000	1.000	CR75I-2.00X24-1.00	CR75I-2.00X36-1.00	CR75I-2.00X48-1.00	CR75I-2.00X60-1.00	CR75I-2.00X72-1.00
2.000	1.250	CR75I-2.00X24-1.25	CR75I-2.00X36-1.25	CR75I-2.00X48-1.25	CR75I-2.00X60-1.25	CR75I-2.00X72-1.25
2.500	1.250	CR75I-2.50X24-1.25	CR75I-2.50X36-1.25	CR75I-2.50X48-1.25	CR75I-2.50X60-1.25	CR75I-2.50X72-1.25
3.000	1.250	CR75I-3.00X24-1.25	CR75I-3.00X36-1.25	CR75I-3.00X48-1.25	CR75I-3.00X60-1.25	CR75I-3.00X72-1.25

See page 472 - 487 for prices, and head and seal kit options.

* Stroke length is dependent upon selection of piston and head type. See following pages for more details.

EFFECTIVE STROKE CALCULATION

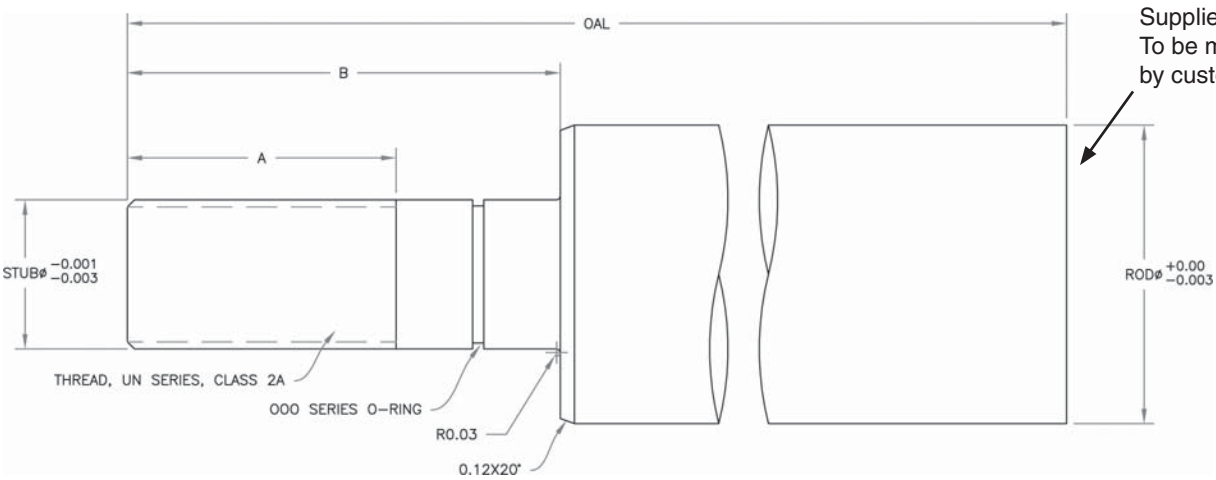


See Pages 865, 867, 869, 871, 873, 875 and 877.

Rod OAL = **Effective Stroke** + Piston Stub OAL + Head Length + 4" Shaft Extension.

MACHINED CHROME RODS

MACHINED CHROME ROD PROGRAM



PISTON STUB SHAFT DETAIL

Part Number	Rod Dia	Thread	Stub Dia	Thread Length A	Stub Length B	12" Nom Stroke OAL	24" Nom Stroke OAL	36" Nom Stroke OAL	48" Nom Stroke OAL	60" Nom Stroke OAL
CR75I-0.75X(OAL)-0.62	0.750	5/8"-18 UNF	0.625	1.255	2.005	24.00	36.00	48.00	N/A	N/A
CR75I-1.00X(OAL)-0.75	1.000	3/4"-16 UNF	0.750	1.630	2.505	24.00	36.00	48.00	60.00	N/A
CR75I-1.12X(OAL)-0.75	1.125	3/4"-16 UNF	0.750	1.630	2.505	24.00	36.00	48.00	60.00	72.00
CR75I-1.25X(OAL)-0.75	1.250	3/4"-16 UNF	0.750	2.255	2.880	24.00	36.00	48.00	60.00	72.00
CR75I-1.50X(OAL)-0.75	1.500	3/4"-16 UNF	0.750	2.255	2.880	24.00	36.00	48.00	60.00	72.00
CR75I-1.50X(OAL)-1.00	1.500	1"-14 UNS	1.000	2.690	3.185	24.00	36.00	48.00	60.00	72.00
CR75I-1.75X(OAL)-1.00	1.750	1"-14 UNS	1.000	2.690	3.185	24.00	36.00	48.00	60.00	72.00
CR75I-2.00X(OAL)-1.00	2.000	1"-14 UNS	1.000	2.690	3.185	24.00	36.00	48.00	60.00	72.00
CR75I-2.00X(OAL)-1.25	2.000	1-1/4"-12 UNF	1.250	2.255	3.630	24.00	36.00	48.00	60.00	72.00
CR75I-2.50X(OAL)-1.25	2.500	1-1/4"-12 UNF	1.250	2.255	3.630	24.00	36.00	48.00	60.00	72.00
CR75I-3.00X(OAL)-1.25	3.000	1-1/4"-12 UNF	1.250	2.255	3.630	24.00	36.00	48.00	60.00	72.00

See page 472 - 487 for prices and head and seal kit options.

Stub shafts are designed to accommodate standard piston types.
See page 472 - 487 for specific mounting details.

MACHINED CHROME RODS

Selection Chart for Pistons, Heads, and Seal Kits to Accommodate Machine Chrome Rod

Rod Dia	Thread		Stub Dia	Stub OAL	Thread Lgth	Nut Part #		Nut Lgth						
0.75	5/8"-18 UNF		0.625	2.005	1.255	**CM-LN45062**		0.75						
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
1.5	**CM-P110629**		IT Piston	1.12	0.00	**CM-SK-P110629**		**CM-H70181**		TK Head	2.00	**CM-SK-H70181**		
1.5	**CM-P70020**		TH Piston	1.13	0.00	**CM-SK-P70020**		**CM-H70181**		TK Head	2.00	**CM-SK-H70181**		
1.5	**CM-P70079**		TM Piston	0.88	0.25	**CM-SK-P70079**		**CM-H70181**		TK Head	2.00	**CM-SK-H70181**		

Rod Dia	Thread		Stub Dia	Stub OAL	Thread Lgth	Nut Part #		Nut Lgth						
1	3/4"-16 UNF		0.75	2.505	1.63	**CM-LN45075**		0.88						
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
2	**CM-P110238**		IT Piston	1.25	0.25	**CM-SK-P110238**		**CM-H107597**		IT Head	2.12	**CM-SK-H107597**		
2	**CM-P110238**		IT Piston	1.25	0.25	**CM-SK-P110238**		**CM-H70093**		TK Head	2.25	**CM-SK-H70093**		
2	**CM-P110238**		IT Piston	1.25	0.25	**CM-SK-P110238**		**CM-H70154**		TH Head	2.38	**CM-SK-H70154**		
2	**CM-P70005**		TH Piston	1.50	0.00	**CM-SK-P70005**		**CM-H107597**		IT Head	2.12	**CM-SK-H107597**		
2	**CM-P70005**		TH Piston	1.50	0.00	**CM-SK-P70005**		**CM-H70093**		TK Head	2.25	**CM-SK-H70093**		
2	**CM-P70005**		TH Piston	1.50	0.00	**CM-SK-P70005**		**CM-H70154**		TH Head	2.38	**CM-SK-H70154**		
2	**CM-P70055**		TM Piston	1.00	0.50	**CM-SK-P70055**		**CM-H107597**		IT Head	2.12	**CM-SK-H107597**		
2	**CM-P70055**		TM Piston	1.00	0.50	**CM-SK-P70055**		**CM-H70093**		TK Head	2.25	**CM-SK-H70093**		
2	**CM-P70055**		TM Piston	1.00	0.50	**CM-SK-P70055**		**CM-H70154**		TH Head	2.38	**CM-SK-H70154**		

Rod Dia	Thread		Stub Dia	Stub OAL	Thread Lgth	Nut Part #		Nut Lgth						
1.125	3/4"-16 UNF		0.75	2.505	1.63	**CM-LN45075**		0.88						
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
2	**CM-P110238**		IT Piston	1.25	0.25	**CM-SK-P110238**		**CM-H107598**		IT Head	2.00	**CM-SK-H107598**		
2	**CM-P110238**		IT Piston	1.25	0.25	**CM-SK-P110238**		**CM-H70155**		TH Head	2.38	**CM-SK-H70155**		
2	**CM-P110238**		IT Piston	1.25	0.25	**CM-SK-P110238**		**CM-H70159**		TK Head	2.25	**CM-SK-H70159**		
2	**CM-P70005**		TH Piston	1.50	0.00	**CM-SK-P70005**		**CM-H107598**		IT Head	2.00	**CM-SK-H107598**		
2	**CM-P70005**		TH Piston	1.50	0.00	**CM-SK-P70005**		**CM-H70155**		TH Head	2.38	**CM-SK-H70155**		
2	**CM-P70005**		TH Piston	1.50	0.00	**CM-SK-P70005**		**CM-H70159**		TK Head	2.25	**CM-SK-H70159**		
2	**CM-P70055**		TM Piston	1.00	0.50	**CM-SK-P70055**		**CM-H107598**		IT Head	2.00	**CM-SK-H107598**		
2	**CM-P70055**		TM Piston	1.00	0.50	**CM-SK-P70055**		**CM-H70155**		TH Head	2.38	**CM-SK-H70155**		
2	**CM-P70055**		TM Piston	1.00	0.50	**CM-SK-P70055**		**CM-H70159**		TK Head	2.25	**CM-SK-H70159**		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
2.5	**CM-P110239**		IT Piston	1.25	0.25	**CM-SK-P110239**		**CM-H107193**		IT Head	2.00	**CM-SK-H107193**		
2.5	**CM-P110239**		IT Piston	1.25	0.25	**CM-SK-P110239**		**CM-H70157**		TH Head	2.38	**CM-SK-H70157**		
2.5	**CM-P110239**		IT Piston	1.25	0.25	**CM-SK-P110239**		**CM-H70161**		TK Head	2.25	**CM-SK-H70161**		
2.5	**CM-P70017**		TH Piston	1.50	0.00	**CM-SK-P70017**		**CM-H107193**		IT Head	2.00	**CM-SK-H107193**		
2.5	**CM-P70017**		TH Piston	1.50	0.00	**CM-SK-P70017**		**CM-H70157**		TH Head	2.38	**CM-SK-H70157**		
2.5	**CM-P70017**		TH Piston	1.50	0.00	**CM-SK-P70017**		**CM-H70161**		TK Head	2.25	**CM-SK-H70161**		
2.5	**CM-P70065**		TM Piston	1.00	0.50	**CM-SK-P70065**		**CM-H107193**		IT Head	2.00	**CM-SK-H107193**		
2.5	**CM-P70065**		TM Piston	1.00	0.50	**CM-SK-P70065**		**CM-H70157**		TH Head	2.38	**CM-SK-H70157**		
2.5	**CM-P70065**		TM Piston	1.00	0.50	**CM-SK-P70065**		**CM-H70161**		TK Head	2.25	**CM-SK-H70161**		

Additional Sizes on page 474 - 487.

* Customer must modify pre-machined stub length on some piston styles.

MACHINED CHROME RODS

Quick Reference Chart for Effective Stroke of Machined Chrome Rods

Rod Dia	Part # 12" Stroke	Part # 24" Stroke	Part # 36" Stroke	Part # 48" Stroke	Part # 60" Stroke
0.75	**CR75I-0.75X24-0.62**	**CR75I-0.75X36-0.62**	**CR75I-0.75X48-0.62**	N/A	N/A
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
1.5	16.00" Eff. Stroke	28.00" Eff. Stroke	40.00" Eff. Stroke	N/A	N/A
1.5	16.00" Eff. Stroke	28.00" Eff. Stroke	40.00" Eff. Stroke	N/A	N/A
1.5	16.00" Eff. Stroke	28.00" Eff. Stroke	40.00" Eff. Stroke	N/A	N/A

Rod Dia	Part # 12" Stroke	Part # 24" Stroke	Part # 36" Stroke	Part # 48" Stroke	Part # 60" Stroke
1	**CR75I-1.00X24-0.75**	**CR75I-1.00X36-0.75**	**CR75I-1.00X48-0.75**	**CR75I-1.00X60-0.75**	N/A
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
2	15.38" Eff. Stroke	27.38" Eff. Stroke	39.38" Eff. Stroke	51.38" Eff. Stroke	N/A
2	15.25" Eff. Stroke	27.25" Eff. Stroke	39.25" Eff. Stroke	51.25" Eff. Stroke	N/A
2	15.12" Eff. Stroke	27.12" Eff. Stroke	39.12" Eff. Stroke	51.12" Eff. Stroke	N/A
2	15.38" Eff. Stroke	27.38" Eff. Stroke	39.38" Eff. Stroke	51.38" Eff. Stroke	N/A
2	15.25" Eff. Stroke	27.25" Eff. Stroke	39.25" Eff. Stroke	51.25" Eff. Stroke	N/A
2	15.12" Eff. Stroke	27.12" Eff. Stroke	39.12" Eff. Stroke	51.12" Eff. Stroke	N/A
2	15.38" Eff. Stroke	27.38" Eff. Stroke	39.38" Eff. Stroke	51.38" Eff. Stroke	N/A
2	15.25" Eff. Stroke	27.25" Eff. Stroke	39.25" Eff. Stroke	51.25" Eff. Stroke	N/A
2	15.12" Eff. Stroke	27.12" Eff. Stroke	39.12" Eff. Stroke	51.12" Eff. Stroke	N/A

Rod Dia	Part # 12" Stroke	Part # 24" Stroke	Part # 36" Stroke	Part # 48" Stroke	Part # 60" Stroke
1.125	**CR75I-1.12X24-0.75**	**CR75I-1.12X36-0.75**	**CR75I-1.12X48-0.75**	**CR75I-1.12X60-0.75**	**CR75I-1.12X72-0.75**
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
2	15.50" Eff. Stroke	27.50" Eff. Stroke	39.50" Eff. Stroke	51.50" Eff. Stroke	63.50" Eff. Stroke
2	15.12" Eff. Stroke	27.12" Eff. Stroke	39.12" Eff. Stroke	51.12" Eff. Stroke	63.12" Eff. Stroke
2	15.25" Eff. Stroke	27.25" Eff. Stroke	39.25" Eff. Stroke	51.25" Eff. Stroke	63.25" Eff. Stroke
2	15.50" Eff. Stroke	27.50" Eff. Stroke	39.50" Eff. Stroke	51.50" Eff. Stroke	63.50" Eff. Stroke
2	15.12" Eff. Stroke	27.12" Eff. Stroke	39.12" Eff. Stroke	51.12" Eff. Stroke	63.12" Eff. Stroke
2	15.25" Eff. Stroke	27.25" Eff. Stroke	39.25" Eff. Stroke	51.25" Eff. Stroke	63.25" Eff. Stroke
2	15.50" Eff. Stroke	27.50" Eff. Stroke	39.50" Eff. Stroke	51.50" Eff. Stroke	63.50" Eff. Stroke
2	15.12" Eff. Stroke	27.12" Eff. Stroke	39.12" Eff. Stroke	51.12" Eff. Stroke	63.12" Eff. Stroke
2	15.25" Eff. Stroke	27.25" Eff. Stroke	39.25" Eff. Stroke	51.25" Eff. Stroke	63.25" Eff. Stroke
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
2.5	15.50" Eff. Stroke	27.50" Eff. Stroke	39.50" Eff. Stroke	51.50" Eff. Stroke	63.50" Eff. Stroke
2.5	15.12" Eff. Stroke	27.12" Eff. Stroke	39.12" Eff. Stroke	51.12" Eff. Stroke	63.12" Eff. Stroke
2.5	15.25" Eff. Stroke	27.25" Eff. Stroke	39.25" Eff. Stroke	51.25" Eff. Stroke	63.25" Eff. Stroke
2.5	15.50" Eff. Stroke	27.50" Eff. Stroke	39.50" Eff. Stroke	51.50" Eff. Stroke	63.50" Eff. Stroke
2.5	15.12" Eff. Stroke	27.12" Eff. Stroke	39.12" Eff. Stroke	51.12" Eff. Stroke	63.12" Eff. Stroke
2.5	15.25" Eff. Stroke	27.25" Eff. Stroke	39.25" Eff. Stroke	51.25" Eff. Stroke	63.25" Eff. Stroke
2.5	15.50" Eff. Stroke	27.50" Eff. Stroke	39.50" Eff. Stroke	51.50" Eff. Stroke	63.50" Eff. Stroke
2.5	15.12" Eff. Stroke	27.12" Eff. Stroke	39.12" Eff. Stroke	51.12" Eff. Stroke	63.12" Eff. Stroke
2.5	15.25" Eff. Stroke	27.25" Eff. Stroke	39.25" Eff. Stroke	51.25" Eff. Stroke	63.25" Eff. Stroke

Additional Sizes on page 474 - 487.

Rod OAL = **Effective Stroke** + Piston Stub OAL + Head Length + 4" Shaft Extension.

MACHINED CHROME RODS

Selection Chart for Pistons, Heads, and Seal Kits to Accommodate Machine Chrome Rod

Rod Dia	Thread		Stub Dia	Stub OAL	Thread Lgth	Nut Part #		Nut Lgth						
1.25	3/4"-16 UNF		0.75	2.88	2.255	**CM-LN45075**		0.88						
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
2	**CM-P110238**		IT Piston	1.25	0.62	**CM-SK-P110238**		**CM-H107595**		IT Head	2.25	**CM-SK-H107595**		
2	**CM-P110238**		IT Piston	1.25	0.62	**CM-SK-P110238**		**CM-H70156**		TH Head	2.38	**CM-SK-H70156**		
2	**CM-P110238**		IT Piston	1.25	0.62	**CM-SK-P110238**		**CM-H70160**		TK Head	2.50	**CM-SK-H70160**		
2	**CM-P70005**		TH Piston	1.50	0.38	**CM-SK-P70005**		**CM-H107595**		IT Head	2.25	**CM-SK-H107595**		
2	**CM-P70005**		TH Piston	1.50	0.38	**CM-SK-P70005**		**CM-H70156**		TH Head	2.38	**CM-SK-H70156**		
2	**CM-P70005**		TH Piston	1.50	0.38	**CM-SK-P70005**		**CM-H70160**		TK Head	2.50	**CM-SK-H70160**		
2	**CM-P70055**		TM Piston	1.00	0.88	**CM-SK-P70055**		**CM-H107595**		IT Head	2.25	**CM-SK-H107595**		
2	**CM-P70055**		TM Piston	1.00	0.88	**CM-SK-P70055**		**CM-H70156**		TH Head	2.38	**CM-SK-H70156**		
2	**CM-P70055**		TM Piston	1.00	0.88	**CM-SK-P70055**		**CM-H70160**		TK Head	2.50	**CM-SK-H70160**		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
2.5	**CM-P110239**		IT Piston	1.25	0.62	**CM-SK-P110239**		**CM-H107194**		IT Head	2.00	**CM-SK-H107194**		
2.5	**CM-P110239**		IT Piston	1.25	0.62	**CM-SK-P110239**		**CM-H70076**		TH Head	2.38	**CM-SK-H70076**		
2.5	**CM-P110239**		IT Piston	1.25	0.62	**CM-SK-P110239**		**CM-H70162**		TK Head	2.25	**CM-SK-H70162**		
2.5	**CM-P110596**		ITW Piston	1.88	0.00	**CM-SK-P110596**		**CM-H107194**		IT Head	2.00	**CM-SK-H107194**		
2.5	**CM-P110596**		ITW Piston	1.88	0.00	**CM-SK-P110596**		**CM-H70076**		TH Head	2.38	**CM-SK-H70076**		
2.5	**CM-P110596**		ITW Piston	1.88	0.00	**CM-SK-P110596**		**CM-H70162**		TK Head	2.25	**CM-SK-H70162**		
2.5	**CM-P70017**		TH Piston	1.50	0.38	**CM-SK-P70017**		**CM-H107194**		IT Head	2.00	**CM-SK-H107194**		
2.5	**CM-P70017**		TH Piston	1.50	0.38	**CM-SK-P70017**		**CM-H70076**		TH Head	2.38	**CM-SK-H70076**		
2.5	**CM-P70017**		TH Piston	1.50	0.38	**CM-SK-P70017**		**CM-H70162**		TK Head	2.25	**CM-SK-H70162**		
2.5	**CM-P70065**		TM Piston	1.00	0.88	**CM-SK-P70065**		**CM-H107194**		IT Head	2.00	**CM-SK-H107194**		
2.5	**CM-P70065**		TM Piston	1.00	0.88	**CM-SK-P70065**		**CM-H70076**		TH Head	2.38	**CM-SK-H70076**		
2.5	**CM-P70065**		TM Piston	1.00	0.88	**CM-SK-P70065**		**CM-H70162**		TK Head	2.25	CM-SK-H70162		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
3	**CM-P70841**		TM Piston	1.00	1.12	**CM-SK-P70841**		**CM-H107196**		IT Head	2.25	**CM-SK-H107196**		
3	**CM-P70841**		TM Piston	1.00	1.12	**CM-SK-P70841**		**CM-H70029**		TH Head	2.75	**CM-SK-H70029**		
3	**CM-P70841**		TM Piston	1.00	1.12	**CM-SK-P70841**		**CM-H70164**		TK Head	2.75	**CM-SK-H70164**		

* Customer must modify pre-machined stub length on some piston styles.

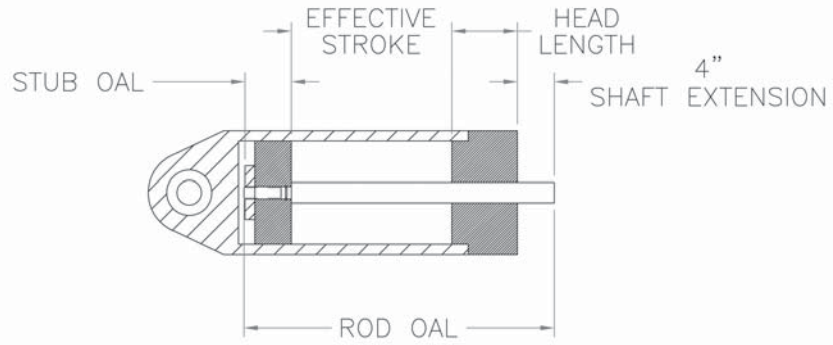
MACHINED CHROME RODS

Quick Reference Chart for Effective Stroke of Machined Chrome Rods

Rod Dia	Part # 12" Stroke	Part # 24" Stroke	Part # 36" Stroke	Part # 48" Stroke	Part # 60" Stroke
1.25	**CR75I-1.25X24-0.75**	**CR75I-1.25X36-0.75**	**CR75I-1.25X48-0.75**	**CR75I-1.25X60-0.75**	**CR75I-1.25X72-0.75**
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
2	14.87" Eff. Stroke	26.87" Eff. Stroke	38.87" Eff. Stroke	50.87" Eff. Stroke	62.87" Eff. Stroke
2	14.74" Eff. Stroke	26.74" Eff. Stroke	38.74" Eff. Stroke	50.74" Eff. Stroke	62.74" Eff. Stroke
2	14.62" Eff. Stroke	26.62" Eff. Stroke	38.62" Eff. Stroke	50.62" Eff. Stroke	62.62" Eff. Stroke
2	14.87" Eff. Stroke	26.87" Eff. Stroke	38.87" Eff. Stroke	50.87" Eff. Stroke	62.87" Eff. Stroke
2	14.74" Eff. Stroke	26.74" Eff. Stroke	38.74" Eff. Stroke	50.74" Eff. Stroke	62.74" Eff. Stroke
2	14.62" Eff. Stroke	26.62" Eff. Stroke	38.62" Eff. Stroke	50.62" Eff. Stroke	62.62" Eff. Stroke
2	14.87" Eff. Stroke	26.87" Eff. Stroke	38.87" Eff. Stroke	50.87" Eff. Stroke	62.87" Eff. Stroke
2	14.74" Eff. Stroke	26.74" Eff. Stroke	38.74" Eff. Stroke	50.74" Eff. Stroke	62.74" Eff. Stroke
2	14.62" Eff. Stroke	26.62" Eff. Stroke	38.62" Eff. Stroke	50.62" Eff. Stroke	62.62" Eff. Stroke
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
2.5	15.12" Eff. Stroke	27.12" Eff. Stroke	39.12" Eff. Stroke	51.12" Eff. Stroke	63.12" Eff. Stroke
2.5	14.74" Eff. Stroke	26.74" Eff. Stroke	38.74" Eff. Stroke	50.74" Eff. Stroke	62.74" Eff. Stroke
2.5	14.87" Eff. Stroke	26.87" Eff. Stroke	38.87" Eff. Stroke	50.87" Eff. Stroke	62.87" Eff. Stroke
2.5	15.12" Eff. Stroke	27.12" Eff. Stroke	39.12" Eff. Stroke	51.12" Eff. Stroke	63.12" Eff. Stroke
2.5	14.74" Eff. Stroke	26.74" Eff. Stroke	38.74" Eff. Stroke	50.74" Eff. Stroke	62.74" Eff. Stroke
2.5	14.87" Eff. Stroke	26.87" Eff. Stroke	38.87" Eff. Stroke	50.87" Eff. Stroke	62.87" Eff. Stroke
2.5	15.12" Eff. Stroke	27.12" Eff. Stroke	39.12" Eff. Stroke	51.12" Eff. Stroke	63.12" Eff. Stroke
2.5	14.74" Eff. Stroke	26.74" Eff. Stroke	38.74" Eff. Stroke	50.74" Eff. Stroke	62.74" Eff. Stroke
2.5	14.87" Eff. Stroke	26.87" Eff. Stroke	38.87" Eff. Stroke	50.87" Eff. Stroke	62.87" Eff. Stroke
2.5	15.12" Eff. Stroke	27.12" Eff. Stroke	39.12" Eff. Stroke	51.12" Eff. Stroke	63.12" Eff. Stroke
2.5	14.74" Eff. Stroke	26.74" Eff. Stroke	38.74" Eff. Stroke	50.74" Eff. Stroke	62.74" Eff. Stroke
2.5	14.87" Eff. Stroke	26.87" Eff. Stroke	38.87" Eff. Stroke	50.87" Eff. Stroke	62.87" Eff. Stroke
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
3	14.87" Eff. Stroke	26.87" Eff. Stroke	38.87" Eff. Stroke	50.87" Eff. Stroke	62.87" Eff. Stroke
3	14.37" Eff. Stroke	26.37" Eff. Stroke	38.37" Eff. Stroke	50.37" Eff. Stroke	62.37" Eff. Stroke
3	14.37" Eff. Stroke	26.37" Eff. Stroke	38.37" Eff. Stroke	50.37" Eff. Stroke	62.37" Eff. Stroke

* Stroke length is dependent upon selection of piston and head type. See following pages for more details.

EFFECTIVE STROKE CALCULATION



Rod OAL = **Effective Stroke** + Piston Stub OAL + Head Length + 4" Shaft Extension.

MACHINED CHROME RODS

Selection Chart for Pistons, Heads, and Seal Kits to Accommodate Machine Chrome Rod

Rod Dia	Thread		Stub Dia	Stub OAL	Thread Lgth	Nut Part #		Nut Lgth						
1.5	3/4"-16 UNF		0.75	2.88	2.255	**CM-LN45075**		0.88						
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
2.5	**CM-P110239**		IT Piston	1.25	0.62	**CM-SK-P110239**		**CM-H107463**		IT Head	2.38	**CM-SK-H107463**		
2.5	**CM-P110239**		IT Piston	1.25	0.62	**CM-SK-P110239**		**CM-H70158**		TH Head	2.38	**CM-SK-H70158**		
2.5	**CM-P110239**		IT Piston	1.25	0.62	**CM-SK-P110239**		**CM-H70163**		TK Head	2.25	**CM-SK-H70163**		
2.5	**CM-P110596**		ITW Piston	1.88	0.00	**CM-SK-P110596**		**CM-H107463**		IT Head	2.38	**CM-SK-H107463**		
2.5	**CM-P110596**		ITW Piston	1.88	0.00	**CM-SK-P110596**		**CM-H70158**		TH Head	2.38	**CM-SK-H70158**		
2.5	**CM-P110596**		ITW Piston	1.88	0.00	**CM-SK-P110596**		**CM-H70163**		TK Head	2.25	**CM-SK-H70163**		
2.5	**CM-P70017**		TH Piston	1.50	0.38	**CM-SK-P70017**		**CM-H107463**		IT Head	2.38	**CM-SK-H107463**		
2.5	**CM-P70017**		TH Piston	1.50	0.38	**CM-SK-P70017**		**CM-H70158**		TH Head	2.38	**CM-SK-H70158**		
2.5	**CM-P70017**		TH Piston	1.50	0.38	**CM-SK-P70017**		**CM-H70163**		TK Head	2.25	**CM-SK-H70163**		
2.5	**CM-P70065**		TM Piston	1.00	0.88	**CM-SK-P70065**		**CM-H107463**		IT Head	2.38	**CM-SK-H107463**		
2.5	**CM-P70065**		TM Piston	1.00	0.88	**CM-SK-P70065**		**CM-H70158**		TH Head	2.38	**CM-SK-H70158**		
2.5	**CM-P70065**		TM Piston	1.00	0.88	**CM-SK-P70065**		**CM-H70163**		TK Head	2.25	**CM-SK-H70163**		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
3	**CM-P70841**		TM Piston	1.00	1.12	**CM-SK-P70841**		**CM-H107131**		IT Head	2.25	**CM-SK-H107131**		
3	**CM-P70841**		TM Piston	1.00	1.12	**CM-SK-P70841**		**CM-H70011**		TH Head	2.75	**CM-SK-H70011**		
3	**CM-P70841**		TM Piston	1.00	1.12	**CM-SK-P70841**		**CM-H70130**		TK Head	2.75	**CM-SK-H70130**		

Rod Dia	Thread		Stub Dia	Stub OAL	Thread Lgth	Nut Part #		Nut Lgth						
1.5	1"-14 UNS		1.00	3.185	2.69	**CM-LN45100**		1.06						
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
3	**CM-P110121**		ITW Piston	2.00	0.00	**CM-SK-P110121**		**CM-H107131**		IT Head	2.25	**CM-SK-H107131**		
3	**CM-P110121**		ITW Piston	2.00	0.00	**CM-SK-P110121**		**CM-H70011**		TH Head	2.75	**CM-SK-H70011**		
3	**CM-P110121**		ITW Piston	2.00	0.00	**CM-SK-P110121**		**CM-H70130**		TK Head	2.75	**CM-SK-H70130**		
3	**CM-P70006**		TH Piston	1.75	0.25	**CM-SK-P70006**		**CM-H107131**		IT Head	2.25	**CM-SK-H107131**		
3	**CM-P70006**		TH Piston	1.75	0.25	**CM-SK-P70006**		**CM-H70011**		TH Head	2.75	**CM-SK-H70011**		
3	**CM-P70006**		TH Piston	1.75	0.25	**CM-SK-P70006**		**CM-H70130**		TK Head	2.75	**CM-SK-H70130**		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
3.25	**CM-P110608**		IT Piston	1.25	0.75	**CM-SK-P110608**		**CM-H107591**		IT Head	2.25	**CM-SK-H107591**		

* Customer must modify pre-machined stub length on some piston styles.

MACHINED CHROME RODS

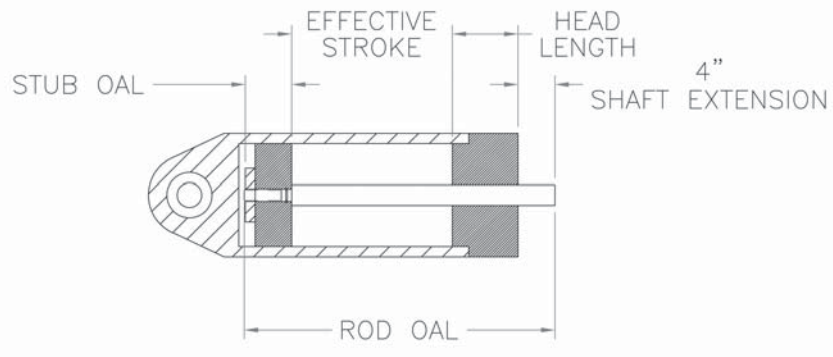
Quick Reference Chart for Effective Stroke of Machined Chrome Rods

Rod Dia	Part # 12" Stroke	Part # 24" Stroke	Part # 36" Stroke	Part # 48" Stroke	Part # 60" Stroke
1.5	**CR75I-1.50X24-0.75**	**CR75I-1.50X36-0.75**	**CR75I-1.50X48-0.75**	**CR75I-1.50X60-0.75**	**CR75I-1.50X72-0.75**
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
2.5	14.74" Eff. Stroke	26.74" Eff. Stroke	38.74" Eff. Stroke	50.74" Eff. Stroke	62.74" Eff. Stroke
2.5	14.74" Eff. Stroke	26.74" Eff. Stroke	38.74" Eff. Stroke	50.74" Eff. Stroke	62.74" Eff. Stroke
2.5	14.87" Eff. Stroke	26.87" Eff. Stroke	38.87" Eff. Stroke	50.87" Eff. Stroke	62.87" Eff. Stroke
2.5	14.74" Eff. Stroke	26.74" Eff. Stroke	38.74" Eff. Stroke	50.74" Eff. Stroke	62.74" Eff. Stroke
2.5	14.74" Eff. Stroke	26.74" Eff. Stroke	38.74" Eff. Stroke	50.74" Eff. Stroke	62.74" Eff. Stroke
2.5	14.87" Eff. Stroke	26.87" Eff. Stroke	38.87" Eff. Stroke	50.87" Eff. Stroke	62.87" Eff. Stroke
2.5	14.74" Eff. Stroke	26.74" Eff. Stroke	38.74" Eff. Stroke	50.74" Eff. Stroke	62.74" Eff. Stroke
2.5	14.74" Eff. Stroke	26.74" Eff. Stroke	38.74" Eff. Stroke	50.74" Eff. Stroke	62.74" Eff. Stroke
2.5	14.87" Eff. Stroke	26.87" Eff. Stroke	38.87" Eff. Stroke	50.87" Eff. Stroke	62.87" Eff. Stroke
2.5	14.74" Eff. Stroke	26.74" Eff. Stroke	38.74" Eff. Stroke	50.74" Eff. Stroke	62.74" Eff. Stroke
2.5	14.74" Eff. Stroke	26.74" Eff. Stroke	38.74" Eff. Stroke	50.74" Eff. Stroke	62.74" Eff. Stroke
2.5	14.87" Eff. Stroke	26.87" Eff. Stroke	38.87" Eff. Stroke	50.87" Eff. Stroke	62.87" Eff. Stroke
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
3	14.87" Eff. Stroke	26.87" Eff. Stroke	38.87" Eff. Stroke	50.87" Eff. Stroke	62.87" Eff. Stroke
3	14.37" Eff. Stroke	26.37" Eff. Stroke	38.37" Eff. Stroke	50.37" Eff. Stroke	62.37" Eff. Stroke
3	14.37" Eff. Stroke	26.37" Eff. Stroke	38.37" Eff. Stroke	50.37" Eff. Stroke	62.37" Eff. Stroke

Rod Dia	Part # 12" Stroke	Part # 24" Stroke	Part # 36" Stroke	Part # 48" Stroke	Part # 60" Stroke
1.5	**CR75I-1.50X24-1.00**	**CR75I-1.50X36-1.00**	**CR750I-1.50X48-1.00**	**CR75I-1.50X60-1.00**	**CR75I-1.50X72-1.00**
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
3	14.57" Eff. Stroke	26.57" Eff. Stroke	38.57" Eff. Stroke	50.57" Eff. Stroke	62.57" Eff. Stroke
3	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
3	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
3	14.57" Eff. Stroke	26.57" Eff. Stroke	38.57" Eff. Stroke	50.57" Eff. Stroke	62.57" Eff. Stroke
3	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
3	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
3.25	14.57" Eff. Stroke	26.57" Eff. Stroke	38.57" Eff. Stroke	50.57" Eff. Stroke	62.57" Eff. Stroke

* Stroke length is dependent upon selection of piston and head type. See following pages for more details.

EFFECTIVE STROKE CALCULATION



Rod OAL = **Effective Stroke** + Piston Stub OAL + Head Length + 4" Shaft Extension.

MACHINED CHROME RODS

Selection Chart for Pistons, Heads, and Seal Kits to Accommodate Machine Chrome Rod

Rod Dia	Thread		Stub Dia	Stub OAL	Thread Lgth	Nut Part #		Nut Lgth						
1.5	1"-14 UNS		1.00	3.185	2.69	**CM-LN45100**		1.06						
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
3.5	**CM-P110241**		IT Piston	1.25	0.75	**CM-SK-P110241**		**CM-H107198**		IT Head	2.25	**CM-SK-H107198**		
3.5	**CM-P110241**		IT Piston	1.25	0.75	**CM-SK-P110241**		**CM-H70013**		TH Head	2.75	**CM-SK-H70013**		
3.5	**CM-P110241**		IT Piston	1.25	0.75	**CM-SK-P110241**		**CM-H70089**		TK Head	2.75	**CM-SK-H70089**		
3.5	**CM-P70872**		TM Piston	1.00	1.38	**CM-SK-P70872**		**CM-H107198**		IT Head	2.25	**CM-SK-H107198**		
3.5	**CM-P70872**		TM Piston	1.00	1.38	**CM-SK-P70872**		**CM-H70013**		TH Head	2.75	**CM-SK-H70013**		
3.5	**CM-P70872**		TM Piston	1.00	1.38	**CM-SK-P70872**		**CM-H70089**		TK Head	2.75	**CM-SK-H70089**		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
4	**CM-P110242**		IT Piston	1.25	0.75	**CM-SK-P110242**		**CM-H107130**		IT Head	2.25	**CM-SK-H107130**		
4	**CM-P110242**		IT Piston	1.25	0.75	**CM-SK-P110242**		**CM-H70014**		TH Head	2.75	**CM-SK-H70014**		
4	**CM-P110242**		IT Piston	1.25	0.75	**CM-SK-P110242**		**CM-H70115**		TK Head	2.75	**CM-SK-H70115**		
4	**CM-P70067**		TM Piston	1.00	1.00	**CM-SK-P70067**		**CM-H107130**		IT Head	2.25	**CM-SK-H107130**		
4	**CM-P70067**		TM Piston	1.00	1.00	**CM-SK-P70067**		**CM-H70014**		TH Head	2.75	**CM-SK-H70014**		
4	**CM-P70067**		TM Piston	1.00	1.00	**CM-SK-P70067**		**CM-H70115**		TK Head	2.75	**CM-SK-H70115**		

Rod Dia	Thread		Stub Dia	Stub OAL	Thread Lgth	Nut Part #		Nut Lgth						
1.75	1"-14 UNS		1.00	3.185	2.69	**CM-LN45100**		1.06						
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
3	**CM-P110121**		ITW Piston	2.00	0.00	**CM-SK-P110121**		**CM-H107189**		IT Head	2.25	**CM-SK-H107189**		
3	**CM-P110121**		ITW Piston	2.00	0.00	**CM-SK-P110121**		**CM-H107729**		ITW Head	2.62	**CM-SK-H107729**		
3	**CM-P110121**		ITW Piston	2.00	0.00	**CM-SK-P110121**		**CM-H70560**		TK Head	2.75	**CM-SK-H70560**		
3	**CM-P110121**		ITW Piston	2.00	0.00	**CM-SK-P110121**		**CM-H70814**		TH Head	2.75	**CM-SK-H70814**		
3	**CM-P70006**		TH Piston	1.75	0.25	**CM-SK-P70006**		**CM-H107189**		IT Head	2.25	**CM-SK-H107189**		
3	**CM-P70006**		TH Piston	1.75	0.25	**CM-SK-P70006**		**CM-H107729**		ITW Head	2.62	**CM-SK-H107729**		
3	**CM-P70006**		TH Piston	1.75	0.25	**CM-SK-P70006**		**CM-H70560**		TK Head	2.75	**CM-SK-H70560**		
3	**CM-P70006**		TH Piston	1.75	0.25	**CM-SK-P70006**		**CM-H70814**		TH Head	2.75	**CM-SK-H70814**		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
3.25	**CM-P110608**		IT Piston	1.25	0.75	**CM-SK-P110608**		**CM-H107592**		IT Head	2.25	**CM-SK-H107592**		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
3.5	**CM-P110241**		IT Piston	1.25	0.75	**CM-SK-P110241**		**CM-H107108**		IT Head	2.25	**CM-SK-H107108**		
3.5	**CM-P110241**		IT Piston	1.25	0.75	**CM-SK-P110241**		**CM-H107791**		ITW Head	2.62	**CM-SK-H107791**		
3.5	**CM-P110241**		IT Piston	1.25	0.75	**CM-SK-P110241**		**CM-H70504**		TH Head	2.75	**CM-SK-H70504**		
3.5	**CM-P110241**		IT Piston	1.25	0.75	**CM-SK-P110241**		**CM-H70862**		TK Head	2.75	**CM-SK-H70862**		
3.5	**CM-P70872**		TM Piston	1.00	1.38	**CM-SK-P70872**		**CM-H107108**		IT Head	2.25	**CM-SK-H107108**		
3.5	**CM-P70872**		TM Piston	1.00	1.38	**CM-SK-P70872**		**CM-H107791**		ITW Head	2.62	**CM-SK-H107791**		
3.5	**CM-P70872**		TM Piston	1.00	1.38	**CM-SK-P70872**		**CM-H70504**		TH Head	2.75	**CM-SK-H70504**		
3.5	**CM-P70872**		TM Piston	1.00	1.38	**CM-SK-P70872**		**CM-H70862**		TK Head	2.75	**CM-SK-H70862**		

* Customer must modify pre-machined stub length on some piston styles.

MACHINED CHROME RODS

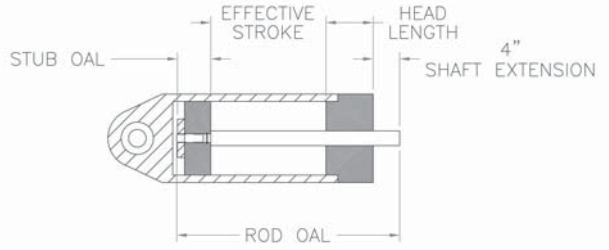
Quick Reference Chart for Effective Stroke of Machined Chrome Rods

Rod Dia	Part # 12" Stroke	Part # 24" Stroke	Part # 36" Stroke	Part # 48" Stroke	Part # 60" Stroke
1.5	**CR75I-1.50X24-1.00**	**CR75I-1.50X36-1.00**	**CR75I-1.50X48-1.00**	**CR75I-1.50X60-1.00**	**CR75I-1.50X72-1.00**
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
3.5	14.57" Eff. Stroke	26.57" Eff. Stroke	38.57" Eff. Stroke	50.57" Eff. Stroke	62.57" Eff. Stroke
3.5	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
3.5	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
3.5	14.57" Eff. Stroke	26.57" Eff. Stroke	38.57" Eff. Stroke	50.57" Eff. Stroke	62.57" Eff. Stroke
3.5	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
3.5	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
4	14.57" Eff. Stroke	26.57" Eff. Stroke	38.57" Eff. Stroke	50.57" Eff. Stroke	62.57" Eff. Stroke
4	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
4	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
4	14.57" Eff. Stroke	26.57" Eff. Stroke	38.57" Eff. Stroke	50.57" Eff. Stroke	62.57" Eff. Stroke
4	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
4	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke

Rod Dia	Part # 12" Stroke	Part # 24" Stroke	Part # 36" Stroke	Part # 48" Stroke	Part # 60" Stroke
1.75	**CR75I-1.75X24-1.00**	**CR75I-1.75X36-1.00**	**CR75I-1.75X48-1.00**	**CR75I-1.75X60-1.00**	**CR75I-1.75X72-1.00**
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
3	14.57" Eff. Stroke	26.57" Eff. Stroke	38.57" Eff. Stroke	50.57" Eff. Stroke	62.57" Eff. Stroke
3	14.20" Eff. Stroke	26.20" Eff. Stroke	38.20" Eff. Stroke	50.20" Eff. Stroke	62.20" Eff. Stroke
3	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
3	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
3	14.57" Eff. Stroke	26.57" Eff. Stroke	38.57" Eff. Stroke	50.57" Eff. Stroke	62.57" Eff. Stroke
3	14.20" Eff. Stroke	26.20" Eff. Stroke	38.20" Eff. Stroke	50.20" Eff. Stroke	62.20" Eff. Stroke
3	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
3	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
3.25	14.57" Eff. Stroke	26.57" Eff. Stroke	38.57" Eff. Stroke	50.57" Eff. Stroke	62.57" Eff. Stroke
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
3.5	14.57" Eff. Stroke	26.57" Eff. Stroke	38.57" Eff. Stroke	50.57" Eff. Stroke	62.57" Eff. Stroke
3.5	14.20" Eff. Stroke	26.20" Eff. Stroke	38.20" Eff. Stroke	50.20" Eff. Stroke	62.20" Eff. Stroke
3.5	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
3.5	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
3.5	14.57" Eff. Stroke	26.57" Eff. Stroke	38.57" Eff. Stroke	50.57" Eff. Stroke	62.57" Eff. Stroke
3.5	14.20" Eff. Stroke	26.20" Eff. Stroke	38.20" Eff. Stroke	50.20" Eff. Stroke	62.20" Eff. Stroke
3.5	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
3.5	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke

* Stroke length is dependent upon selection of piston and head type. See following pages for more details.

EFFECTIVE STROKE CALCULATION



Rod OAL = **Effective Stroke** + Piston Stub OAL + Head Length + 4" Shaft Extension.

MACHINED CHROME RODS

Selection Chart for Pistons, Heads, and Seal Kits to Accommodate Machine Chrome Rod

Rod Dia	Thread		Stub Dia	Stub OAL	Thread Lgth	Nut Part #		Nut Lgth						
1.75	1"-14 UNS		1.00	3.185	2.69	**CM-LN45100**		1.06						
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
4	**CM-P110242**		IT Piston	1.25	0.75	**CM-SK-P110242**		**CM-H107124**		IT Head	2.25	**CM-SK-H107124**		
4	**CM-P110242**		IT Piston	1.25	0.75	**CM-SK-P110242**		**CM-H70488**		TH Head	2.75	**CM-SK-H70488**		
4	**CM-P110242**		IT Piston	1.25	0.75	**CM-SK-P110242**		**CM-H70576**		TK Head	2.75	**CM-SK-H70576**		
4	**CM-P70067**		TM Piston	1.00	1.00	**CM-SK-P70067**		**CM-H107124**		IT Head	2.25	**CM-SK-H107124**		
4	**CM-P70067**		TM Piston	1.00	1.00	**CM-SK-P70067**		**CM-H70488**		TH Head	2.75	**CM-SK-H70488**		
4	**CM-P70067**		TM Piston	1.00	1.00	**CM-SK-P70067**		**CM-H70576**		TK Head	2.75	**CM-SK-H70576**		

Rod Dia	Thread		Stub Dia	Stub OAL	Thread Lgth	Nut Part #		Nut Lgth						
2	1"-14 UNS		1.00	3.185	2.69	**CM-LN45100**		1.06						
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
3	**CM-P110121**		ITW Piston	2.00	0.00	**CM-SK-P110121**		**CM-H107359**		IT Head	2.50	**CM-SK-H107359**		
3	**CM-P110121**		ITW Piston	2.00	0.00	**CM-SK-P110121**		**CM-H107548**		ITW Head	2.62	**CM-SK-H107548**		
3	**CM-P110121**		ITW Piston	2.00	0.00	**CM-SK-P110121**		**CM-H70012**		TH Head	2.75	**CM-SK-H70012**		
3	**CM-P110121**		ITW Piston	2.00	0.00	**CM-SK-P110121**		**CM-H70165**		TK Head	2.75	**CM-SK-H70165**		
3	**CM-P70006**		TH Piston	1.75	0.25	**CM-SK-P70006**		**CM-H107359**		IT Head	2.50	**CM-SK-H107359**		
3	**CM-P70006**		TH Piston	1.75	0.25	**CM-SK-P70006**		**CM-H107548**		ITW Head	2.62	**CM-SK-H107548**		
3	**CM-P70006**		TH Piston	1.75	0.25	**CM-SK-P70006**		**CM-H70012**		TH Head	2.75	**CM-SK-H70012**		
3	**CM-P70006**		TH Piston	1.75	0.25	**CM-SK-P70006**		**CM-H70165**		TK Head	2.75	**CM-SK-H70165**		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
3.5	**CM-P110241**		IT Piston	1.25	0.75	**CM-SK-P110241**		**CM-H107112**		IT Head	2.25	**CM-SK-H107112**		
3.5	**CM-P110241**		IT Piston	1.25	0.75	**CM-SK-P110241**		**CM-H107549**		ITW Head	2.62	**CM-SK-H107549**		
3.5	**CM-P110241**		IT Piston	1.25	0.75	**CM-SK-P110241**		**CM-H70030**		TH Head	2.75	**CM-SK-H70030**		
3.5	**CM-P110241**		IT Piston	1.25	0.75	**CM-SK-P110241**		**CM-H70167**		TK Head	2.75	**CM-SK-H70167**		
3.5	**CM-P70872**		TM Piston	1.00	1.38	**CM-SK-P70872**		**CM-H107112**		IT Head	2.25	**CM-SK-H107112**		
3.5	**CM-P70872**		TM Piston	1.00	1.38	**CM-SK-P70872**		**CM-H107549**		ITW Head	2.62	**CM-SK-H107549**		
3.5	**CM-P70872**		TM Piston	1.00	1.38	**CM-SK-P70872**		**CM-H70030**		TH Head	2.75	**CM-SK-H70030**		
3.5	**CM-P70872**		TM Piston	1.00	1.38	**CM-SK-P70872**		**CM-H70167**		TK Head	2.75	**CM-SK-H70167**		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
4	**CM-P110242**		IT Piston	1.25	0.75	**CM-SK-P110242**		**CM-H107311**		IT Head	2.25	**CM-SK-H107311**		
4	**CM-P110242**		IT Piston	1.25	0.75	**CM-SK-P110242**		**CM-H107550**		ITW Head	3.25	**CM-SK-H107550**		
4	**CM-P110242**		IT Piston	1.25	0.75	**CM-SK-P110242**		**CM-H70015**		TH Head	2.75	**CM-SK-H70015**		
4	**CM-P110242**		IT Piston	1.25	0.75	**CM-SK-P110242**		**CM-H70116**		TK Head	2.75	**CM-SK-H70116**		
4	**CM-P70067**		TM Piston	1.00	1.00	**CM-SK-P70067**		**CM-H107311**		IT Head	2.25	**CM-SK-H107311**		
4	**CM-P70067**		TM Piston	1.00	1.00	**CM-SK-P70067**		**CM-H107550**		ITW Head	3.25	**CM-SK-H107550**		
4	**CM-P70067**		TM Piston	1.00	1.00	**CM-SK-P70067**		**CM-H70015**		TH Head	2.75	**CM-SK-H70015**		
4	**CM-P70067**		TM Piston	1.00	1.00	**CM-SK-P70067**		**CM-H70116**		TK Head	2.75	**CM-SK-H70116**		

* Customer must modify pre-machined stub length on some piston styles.

MACHINED CHROME RODS

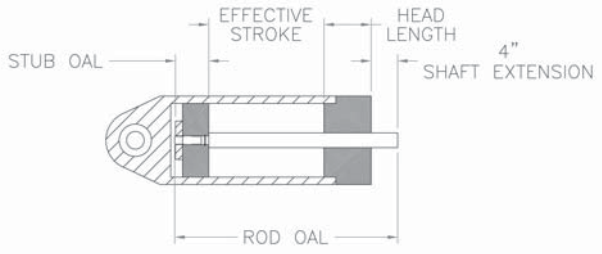
Quick Reference Chart for Effective Stroke of Machined Chrome Rods

Rod Dia	Part # 12" Stroke	Part # 24" Stroke	Part # 36" Stroke	Part # 48" Stroke	Part # 60" Stroke
1.75	**CR75I-1.75X24-1.00**	**CR75I-1.75X36-1.00**	**CR75I-1.75X48-1.00**	**CR75I-1.75X60-1.00**	**CR75I-1.75X72-1.00**
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
4	14.57" Eff. Stroke	26.57" Eff. Stroke	38.57" Eff. Stroke	50.57" Eff. Stroke	62.57" Eff. Stroke
4	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
4	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
4	14.57" Eff. Stroke	26.57" Eff. Stroke	38.57" Eff. Stroke	50.57" Eff. Stroke	62.57" Eff. Stroke
4	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
4	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke

Rod Dia	Part # 12" Stroke	Part # 24" Stroke	Part # 36" Stroke	Part # 48" Stroke	Part # 60" Stroke
2	**CR75I-2.00X24-1.00**	**CR75I-2.00X36-1.00**	**CR75I-2.00X48-1.00**	**CR75I-2.00X60-1.00**	**CR75I-2.00X72-1.00**
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
3	14.32" Eff. Stroke	26.32" Eff. Stroke	38.32" Eff. Stroke	50.32" Eff. Stroke	62.32" Eff. Stroke
3	14.20" Eff. Stroke	26.20" Eff. Stroke	38.20" Eff. Stroke	50.20" Eff. Stroke	62.20" Eff. Stroke
3	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
3	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
3	14.32" Eff. Stroke	26.32" Eff. Stroke	38.32" Eff. Stroke	50.32" Eff. Stroke	62.32" Eff. Stroke
3	14.20" Eff. Stroke	26.20" Eff. Stroke	38.20" Eff. Stroke	50.20" Eff. Stroke	62.20" Eff. Stroke
3	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
3	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
3.5	14.57" Eff. Stroke	26.57" Eff. Stroke	38.57" Eff. Stroke	50.57" Eff. Stroke	62.57" Eff. Stroke
3.5	14.20" Eff. Stroke	26.20" Eff. Stroke	38.20" Eff. Stroke	50.20" Eff. Stroke	62.20" Eff. Stroke
3.5	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
3.5	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
3.5	14.57" Eff. Stroke	26.57" Eff. Stroke	38.57" Eff. Stroke	50.57" Eff. Stroke	62.57" Eff. Stroke
3.5	14.20" Eff. Stroke	26.20" Eff. Stroke	38.20" Eff. Stroke	50.20" Eff. Stroke	62.20" Eff. Stroke
3.5	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
3.5	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
4	14.57" Eff. Stroke	26.57" Eff. Stroke	38.57" Eff. Stroke	50.57" Eff. Stroke	62.57" Eff. Stroke
4	13.57" Eff. Stroke	25.57" Eff. Stroke	37.57" Eff. Stroke	49.57" Eff. Stroke	61.57" Eff. Stroke
4	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
4	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
4	14.57" Eff. Stroke	26.57" Eff. Stroke	38.57" Eff. Stroke	50.57" Eff. Stroke	62.57" Eff. Stroke
4	13.57" Eff. Stroke	25.57" Eff. Stroke	37.57" Eff. Stroke	49.57" Eff. Stroke	61.57" Eff. Stroke
4	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke
4	14.07" Eff. Stroke	26.07" Eff. Stroke	38.07" Eff. Stroke	50.07" Eff. Stroke	62.07" Eff. Stroke

* Stroke length is dependent upon selection of piston and head type. See following pages for more details.

EFFECTIVE STROKE CALCULATION



Rod OAL = **Effective Stroke** + Piston Stub OAL + Head Length + 4" Shaft Extension.

MACHINED CHROME RODS

Selection Chart for Pistons, Heads, and Seal Kits to Accommodate Machine Chrome Rod

Rod Dia	Thread		Stub Dia	Stub OAL	Thread Lgth	Nut Part #		Nut Lgth						
2	1-1/4"-12 UNF		1.25	3.63	2.255	**CM-LN45126**		1.38						
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
4	**CM-P70010**		TH Piston	1.75	0.38	**CM-SK-P70010**		**CM-H107311**		IT Head	2.25	**CM-SK-H107311**		
4	**CM-P70010**		TH Piston	1.75	0.38	**CM-SK-P70010**		**CM-H107550**		ITW Head	3.25	**CM-SK-H107550**		
4	**CM-P70010**		TH Piston	1.75	0.38	**CM-SK-P70010**		**CM-H70015**		TH Head	2.75	**CM-SK-H70015**		
4	**CM-P70010**		TH Piston	1.75	0.38	**CM-SK-P70010**		**CM-H70116**		TK Head	2.75	**CM-SK-H70116**		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
4.5	**CM-P110537**		ITW Piston	2.00	0.00	**CM-SK-P110537**		**CM-H107200**		IT Head	2.25	**CM-SK-H107200**		
4.5	**CM-P110537**		ITW Piston	2.00	0.00	**CM-SK-P110537**		**CM-H107716**		ITW Head	3.25	**CM-SK-H107716**		
4.5	**CM-P110537**		ITW Piston	2.00	0.00	**CM-SK-P110537**		**CM-H70276**		TH Head	2.75	**CM-SK-H70276**		
4.5	**CM-P110537**		ITW Piston	2.00	0.00	**CM-SK-P110537**		**CM-H70367**		TK Head	2.75	**CM-SK-H70367**		
4.5	**CM-P70275**		TH Piston	1.75	0.38	**CM-SK-P70275**		**CM-H107200**		IT Head	2.25	**CM-SK-H107200**		
4.5	**CM-P70275**		TH Piston	1.75	0.38	**CM-SK-P70275**		**CM-H107716**		ITW Head	3.25	**CM-SK-H107716**		
4.5	**CM-P70275**		TH Piston	1.75	0.38	**CM-SK-P70275**		**CM-H70276**		TH Head	2.75	**CM-SK-H70276**		
4.5	**CM-P70275**		TH Piston	1.75	0.38	**CM-SK-P70275**		**CM-H70367**		TK Head	2.75	**CM-SK-H70367**		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
5	**CM-P110248**		ITW Piston	2.00	0.00	**CM-SK-P110248**		**CM-H107212**		IT Head	2.25	**CM-SK-H107212**		
5	**CM-P110248**		ITW Piston	2.00	0.00	**CM-SK-P110248**		**CM-H107679**		ITW Head	3.00	**CM-SK-H107679**		
5	**CM-P110248**		ITW Piston	2.00	0.00	**CM-SK-P110248**		**CM-H70037**		TH Head	3.00	**CM-SK-H70037**		
5	**CM-P110248**		ITW Piston	2.00	0.00	**CM-SK-P110248**		**CM-H70114**		TK Head	3.00	**CM-SK-H70114**		
5	**CM-P70018**		TH Piston	2.00	0.00	**CM-SK-P70018**		**CM-H107212**		IT Head	2.25	**CM-SK-H107212**		
5	**CM-P70018**		TH Piston	2.00	0.00	**CM-SK-P70018**		**CM-H107679**		ITW Head	3.00	**CM-SK-H107679**		
5	**CM-P70018**		TH Piston	2.00	0.00	**CM-SK-P70018**		**CM-H70037**		TH Head	3.00	**CM-SK-H70037**		
5	**CM-P70018**		TH Piston	2.00	0.00	**CM-SK-P70018**		**CM-H70114**		TK Head	3.00	**CM-SK-H70114**		
5	**CM-P70090**		TM Piston	1.50	0.62	**CM-SK-P70090**		**CM-H107212**		IT Head	2.25	**CM-SK-H107212**		
5	**CM-P70090**		TM Piston	1.50	0.62	**CM-SK-P70090**		**CM-H107679**		ITW Head	3.00	**CM-SK-H107679**		
5	**CM-P70090**		TM Piston	1.50	0.62	**CM-SK-P70090**		**CM-H70037**		TH Head	3.00	**CM-SK-H70037**		
5	**CM-P70090**		TM Piston	1.50	0.62	**CM-SK-P70090**		**CM-H70114**		TK Head	3.00	**CM-SK-H70114**		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
5.5	**CM-P110511**		ITW Piston	2.120	0.00	**CM-SK-P110511**		**CM-H70153**		TH Head	3.00	**CM-SK-H70153**		
5.5	**CM-P110511**		ITW Piston	2.120	0.00	**CM-SK-P110511**		**CM-H70389**		TK Head	3.00	**CM-SK-H70389**		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
6	**CM-P110249**		ITW Piston	2.120	0.00	**CM-SK-P110249**		**CM-H107345**		IT Head	2.50	**CM-SK-H107345**		
6	**CM-P110249**		ITW Piston	2.120	0.00	**CM-SK-P110249**		**CM-H70041**		TH Head	3.00	**CM-SK-H70041**		
6	**CM-P110249**		ITW Piston	2.120	0.00	**CM-SK-P110249**		**CM-H70112**		TK Head	3.00	**CM-SK-H70112**		

* Customer must modify pre-machined stub length on some piston styles.

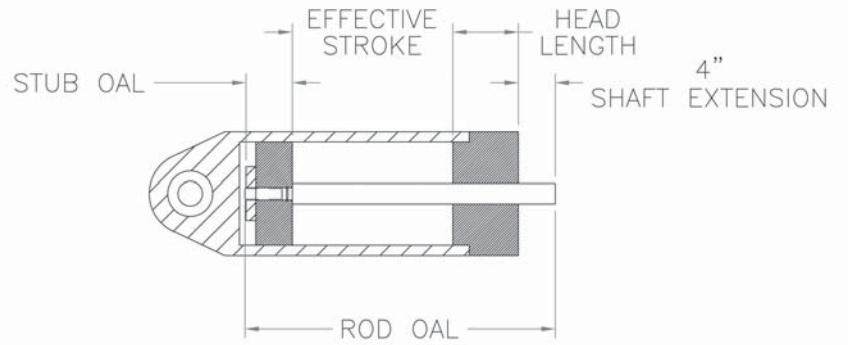
MACHINED CHROME RODS

Quick Reference Chart for Effective Stroke of Machined Chrome Rods

Rod Dia	Part # 12" Stroke	Part # 24" Stroke	Part # 36" Stroke	Part # 48" Stroke	Part # 60" Stroke
2	**CR75I-2.00X24-1.25**	**CR75I-2.00X36-1.25**	**CR75I-2.00X48-1.25**	**CR75I-2.00X60-1.25**	**CR75I-2.00X72-1.25**
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
4	14.12" Eff. Stroke	26.12" Eff. Stroke	38.12" Eff. Stroke	50.12" Eff. Stroke	62.12" Eff. Stroke
4	13.12" Eff. Stroke	25.12" Eff. Stroke	37.12" Eff. Stroke	49.12" Eff. Stroke	61.12" Eff. Stroke
4	13.62" Eff. Stroke	25.62" Eff. Stroke	37.62" Eff. Stroke	49.62" Eff. Stroke	61.62" Eff. Stroke
4	13.62" Eff. Stroke	25.62" Eff. Stroke	37.62" Eff. Stroke	49.62" Eff. Stroke	61.62" Eff. Stroke
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
4.5	14.12" Eff. Stroke	26.12" Eff. Stroke	38.12" Eff. Stroke	50.12" Eff. Stroke	62.12" Eff. Stroke
4.5	13.12" Eff. Stroke	25.12" Eff. Stroke	37.12" Eff. Stroke	49.12" Eff. Stroke	61.12" Eff. Stroke
4.5	13.62" Eff. Stroke	25.62" Eff. Stroke	37.62" Eff. Stroke	49.62" Eff. Stroke	61.62" Eff. Stroke
4.5	13.62" Eff. Stroke	25.62" Eff. Stroke	37.62" Eff. Stroke	49.62" Eff. Stroke	61.62" Eff. Stroke
4.5	14.12" Eff. Stroke	26.12" Eff. Stroke	38.12" Eff. Stroke	50.12" Eff. Stroke	62.12" Eff. Stroke
4.5	13.12" Eff. Stroke	25.12" Eff. Stroke	37.12" Eff. Stroke	49.12" Eff. Stroke	61.12" Eff. Stroke
4.5	13.62" Eff. Stroke	25.62" Eff. Stroke	37.62" Eff. Stroke	49.62" Eff. Stroke	61.62" Eff. Stroke
4.5	13.62" Eff. Stroke	25.62" Eff. Stroke	37.62" Eff. Stroke	49.62" Eff. Stroke	61.62" Eff. Stroke
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
5	14.12" Eff. Stroke	26.12" Eff. Stroke	38.12" Eff. Stroke	50.12" Eff. Stroke	62.12" Eff. Stroke
5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
5	14.12" Eff. Stroke	26.12" Eff. Stroke	38.12" Eff. Stroke	50.12" Eff. Stroke	62.12" Eff. Stroke
5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
5	14.12" Eff. Stroke	26.12" Eff. Stroke	38.12" Eff. Stroke	50.12" Eff. Stroke	62.12" Eff. Stroke
5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
5.5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
5.5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
Bore Dia	12" Nominal Stroke	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
6	13.87" Eff. Stroke	25.87" Eff. Stroke	37.87" Eff. Stroke	49.87" Eff. Stroke	61.87" Eff. Stroke
6	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
6	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke

* Stroke length is dependent upon selection of piston and head type. See following pages for more details.

EFFECTIVE STROKE CALCULATION



Rod OAL = **Effective Stroke** + Piston Stub OAL + Head Length + 4" Shaft Extension.

MACHINED CHROME RODS

Selection Chart for Pistons, Heads, and Seal Kits to Accommodate Machine Chrome Rod

Rod Dia	Thread		Stub Dia	Stub OAL	Thread Lgth	Nut Part #		Nut Lgth						
2.5	1-1/4"-12 UNF		1.25	3.630	2.255	**CM-LN45126**		1.38						
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
4	**CM-P70010**		TH Piston	1.750	0.38	**CM-SK-P70010**		**CM-H107386**		IT Head	2.50	**CM-SK-H107386**		
4	**CM-P70010**		TH Piston	1.750	0.38	**CM-SK-P70010**		**CM-H107551**		ITW Head	3.25	**CM-SK-H107551**		
4	**CM-P70010**		TH Piston	1.750	0.38	**CM-SK-P70010**		**CM-H70032**		TH Head	2.75	**CM-SK-H70032**		
4	**CM-P70010**		TH Piston	1.750	0.38	**CM-SK-P70010**		**CM-H70168**		TK Head	2.75	**CM-SK-H70168**		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
4.5	**CM-P110537**		ITW Piston	2.000	0.00	**CM-SK-P110537**		**CM-H107552**		ITW Head	3.25	**CM-SK-H107552**		
4.5	**CM-P110537**		ITW Piston	2.000	0.00	**CM-SK-P110537**		**CM-H70310**		TH Head	2.75	**CM-SK-H70310**		
4.5	**CM-P110537**		ITW Piston	2.000	0.00	**CM-SK-P110537**		**CM-H70378**		TK Head	2.75	**CM-SK-H70378**		
4.5	**CM-P70275**		TH Piston	1.750	0.38	**CM-SK-P70275**		**CM-H107552**		ITW Head	3.25	**CM-SK-H107552**		
4.5	**CM-P70275**		TH Piston	1.750	0.38	**CM-SK-P70275**		**CM-H70310**		TH Head	2.75	**CM-SK-H70310**		
4.5	**CM-P70275**		TH Piston	1.750	0.38	**CM-SK-P70275**		**CM-H70378**		TK Head	2.75	**CM-SK-H70378**		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
5	**CM-P110248**		ITW Piston	2.000	0.00	**CM-SK-P110248**		**CM-H107204**		IT Head	2.50	**CM-SK-H107204**		
5	**CM-P110248**		ITW Piston	2.000	0.00	**CM-SK-P110248**		**CM-H107554**		ITW Head	3.62	**CM-SK-H107554**		
5	**CM-P110248**		ITW Piston	2.000	0.00	**CM-SK-P110248**		**CM-H70038**		TH Head	3.00	**CM-SK-H70038**		
5	**CM-P110248**		ITW Piston	2.000	0.00	**CM-SK-P110248**		**CM-H70113**		TK Head	3.00	**CM-SK-H70113**		
5	**CM-P70018**		TH Piston	2.000	0.00	**CM-SK-P70018**		**CM-H107204**		IT Head	2.50	**CM-SK-H107204**		
5	**CM-P70018**		TH Piston	2.000	0.00	**CM-SK-P70018**		**CM-H107554**		ITW Head	3.62	**CM-SK-H107554**		
5	**CM-P70018**		TH Piston	2.000	0.00	**CM-SK-P70018**		**CM-H70038**		TH Head	3.00	**CM-SK-H70038**		
5	**CM-P70018**		TH Piston	2.000	0.00	**CM-SK-P70018**		**CM-H70113**		TK Head	3.00	**CM-SK-H70113**		
5	**CM-P70090**		TM Piston	1.500	0.62	**CM-SK-P70090**		**CM-H107204**		IT Head	2.50	**CM-SK-H107204**		
5	**CM-P70090**		TM Piston	1.500	0.62	**CM-SK-P70090**		**CM-H107554**		ITW Head	3.62	**CM-SK-H107554**		
5	**CM-P70090**		TM Piston	1.500	0.62	**CM-SK-P70090**		**CM-H70038**		TH Head	3.00	**CM-SK-H70038**		
5	**CM-P70090**		TM Piston	1.500	0.62	**CM-SK-P70090**		**CM-H70113**		TK Head	3.00	**CM-SK-H70113**		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
5.5	**CM-P110511**		ITW Piston	2.120	0.00	**CM-SK-P110511**		**CM-H107611**		ITW Head	3.62	**CM-SK-H107611**		
5.5	**CM-P110511**		ITW Piston	2.120	0.00	**CM-SK-P110511**		**CM-H70142**		TH Head	3.00	**CM-SK-H70142**		
5.5	**CM-P110511**		ITW Piston	2.120	0.00	**CM-SK-P110511**		**CM-H70390**		TK Head	3.00	**CM-SK-H70390**		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
6	**CM-P110249**		ITW Piston	2.120	0.00	**CM-SK-P110249**		**CM-H107206**		IT Head	2.50	**CM-SK-H107206**		
6	**CM-P110249**		ITW Piston	2.120	0.00	**CM-SK-P110249**		**CM-H107556**		ITW Head	3.62	**CM-SK-H107556**		
6	**CM-P110249**		ITW Piston	2.120	0.00	**CM-SK-P110249**		**CM-H70042**		TH Head	3.00	**CM-SK-H70042**		
6	**CM-P110249**		ITW Piston	2.120	0.00	**CM-SK-P110249**		**CM-H70111**		TK Head	3.00	**CM-SK-H70111**		

* Customer must modify pre-machined stub length on some piston styles.

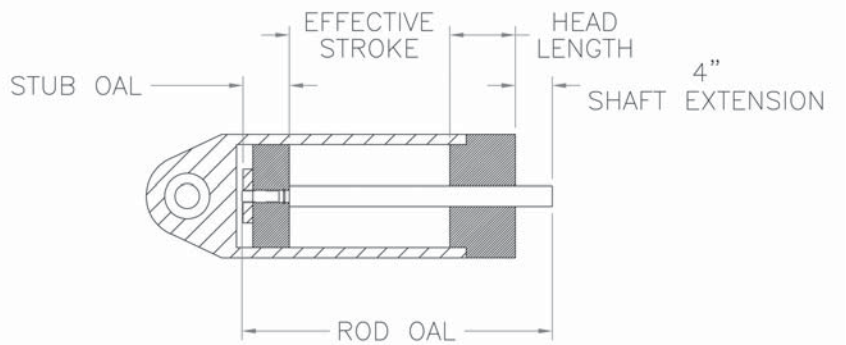
MACHINED CHROME RODS

Quick Reference Chart for Effective Stroke of Machined Chrome Rods

Rod Dia	Part # 12" Stroke	Part # 24" Stroke	Part # 36" Stroke	Part # 48" Stroke	Part # 60" Stroke
2.5	**CR75I-2.50X24-1.25**	**CR75I-2.50X36-1.25**	**CR75I-2.50X48-1.25**	**CR75I-2.50X60-1.25**	**CR75I-2.50X72-1.25**
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
4	13.87" Eff. Stroke	25.87" Eff. Stroke	37.87" Eff. Stroke	49.87" Eff. Stroke	61.87" Eff. Stroke
4	13.12" Eff. Stroke	25.12" Eff. Stroke	37.12" Eff. Stroke	49.12" Eff. Stroke	61.12" Eff. Stroke
4	13.62" Eff. Stroke	25.62" Eff. Stroke	37.62" Eff. Stroke	49.62" Eff. Stroke	61.62" Eff. Stroke
4	13.62" Eff. Stroke	25.62" Eff. Stroke	37.62" Eff. Stroke	49.62" Eff. Stroke	61.62" Eff. Stroke
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
4.5	13.12" Eff. Stroke	25.12" Eff. Stroke	37.12" Eff. Stroke	49.12" Eff. Stroke	61.12" Eff. Stroke
4.5	13.62" Eff. Stroke	25.62" Eff. Stroke	37.62" Eff. Stroke	49.62" Eff. Stroke	61.62" Eff. Stroke
4.5	13.62" Eff. Stroke	25.62" Eff. Stroke	37.62" Eff. Stroke	49.62" Eff. Stroke	61.62" Eff. Stroke
4.5	13.12" Eff. Stroke	25.12" Eff. Stroke	37.12" Eff. Stroke	49.12" Eff. Stroke	61.12" Eff. Stroke
4.5	13.62" Eff. Stroke	25.62" Eff. Stroke	37.62" Eff. Stroke	49.62" Eff. Stroke	61.62" Eff. Stroke
4.5	13.62" Eff. Stroke	25.62" Eff. Stroke	37.62" Eff. Stroke	49.62" Eff. Stroke	61.62" Eff. Stroke
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
5	13.87" Eff. Stroke	25.87" Eff. Stroke	37.87" Eff. Stroke	49.87" Eff. Stroke	61.87" Eff. Stroke
5	12.75" Eff. Stroke	24.75" Eff. Stroke	36.75" Eff. Stroke	48.75" Eff. Stroke	60.75" Eff. Stroke
5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
5	13.87" Eff. Stroke	25.87" Eff. Stroke	37.87" Eff. Stroke	49.87" Eff. Stroke	61.87" Eff. Stroke
5	12.75" Eff. Stroke	24.75" Eff. Stroke	36.75" Eff. Stroke	48.75" Eff. Stroke	60.75" Eff. Stroke
5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
5	13.87" Eff. Stroke	25.87" Eff. Stroke	37.87" Eff. Stroke	49.87" Eff. Stroke	61.87" Eff. Stroke
5	12.75" Eff. Stroke	24.75" Eff. Stroke	36.75" Eff. Stroke	48.75" Eff. Stroke	60.75" Eff. Stroke
5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
5.5	12.75" Eff. Stroke	24.75" Eff. Stroke	36.75" Eff. Stroke	48.75" Eff. Stroke	60.75" Eff. Stroke
5.5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
5.5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
6	13.87" Eff. Stroke	25.87" Eff. Stroke	37.87" Eff. Stroke	49.87" Eff. Stroke	61.87" Eff. Stroke
6	12.75" Eff. Stroke	24.75" Eff. Stroke	36.75" Eff. Stroke	48.75" Eff. Stroke	60.75" Eff. Stroke
6	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
6	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke

* Stroke length is dependent upon selection of piston and head type. See following pages for more details.

EFFECTIVE STROKE CALCULATION



Rod OAL = **Effective Stroke** + Piston Stub OAL + Head Length + 4" Shaft Extension.

MACHINED CHROME RODS

Selection Chart for Pistons, Heads, and Seal Kits to Accommodate Machine Chrome Rod

Rod Dia	Thread		Stub Dia	Stub OAL	Thread Lgth	Nut Part #		Nut Lgth						
3	1-1/4"-12 UNF		1.25	3.63	2.255	**CM-LN45126**		1.38						
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
4	**CM-P70010**		TH Piston	1.75	0.38	**CM-SK-P70010**		**CM-H107525**		IT Head	2.50	**CM-SK-H107525**		
4	**CM-P70010**		TH Piston	1.75	0.38	**CM-SK-P70010**		**CM-H107640**		ITW Head	3.62	**CM-SK-H107640**		
4	**CM-P70010**		TH Piston	1.75	0.38	**CM-SK-P70010**		**CM-H70033**		TH Head	2.75	**CM-SK-H70033**		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
4.5	**CM-P110537**		ITW Piston	2.00	0.00	**CM-SK-P110537**		**CM-H107553**		ITW Head	3.25	**CM-SK-H107553**		
4.5	**CM-P110537**		ITW Piston	2.00	0.00	**CM-SK-P110537**		**CM-H70377**		TH Head	2.75	**CM-SK-H70377**		
4.5	**CM-P110537**		ITW Piston	2.00	0.00	**CM-SK-P110537**		**CM-H70379**		TK Head	2.75	**CM-SK-H70379**		
4.5	**CM-P70275**		TH Piston	1.75	0.38	**CM-SK-P70275**		**CM-H107553**		ITW Head	3.25	**CM-SK-H107553**		
4.5	**CM-P70275**		TH Piston	1.75	0.38	**CM-SK-P70275**		**CM-H70377**		TH Head	2.75	**CM-SK-H70377**		
4.5	**CM-P70275**		TH Piston	1.75	0.38	**CM-SK-P70275**		**CM-H70379**		TK Head	2.75	**CM-SK-H70379**		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
5	**CM-P110248**		ITW Piston	2.00	0.00	**CM-SK-P110248**		**CM-H107205**		IT Head	2.50	**CM-SK-H107205**		
5	**CM-P110248**		ITW Piston	2.00	0.00	**CM-SK-P110248**		**CM-H107555**		ITW Head	3.62	**CM-SK-H107555**		
5	**CM-P110248**		ITW Piston	2.00	0.00	**CM-SK-P110248**		**CM-H70039**		TH Head	3.00	**CM-SK-H70039**		
5	**CM-P110248**		ITW Piston	2.00	0.00	**CM-SK-P110248**		**CM-H70107**		TK Head	3.00	**CM-SK-H70107**		
5	**CM-P70018**		TH Piston	2.00	0.00	**CM-SK-P70018**		**CM-H107205**		IT Head	2.50	**CM-SK-H107205**		
5	**CM-P70018**		TH Piston	2.00	0.00	**CM-SK-P70018**		**CM-H107555**		ITW Head	3.62	**CM-SK-H107555**		
5	**CM-P70018**		TH Piston	2.00	0.00	**CM-SK-P70018**		**CM-H70039**		TH Head	3.00	**CM-SK-H70039**		
5	**CM-P70018**		TH Piston	2.00	0.00	**CM-SK-P70018**		**CM-H70107**		TK Head	3.00	**CM-SK-H70107**		
5	**CM-P70090**		TM Piston	1.50	0.62	**CM-SK-P70090**		**CM-H107205**		IT Head	2.50	**CM-SK-H107205**		
5	**CM-P70090**		TM Piston	1.50	0.62	**CM-SK-P70090**		**CM-H107555**		ITW Head	3.62	**CM-SK-H107555**		
5	**CM-P70090**		TM Piston	1.50	0.62	**CM-SK-P70090**		**CM-H70039**		TH Head	3.00	**CM-SK-H70039**		
5	**CM-P70090**		TM Piston	1.50	0.62	**CM-SK-P70090**		**CM-H70107**		TK Head	3.00	**CM-SK-H70107**		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
5.5	**CM-P110511**		ITW Piston	2.12	0.00	**CM-SK-P110511**		**CM-H107612**		ITW Head	3.62	**CM-SK-H107612**		
5.5	**CM-P110511**		ITW Piston	2.12	0.00	**CM-SK-P110511**		**CM-H70143**		TH Head	3.00	**CM-SK-H70143**		
5.5	**CM-P110511**		ITW Piston	2.12	0.00	**CM-SK-P110511**		**CM-H70391**		TK Head	3.00	**CM-SK-H70391**		
Bore Dia	Piston Part #		Piston Style	Piston Lgth	Stub Cut*	Piston Seal Kit		Head Part#		Head Style	Head Lgth	Seal Kit		
6	**CM-P110249**		ITW Piston	2.12	0.00	**CM-SK-P110249**		**CM-H107207**		IT Head	2.50	**CM-SK-H107207**		
6	**CM-P110249**		ITW Piston	2.12	0.00	**CM-SK-P110249**		**CM-H107557**		ITW Head	3.62	**CM-SK-H107557**		
6	**CM-P110249**		ITW Piston	2.12	0.00	**CM-SK-P110249**		**CM-H70043**		TH Head	3.00	**CM-SK-H70043**		
6	**CM-P110249**		ITW Piston	2.12	0.00	**CM-SK-P110249**		**CM-H70108**		TK Head	3.00	**CM-SK-H70108**		

* Customer must modify pre-machined stub length on some piston styles.

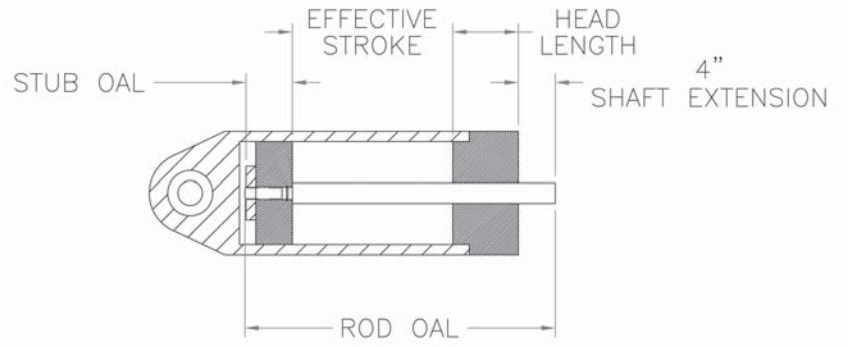
MACHINED CHROME RODS

Quick Reference Chart for Effective Stroke of Machined Chrome Rods

Rod Dia	Part # 12" Stroke	Part # 24" Stroke	Part # 36" Stroke	Part # 48" Stroke	Part # 60" Stroke
3	**CR75I-3.00X24-1.25**	**CR75I-3.00X36-1.25**	**CR75I-3.00X48-1.25**	**CR75I-3.00X60-1.25**	**CR75I-3.00X72-1.25**
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
4	13.87" Eff. Stroke	25.87" Eff. Stroke	37.87" Eff. Stroke	49.87" Eff. Stroke	61.87" Eff. Stroke
4	12.75" Eff. Stroke	24.75" Eff. Stroke	36.75" Eff. Stroke	48.75" Eff. Stroke	60.75" Eff. Stroke
4	13.62" Eff. Stroke	25.62" Eff. Stroke	37.62" Eff. Stroke	49.62" Eff. Stroke	61.62" Eff. Stroke
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
4.5	13.12" Eff. Stroke	25.12" Eff. Stroke	37.12" Eff. Stroke	49.12" Eff. Stroke	61.12" Eff. Stroke
4.5	13.62" Eff. Stroke	25.62" Eff. Stroke	37.62" Eff. Stroke	49.62" Eff. Stroke	61.62" Eff. Stroke
4.5	13.62" Eff. Stroke	25.62" Eff. Stroke	37.62" Eff. Stroke	49.62" Eff. Stroke	61.62" Eff. Stroke
4.5	13.12" Eff. Stroke	25.12" Eff. Stroke	37.12" Eff. Stroke	49.12" Eff. Stroke	61.12" Eff. Stroke
4.5	13.62" Eff. Stroke	25.62" Eff. Stroke	37.62" Eff. Stroke	49.62" Eff. Stroke	61.62" Eff. Stroke
4.5	13.62" Eff. Stroke	25.62" Eff. Stroke	37.62" Eff. Stroke	49.62" Eff. Stroke	61.62" Eff. Stroke
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
5	13.87" Eff. Stroke	25.87" Eff. Stroke	37.87" Eff. Stroke	49.87" Eff. Stroke	61.87" Eff. Stroke
5	12.75" Eff. Stroke	24.75" Eff. Stroke	36.75" Eff. Stroke	48.75" Eff. Stroke	60.75" Eff. Stroke
5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
5	13.87" Eff. Stroke	25.87" Eff. Stroke	37.87" Eff. Stroke	49.87" Eff. Stroke	61.87" Eff. Stroke
5	12.75" Eff. Stroke	24.75" Eff. Stroke	36.75" Eff. Stroke	48.75" Eff. Stroke	60.75" Eff. Stroke
5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
5	13.87" Eff. Stroke	25.87" Eff. Stroke	37.87" Eff. Stroke	49.87" Eff. Stroke	61.87" Eff. Stroke
5	12.75" Eff. Stroke	24.75" Eff. Stroke	36.75" Eff. Stroke	48.75" Eff. Stroke	60.75" Eff. Stroke
5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
5.5	12.75" Eff. Stroke	24.75" Eff. Stroke	36.75" Eff. Stroke	48.75" Eff. Stroke	60.75" Eff. Stroke
5.5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
5.5	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
Bore Dia	12" Nominal Stroke (24"OAL)	24" Nominal Stroke (36" OAL)	36" Nominal Stroke (48" OAL)	48 Nominal Stoke (60" OAL)	60" Nominal Stroke (72" OAL)
6	13.87" Eff. Stroke	25.87" Eff. Stroke	37.87" Eff. Stroke	49.87" Eff. Stroke	61.87" Eff. Stroke
6	12.75" Eff. Stroke	24.75" Eff. Stroke	36.75" Eff. Stroke	48.75" Eff. Stroke	60.75" Eff. Stroke
6	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke
6	13.37" Eff. Stroke	25.37" Eff. Stroke	37.37" Eff. Stroke	49.37" Eff. Stroke	61.37" Eff. Stroke

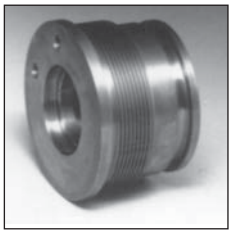
* Stroke length is dependent upon selection of piston and head type.

EFFECTIVE STROKE CALCULATION

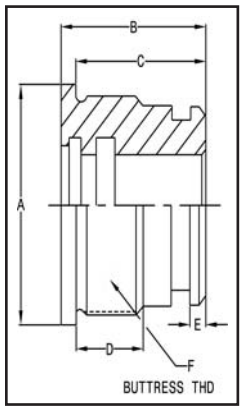


Rod OAL = **Effective Stroke** + Piston Stub OAL + Head Length + 4" Shaft Extension.

MOBILE CYLINDER HEADS



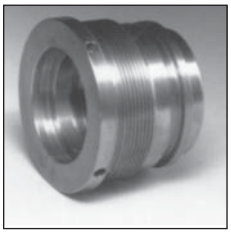
Material: 65-45-12
Ductile Iron



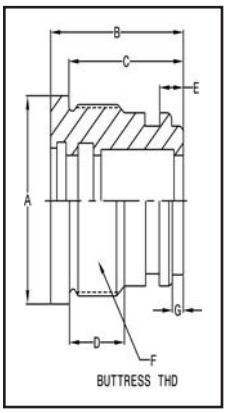
IT Head

PART NUMBER	BORE +.003" -.003"	ROD +.000" -.003"	A	B	C	D	E	F (BUT-TRESS)	SEAL KIT NUMBER
CM-H107277	1.500	1.000	2.00	2.00	1.50	0.75	0.28	1-3/4"-12	CM-SK-H107277
CM-H107597	2.000	1.000	2.50	2.12	1.94	1.00	0.12	2-1/4"-12	CM-SK-H107597
CM-H107598	2.000	1.125	2.50	2.00	1.75	0.75	0.19	2-1/4"-12	CM-SK-H107598
CM-H107595	2.000	1.250	2.50	2.25	2.00	1.00	0.19	2-1/4"-12	CM-SK-H107595
CM-H107193	2.500	1.125	3.00	2.00	1.75	0.75	0.19	2-3/4"-12	CM-SK-H107193
CM-H107194	2.500	1.250	3.00	2.00	1.75	0.75	0.19	2-3/4"-12	CM-SK-H107194
CM-H107463	2.500	1.500	3.00	2.38	2.00	1.00	0.19	2-3/4"-12	CM-SK-H107463
CM-H107673	2.500	1.750	3.00	2.25	1.88	0.88	0.28	2-3/4"-12	CM-SK-H107673
CM-H107157	3.000	1.000	3.50	2.25	2.00	1.00	0.19	3-1/4"-12	CM-SK-H107157
CM-H107196	3.000	1.250	3.50	2.25	2.00	1.00	0.19	3-1/4"-12	CM-SK-H107196
CM-H107131	3.000	1.500	3.50	2.25	2.00	1.00	0.19	3-1/4"-12	CM-SK-H107131
CM-H107189	3.000	1.750	3.50	2.25	2.00	1.00	0.19	3-1/4"-12	CM-SK-H107189
CM-H107359	3.000	2.000	3.50	2.50	2.00	1.00	0.19	3-1/4"-12	CM-SK-H107359
CM-H107591	3.250	1.500	3.75	2.25	2.00	1.00	0.19	3-1/2"-12	CM-SK-H107591
CM-H107592	3.250	1.750	3.75	2.25	2.00	1.00	0.19	3-1/2"-12	CM-SK-H107592
CM-H107197	3.500	1.250	4.00	2.25	2.00	1.00	0.19	3-3/4"-12	CM-SK-H107197
CM-H107198	3.500	1.500	4.00	2.25	2.00	1.00	0.19	3-3/4"-12	CM-SK-H107198
CM-H107108	3.500	1.750	4.00	2.25	2.00	1.00	0.19	3-3/4"-12	CM-SK-H107108
CM-H107112	3.500	2.000	4.00	2.25	2.00	1.00	0.19	3-3/4"-12	CM-SK-H107112
CM-H107462	3.500	2.500	4.00	2.50	2.12	1.00	0.25	3-3/4"-12	CM-SK-H107462
CM-H107130	4.000	1.500	4.50	2.25	2.00	1.00	0.19	4-1/4"-12	CM-SK-H107130
CM-H107124	4.000	1.750	4.50	2.25	2.00	1.00	0.19	4-1/4"-12	CM-SK-H107124
CM-H107311	4.000	2.000	4.50	2.25	2.00	1.00	0.19	4-1/4"-12	CM-SK-H107311
CM-H107331	4.000	2.250	4.50	2.25	2.00	1.00	0.19	4-1/4"-12	CM-SK-H107331
CM-H107386	4.000	2.500	4.50	2.50	2.12	1.12	0.19	4-1/4"-12	CM-SK-H107386
CM-H107525	4.000	3.000	4.50	2.50	2.12	1.00	0.25	4-1/4"-12	CM-SK-H107525
CM-H107199	4.500	1.750	5.00	2.25	2.00	1.00	0.19	4-3/4"-12	CM-SK-H107199
CM-H107200	4.500	2.000	5.00	2.25	2.00	1.00	0.19	4-3/4"-12	CM-SK-H107200
CM-H107201	4.500	2.250	5.00	2.25	2.00	1.00	0.19	4-3/4"-12	CM-SK-H107201
CM-H107528	4.500	3.500	5.00	2.38	2.00	1.00	0.19	4-3/4"-12	CM-SK-H107528
CM-H107234	5.000	1.750	5.50	2.25	2.00	1.00	0.19	5-1/4"-12	CM-SK-H107234
CM-H107212	5.000	2.000	5.50	2.25	2.00	1.00	0.19	5-1/4"-12	CM-SK-H107212
CM-H107204	5.000	2.500	5.50	2.50	2.12	1.12	0.19	5-1/4"-12	CM-SK-H107204
CM-H107205	5.000	3.000	5.50	2.50	2.12	1.12	0.19	5-1/4"-12	CM-SK-H107205
CM-H107345	6.000	2.000	6.50	2.50	2.12	1.12	0.19	6-1/4"-12	CM-SK-H107345
CM-H107206	6.000	2.500	6.50	2.50	2.12	1.12	0.19	6-1/4"-12	CM-SK-H107206
CM-H107207	6.000	3.000	6.50	2.50	2.12	1.12	0.19	6-1/4"-12	CM-SK-H107207
CM-H107178	6.000	3.500	6.50	2.50	2.12	1.12	0.19	6-1/4"-12	CM-SK-H107178
CM-H107328	7.000	3.000	7.50	2.88	2.50	1.12	0.59	7-1/4"-10	CM-SK-H107328
CM-H107493	7.000	3.500	7.50	2.88	2.50	1.12	0.59	7-1/4"-10	CM-SK-H107493
CM-H107467	7.000	4.000	7.50	2.88	2.50	1.12	0.59	7-1/4"-10	CM-SK-H107467
CM-H107466	8.000	4.000	9.00	3.75	3.25	1.50	0.88	8-1/4"-10	CM-SK-H107466
CM-H107494	8.000	4.500	9.00	3.75	3.25	1.50	0.88	8-1/4"-10	CM-SK-H107494
CM-H107475	8.000	5.000	9.00	3.75	3.25	1.50	0.88	8-1/4"-10	CM-SK-H107475

MOBILE CYLINDER HEADS



Material: 65-45-12
Ductile Iron

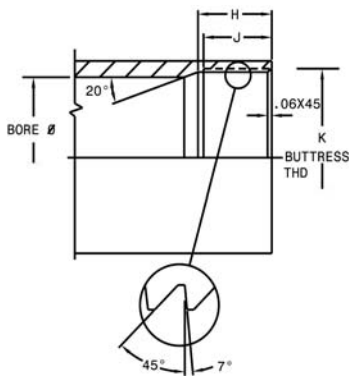


ITW Head

PART NUMBER	BORE +.003" -.003"	ROD +.000" -.003"	A	B	C	D	E	F (BUT-TRESS)	G	SEAL KIT NUMBER
CM-H107729	3.000	1.750	3.50	2.62	2.25	1.00	0.56	3-1/4"-12	0.38	CM-SK-H107729
CM-H107548	3.000	2.000	3.50	2.62	2.25	1.00	0.56	3-1/4"-12	0.38	CM-SK-H107548
CM-H107791	3.500	1.750	4.00	2.62	2.25	1.00	0.56	3-3/4"-12	0.38	CM-SK-H107791
CM-H107549	3.500	2.000	4.00	2.62	2.25	1.00	0.56	3-3/4"-12	0.38	CM-SK-H107549
CM-H107550	4.000	2.000	4.50	3.25	2.75	1.25	0.56	4-1/4"-12	0.38	CM-SK-H107550
CM-H107551	4.000	2.500	4.50	3.25	2.75	1.25	0.56	4-1/4"-12	0.38	CM-SK-H107551
CM-H107640	4.000	3.000	4.50	3.62	3.12	1.38	0.19	4-1/4"-12	N/A	CM-SK-H107640
CM-H107716	4.500	2.000	5.00	3.25	2.75	1.25	0.56	4-3/4"-12	0.38	CM-SK-H107716
CM-H107552	4.500	2.500	5.00	3.25	2.75	1.25	0.56	4-3/4"-12	0.38	CM-SK-H107552
CM-H107553	4.500	3.000	5.00	3.25	2.75	1.25	0.56	4-3/4"-12	0.38	CM-SK-H107553
CM-H107630	4.500	3.500	5.00	3.62	3.12	1.38	0.19	4-3/4"-12	N/A	CM-SK-H107630
CM-H107679	5.000	2.000	5.50	3.00	2.50	1.12	0.56	5-1/4"-12	0.38	CM-SK-H107679
CM-H107554	5.000	2.500	5.50	3.62	3.12	1.38	0.81	5-1/4"-12	0.56	CM-SK-H107554
CM-H107555	5.000	3.000	5.50	3.62	3.12	1.38	0.81	5-1/4"-12	0.56	CM-SK-H107555
CM-H107651	5.000	3.500	5.50	3.62	3.12	1.38	0.81	5-1/4"-12	0.56	CM-SK-H107651
CM-H107606	5.000	4.000	5.50	3.62	3.12	1.38	0.19	5-1/4"-12	N/A	CM-SK-H107606
CM-H107611	5.500	2.500	6.00	3.62	3.12	1.38	0.81	5-3/4"-12	0.56	CM-SK-H107611
CM-H107612	5.500	3.000	6.00	3.62	3.12	1.38	0.81	5-3/4"-12	0.56	CM-SK-H107612
CM-H107706	5.500	3.500	6.00	3.62	3.12	1.38	0.81	5-3/4"-12	0.56	CM-SK-H107706
CM-H107583	5.500	4.000	6.00	3.62	3.12	1.38	0.81	5-3/4"-12	0.56	CM-SK-H107583
CM-H107608	5.500	4.500	6.12	3.62	3.12	1.38	0.19	5-3/4"-12	N/A	CM-SK-H107608
CM-H107556	6.000	2.500	6.50	3.62	3.12	1.38	0.81	6-1/4"-12	0.56	CM-SK-H107556
CM-H107557	6.000	3.000	6.50	3.62	3.12	1.38	0.81	6-1/4"-12	0.56	CM-SK-H107557
CM-H107558	6.000	3.500	6.50	3.62	3.12	1.38	0.81	6-1/4"-12	0.56	CM-SK-H107558
CM-H107570	6.000	4.000	6.50	3.62	3.12	1.38	0.81	6-1/4"-12	0.56	CM-SK-H107570
CM-H107584	6.000	4.500	6.50	3.38	2.88	1.25	0.81	6-1/4"-12	0.62	CM-SK-H107584
CM-H107721	7.000	2.500	7.50	4.25	3.75	1.50	1.03	7-1/4"-10	0.75	CM-SK-H107721
CM-H107559	7.000	3.000	7.50	4.25	3.75	1.50	1.03	7-1/4"-10	0.75	CM-SK-H107559
CM-H107560	7.000	3.500	7.50	4.25	3.75	1.50	1.03	7-1/4"-10	0.75	CM-SK-H107560
CM-H107561	7.000	4.000	7.50	4.25	3.75	1.50	1.03	7-1/4"-10	0.75	CM-SK-H107561
CM-H107607	8.000	3.500	8.50	4.50	3.75	1.50	1.03	8-1/4"-10	0.75	CM-SK-H107607
CM-H107562	8.000	4.000	8.50	4.50	3.75	1.50	1.03	8-1/4"-10	0.75	CM-SK-H107562
CM-H107563	8.000	4.500	8.50	4.50	3.75	1.50	1.03	8-1/4"-10	0.75	CM-SK-H107563
CM-H107722	8.000	5.000	8.50	4.50	3.75	1.50	1.03	8-1/4"-10	0.075	CM-SK-H107722
CM-H107605	10.000	4.000	10.50	5.00	4.25	1.50	1.25	10-1/4"-10	1.00	CM-SK-H107605
CM-H107604	10.000	5.000	10.50	5.00	4.25	1.50	1.25	10-1/4"-10	1.00	CM-SK-H107604

IT & ITW Technical Information

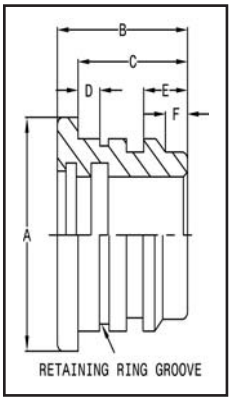
Basic information for Internal Buttress Threads (52 degrees)
"H" = Length of Thread on Head plus 1/8"
"J" = Length of Thread on Head plus 1/16"
"K" = Buttress Thread as determined by Head



Basic Thread Size	Min. Major Diameter	Pitch Diameter	Minor Diameter
2-1/4"-12	2.2604	2.2000/2.2075	2.1500/2.1575
2-3/4"-12	2.7604	2.7000/2.7080	2.6500/2.6580
3-1/4"-12	3.2604	3.2000/3.2080	3.1500/3.1580
3-1/2"-12	3.5104	3.4500/3.4580	3.4000/3.4080
3-3/4"-12	3.7604	3.7000/3.7080	3.6500/3.6580
4-1/4"-12	4.2604	4.2000/4.2084	4.1500/4.1584
4-3/4"-12	4.7604	4.7000/4.7084	4.6500/4.6584
5-1/4"-12	5.2604	5.2000/5.2084	5.1500/5.1584
5-3/4"-12	5.7604	5.7000/5.7084	5.6500/5.6584
6-1/4"-12	6.2604	6.2000/6.2084	6.1500/6.1584
7-1/4"-10	7.2626	7.1900/7.1995	7.1300/7.1395
8-1/4"-10	8.2626	8.1900/8.1995	8.1300/8.1395
10-1/4"-10	10.2626	10.1900/10.1995	10.1300/10.1395

MOBILE CYLINDER HEADS

Material: Ductile Iron

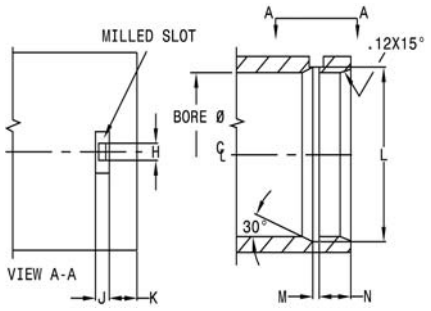


TK Head

TK HEAD	BORE +.003" -.003"	ROD +.000" -.003"	A	B	C	D	E	F	TK LOCK WIRE #
CM-H70181	1.500	0.750	1.88	2.00	1.63	0.38	0.63	0.38	CM-RR20030
CM-H70184	1.500	1.000	1.88	2.00	1.12	0.31	0.19	N/A	CM-RR20030
CM-H70093	2.000	1.000	2.38	2.25	1.88	0.44	0.75	0.50	CM-RR20029
CM-H70159	2.000	1.125	2.38	2.25	1.88	0.44	0.75	0.44	CM-RR20029
CM-H70160	2.000	1.250	2.38	2.50	1.88	0.44	0.75	0.44	CM-RR20029
CM-H70161	2.500	1.125	2.88	2.25	1.88	0.44	0.75	0.44	CM-RR20031
CM-H70162	2.500	1.250	2.88	2.25	1.88	0.44	0.75	0.38	CM-RR20031
CM-H70163	2.500	1.500	2.88	2.25	1.88	0.44	0.75	0.62	CM-RR20031
CM-H70861	2.500	1.750	2.88	2.50	1.88	0.44	0.75	0.38	CM-RR20031
CM-H70164	3.000	1.250	3.38	2.75	2.25	0.51	0.88	0.50	CM-RR20027
CM-H70130	3.000	1.500	3.38	2.75	2.25	0.51	0.88	0.50	CM-RR20027
CM-H70560	3.000	1.750	3.38	2.75	2.25	0.51	0.88	0.44	CM-RR20027
CM-H70165	3.000	2.000	3.38	2.75	2.25	0.51	0.88	0.44	CM-RR20027
CM-H70166	3.500	1.250	3.88	2.75	2.25	0.51	0.88	0.50	CM-RR20032
CM-H70089	3.500	1.500	3.88	2.75	2.25	0.51	0.88	0.50	CM-RR20032
CM-H70862	3.500	1.750	3.88	2.75	2.25	0.51	0.88	0.50	CM-RR20032
CM-H70167	3.500	2.000	3.88	2.75	2.25	0.51	0.88	0.50	CM-RR20032
CM-H70115	4.000	1.500	4.50	2.75	2.25	0.44	0.88	0.44	CM-RR20033
CM-H70576	4.000	1.750	4.50	2.75	2.25	0.44	0.88	0.44	CM-RR20033
CM-H70116	4.000	2.000	4.50	2.75	2.25	0.44	0.88	0.44	CM-RR20033
CM-H70168	4.000	2.500	4.50	2.75	2.25	0.44	0.88	0.44	CM-RR20033
CM-H70367	4.500	2.000	5.00	2.75	2.25	0.44	0.88	0.44	CM-RR20087
CM-H70378	4.500	2.500	5.00	2.75	2.25	0.44	0.88	0.44	CM-RR20087
CM-H70379	4.500	3.000	5.00	2.75	2.25	0.44	0.88	0.44	CM-RR20087
CM-H70114	5.000	2.000	5.50	3.00	2.50	0.56	0.94	0.50	CM-RR20039
CM-H70113	5.000	2.500	5.50	3.00	2.50	0.56	0.94	0.50	CM-RR20039
CM-H70107	5.000	3.000	5.50	3.00	2.50	0.56	0.94	0.50	CM-RR20039
CM-H70389	5.500	2.000	6.00	3.00	2.50	0.56	0.94	0.50	CM-RR20089
CM-H70390	5.500	2.500	6.00	3.00	2.50	0.56	0.94	0.50	CM-RR20089
CM-H70391	5.500	3.000	6.00	3.00	2.50	0.56	0.94	0.50	CM-RR20089
CM-H70112	6.000	2.000	6.50	3.00	2.50	0.56	0.94	0.50	CM-RR20040
CM-H70111	6.000	2.500	6.50	3.00	2.50	0.56	0.94	0.50	CM-RR20040
CM-H70108	6.000	3.000	6.50	3.00	2.50	0.56	0.94	0.50	CM-RR20040

TK Technical Information

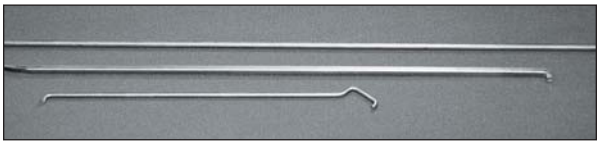
Retaining Groove Information



BORE +.003" -.003"	H	J	K	L +.010" -.000"	M +.005" -.000"	N +.000" -.005"
1.500	0.25	0.25	0.28	1.625	0.125	0.375*
2.000	0.25	0.25	0.34	2.125	0.125	0.438
2.500	0.25	0.25	0.34	2.625	0.125	0.438
3.000	0.25	0.25	0.41	3.125	0.125	0.500
3.500	0.25	0.25	0.41	3.625	0.125	0.500
4.000	0.38	0.25	0.41	4.188	0.188	0.438
4.500	0.38	0.25	0.41	4.688	0.188	0.438
5.000	0.38	0.25	0.53	5.188	0.188	0.562
5.500	0.38	0.25	0.53	5.688	0.188	0.562
6.000	0.38	0.25	0.53	6.188	0.188	0.562

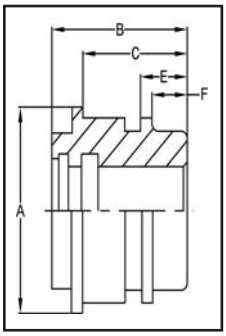
* 0.312 for 1" Rod.

Wind-In Lock Wires



MOBILE CYLINDER HEADS

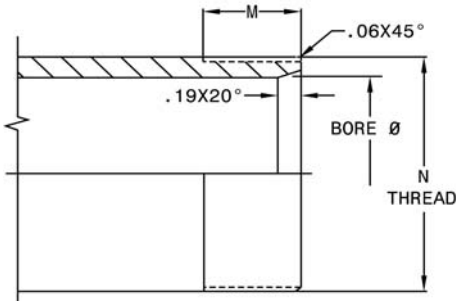
Material: Ductile Iron



TH Head

PART NUMBER	BORE +.003" -.003"	ROD +.000" -.003"	A	B	C	E	F	SEAL KIT NUMBER
CM-H70154	2.000	1.000	2.25	2.38	1.94	0.81	0.62	CM-SK-H70154
CM-H70155	2.000	1.125	2.25	2.38	1.94	0.81	0.62	CM-SK-H70155
CM-H70156	2.000	1.250	2.25	2.38	1.94	0.81	0.62	CM-SK-H70156
CM-H70157	2.500	1.125	2.75	2.38	1.94	0.81	0.62	CM-SK-H70157
CM-H70076	2.500	1.250	2.75	2.38	1.94	0.81	0.62	CM-SK-H70076
CM-H70158	2.500	1.500	2.75	2.38	1.94	0.81	0.62	CM-SK-H70158
CM-H70462	2.500	1.750	2.75	2.38	2.19	0.81	0.62	CM-SK-H70462
CM-H70029	3.000	1.250	3.25	2.75	2.19	0.94	0.75	CM-SK-H70029
CM-H70011	3.000	1.500	3.25	2.75	2.19	0.94	0.75	CM-SK-H70011
CM-H70814	3.000	1.750	3.25	2.75	2.19	0.94	0.75	CM-SK-H70814
CM-H70012	3.000	2.000	3.25	2.75	2.56	0.94	0.69	CM-SK-H70012
CM-H70013	3.500	1.500	3.75	2.75	2.19	0.94	0.75	CM-SK-H70013
CM-H70504	3.500	1.750	3.75	2.75	2.19	0.94	0.75	CM-SK-H70504
CM-H70030	3.500	2.000	3.75	2.75	2.19	0.94	0.75	CM-SK-H70030
CM-H70031	3.500	2.500	3.75	2.75	2.56	0.94	0.75	CM-SK-H70031
CM-H70014	4.000	1.500	4.25	2.75	2.19	0.94	0.75	CM-SK-H70014
CM-H70488	4.000	1.750	4.25	2.75	2.19	0.94	0.75	CM-SK-H70488
CM-H70015	4.000	2.000	4.25	2.75	2.19	0.94	0.75	CM-SK-H70015
CM-H70032	4.000	2.500	4.25	2.75	2.19	0.94	0.75	CM-SK-H70032
CM-H70033	4.000	3.000	4.25	2.75	2.56	0.94	0.75	CM-SK-H70033
CM-H70276	4.500	2.000	4.75	2.75	2.19	0.94	0.75	CM-SK-H70276
CM-H70310	4.500	2.500	4.75	2.75	2.19	0.94	0.75	CM-SK-H70310
CM-H70377	4.500	3.000	4.75	2.75	2.19	0.94	0.69	CM-SK-H70377
CM-H70037	5.000	2.000	5.38	3.00	2.44	1.13	0.88	CM-SK-H70037
CM-H70038	5.000	2.500	5.38	3.00	2.44	1.13	0.88	CM-SK-H70038
CM-H70039	5.000	3.000	5.38	3.00	2.44	1.13	0.88	CM-SK-H70039
CM-H70153	5.500	2.000	5.88	3.00	2.44	1.13	0.88	CM-SK-H70153
CM-H70142	5.500	2.500	5.88	3.00	2.44	1.13	0.88	CM-SK-H70142
CM-H70143	5.500	3.000	5.88	3.00	2.44	1.13	0.88	CM-SK-H70143
CM-H70041	6.000	2.000	6.38	3.00	2.44	1.13	0.88	CM-SK-H70041
CM-H70042	6.000	2.500	6.38	3.00	2.44	1.13	0.88	CM-SK-H70042
CM-H70043	6.000	3.000	6.38	3.00	2.44	1.13	0.88	CM-SK-H70043
CM-H70180	7.000	2.500	7.50	4.00	3.13	1.75	1.50	CM-SK-H70180
CM-H70176	7.000	3.000	7.50	4.00	3.13	1.75	1.50	CM-SK-H70176
CM-H70186	7.000	3.500	7.50	4.00	3.13	1.75	1.50	CM-SK-H70186
CM-H70133	8.000	3.000	8.50	4.00	3.13	1.75	1.50	CM-SK-H70133
CM-H70195	8.000	3.500	8.50	4.00	3.13	1.75	1.50	CM-SK-H70195
CM-H70217	8.000	4.000	8.50	4.00	3.13	1.75	1.50	CM-SK-H70217

TH Head Technical Information

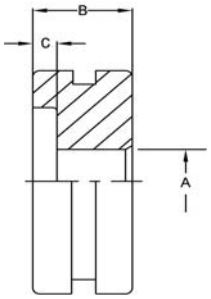


Bore +.003" −.003"	M	N	Thread Major Diameter	Thread Pitch Diameter
2.000	0.81	2-3/8"-12 UN-2A	2.3731/2.3617	2.3191/2.3128
2.500	0.81	2-7/8"-12 UN-2A	2.8731/2.8617	2.8191/2.8127
3.000	1.00	3-1/2"-12 UN-2A	3.4981/3.4867	3.4440/3.4376
3.500	1.00	4"-12 UN-2A	3.9980/3.9866	3.9439/3.9374
4.000	1.00	4-1/2"-12 UN-2A	4.4980/4.4866	4.4439/4.4374
4.500	1.00	5"-12 UN-2A	4.9980/4.9866	4.9439/4.9372
5.000	1.00	5-1/2"-12 UN-2A	5.4980/5.4866	5.4439/5.4372
5.500	1.00	6"-12 UN-2A	5.9979/5.9865	5.9438/5.9369
6.000	1.00	6-5/8"-12 UN-2A	6.6229/6.6115	6.5688/6.5619
7.000	1.25	7-7/8"-12 UN-2A	7.8729/7.8615	7.8188/7.8119
8.000	1.25	8-7/8"-12 UN-2A	8.8729/8.8615	8.8188/8.8119

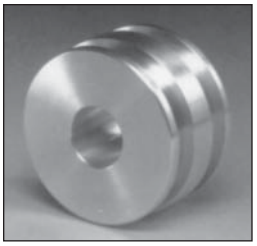
MOBILE CYLINDER PISTONS

Material: Ductile Iron

TM Piston

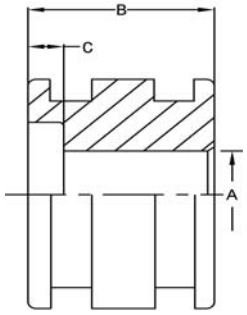


PART NUMBER	BORE +.003"-.003"	A +.002"-.000"	B	C	SEAL KIT NUMBER
CM-P70079	1.50	0.626	0.88	N/A	CM-SK-P70079
CM-P70055	2.00	0.751	1.00	N/A	CM-SK-P70055
CM-P70065	2.50	0.751	1.00	N/A	CM-SK-P70065
CM-P70841	3.00	0.751	1.00	0.25	CM-SK-P70841
CM-P70872	3.50	1.001	1.00	0.38	CM-SK-P70872
CM-P70067	4.00	1.001	1.00	N/A	CM-SK-P70067
CM-P70384	4.50	1.251	1.50	N/A	CM-SK-P70384
CM-P70090	5.00	1.251	1.50	N/A	CM-SK-P70090
CM-P70385	5.50	1.501	1.50	N/A	CM-SK-P70385
CM-P70139	6.00	1.501	1.50	N/A	CM-SK-P70139

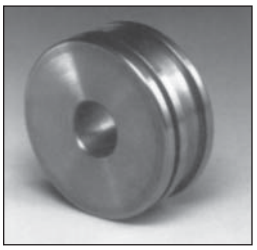


Material: Ductile Iron

TH Piston

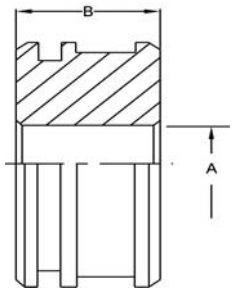


PART NUMBER	BORE +.003"-.003"	A +.002"-.000"	B	C	SEAL KIT NUMBER
CM-P70020	1.50	0.626	1.13	N/A	CM-SK-P70020
CM-P70005	2.00	0.751	1.50	N/A	CM-SK-P70005
CM-P70017	2.50	0.751	1.50	N/A	CM-SK-P70017
CM-P70006	3.00	1.001	1.75	N/A	CM-SK-P70006
CM-P70007	3.50	1.126	1.75	N/A	CM-SK-P70007
CM-P70010	4.00	1.251	1.75	N/A	CM-SK-P70010
CM-P70275	4.50	1.251	1.75	N/A	CM-SK-P70275
CM-P70018	5.00	1.251	2.00	N/A	CM-SK-P70018
CM-P70141	5.50	1.501	2.00	N/A	CM-SK-P70141
CM-P70019	6.00	1.501	2.00	N/A	CM-SK-P70019
CM-P70175	7.00	1.751	3.00	0.75	CM-SK-P70175
CM-P70134	8.00	2.001	3.00	0.75	CM-SK-P70134



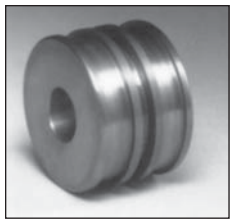
Material: 65-45-12
Ductile Iron

IT (narrow) Piston

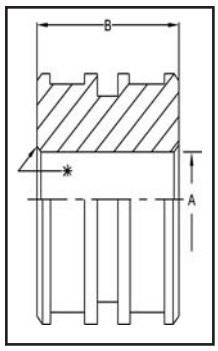


PART NUMBER	BORE +.003"-.003"	A +.002"-.000"	B	SEAL KIT NUMBER
CM-P110629	1.500	0.626	1.12	CM-SK-P110629
CM-P110238	2.000	0.751	1.25	CM-SK-P110238
CM-P110239	2.500	0.751	1.25	CM-SK-P110239
CM-P110240	3.000	0.876	1.25	CM-SK-P110240
CM-P110608	3.250	1.001	1.25	CM-SK-P110608
CM-P110241	3.500	1.001	1.25	CM-SK-P110241
CM-P110242	4.000	1.001	1.25	CM-SK-P110242
CM-P110384	4.500	1.126	1.50	CM-SK-P110384
CM-P110212	5.000	1.126	1.50	CM-SK-P110212

MOBILE CYLINDER PISTONS



Material: 65-45-12
Ductile Iron

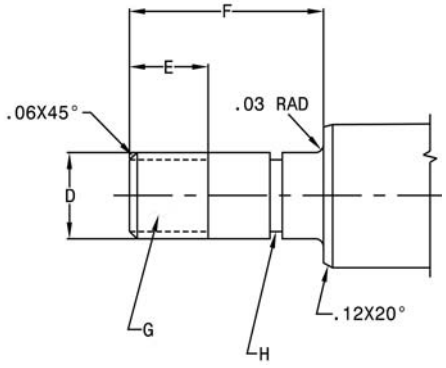


IT (wide) Piston

IT (WIDE) PISTON	BORE +.003"-.003"	A +.002"-.000"	B	SEAL KIT NUMBER
CM-P110548	2.000	1.001	2.00	CM-SK-P110548
CM-P110596	2.500	0.751	1.88	CM-SK-P110596
CM-P110121	3.000	1.001	2.00	CM-SK-P110121
CM-P110288	3.500	1.126	2.00	CM-SK-P110288
CM-P110287	4.000	1.126	2.00	CM-SK-P110287
CM-P110537	4.500	1.251	2.00	CM-SK-P110537
CM-P110248	5.000	1.251	2.00	CM-SK-P110248
CM-P110511	5.500	1.251	2.12	CM-SK-P110511
CM-P110249	6.000	1.251	2.12	CM-SK-P110249
CM-P110607	6.000	1.501	2.12	CM-SK-P110607
CM-P110312	7.000	1.751	2.12	CM-SK-P110312
CM-P110479	8.000	2.001	3.12	CM-SK-P110479
CM-P110683	9.000	2.501	4.38	CM-SK-P110683
CM-P110634	10.000	2.500	4.38	CM-SK-P110634

*NOTE: P110479 is counter bored for a (-226) Stub O-ring.
P110634 is counter bored for a (-230) Stub O-ring.
P110683 is counter bored for a (-230) Stub O-ring.

Piston Stub Technical Information



"D" = "A" Diameter of Piston, minus 0.001"/0.003"
"E" = Nut Length + 0.25"
"F" = Piston Width "B" minus Counterbore Depth "C" + Nut Length + 0.12"
"G"= Thread Size to be determined by nut used
"H"= Located under middle of Piston, 0.098"/0.093" Wide X 0.050"/0.052" Deep for 1/16 cross section O-ring (000 Series)

Note: Good rule of thumb is to size the stub diameter at least one half the diameter of the rod.

NOTES

Kits & Tools

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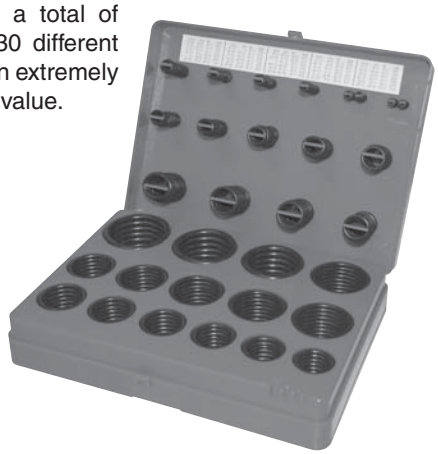
O-RING KITS

O-RING KIT

Part Number: 568 KIT-A

PART NUMBER	QTY	PART NUMBER	QTY
006-012	20	210-222	10
110-116	13	325-327	7

This kit contains a total of 382 O-Rings in 30 different sizes, providing an extremely low cost per size value.



O-RING METRIC KIT

Part Number: METRIC O KIT-J-A

I.D X C.S. (mm)	QTY	I.D X C.S. (mm)	QTY
3 X 2.0	16	20 X 3.0	12
4 X 2.0	16	22 X 3.0	12
5 X 2.0	16	24 X 3.0	12
6 X 2.0	16	25 X 3.0	12
7 X 2.0	16	27 X 3.0	12
8 X 2.0	16	28 X 3.0	12
10 X 2.0	16	30 X 3.0	12
10 X 2.5	16	32 X 3.0	12
11 X 2.5	13	33 X 3.0	12
12 X 2.5	13	35 X 3.0	12
14 X 2.5	13	36 X 3.0	12
16 X 2.5	13	38 X 3.0	12
17 X 2.5	13	38 X 4.0	9
19 X 2.5	13	41 X 4.0	9
19 X 3.0	12	44 X 4.0	9

The Metric O-Kit J-A contains a total of 389 O-Rings in 30 different sizes, another extremely low cost per size value.

O-RING KITS

U.S. INDUSTRIAL O-RING KIT

Part Number: 568 KIT

PART NUMBER	QTY	PART NUMBER	QTY
005-011	25	111-116	10
012	15	117-121	7
013-018	10	210-211	10
110	15	212-219	7

This kit contains a total of 436 70 Durometer O-Rings in 36 different sizes, providing an extremely low cost per size value.

QUAD WAREHOUSE KIT

Part Number: QUAD-RING WH KIT

PART NUMBER	QTY	PART NUMBER	QTY
QR-4004-012	10	QR-4125-135	3
QR-4013-030	5	QR-4136-154	2
QR-4031-038	3	QR-4204-216	5
QR-4039-048	2	QR-4217-229	3
QR-4108-116	10	QR-4230-338	2
QR-4117-124	5		

Similar to the O-Ring Warehouse kit, the Quad Seal Warehouse kit contains a total of 583 four-lobed seals in 145 different sizes. This kit is ideal for the small distributor who wishes to have a comprehensive on-hand inventory of Quad seals for counter sales.

O-RING KITS

O-RING WAREHOUSE KIT

Part Number: 568 WH KIT

PART NUMBER	QTY	PART NUMBER	QTY
001-016	20	217-229	5
017-024	10	230-232	3
025-031	7	233-237	2
032-043	5	325-328	5
044-046	2	329-330	4
110-116	15	331-338	2
117-124	10	901-914	5
125-142	5	916, 918	5
143-146	3	920, 924	5
147-151	2	928, 932	5
210-216	10		

Our O-ring Warehouse kit is ideally suited for the repair shop that needs a large on-hand selection of O-rings to insure quick repair of all machine types. 1,110 O-Rings in 150 different sizes are included in this kit. Each size is individually packaged in heavy duty ziploc bags to protect against environmental exposure and contamination. All packages are then stored in a sturdy styrene cabinet with pull-out drawers for easy access to parts. Included card shows size, dimensions, and drawer location for each ring.

90 DUROMETER O-RING WAREHOUSE KIT

Part Number: 568 WH KIT-90D

PART NUMBER	QTY	PART NUMBER	QTY
001-016-90D	20	217-229-90D	5
017-024-90D	10	230-232-90D	3
025-031-90D	7	233-237-90D	2
032-043-90D	5	325-328-90D	5
044-046-90D	2	329-330-90D	4
110-116-90D	15	331-338-90D	2
117-124-90D	10	901-914-90D	5
125-142-90D	5	916, 918-90D	5
143-146-90D	3	920, 924-90D	5
147-151-90D	2	928, 932-90D	5
210-216-90D	10		

Our 90 Durometer O-ring Warehouse kit is ideally suited for the repair shop that needs a large on-hand selection of O-Rings to insure quick repair of all machine types. 1,110 O-Rings in 150 different sizes are included in this kit.

O-RING KITS

90 DUROMETER O-RING KIT

Part Number: 568 90D KIT

PART NUMBER	QTY	PART NUMBER	QTY
005-011-90D	25	111-116-90D	10
012-90D	15	117-121-90D	7
013-018-90D	10	210-211-90D	10
110-90D	15	212-219-90D	7

This kit contains a total of 436 90 Durometer O-Rings in 36 different sizes, providing an extremely low cost per size value.

SAE 900 O-RING BOSS KIT

Part Number: 900 BOSS KIT

PART NUMBER	QTY	SAE PORT SIZE	PART NUMBER	QTY	SAE PORT SIZE
568-904	35	-4	568-910	20	-10
568-905	30	-5	568-911	15	-11
568-906	30	-6	568-912	15	-12
568-907	20	-7	568-913	15	-13
568-908	20	-8	568-914	15	-14
568-909	20	-9	568-916	15	-16

This 250 piece assortment contains the most popular size 90 Durometer Boss O-rings in 12 different fitting sizes, individually separated, which will supply your shop, service truck, or parts counter with the sizes you need!

FLUOROCARBON O-RING KIT

Part Number: 568 FC KIT

PART NUMBER	QTY	PART NUMBER	QTY
005-011V	25	111-116V	10
012V	15	117-121V	7
013-018V	10	210-211V	10
110V	15	212-219V	7

This kit contains a total of 436 75 Durometer Fluorocarbon O-Rings in 36 different sizes, providing an extremely low cost per size value.

O-RING KITS

MAX O-RING KIT

Part Number:
MAX 1381 KIT

Part Number:
MAX 1381 KIT-90D

These sturdy kits, packaged in a heavy duty box, contain 1415 O-Rings in the most popular sizes. Every service truck should have one of these. Five internal boxes contain 1/16" C/S, 3/32" C/S, 1/8" C/S, Boss, and Flange fitting o-rings. Contents and quantities are listed below.

Flange Seals

FLANGE NUMBER	QTY	FLANGE NUMBER	QTY
8	10	20	5
12	10	24	5
16	10	32	5

Boss O-Rings

BOSS NUMBER	QTY	BOSS NUMBER	QTY
903	15	907	25
904	25	910	25
906	15	912	15
908	25	916	10

1/16" C/S O-Rings

O-RING NUMBER	QTY	O-RING NUMBER	QTY
006 - 118	25	028	15
019 - 021	20	029	10
022 - 026	15	030	10

3/32" C/S O-Rings

O-RING NUMBER	QTY	O-RING NUMBER	QTY
109 - 118	25	129	10
119 - 120	20	131	10
121 - 127	15	133	10
128	10	135	5

1/8" C/S O-Rings

O-RING NUMBER	QTY	O-RING NUMBER	QTY
210 - 214	20	228	10
215 - 222	15	232	10
223 - 224	10	236	10
226	10		

O-RING KITS

SAE 900 O-RING BOSS FLUOROCARBON KIT

Part Number: 900 BOSS FC

PART NUMBER	QTY	SAE PORT SIZE	PART NUMBER	QTY	SAE PORT SIZE
568-904V	35	-4	568-910V	20	-10
568-905V	30	-5	568-911V	15	-11
568-906V	30	-6	568-912V	15	-12
568-907V	20	-7	568-913V	15	-13
568-908V	20	-8	568-914V	15	-14
568-909V	20	-9	568-916V	15	-16

This 250 piece assortment contains the most popular size 90 Durometer FKM Boss O-rings in 12 different fitting sizes, individually separated, which will supply your shop, service truck, or parts counter with the sizes you need!

PTFE O-RING KIT

Part Number: 568 PTFE KIT

This kit contains a total of 325 PTFE O-Rings (55 - 58 Shore D) in 36 different sizes. PTFE O-Rings can withstand temperatures up to 500° F and are impervious to a wide range of chemicals.

PART NUMBER	QTY
005-012T	15
013-018T	10
110-116T	10
117-121T	5
210-219T	5

QUAD RING KIT

Part Number: QUAD-RING KIT

PART NUMBER	QTY	PART NUMBER	QTY
4005-4012	10	4110-4116	6
4013-4016	6	4117-4121	4
4017-4018	5	4210-4219	5

This kit contains a total of 226 Quad rings in 36 different sizes, providing an extremely low cost per size value.

O-RING KITS

O-RING FACE KIT

Part Number: 568 FACE KIT

PART NUMBER	QTY	PART NUMBER	QTY
011-90D	25	018-90D	20
012-90D	25	021-90D	15
014-90D	25	025-90D	10
016-90D	25	029-90D	10

This kit contains a total of 155 90 Durometer O-Rings in 8 different sizes, providing an extremely low cost per size value.

O-RING FLANGE KIT

Part Number: 568 FLANGE KIT

PART NUMBER	QTY	PART NUMBER	QTY
210-90D	10	225-90D	10
214-90D	10	228-90D	10
219-90D	10	232-90D	10
222-90D	10		

This kit contains a total of 70, 90 Durometer O-Rings, in 7 different sizes, providing an extremely low cost per size value.

SPLIT FLANGE SEAL KIT

Part Number: SFS KIT

PART NUMBER	QTY	PART NUMBER	QTY
SFS-8	5	SFS-24	5
SFS-12	5	SFS-32	5
SFS-16	5	SFS-40	5
SFS-20	5		

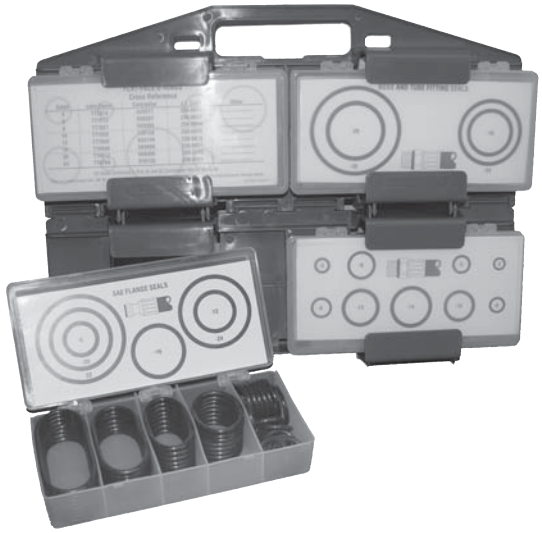
This kit contains 35 Split Flange Seals in 7 popular sizes.

O-RING KITS

HOSE END & ADAPTER KIT

Part Number: O-R FITTING KIT

This handy kit contains 27 sizes and 216 pieces of 90A Durometer O-rings for boss, split flange, and flat face hose end fittings and adapters. Each box has a graphic label identifying the type of application and dash number for the seal. A chart on the back of the box lists popular OEM part number matches for each O-ring. Due to popular demand, these kits are now available individually.



SAE FLANGE SEALS

Part Number: SAE FLANGE SEALS

BOX PART NUMBER	PART NUMBER	QTY
-8	568-210-90D	8
-12	568-214-90D	8
-16	568-219-90D	8
-20	568-222-90D	8
-24	568-225-90D	8
-32	568-228-90D	8

FLAT FACE SEALS

Part Number: FLAT FACE O-RINGS

BOX PART NUMBER	PART NUMBER	QTY
-4	568-011-90D	8
-6	568-012-90D	8
-8	568-014-90D	8
-10	568-016-90D	8
-12	568-018-90D	8
-16	568-021-90D	8
-20	568-025-90D	8
-24	568-029-90D	8

BOSS & TUBE SEALS

Part Number: BOSS & TUBE FITTINGS-1

Part Number: BOSS & TUBE FITTINGS-2

BOX PART NUMBER	PART NUMBER	QTY	KIT NUMBER
-2	568-902	8	FITTINGS-1
-3	568-903	8	FITTINGS-1
-4	568-904	8	FITTINGS-1
-5	568-905	8	FITTINGS-1
-6	568-906	8	FITTINGS-1
-8	568-908	8	FITTINGS-1
-10	568-910	8	FITTINGS-1

BOX PART NUMBER	PART NUMBER	QTY	KIT NUMBER
-12	568-912	8	FITTINGS-1
-14	568-914	8	FITTINGS-1
-16	568-916	8	FITTINGS-2
-20	568-920	8	FITTINGS-2
-24	568-924	8	FITTINGS-2
-32	568-932	8	FITTINGS-2

O-RING KITS

COMMON JAPANESE SIZE O-RINGS IN 70 DUROMETER

Part Number: METRIC O KIT-J

This 380 piece kit contains the most popular Japanese Industrial metric O-ring sizes.

I.D.	C.S	QTY	I.D.	C.S	QTY
2.8	1.9	25	20.8	2.4	8
3.8	1.9	20	21.8	2.4	8
4.8	1.9	20	24.4	3.1	6
5.8	1.9	20	29.4	3.1	7
6.8	1.9	15	21.7	3.5	5
7.8	1.9	15	22.1	3.5	5
8.8	1.9	15	23.7	3.5	7
9.8	1.9	15	24.7	3.5	7
9.8	2.4	15	25.2	3.5	7
10.8	2.4	15	25.7	3.5	7
11.0	2.4	15	27.7	3.5	7
11.8	2.4	12	28.7	3.5	6
12.8	2.4	12	29.2	3.5	6
13.8	2.4	12	29.7	3.5	6
14.8	2.4	12	30.7	3.5	6
15.8	2.4	12	31.2	3.5	6
17.8	2.4	8	14.5	4.0	4
19.8	2.4	8	23.5	4.0	6

COMMON JAPANESE SIZE O-RINGS IN 90 DUROMETER

Part Number: METRIC O KIT-J-90D

This 380 piece kit contains the most popular Japanese Industrial metric O-ring sizes in 90 durometer NBR.

I.D.	C.S	QTY	I.D.	C.S	QTY
2.8	1.9	25	20.8	2.4	8
3.8	1.9	20	21.8	2.4	8
4.8	1.9	20	24.4	3.1	6
5.8	1.9	20	29.4	3.1	7
6.8	1.9	15	21.7	3.5	5
7.8	1.9	15	22.1	3.5	5
8.8	1.9	15	23.7	3.5	7
9.8	1.9	15	24.7	3.5	7
9.8	2.4	15	25.2	3.5	7
10.8	2.4	15	25.7	3.5	7
11.0	2.4	15	27.7	3.5	7
11.8	2.4	12	28.7	3.5	6
12.8	2.4	12	29.2	3.5	6
13.8	2.4	12	29.7	3.5	6
14.8	2.4	12	30.7	3.5	6
15.8	2.4	12	31.2	3.5	6
17.8	2.4	8	14.5	4.0	4
19.8	2.4	8	23.5	4.0	6

O-RING KITS

COMMON EUROPEAN SIZE O-RINGS IN 70 DUROMETER

Part Number: METRIC O KIT-E

This 500 piece kit contains the most popular European metric O-ring sizes.

I.D.	C.S.	QTY	I.D.	C.S.	QTY
5.0	1.5	20	19.0	2.0	10
13.0	1.5	15	20.0	2.0	10
16.0	1.5	10	4.3	2.4	15
2.2	1.6	20	5.3	2.4	15
3.1	1.6	20	5.6	2.4	15
4.1	1.6	20	7.6	2.4	15
7.1	1.6	20	8.3	2.4	15
9.1	1.6	15	8.6	2.4	15
10.1	1.6	15	10.0	2.5	10
13.1	1.6	15	13.0	2.5	10
4.0	2.0	20	14.0	2.5	10
6.0	2.0	20	15.0	2.5	10
8.0	2.0	15	17.0	2.5	10
9.0	2.0	15	18.0	2.5	10
10.0	2.0	15	19.0	2.5	10
12.0	2.0	15	9.0	3.0	10
14.0	2.0	10	10.0	3.0	10
16.0	2.0	10	11.0	3.0	10

COMMON EUROPEAN SIZE O-RINGS IN 90 DUROMETER

Part Number: METRIC O KIT-E-90D

This 500 piece kit contains the most popular European metric O-ring sizes.

I.D.	C.S.	QTY	I.D.	C.S.	QTY
5.0	1.5	20	19.0	2.0	10
13.0	1.5	15	20.0	2.0	10
16.0	1.5	10	4.3	2.4	15
2.2	1.6	20	5.3	2.4	15
3.1	1.6	20	5.6	2.4	15
4.1	1.6	20	7.6	2.4	15
7.1	1.6	20	8.3	2.4	15
9.1	1.6	15	8.6	2.4	15
10.1	1.6	15	10.0	2.5	10
13.1	1.6	15	13.0	2.5	10
4.0	2.0	20	14.0	2.5	10
6.0	2.0	20	15.0	2.5	10
8.0	2.0	15	17.0	2.5	10
9.0	2.0	15	18.0	2.5	10
10.0	2.0	15	19.0	2.5	10
12.0	2.0	15	9.0	3.0	10
14.0	2.0	10	10.0	3.0	10
16.0	2.0	10	11.0	3.0	10

O-RING SPLICE KITS

O-RING SPLICE KIT
INCH SIZES

Part Number: 568 SPLICE KIT

Kit Contains:
1. Stock of 70 Durometer Buna O-ring Cord
2. Razor Blade
3. Splicing tool
4. Tube of Adhesive

Replacement Parts

Parts:
#568 Splice Tool
#568 Adhesive
70 Duro. Cord

O-RING SPLICE KIT
INCH& METRIC SIZES

Part Number: MET/INCH SPLICE KIT

This kit can produce O-Rings of any standard inch size cross-section plus a wide variety of metric sizes. Each kit contains quick drying adhesive, cutting and splicing jig, razor blade, and 14 lengths of 70 Durometer Buna-N cord stock as follows:

Inch cross-sections: (inch)
1/16" (.070), 3/32" (.103), 1/8" (.139),
3/16" (.210), 1/4" (.275)
Metric cross-sections: (mm)
1.6, 2.0, 2.5, 3.0, 3.5, 4.0, 5.0, 5.7, 8.4

These kits can produce O-Rings of any circumference. The 568 kit contains the most popular inch cross sectional sized O-ring cord. The Metric and Inch Kit has both standard inch size cross sectional cord plus a wide variety of metric sized cord. Both kits contain quick drying adhesive, a cutting and splicing jig, a razor blade and 70 Durometer Buna-N cord.

FLUOROCARBON O-RING SPLICE KIT
INCH SIZES

Part Number: 568 FC SPLICE KIT

Kit Contains:
1. Stock of 75 Durometer Fluorocarbon Cord
2. Razor Blade
3. Splicing tool
4. Tube of Adhesive

Replacement Parts

Parts:
#568 Splice Tool
#568 Adhesive
75 Duro. Fluorocarbon Cord

BACK-UP RING KITS

574 BACK-UP RING KIT

Part Number: 574 KIT

PART NUMBER	QTY	PART NUMBER	QTY
574-005	10	574-114	10
574-006	10	574-115	10
574-007	10	574-116	10
574-008	10	574-117	5
574-009	10	574-118	5
574-010	10	574-119	5
574-011	10	574-120	5
574-012	10	574-121	5
574-013	10	574-210	7
574-014	10	574-211	7
574-015	10	574-212	7
574-016	10	574-213	7
574-017	10	574-214	5
574-018	10	574-215	5
574-110	10	574-216	5
574-111	10	574-217	5
574-112	10	574-218	5
574-113	10	574-219	5

This 293 piece kit contains 36 of the most popular size “Parback®” Style Dished Cross Section back-up rings. Molded of 90A Durometer Buna-N Rubber, they stretch for installation and return quickly to their original size. SIZES CORRESPOND TO O-RING NUMBERS. Your shop and service truck should not be without this handy kit.

575 BACK-UP RING KIT

Part Number: 575 KIT

PART NUMBER	QTY	PART NUMBER	QTY
575-111	25	575-216	25
575-112	25	575-217	15
575-113	25	575-218	15
575-114	25	575-219	15
575-115	25	575-220	15
575-116	25	575-221	15
575-210	25	575-222	15
575-211	25	575-223	15
575-212	25	575-224	15
575-213	25	575-325	10
575-214	25	575-326	10
575-215	25	575-327	10

This 475 piece kit contains 24 of the most popular size urethane back-up rings. This assortment is essential for parts counters, shop use, and service trucks.

BACK-UP RING KITS

PTFE BACK-UP RING KIT

Part Number: 575 PTFE KIT S

PART NUMBER	QTY	PART NUMBER	QTY
575-005ST	15	575-114ST	10
575-006ST	15	575-115ST	10
575-007ST	15	575-116ST	10
575-008ST	15	575-117ST	5
575-009ST	15	575-118ST	5
575-010ST	15	575-119ST	5
575-011ST	15	575-120ST	5
575-012ST	15	575-121ST	5
575-013ST	10	575-210ST	5
575-014ST	10	575-211ST	5
575-015ST	10	575-212ST	5
575-016ST	10	575-213ST	5
575-017ST	10	575-214ST	5
575-018ST	10	575-215ST	5
575-110ST	10	575-216ST	5
575-111ST	10	575-217ST	5
575-112ST	10	575-218ST	5
575-113ST	10	575-219ST	5

This 325 piece kit contains 36 of the most popular size PTFE Back-up Rings. These rings are compatible with all hydraulic fluids, since they are virtually chemically inert, and can be used in applications involving elevated operating temperatures. These rings are scarf cut to facilitate installation.

RETAINER RING KITS

Each kit has an assortment of retainer rings (Tru-arc, Eaton, or spiral wound style) packed in a reusable plastic box. All rings are made in the USA from carbon spring steel.

Each kit contains: 18 sizes - 9 internal, 9 external • 216 rings per box • 12 rings per size

TRU-ARC

Part Number: 300-310 KIT

PART NUMBER	QTY.	PART NUMBER	QTY.
300-050	12	310-050	12
300-062	12	310-062	12
300-075	12	310-075	12
300-087	12	310-087	12
300-100	12	310-100	12
300-112	12	310-112	12
300-125	12	310-125	12
300-137	12	310-137	12
300-150	12	310-150	12

SPIRAL WOUND

Part Number: SRR KIT

PART NUMBER	QTY.	PART NUMBER	QTY.
WHM-050	12	WSM-050	12
WHM-062	12	WSM-062	12
WHM-075	12	WSM-075	12
WHM-087	12	WSM-087	12
WHM-100	12	WSM-100	12
WHM-112	12	WSM-112	12
WHM-125	12	WSM-125	12
WHM-137	12	WSM-137	12
WHM-150	12	WSM-150	12

EATON

Part Number: ERR KIT

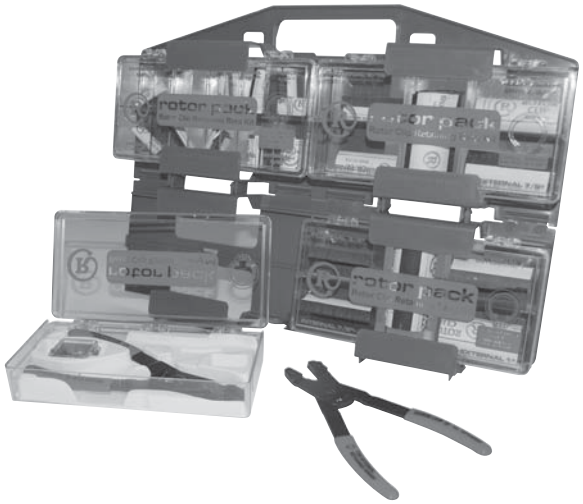
PART NUMBER	QTY.	PART NUMBER	QTY.
NAN-050	12	XAN-050	12
NAN-062	12	XAN-062	12
NAN-075	12	XAN-075	12
NAN-087	12	XAN-087	12
NAN-100	12	XAN-100	12
NAN-112	12	XAN-112	12
NAN-125	12	XAN-125	12
NAN-137	12	XAN-137	12
NAN-150	12	XAN-150	12

RETAINER RING KITS

ROTOR PACK KIT

Part Number: RPK 4 KIT

Packaged in four plastic cases with a handy carrying case, our rotor pack kit contains approximately 50 each of 20 common internal/external retaining ring sizes. The internal rings fit housings or bores from 3/8" internal diameter to 1-1/8". External rings accommodate shaft sizes from 1/4" internal diameter to 1-1/8". Two retainer ring installation pliers are also included.



EXTERNAL RETAINER RINGS

Part Number: 310 KIT

PART NUMBER	SHAFT SIZE	QTY.	PART NUMBER	SHAFT SIZE	QTY.
310-100	1.000	5	310-200	2.000	5
310-125	1.250	5	310-225	2.250	5
310-137	1.375	5	310-250	2.500	5
310-150	1.500	5	310-275	2.750	3
310-175	1.750	5	310-300	3.000	3

These assortments contain the most popular size retainer rings, boxed in a handy storage and display case, which will supply your shop, service truck, or parts counter with the sizes you need!

INTERNAL RETAINER RINGS

Part Number: 300 KIT

PART NUMBER	BORE SIZE	QTY.	PART NUMBER	BORE SIZE	QTY.
300-075	0.750	10	300-200	2.000	10
300-087	0.875	10	300-225	2.250	5
300-100	1.000	10	300-250	2.500	5
300-112	1.125	10	300-275	2.750	5
300-125	1.250	10	300-300	3.000	5
300-137	1.375	10	300-350	3.500	5
300-150	1.500	10	300-400	4.000	5
300-162	1.625	10	300-450	4.500	2
300-175	1.750	10	300-500	5.000	2

ASSORTMENT KITS

CAT® O-RING KIT

Part Number: CTC-4C4784

This handy kit, in an unbreakable box, contains the 9 most popular sized D-Rings used on Caterpillar® equipment.

CAT® SILICONE O-RING KIT

Part Number: CTC-4C8253

This handy kit, in an unbreakable box, contains 149 silicone o-rings in the 32 most popular sizes used on Caterpillar® equipment.

CAT® FLANGE KIT

Part Number: CTC-2701545

This handy kit contains the 6 most popular sized flange seals O-Rings used on Caterpillar® equipment.

CAT® NITRILE O-RING KIT

Part Number: CTC-4C4782

This handy kit, in an unbreakable box, contains 570 nitrile o-rings in the 32 most popular sizes used on Caterpillar® equipment.

NOTE: Caterpillar® part numbers are used as a reference only. We do not imply that these parts are original equipment parts.

ASSORTMENT KITS

THE ULTIMATE NITRILE O-RING ASSORTMENT

Part Number: 568 KIT-ULTIMATE

Includes: 12 drawers and 3 slide racks, plus base. Total weight 232 lbs.

214 Items, 1324 Pieces.

Sizes Include:
-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -012, -013, -014, -015, -016, -017, -018, -019, -020, -021, -022, -023, -024, -025, -026, -027, -028, -029, -030, -031, -032, -033, -034, -035, -036, -037, -038, -039, -040, -041, -042, -043, -044, -045, -046, -047, -048, -049, -050

-106, -107, -108, -109, -110, -111, -112, -113, -114, -115, -116, -117, -118, -119, -120, -121, -122, -123, -124, -125, -126, -127, -128, -129, -130, -131, -132, -133, -134, -135, -136, -137, -138, -139, -140, -141, -142, -143, -144, -145, -146, -147, -148, -149, -150, -151, -152, -153, -154, -155, -156, -157, -158, -159, -160, -161, -162, -163

-204, -205, -206, -207, -208, -209, -210, -211, -212, -213, -214, -215, -216, -217, -218, -219, -220, -221, -222, -223, -224, -225, -226, -227, -228, -229, -230, -231, -232, -233, -234, -235, -236, -237, -238, -239, -240, -241, -242, -243, -244, -245, -246, -247, -248, -249, -250, -251, -252, -253, -254, -255, -256, -257, -258, -259, -260, -261, -262

-314, -315, -316, -317, -318, -319, -320, -321, -322, -323, -324, -325, -326, -327, -328, -329, -330, -331, -332, -333, -334, -335, -336, -337, -338, -339, -340, -341, -342, -343, -344, -345, -346, -347, -348, -349, -350, -351, -352, -353, -354, -355

-425, -426, -427, -428, -429

3 racks - each one is: 20” wide x 15-3/4” deep x 15” high
1 base - 20-3/8” wide x 16” deep x 15-1/8” high
Approximately 61” from top to bottom

ASSORTMENT KITS

THE ULTIMATE FLUOROCARBON O-RING ASSORTMENT

Part Number: 568 FC KIT-ULTIMATE

Includes: 12 drawers and 3 slide racks, plus base. Total weight 232 lbs.

214 Items, 1324 Pieces.

Sizes Include:
-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -012, -013, -014, -015, -016, -017, -018, -019, -020, -021, -022, -023, -024, -025, -026, -027, -028, -029, -030, -031, -032, -033, -034, -035, -036, -037, -038, -039, -040, -041, -042, -043, -044, -045, -046, -047, -048, -049, -050

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-204, -205, -206, -207, -208, -209, -210, -211, -212, -213, -214, -215, -216, -217, -218, -219, -220, -221, -222, -223, -224, -225, -226, -227, -228, -229, -230, -231, -232, -233, -234, -235, -236, -237, -238, -239, -240, -241, -242, -243, -244, -245, -246, -247, -248, -249, -250, -251, -252, -253, -254, -255, -256, -257, -258, -259, -260, -261, -262

-314, -315, -316, -317, -318, -319, -320, -321, -322, -323, -324, -325, -326, -327, -328, -329, -330, -331, -332, -333, -334, -335, -336, -337, -338, -339, -340, -341, -342, -343, -344, -345, -346, -347, -348, -349, -350, -351, -352, -353, -354, -355

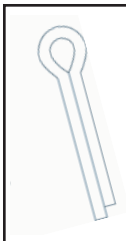
-425, -426, -427, -428, -429

3 racks - each one is: 20” wide x 15-3/4” deep x 15” high
1 base - 20-3/8” wide x 16” deep x 15-1/8” high
Approximately 61” from top to bottom

ASSORTMENT KITS

COTTER PIN KIT

Part Number: COTTER PIN KIT

 555 Pieces	1/16" X 1" 150 pcs.	3/32" X 1" 150 pcs.
	1/8" X 1 1/4" 75 pcs.	3/32" X 1 1/2" 100 pcs.
	1/8" X 2" 50 pcs.	5/32" X 2 1/2" 30 pcs.

WOODRUFF KEY KIT

Part Number: WOODRUFF KEYS KIT

65 Pieces	1/8" X 1/2" No. 3 16 pcs.	1/8" X 5/8" No. 5 15 pcs.
	3/32" X 5/8" No. 6 15 pcs.	3/16" X 3/4" No. 9 10 pcs.
	1/4" X 7/8" No. A 5 pcs.	1/4" X 1" No. 15 4 pcs.

GREASE FITTING KIT

Part Number: GREASE FITTING KIT

32 Pieces	1/8" NPT Straight 6 pcs.	1/4" - 28 Straight 6 pcs.
	3/16" Drive Straight 4 pcs.	1/8" NPT 45 1/8" NPT 90 3 pcs. ea.
	1/4" - 28 45 1/4" - 28 90 3 pc. ea.	5/16" Drive Straight 4 pcs.

SET SCREW KIT

Part Number: SSK-INCH

Use these set screws in confined areas, where there is no room for a protruding head. Nine coarse sizes, three fine sizes.

Hex wrench shown not included. Coarse sizes: 1/8"-40 x 3/16", 5/32"-32 x 3/16", 3/16"-24 x 1/4", 1/4"-20 x 1/4", 1/4"-20 x 3/8", 5/16"-18 x 3/8", 5/16"-18 x 1/2", 3/8"-16 x 3/8", and 3/8"-16 x 1/2". Fine sizes: 1/4"-28 x 1/4", 5/16"-24 x 3/8", 3/8"-24 x 3/8"

ASSORTMENT KITS

CAP PLUG KIT

Part Number: CAP PLUG KIT

Our new and improved cap plug kit contains 22% more cap plugs in an environmentally friendly corrugated box. Separated areas hold 625 cap plugs in 24 of the most popular sizes.

Cap Plug Number	QTY	Cap Plug Number	QTY	Cap Plug Number	QTY
CAP-2-X	50	CAP-PD-100	25	CAP-G-22	20
CAP-4	50	CAP-PD-120	25	CAP-G-25	20
CAP-6-X	50	CAP-PD-140	20	CAP-G-27	20
CAP-9	50	CAP-PD-160	20	CAP-P-28	25
CAP-12-X	25	CAP-G-2	20	CAP-P-38	25
CAP-14	20	CAP-G-8	20	CAP-P-48	25
CAP-PD-60	25	CAP-G-14	20	CAP-P-68-H	25
CAP-PD-80	25	CAP-G-18	20	CAP-P-88-H	20

INSTALLATION TOOLS

ROD U-SEAL INSTALLATION TOOLS

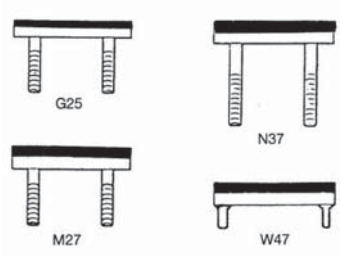
Part Number	Seal ID Range
IT 100	3/4” to 1-1/4”
IT 150	1-3/8” to 1-7/8”
IT 200	2” to 3”
IT 100-NN	3/4” to 1-1/4”
IT 150-NN	1-3/8” to 1-7/8”
IT 200-NN	2” to 3”

These tools aid U-seal installation, eliminating the risk of damaging the seal lip.

REMANUFACTURING TOOLS

HONE STONE SETS

Stone sets for 2.5” to 60”* diameter, portable tools (two stones and two guides per set). For Industrial applications. From fast stock removal in deburred, bored, ground, or reamed holes to fine finishing in previously honed holes, these hone stone sets are in stock and ready for next day delivery.



Stone Number	Diameter
G25	2.5 - 2.7
M27	2.7 - 4.1
N37	3.5 - 5.5
W47	4.1 - 60.0*

* Requires Master Holder Set - Limited to 21" with H-AN-815

PART NUMBER	BORE SIZE	MATERIAL	GRIT SIZE	HARDNESS	LUBRICANT
H-G25-A25	2.5 - 2.7	Aluminum Oxide	80	Medium	N/A
H-G25-A43	2.5 - 2.7	Aluminum Oxide	150	Soft	N/A
H-G25-A45	2.5 - 2.7	Aluminum Oxide	150	Medium	N/A
H-G25-A65	2.5 - 2.7	Aluminum Oxide	280	Medium	N/A
H-G25-J45	2.5 - 2.7	Silicon Carbide	150	Medium	N/A
H-G25-J65	2.5 - 2.7	Silicon Carbide	280	Medium	N/A
H-G25-J85	2.5 - 2.7	Silicon Carbide	400	Medium	N/A
H-G25-J87	2.5 - 2.7	Silicon Carbide	400	Hard	N/A
H-G25-R25X	2.5 - 2.7	Red Aluminum Oxide	80	Medium	Sulfur Impregnated
H-M27-A25	2.7 - 4.1	Aluminum Oxide	80	Medium	N/A
H-M27-A43	2.7 - 4.1	Aluminum Oxide	150	Soft	N/A
H-M27-A45	2.7 - 4.1	Aluminum Oxide	150	Medium	N/A
H-M27-A65	2.7 - 4.1	Aluminum Oxide	280	Medium	N/A
H-M27-J45	2.5 - 2.7	Silicon Carbide	150	Medium	N/A
H-M27-J55	2.5 - 2.7	Silicon Carbide	220	Medium	N/A
H-M27-J65	2.5 - 2.7	Silicon Carbide	280	Medium	N/A
H-M27-J85	2.5 - 2.7	Silicon Carbide	400	Medium	N/A
H-M27-J87	2.5 - 2.7	Silicon Carbide	400	Hard	N/A
H-M27-R25X	2.7 - 4.1	Red Aluminum Oxide	80	Medium	Sulfur Impregnated
H-N37-A25	3.5 - 5.5	Aluminum Oxide	80	Medium	N/A
H-N37-A43	3.5 - 5.5	Aluminum Oxide	150	Soft	N/A
H-N37-A65	3.5 - 5.5	Aluminum Oxide	280	Medium	N/A
H-N37-A45	3.5 - 5.5	Aluminum Oxide	150	Medium	N/A
H-N37-A63	3.5 - 5.5	Aluminum Oxide	280	Soft	N/A
H-N37-J45	3.5 - 5.5	Silicon Carbide	150	Medium	N/A
H-N37-J65	3.5 - 5.5	Silicon Carbide	280	Medium	N/A
H-N37-J85	3.5 - 5.5	Silicon Carbide	400	Medium	N/A
H-N37-J87	3.5 - 5.5	Silicon Carbide	400	Hard	N/A
H-N37-R25X	3.5 - 5.5	Red Aluminum Oxide	80	Medium	Sulfur Impregnated
H-W47-A25	4.1 - 60.0*	Aluminum Oxide	80	Medium	N/A
H-W47-A43	4.1 - 60.0*	Aluminum Oxide	150	Soft	N/A
H-W47-A45	4.1 - 60.0*	Aluminum Oxide	150	Medium	N/A
H-W47-A65	4.1 - 60.0*	Aluminum Oxide	280	Medium	N/A
H-W47-J45	4.1 - 60.0*	Silicon Carbide	150	Medium	N/A
H-W47-J65	4.1 - 60.0*	Silicon Carbide	280	Medium	N/A
H-W47-J85	4.1 - 60.0*	Silicon Carbide	400	Medium	N/A
H-W47-J87	4.1 - 60.0*	Silicon Carbide	400	Hard	N/A
H-W47-R25X	4.1 - 60.0*	Red Aluminum Oxide	80	Medium	Sulfur Impregnated

* Requires Master Holder Set - Limited to 21" with H-AN-815

REMANUFACTURING TOOLS

PORTABLE HONES

Part Number: **H-AN-815**

Additional sizes and accessories shown below.

Illustration shows standard AN-815 Portable Hone assembled with single length master holder set and stone set. Requires 16 mm (5/8") chuck capacity for 63.5-127 mm (2.5"-5") diameter. Requires 19mm (3/4") chuck capacity for 127-381 mm (5"-15") diameter. Requires 25.4 mm (1") chuck capacity for larger than 381 mm (15") diameter.

Weight 2.3 kg (5 lbs).

HONING OIL - 5 GALLON PAIL

Part Number: **H-TA-230-5**

Honing oil is specially compounded for ferrous and non ferrous honing to:

- Dissipate heat from the workpiece
- Lubricate tool contact surfaces (guides)
- Flush bore free of honing swarf
- And maintain clean, free cutting abrasive conditions

Recommended for continuous honing of most materials, including: steel, cast iron, carbide, aluminum, bronze and ceramics. Use with any make honing equipment or tooling.

FOR A COMPLETE PORTABLE HONE ORDER A + B + C + D + E				A - BASIC HONE		B - MASTER HOLDER SETS				C - STONE SUPPORT		D - STONE SET	E - SHAFT EXTENSION
Diameter Range													
General Purpose Stone Sets		Guideless and Keyway Stone Sets				Single Length		Double Length					
mm	Inches	mm	Inches	Part Number		Part Number		Part Number		Part Number			
64-140	2.5-5.5	64-142	2.5-5.6	H-AN-815		None		None		None		See Table on page 516 for portable hone stone sets	For holes longer than 508 mm (20") see table below for Shaft Extensions.
104-160	4.1-6.3	114-165	4.5-6.5	H-AN-815		H-AN-345		None		None			
119-178	4.7-7.0	130-183	5.1-7.2	H-AN-815		H-AN-355		H-AN-855		None			
152-229	6.0-9.0	163-234	6.4-9.2	H-AN-815		H-AN-365		H-AN-865		H-AN-260			
206-305	8.1-12.0	213-310**	8.4-12.2**	H-AN-815		H-AN-375		H-AN-875		H-AN-280			
279-381	11.0-15.0	284-386**	11.2-15.2**	H-AN-815		H-AN-385		H-AN-885		H-AN-290			
356-457	14.0-18.0	363-465**	14.3-18.3**	H-AN-815*		H-AN-395		H-AN-895		H-AN-340			
432-533	17.0-21.0	437-538**	17.2-21.2**	H-AN-815*		H-AN-415		H-AN-915		H-AN-450			

* For light work only in this diameter range.
** Do not use WW (Guideless) Stone Sets in this range due to lack of stability.

Length		Drive Shanks		Shaft Extensions	
mm	Inches	Part Number		Part Number	
76	3	H-AN-608A		None	
152	6	H-AN-618A***		H-AN-840	
305	12	None		H-AN-841***	
610	24	None		H-AN-842	
1220	48	None		H-AN-844	

Furnished with 152 mm (6") Drive Shank and 305 mm (12") Shaft Extension. Other shanks or extensions may be selected from the table above to make up any practical length (either drive shank can be used with any combination of extensions).

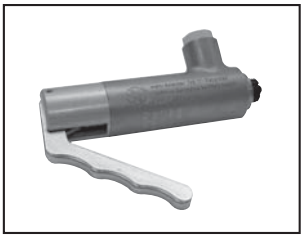
*** Supplied with hone.

Master Holder Sets and Stone Supports

Master Holder Sets, listed in the table above, are used with Type W47,WW51 and WY51 Stone Sets. Double Length Master Holders require two stone sets–use when it is necessary to bridge interruptions in the bore. Each Master Holder Set consists of two holders for stones and two holders for guides.
Stone Supports are required to give rigidity to the hone assembly when honing bores larger than 178 mm (7") diameter.

TESTING TOOLS

FasTest® WEH 17 SERIES



Your Ergonomic Solution to Eliminate Wrenches and Bottle-Necks

FasTest® WEH 17 connectors provide leak tight connections for filling, charging, evacuation and pressure testing. The WEH 17 automatically seals when pressurized. Available in lever or pneumatically activated versions to grip and seal to female threads. Test pressures to 3500 psi.

How to Operate

To Connect: Collapse split collets in accordance with the operating method you have selected. Insert collets into female thread of the component to be tested. Expand collet to grip and seal. Activate test media through connector side port.

To Disconnect: Deactivate test pressure. Collapse split collets in accordance with the operating method you have selected. Remove connector from test piece.
Caution: WEH Series 17 connectors are not internally valved. Disconnecting while pressurized will cause leakage of test media.

Technical Data

Seals: Nitrile
Materials: Stainless steel
Temperature: -40° to +250°F
Pressure Ranges: 0 to 5000 psi. (static)
Pneumatic Operation: Requires a minimum air supply of 75 psi.
Rated Pressure: Based on test results using threaded ports manufactured to the referenced specifications and steel material. Other materials or deviations from those specifications may reduce the safe working pressure and should be verified by test. For dynamic pressure cycles or heavy side-load applications please see ***FasMate***® Series.

NPTF Pipe Thread

PART NUMBER	CONNECTS TO FEMALE THREAD	RATED PRESSURE	MAIN SEAL SET 5/PKG
HH17H-40204041-1BB1	1/4" NPTF	5000	S17-041B
HH17H-40206061-1BB1*	3/8" NPTF	5000	S17-061B
HH17H-40208081-1BB1	1/2" NPTF	5000	S17-081B
HH17H-40212121-1BB1	3/4" NPTF	3500	S17-121B

SAE O-Ring

PART NUMBER	CONNECTS TO FEMALE THREAD	RATED PRESSURE	MAIN SEAL SET 5/PKG
HH17H-044021-1BB1	-4 (7/16-20)	5000	S17-042B
HH17H-064041-1BB1	-6 (9/16-18)	5000	S17-062B
HH17H-084061-1BB1*	-8 (3/4-16)	5000	S17-082B
HH17H-104081-1BB1	-10 (7/8-14)	5000	S17-102B
HH17H-124121-1BB1	-12 (1 1/16-12)	3500	S17-122B

* In-stock. Additional sizes available for order.

TESTING TOOLS

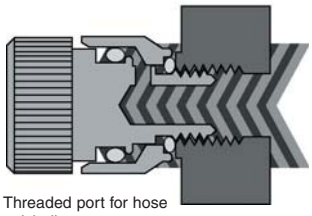
TwistMate® MIT SERIES

No Wrenches Needed • Hand Tighten Your Port Adapters • Shortens Testing Time

Twistmate® MIT mechanical internal thread connectors and plugs provide fast leak tight threaded connections for testing, filling, flushing, plugging, calibrating or venting applications . The patented pressure assisted sealing eliminates wrench tightening and thread sealants for safe secure connections up to 10,000 psi. With sizes up to 4" NPTF, and high flow design, the MIT is ideal for large unit run testing. Fast and reliable sealing reduces test time and production losses from scrap, rework, and re-testing. Full-flow design for shortest filling and test times.

Spin Twistmate® finger-tight onto thread until face seal contacts test piece. They seal automatically when the system is pressurized. Air, gas or hydraulic pressure in the system provides a sealing force that presses the urethane main seal against the face of the threads. This automatic internal piston action maintains the seal with minimum pressure .

Piston Action



Threaded port for hose quick disconnect.

Operation

Step 1. Spin ***Twistmate***® into the treaded port until the seal makes contact.

Step 2. Introduct the media and pressure. The external sleeve automatically moves toward the test port enhancing the seal squeeze. Vacuum applications will require finger-tightening.

Technical Data

Seals: Urethane and Nitrile
Materials: Steel with QPQ or Stainless Steel
Temperature: -40° to +200°F
Pressure: Vacuum to 10,000 psi
Rated Pressure: Based on test results using threaded ports manufactured to the referenced specifications and steel material. Other materials or deviations from those specifications may reduce the safe working pressure and should be verified by test.

NPTF Pipe Thread

PART NUMBER	CONNECTS TO FEMALE THREAD	RATED PRESSURE	CONNECTOR TYPE	MAIN SEAL SET 5/PKG
HHMIT-022021	1/8" NPTF	5000	SWIVEL	S1109-U70
HHMIT-042041	1/4" NPTF	5000	SWIVEL	S1111-U70
HHMIT-062061	3/8" NPTF	5000	SWIVEL	S1113-U70
HHMIT-082081	1/2" NPTF	5000	SWIVEL	S1209-U70
HHMIT-122121X	3/4" NPTF	5000	CONNECTOR	S1213-U70
HHMIT-162161X	1" NPTF	5000	CONNECTOR	S1216-U70
HHMIT-202201X	1-1/2" NPTF	5000	CONNECTOR	S1222-U70
HHMIT-242241X	2" NPTF	5000	CONNECTOR	S1327-U70

SAE O-Ring

PART NUMBER	CONNECTS TO FEMALE THREAD	RATED PRESSURE	CONNECTOR TYPE	MAIN SEAL SET 5/PKG
HHMIT-044021X	-04 (7/16-20)	5000	CONNECTOR	S1109-U70
HHMIT-064041X	-06 (9/16-18)	5000	CONNECTOR	S1111-U70
HHMIT-084081X	-08 (3/4-16)	4000	CONNECTOR	S1209-U70
HHMIT-104081X	-10 (7/8-14)	4000	CONNECTOR	S1209-U70
HHMIT-124121X	-12 (1 1/16-12)	4000	CONNECTOR	S1213-U70
HHMIT-164161X	-16 (1 5/16-12)	4000	CONNECTOR	S1217-U70
HHMIT-204201X	-20 (1 5/8-12)	4000	CONNECTOR	S1222-U70

REMOVAL TOOLS

**We have the packing removal tools to fit your needs.
Try out these high quality tools in your shop.**

Proper tools make the job of servicing cylinders easier and faster and reduce the possibility of damaging the finely machined surfaces. The handy tools listed on this page aid in the repair of telescopic cylinders and make it easier to do a quality job.

O-RING PICK SET 1

Part Number: O-RING PICK

These Bronze O-ring Picks, w/ black vinyl case, aid in the installation and extraction of O-rings.

O-RING PICK SET 2

Part Number: ORP-B

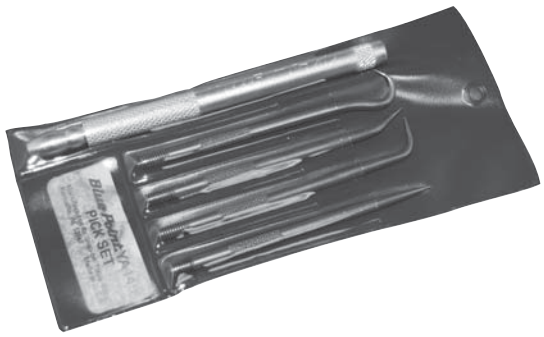
Part Number: ORP-SS

Available in brass (ORP-B) or stainless steel (ORP-SS), these tools have been specifically engineered to enhance o-ring removal and replacement. Coated handles increase the tools performance in less than perfect environments.

O-RING PICK SET 3

Part Number: O PICK SET

Packaged in a clear vinyl pouch, kit contains a knurled handle and four screw-in picks with different hook configurations. Set includes straight tip, o-ring 90° tip, hook tip, and angle tip.



O-RING PICK SET 4

Part Number: MAXI PICK SET

Packaged in a plastic pouch, these highly visible picks feature screwdriver-type colored handles. Set includes awl, hook tip, 45° bent tip tool, and 90° bent tip tool.

REMOVAL TOOLS

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Try out these high quality tools in your shop.**

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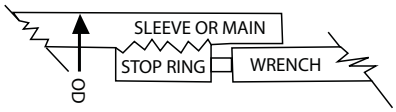
5 PIECE TOOL KIT SET

Part Number: CH-TK-1

STOP RING WRENCH

Part Number	Sleeve or Plunger O.D.	Pins
CM-376-6067-047	2-3/4"	5 Pins
CM-376-6067-048	3-3/4"	5 Pins
CM-376-6067-049	4-3/4"	7 Pins
CM-376-6067-050	5-3/4"	7 Pins
CM-376-6067-051	6-3/4"	7 Pins
CM-376-6067-052	7-7/8"	8 Pins
CM-376-6067-053	9-3/8"	8 Pins



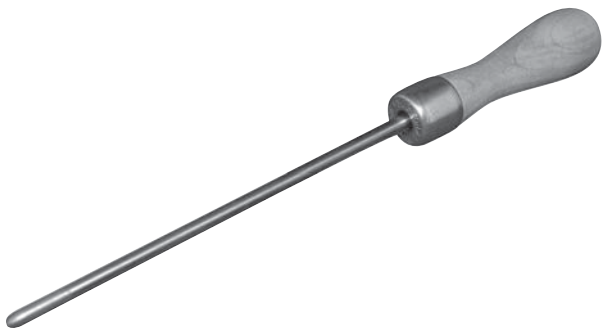
FLEXIBLE PACKING HOOKS

Part Number	Packing Space	Length
FPH-187	3/16"-up	6-1/2"
FPH-312R	5/16"-up	7-1/2"
FPH-437R	7/16"-up	10-1/2"
FPH-500R	1/2"-up	14-1/2"

With a tempered tool steel corkscrew tip and a woven strand steel flexible shaft, this tool makes hard to reach packing easy to pull out. Works best by using two hooks at diametrically opposed points (180°).

CHEVRON ASSEMBLY TOOL

Part Number: CM-376-9067-001



REMOVAL TOOLS

**We have the packing removal tools to fit your needs.
Try out these high quality tools in your shop.**

Proper tools make the job of servicing cylinders easier and faster and reduce the possibility of damaging the finely machined surfaces. The handy tools listed on this page aid in the repair of telescopic cylinders and make it easier to do a quality job.

REPLACEABLE WOODSCREW TIPS

Part Number	Packing Space
FPH-RTW312	5/16”-up
FPH-RTW437	7/16”-up

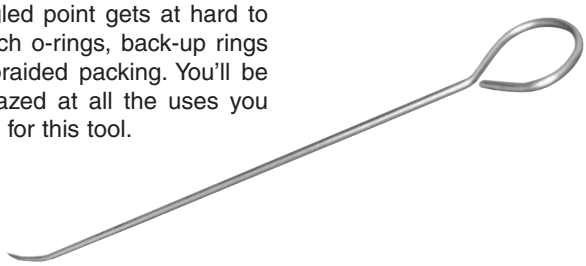
REPLACEABLE CORKSCREW TIPS

Part Number	Packing Space
FPH-RTC312	5/16”-up
FPH-RTC437	7/16”-up
FPH-RTC500	1/2”-up

SOLID SHAFT PICKS

Part Number	Packing Space	Length
SSP-125		9-1/2”
SSP-312	5/16”-up	10”

Formed from hardened steel, this tool’s length and sharp angled point gets at hard to reach o-rings, back-up rings & braided packing. You’ll be amazed at all the uses you find for this tool.



REMOVAL TOOLS

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11 PIECE PACKING TOOL KIT

Part Number: PACK TOOL SET-11

PART NUMBER	QTY	PART NUMBER	QTY
FPH-312R	2	FPH-RTC312	1
FPH-437R	2	FPH-RTC437	1
SSP-125	1	WRENCH	1
SSP-187	1	BOX	1
SSP-312	1		

17 PIECE PACKING TOOL KIT

Part Number: PACK TOOL SET-17

PART NUMBER	QTY	PART NUMBER	QTY
FPH-312R	2	FPH-RTC437	1
FPH-437R	2	FPH-RTC500	1
FPH-500R	2	FPH-RTW312	1
SSP-125	1	FPH-RTW437	1
SSP-187	1	FPH-RTW500	1
SSP-312	1	WRENCH	1
FPH-RTC312	1	BOX	1

DISMANTLING TOOLS

SPANNER WRENCHES

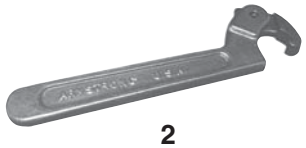
(1) ADJUSTABLE HEAD — PIN STYLE

PART NUMBER	PART OD RANGE		PIN DIA.	PIN LGTH.
SPAP-2.00X0.13	3/4" to 2"	(19mm to 50mm)	1/8"	1/8"
SPAP-2.00X0.19	3/4" to 2"	(19mm to 50mm)	3/16"	5/32"
SPAP-3.00X0.19	1-1/4" to 3"	(32mm to 76mm)	3/16"	3/16"
SPAP-3.00X0.25	1-1/4" to 3"	(32mm to 76mm)	1/4"	7/32"
SPAP-4.75X0.25	2" to 4-3/4"	(51mm to 120mm)	1/4"	1/4"
SPAP-6.25X0.38	4-1/2" to 6-1/4"	(115mm to 159mm)	3/8"	1/4"

1

(2) ADJUSTABLE HEAD — HOOK STYLE

PART NUMBER	PART OD RANGE		HOOK WD.	HOOK DP.
SPAH-2.00	3/4" to 2"	(19mm to 50mm)	11/32"	1/8"
SPAH-3.00	1-1/4" to 3"	(32mm to 76mm)	13/32"	5/32"
SPAH-4.75	2" to 4-3/4"	(51mm to 120mm)	15/32"	3/16"
SPAH-6.25	4-1/2" to 6-1/4"	(115mm to 159mm)	15/32"	1/4"
SPAH-8.75	6-1/8" to 8-3/4"	(155mm to 222mm)	15/32"	5/16"



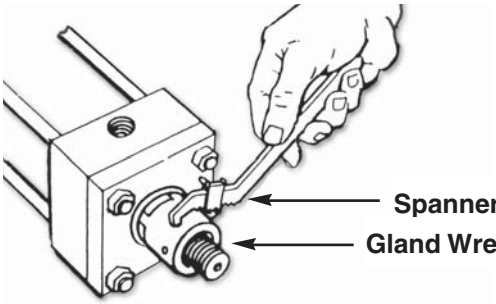
2

(3) ADJUSTABLE FACE — PIN STYLE

PART NUMBER	DIA. RANGE (CENTER TO CENTER)		PIN DIA.	PIN LGTH.
SPAPF-2.00X0.19	5/8" to 2"	(16mm to 50mm)	3/16"	1/8"
SPAPF-3.00X0.25	5/8" to 3"	(16mm to 76mm)	1/4"	3/16"
SPAPF-4.00X0.31	5/8" to 4"	(16mm to 101mm)	5/16"	1/4"

3

PARKER GLAND WRENCHES



Rod Dia.	Kit #	ID X OD X HT	Spanner (Sold Separately Above)
1/2", 5/8", 12mm & 14mm	PKH-069590	11/16" X 1-1/8" X 1-3/8"	SPAP-2.00X0.19
18mm	PKH-084765	13/16" X 1-1/4" X 1-7/16"	SPAP-2.00X0.19 or SPAP-3.00X0.19
1" & 22mm	PKH-069591	1-1/16" X 1-5/8" X 1-1/2"	SPAP-2.00X0.19 or SPAP-3.00X0.19
28mm	PKH-084766	1-1/4" X 1-11/16" X 9/16"	SPAP-2.00X0.19 or SPAP-3.00X0.19
1-3/8" & 36mm	PKH-069592	1-7/16" X 1-7/8" X 1-5/8"	SPAP-2.00X0.19 or SPAP-3.00X0.19
1-3/4" & 45mm	PKH-069593	1-13/16" X 2-1/4" X 1-5/8"	SPAP-3.00X0.25 or SPAP-4.75X0.25
2"	PKH-069594	2-1/16" X 2-1/2" X 2"	SPAP-3.00X0.25 or SPAP-4.75X0.25
2-1/2" & 56mm	PKH-069595	2-9/16" X 3" X 2-1/8"	SPAP-3.00X0.25 or SPAP-4.75X0.25
70mm	PKH-069596	2-15/16" X 3-1/2" X 2-3/8"	SPAP-4.75X0.25

LEAK DETECTION

LEAK DETECTION KIT

Part Number: LDU-OPK-341

HOW IT WORKS
A small amount of liquid fluorescent dye is added to a circulating fluid system that is being inspected for leaks. The system is then run for a short time to allow the dye to mix and circulate with the host fluid. The dye/fluid mixture escapes with the host fluid wherever there is a leak and glows a bright yellow/green when inspected with a high-intensity ultraviolet or UV/black light lamp. This method is extremely effective in locating even the smallest, most elusive leaks, as well as multiple leaks.

INDIVIDUAL LEAK DETECTION PRODUCTS

Part Number	Description
LDU-CR-800	CLEANER, 8 OZ SPRAY
LDU-MD-500	DETECTOR, ULTRASONIC, W/O EMITTER
LDU-OIL-GLO-44-G	DYE, ALL-IN-ONE, 1 GALLON
LDU-OIL-GLO-44-P	DYE, ALL-IN-ONE, 16 OZ
LDU-OPX-3000	LAMP, LED, 115V CHARGER
LDU-UVS-40	SPECTACLES, UV ENHANCING

MEASURING TOOLS

HIGH QUALITY DIGITAL CALIPER

Part Number

HH-CALIPER-6-FR

This high quality instrument measures to 6" (150 mm). A push of a button changes from inches, mm, and fractions. Functions also include: On/Off function, zero key, data input capabilities, test for low voltage, and "Auto Off" function when unit sits dormant for more than 4 minutes.

DIGITAL CALIPERS

Part Number

HH-CALIPER-6
HH-CALIPER-6-P
HH-CALIPER-12
HH-CALIPER-12-P

Quality calipers able to measure up to 6” (150mm) or 12” (300mm). A push of a button changes from inches to metric. A clear LCD display shows a reading with a resolution of 0.0005” (0.01mm) that is accurate to ±0.001" (±0.03mm). These calipers come in a sturdy, padded plastic case with instructions and a spare battery.

O-RING MEASURING CONE

Part Number: O RING CONE-INCH

Handy cone provides o-ring dash numbers instantly. Measures 184 of the most widely used sizes in 5 standard widths, 1/4” ID to 5-5/8” ID. Made of high density polyurethane, the cone stands 17-1/2” high.

MEASURING TOOLS

PI TAPES

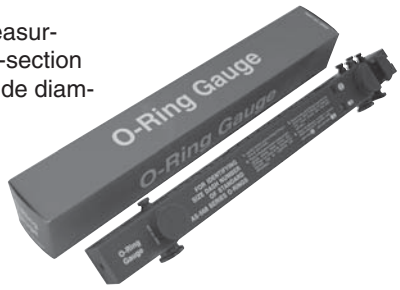
Part Number	Size
PI-212	2” - 12”

This handy tool allows for quick, accurate measuring of the outside diameters (OD) of vee packing, large U-Seals, Piston Rings, and metal parts such as cylinder stages, rams and rods. This tape comes with certificate of calibration. Accurate to .001”.

O-RING GAUGE

Part Number: OR-GAUGE

Slide gauge for measuring standard cross-section o-rings with an inside diameter up to 13”.



POWER PUNCH MAXI SET

Part Number: MAXI PUNCH SET

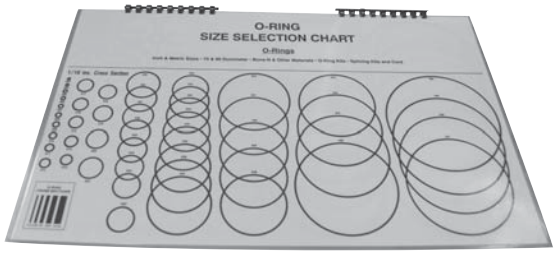
PART NUMBER	PUNCH RANGE
Punch Set	1/4, 5/16, 3/8, 7/16, 1/2, 16,5/8, 1/16, 3/4, 3/16, 7/8, 5/16, 1

This extremely high quality punch set includes 13 punches, power punch, centering pin, punch pad and carrying case. Durable cutting heads cut washers and bolt holes effortlessly.

O-RING CHART

Part Number: O-RING CHART

Durable, Accurate, and Fast, these charts allow for easy Standard O-ring size identification. No shop should be without one!



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Urethane
Formulated of copolymers of ether or ester based urethanes, this material is used in a wide application of seals, wipers, back-up rings, cushions, bumpers, and a myriad of other uses. Highly resistant to oil swell, ozone, oxidation and abrasion, it also has excellent cut resistance. Highly resilient, urethanes also have high tensile strength and elongation properties. Urethanes remain an excellent choice in hydraulic systems using petroleum based fluids. Most urethane seals remain flexible and efficient in temperatures ranging from -65° F to +200° F with some able to withstand intermittent temperatures up to +300° F.

Nitrile
The most common nitrile copolymer blend is the compound known as Buna-N. Possessing very good resistance to petroleum based hydraulic oils, Buna-N also works well with fuels such as diesel or gasoline. Nitrile seals have a good resistance to compression set, but their flexibility suffers somewhat in the lower temperature range. Seals made from this material have a low resistance to ozone and must be stored carefully in most environments. Working temperatures are -40° to +240° F.

PTFE
Most PTFE seals, in order to retain their toughness and flexibility, are fortified with short glass fiber, bronze flashes, carbon graphite, or a combination of these fillers. Because of a lack of resilience (memory) in PTFE, an energizer is most often employed to obtain the desired fit. Benefits are chemical inertness, high heat resistance, low temperature flexibility, low running friction, and non-adhesive characteristics. Temperatures to +500° F are obtainable but are often reduced by the filler or energizer employed.

Fluorocarbon
Fluorocarbon combines high temperature resistance with excellent chemical resistance. Excellent for use with alcohol and aromatic fuels and highly resistant to ultraviolet light and ozone. This material is not recommended for use in low temperatures or in aircraft hydraulic fluids. Temperature range is -20° to +400° F.

Ethylene-Propylene
Ethylene-Propylene can be used for sealing phosphate ester hydraulic fluids such as Skydrol. Not suitable for petroleum based fluids, Ethylene-Propylene is highly effective for use with steam, acetone, and dilute acids and bases. Specially compounded Ethylene-Propylene can be made suitable for automobile brake systems. Temperature range from -20° to +300° F.

Silicone
Silicone is an elastomer made from silicon, oxygen, hydrogen, and carbon. The key use of this material is in static seals employed in a wide (-75° F to +450° F) range of temperatures. Silicone has a high resistance to dry heat, ultraviolet light and ozone. This material is not recommended for dynamic situations due to poor abrasion resistance and high friction characteristics.

Glossary of Terms

Bearing/Wear Rings: Soft metal or plastic rings placed in grooves on the piston or in the head to prevent contact between hard metal surfaces.

Durometer: A generic term referring to the instrument and the scale used to measure the relative hardness of various elastomers. The lower the durometer reading, the softer the material.

Dynamic Seal: A sealing device used between mating surfaces that have relative motion.

Elastomer: A rubber-like material having the capacity for large deformation and rapid, complete recovery from the deforming force.

Gland: A groove or open area machined into the head or piston that houses the sealing device.

Static Seal: A sealing device used between mating surfaces that have no relative motion.

Wiper/Scraper: A device placed in the head of a cylinder for the purpose of excluding foreign matter from the inside of the cylinder.

These are general guidelines only, and users must conduct their own functional tests to determine the suitabliity of any compound for their particular application.

R = Recommended
M = Marginal
U = Unsatisfactory
X = Insufficient Data

Fluid	Nitrile	SBR	EPDM	Neoprene	Polyacrylate	Urethane	Silicone	Fluoroelastomer
Acetaldehyde	U	U	R	U	U	U	R	U
Acetamide	R	U	R	R	U	U	M	U
Acetic Acid	M	M	R	R	U	U	R	U
Acetone	U	M	R	M	U	U	M	U
Acetophenone	U	U	R	U	U	U	U	U
Acetylene	R	R	R	R	X	X	R	R
Ammonia	R	R	R	R	U	X	R	U
Ammonium Hydroxide	R	R	R	R	U	U	R	R
Amyl Acetate	U	U	M	U	U	U	U	U
Anderol L-774	M	U	U	U	R	U	U	R
Aniline	U	U	R	U	U	U	U	M
Ansul Ether	M	U	M	U	U	R	U	U
Antifreeze	R	R	R	R	U	U	R	R
Aroclors	M	U	R	U	U	X	M	R
Askarel	R	U	U	U	U	U	U	R
ASTM #1	R	U	U	R	R	R	R	R
ASTM #3	R	U	U	U	R	R	U	R
ASTM Fuel A	R	U	U	R	R	R	U	R
ASTM Fuel B	R	U	U	U	U	R	U	R
ASTM Fuel C	R	U	U	U	U	R	U	R
ASTM Fuel D	M	U	U	U	U	R	U	R
Auto Transmission Fluid	R	U	U	M	R	R	M	R
Beer	R	R	R	R	U	U	R	R
Benzaldehyde	U	U	R	U	U	U	U	U
Benzene	U	U	U	U	U	U	U	R
Benzine	R	U	U	R	R	R	U	R
Benzoic Acid	U	U	U	U	U	U	U	R
Benzophenone	U	U	R	X	U	U	U	R
Benzyl Alcohol	U	U	U	R	U	U	X	R
Bleach	R	R	R	R	U	U	U	R
Borax	R	R	R	U	R	R	R	R
Boric Acid	R	R	R	R	U	R	R	R
* Brake Fliud (non-Petroleum)	U	R	R	R	U	U	R	U
Bromine	U	U	U	U	U	U	U	R
Bromobenzene	U	U	U	U	U	U	U	R
Bunker Oil	R	U	U	U	R	R	U	R
Butane	R	M	U	R	R	U	U	R
Butter	R	U	M	R	R	R	R	R
Butyl Acetate	U	U	U	U	U	U	U	U
Butyl Alcohol	R	R	R	R	U	U	R	R
Butyl Amine	M	U	U	U	U	U	R	U
Butyl Carbitol	U	U	R	M	U	X	U	M
Butyl Cellosolve	M	U	R	M	U	U	R	U
Butyraldehyde	U	U	R	U	U	U	U	U
Carbitol	R	R	R	R	U	U	R	R

Fluid	Nitrile	SBR	EPDM	Neoprene	Polyacrylate	Urethane	Silicone	Fluoroelastomer
Carbitol Acetate	U	U	U	U	U	U	U	R
Carbon Disulfide	U	U	U	U	U	X	U	R
Carbon Tetrachloride	R	U	U	U	U	U	U	R
Carbonic Acid	R	R	R	R	R	R	R	R
Castor Oil	R	R	R	R	R	R	R	R
Cellosolve	U	R	U	U	U	U	U	U
Chassis Grease	R	U	U	M	R	X	U	R
Chloracetic Acid	U	U	R	U	U	U	X	U
Chloracetone	U	U	R	M	X	X	U	R
Chlordane	R	U	U	M	X	X	U	R
Chlorine	U	U	R	U	U	U	X	R
Chlorobenzol	U	U	U	U	U	U	U	R
Chloroform	U	U	U	U	U	U	U	R
Chlorsulfonic Acid	U	U	U	U	U	U	U	U
Chrome Plating Solution	U	U	R	U	U	U	R	R
Chromic Acid	U	U	X	U	X	X	M	R
Citric Acid	R	R	R	R	X	X	R	R
Cod Liver Oil	R	U	U	R	R	U	R	R
Coffee	R	R	R	R	U	U	R	R
Corn Oil	R	U	U	U	R	U	R	R
Creosote	R	U	U	R	R	M	U	R
Creoste Oil	R	U	U	M	X	X	M	R
Creosylic Acid	U	U	U	U	U	U	U	R
Crude Oil	R	U	U	U	R	X	U	R
Cyclohexane	R	U	U	M	R	R	U	R
Cyclohexanol	R	U	U	R	X	X	U	R
Decalin	U	U	U	U	U	U	U	R
Denatured Alcohol	R	R	R	R	U	U	R	R
Diacetone	U	U	R	U	U	U	U	U
Dibutyl Amine	U	U	U	M	U	U	U	U
Dibutyl Phthalate	U	U	R	U	U	X	X	M
Dichloro Aniline	U	U	U	U	U	U	U	M
Dichloro Butane	R	U	U	U	U	U	U	R
Diesel Oil	R	U	U	M	U	U	U	R
Diethyl Benzene	M	U	U	U	X	X	X	R
Diethylamine	R	R	R	R	U	M	R	U
Diethylene Glycol	R	R	R	R	U	U	R	R
Dimethyl Ether	U	U	U	M	M	R	U	U
Dimethyl Formamide	U	X	R	X	X	X	R	U
Dimethyl Phthalate	U	U	R	U	U	X	X	R
Dimethyl Terephthalate	U	U	U	U	U	U	U	R
Dioctyl Phthalate	U	U	R	U	U	U	M	R
Dioxane	U	U	R	U	U	U	U	U
Diphenyl	U	U	U	U	U	U	U	R
Dow Corning 550	R	R	R	R	R	R	R	R

* Requires special formulation of EPDM

FLUID COMPATIBILITY TABLE

Fluid	Nitrile	SBR	EPDM	Neoprene	Polyacrylate	Urethane	Silicone	Fluoroelastomer
Dow Gard	R	R	R	R	M	M	R	R
Dowtherm A & E	U	U	U	U	U	U	U	R
Elco 28	R	U	U	M	R	R	R	R
Epoxy Resins	X	X	R	R	X	X	X	U
Ethane	R	U	U	R	R	M	U	R
Ethanol	R	R	R	R	U	R	R	R
Ethanolamine	R	R	R	R	U	M	R	U
Ethyl Acetate	U	U	R	U	U	U	R	U
Ethyl Benzene	U	U	U	U	U	U	U	R
Ethyl Cellulose	R	R	R	R	U	R	R	U
Ethyl Chloride	R	R	R	R	M	R	U	R
Ethyl Ether	M	U	M	U	U	R	U	U
Ethyl Formate	U	U	R	R	X	X	X	R
Ethyl Hexanol	M	R	R	R	X	X	X	R
Ethyl Merlaptan	U	U	X	M	X	X	M	R
Ethylene Chloride	U	U	U	U	U	U	U	R
Ethylene Glycol	R	R	R	R	U	X	R	R
Ethylene Oxide	U	U	R	U	U	U	U	U
Formaldehyde	M	M	R	M	U	U	R	U
Formic Acid	M	R	R	R	X	X	M	U
Freon 12	R	R	R	R	X	R	U	R
Fuel Oil	R	U	U	R	R	U	U	R
Fufuryl Alcohol	U	U	R	U	U	U	U	X
Furan	U	U	X	U	U	X	X	X
Furfural	U	U	R	U	U	X	U	U
Fyrquel	U	U	R	U	U	U	R	R
Gallic Acid	R	R	R	R	U	I	X	R
Gasoline	R	U	U	R	R	R	U	R
Gelatin	R	R	R	R	U	U	R	R
Glucose	R	R	R	R	X	U	R	R
Glycerine	R	R	R	R	U	U	R	R
Heptane	R	U	U	R	R	R	U	R
Hexaldehyde	U	U	R	R	X	X	R	U
Hexane	R	U	U	R	R	R	U	R
Hexanol	R	R	M	R	U	U	R	R
Home Heating Oil	R	U	U	M	R	R	R	R
Hydrazine	R	R	R	R	X	X	R	X
Hydrochoride Acid	R	M	R	R	M	U	U	R
Hydrocyanic Acid	R	R	R	R	U	X	M	R
Hydrogen Peroxide	R	R	R	R	U	X	R	R
Hydrogen Sulfide	U	U	R	R	U	X	M	U
Hydroquinone	M	U	U	U	U	X	X	R
Hypoid Gear Lube	R	U	U	M	R	R	M	R
Iodine	R	R	R	U	X	X	X	R
Iso Octane	R	U	U	R	R	R	U	R
Iso Phorone	U	U	R	U	U	U	U	U
Isocyanate	X	X	X	X	X	X	X	R
Isopar	R	X	U	R	R	R	U	R
Isopropanol	R	R	R	R	U	U	R	R
Isopropyl Acetate	U	U	R	U	U	U	U	U

Fluid	Nitrile	SBR	EPDM	Neoprene	Polyacrylate	Urethane	Silicone	Fluoroelastomer
JP-4(MIL-J-5624)	R	U	U	U	R	R	U	R
JP-4(MIL-J-5624)	R	U	U	U	R	R	U	R
Kerosene	R	U	U	R	R	R	U	R
Lacquers	U	U	U	U	U	U	U	U
Lactic Acid	R	R	R	R	U	X	X	R
Lard	R	U	R	R	R	R	R	R
Linoleic Acid	R	U	U	R	X	X	R	R
Linseed Oil	R	U	M	M	R	X	R	R
Lye Solutions	R	R	R	R	U	U	R	R
Malathion	R	U	U	X	X	X	U	R
Maleic Acid	U	U	U	U	U	X	X	R
Mercury	R	R	R	R	X	X	X	R
Meter-Cresol	U	U	U	R	U	U	U	R
Methacrylic Acid	U	U	R	R	U	U	U	M
Methane	R	U	U	R	R	M	U	R
Methanol	R	R	R	R	U	U	U	U
Methyl Acetate	U	U	R	R	U	U	U	U
Methyl Cellosolve	M	U	R	R	U	U	U	M
Methyl Ether Ketone	U	U	R	U	U	U	U	U
Methyl Mercaptan	X	X	R	X	X	X	X	X
Methylene Chloride	U	U	U	U	U	U	U	R
Milk	R	R	R	R	U	U	R	R
Mineral Oil	R	U	M	R	R	R	R	R
Mineral Spirits	R	U	U	U	R	R	U	R
Monovinyl Acetylene	R	R	R	R	X	X	R	R
Mustard	X	R	R	X	X	X	R	R
Naphtha	R	U	U	U	R	R	U	R
Naphthalene	U	U	U	U	X	X	U	R
Naphthenic Acid	R	U	U	U	X	X	U	R
Natural Gas	R	R	U	R	R	R	R	R
Neatsfoot Oil	R	U	R	U	R	R	R	R
Nitric Acid	U	M	R	U	U	U	U	M
Nitrobenzene	U	U	U	U	U	U	U	R
Nitropropane	U	U	R	U	U	U	U	U
Octane	R	U	U	U	U	U	U	R
Octanol	R	R	R	R	U	U	R	R
Oleic Acid	M	U	U	M	X	X	U	R
Oleum	R	U	U	M	X	X	U	R
Oronite 8200	R	U	U	R	X	R	U	R
Oxalic Acid	R	R	R	R	R	X	X	R
Peanut Oil	R	U	M	M	R	X	R	R
Pentane	R	M	U	R	R	U	U	R
Perchlorethylene	R	U	U	U	U	U	U	R
Petroleum Ether	U	U	U	U	U	U	U	R
Phenol	U	U	U	U	U	U	U	R
Phenylhydrazine	U	M	U	U	U	X	X	R
Phosphoric Acid	R	R	R	R	M	U	R	R
Pine Oil	R	U	U	U	U	X	X	R
Potassium Hydroxide	R	R	R	R	U	U	M	U
Propane	R	U	U	R	R	M	U	R

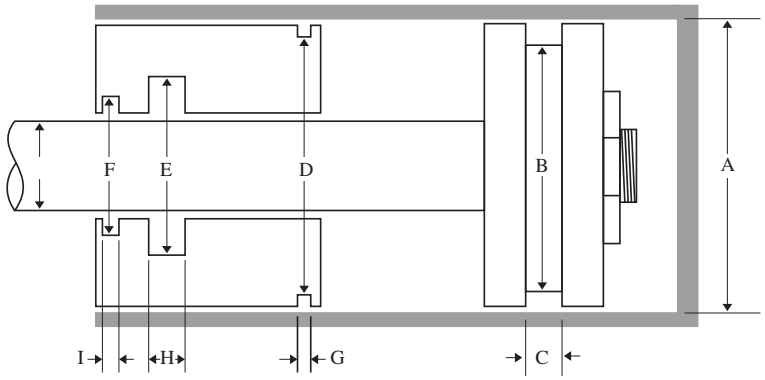
Fluid	Nitrile	SBR	EPDM	Neoprene	Polyacrylate	Urethane	Silicone	Fluoroelastomer
Propanol	R	R	R	R	U	U	R	R
Propyl Acetate	U	U	R	U	U	U	U	U
Propylene Glycol	R	R	R	M	U	M	R	R
Pydraul	U	U	R	U	U	U	U	R
Pyranol	R	U	U	R	R	R	U	R
Pyridine	U	R	U	U	U	X	U	U
Rapeseed Oil	R	U	R	R	R	R	U	R
Resurcinol	X	R	R	X	X	X	X	X
SAE 10W30	R	U	U	M	R	R	R	R
Seawater	R	R	R	R	U	U	R	X
Silicone Grease	R	R	R	R	R	R	R	R
Silver Nitrate	R	R	R	R	R	R	R	R
Skelly Solvent	R	U	U	U	X	X	X	R
Skydrol	U	U	R	U	U	U	U	R
Skydrol 500	U	U	R	U	U	U	U	R
Sodium Hydroxide	R	R	R	R	U	R	R	R
Sovasol	R	U	U	R	R	R	U	R
Soy Bean Oil	R	U	M	M	R	X	R	R
Stearic Acid	R	R	R	R	R	U	U	R
Stoddard Solvent	R	U	U	R	R	R	U	R
Sucrose	R	R	R	R	U	U	R	R

Fluid	Nitrile	SBR	EPDM	Neoprene	Polyacrylate	Urethane	Silicone	Fluoroelastomer
Sulfuric Acid	R	R	R	R	R	U	U	R
Tall Oil	R	U	U	M	R	U	X	R
Tannic Acid	R	R	R	R	U	X	R	R
Tar	R	U	U	M	U	X	R	R
Tartaric Acid	R	R	R	R	X	X	R	R
Tetrachloro Ethane	U	U	U	U	U	U	U	R
Tetralin	U	U	U	U	U	U	U	R
Tidewater Oil	R	U	U	R	R	R	R	R
Toluene	U	U	U	U	U	U	U	R
Trichloro Ethylene	M	U	U	U	U	U	U	R
Triethanol Amine	M	R	R	R	U	U	X	U
Turbine Oil	R	U	U	U	R	R	U	R
Turpentine	R	U	U	U	R	U	U	R
UCDN 50HB280X	R	R	R	R	X	X	R	R
Univis J-43	R	U	U	R	R	R	U	R
Varnish	R	U	U	U	U	M	U	R
Vinegar	R	R	R	R	U	U	R	R
Water	R	R	R	R	U	U	R	R
Wheat Germ Oil	R	U	U	M	R	R	R	R
Whiskey & Wine	R	R	R	R	U	U	R	R
Wood Oil	R	U	U	R	X	M	U	R

HOW OFTEN HAVE YOU RECEIVED A CYLINDER FOR REPAIR AND THE SEALS WERE . . .

- MISSING
- COOKED
- INCORRECT
- EXTRUDED
- NIBBLED
- TWISTED
- ROLLED
- SPLIT
- WORN OUT

The chart below can be used by your counter people, repair shops, or sales people to determine the seals you need. Note the dimensions, refer to your Catalog, and call our sales staff with your information. If the part number(s) you need can't be located in the catalog, our Sales personnel will be glad to help you .



FOR A PROFESSIONAL ANALYSIS OF SEAL FAILURE, SEND YOUR DAMAGED SEALS TO OUR ENGINEERING DEPARTMENT.

PISTON SEALS AND BEARINGS

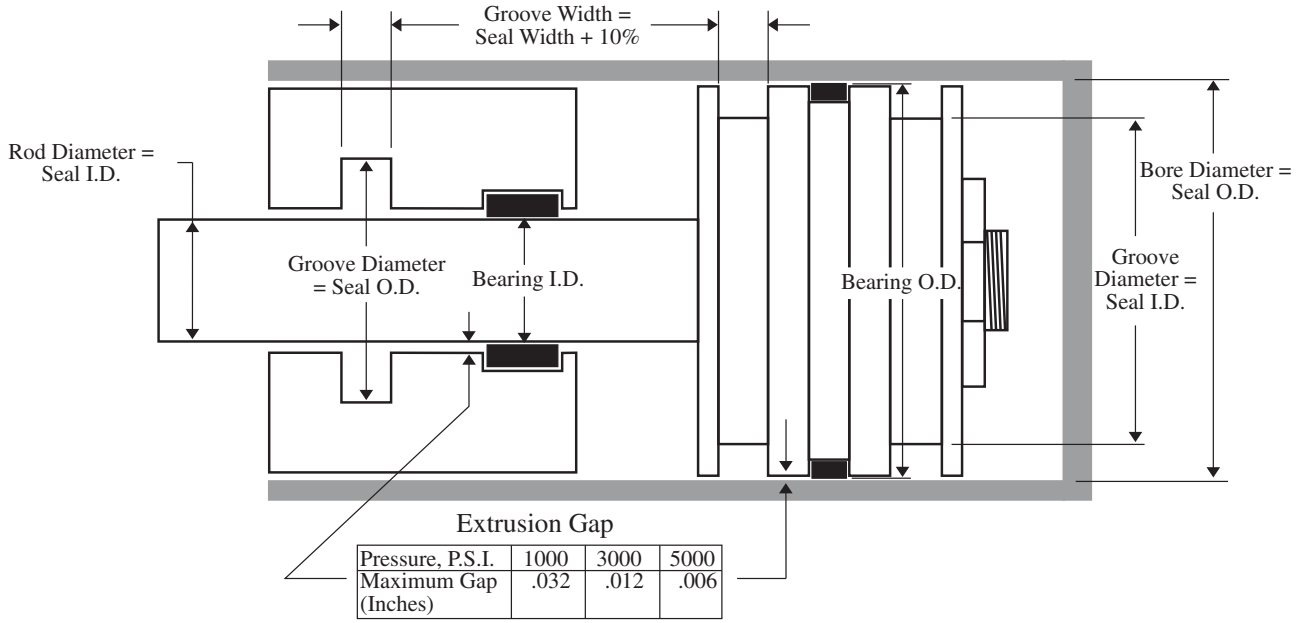
DIAGRAM REFERENCE	DIMENSIONS
A = Bore = Nominal Seal O.D.	_____
B = Groove Diameter = Nominal Seal I.D.	_____
C = Groove Width = Nominal Seal Width	_____

ROD SEALS AND BEARINGS

DIAGRAM REFERENCE	DIMENSIONS
D = Gland Groove Diameter = Nominal Seal I.D.	_____
E = Rod Seal Groove Diameter = Nominal Seal O.D.	_____
F = Wiper Groove Diameter = Nominal Wiper O.D.	_____
G = Gland Groove Width = Nominal Seal Width	_____
H = Rod Seal Groove Width = Nominal Seal Width	_____
I = Wiper Groove Width = Base Width	_____
J = Rod Diameter = Seal & Nominal Wiper I.D.	

_____

COPY FOR SHOP & COUNTER USE



Pressure, P.S.I.	1000	3000	5000
Maximum Gap (Inches)	.032	.012	.006

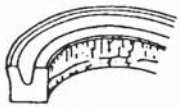
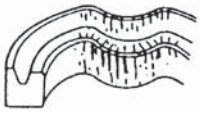
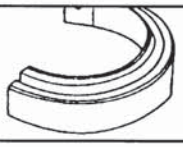
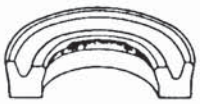
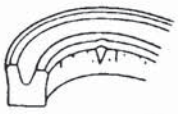
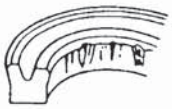
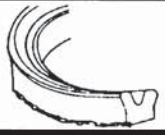
ROD AND ROD GROOVE DIAMETERS

ROD DIAM RANGE, IN.	ROD DIAM. TOLERANCE	GROOVE DIAM TOLERANCE	MAX DIAMETRAL CLEARANCE		
			1000 PSI	3000 PSI	5000 PSI
.125 - .687	+ .0 / -.002	+ .004 / -.0	.008	.006	.004
.750 - 2.875	+ .0 / -.003	+ .008 / -.0	.012	.008	.004
3.000 - 7.000	+ .0 / -.004	+ .010 / -.0	.014	.010	-
7.000 - 7.750	+ .0 / -.005	+ .011 / -.0	.016	.010	-
8.000 - 9.500	+ .0 / -.005	+ .012 / -.0	.016	-	-
10.000 - 15.000	+ .0 / -.006	+ .015 / -.0	.016	-	-

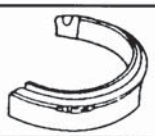
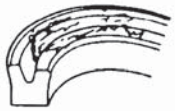
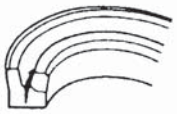
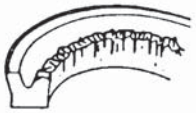
BORE AND PISTON GROOVE DIAMETERS

BORE DIAM RANGE, IN.	BORE DIAM. TOLERANCE	GROOVE DIAM TOLERANCE	MAX DIAMETRAL CLEARANCE		
			1000 PSI	3000 PSI	5000 PSI
.750 - 1.062	+ .003 / -.0	+ .0 / -.004	.010	.008	.004
1.125 - 1.625	+ .003 / -.0	+ .0 / -.005	.010	.008	.004
1.750 - 2.500	+ .003 / -.0	+ .0 / -.007	.012	.008	.004
2.625 - 2.875	+ .003 / -.0	+ .0 / -.008	.012	.008	.005
3.000 - 3.500	+ .004 / -.0	+ .0 / -.008	.014	.010	-
3.625 - 5.625	+ .004 / -.0	+ .0 / -.009	.014	.010	-
5.750 - 6.750	+ .004 / -.0	+ .0 / -.010	.014	.010	-
7.000 - 8.500	+ .005 / -.0	+ .0 / -.011	.016	.010	-
9.000 - 11.000	+ .005 / -.0	+ .0 / -.011	.016	-	-
12.000 - 16.000	+ .006 / -.0	+ .0 / -.012	.018	-	-

EXAMPLES OF SEAL FAILURES AND THEIR CAUSES

TYPE OF FAILURE	VISIBLE CONDITION	PROBABLE CAUSE	POSSIBLE CURE
HARDENING	Hardening of the dynamic face causing glazing and cracks 	Heat generated by high speed	Slow stroke speed Use alternative seal device
	Hardening of the whole seal. Loss of elasticity. 	High fluid temperature. Deterioration of fluid. Compatibility of seal to fluid	Lower oil temperature. Renew Fluid Change to different seal compound
WEAR	Dynamic face is worn to glossy mirror-like finish 	Insufficient lubrication	Check oil viscosity Use alternative seal device
	Wear on dynamic lip is egg-shaped	Rod or piston bore not concentric	Hone to within seal specs Replace worn rod or cylinder tube
	Abnormal wear on one side of the dynamic lip 	Worn bearing or wear ring. Excessive lateral load	Replace bearings Increase bearing area
SCARRING	Cut or dent on the lip 	Storage on a nail or peg. Improper installation tool	Store flat in a plastic bag in a closed cardboard box Installation tools should not have sharp edges
	Scratches on the dynamic side 	Scars on the rod or bore. Foreign material in fluid	Hone, polish, and de-burr metal parts Flush system
SWELLING	Material soft and misshaped	Absorption of fluid. Fluid and seal are incompatible. Water in system	Change seal compound or system fluid Flush system
DETERIORATION	Cracks and loss of elasticity. Material easily crumbles	High fluid temperature. Exposure to ozone or sunlight	Lower oil temperature Store seals away from sunlight and arc welding area.
GROOVING	Axial cuts on the dynamic side	Metal chips or other foreign material in system. Imploded air bubbles	Flush system Bleed air from system
EXTRUSION	Extruded material on dynamic side of heel	Gap between mating surfaces too wide. Worn bearings. Pressure extreme	Employ back-up ring. Replace bearings. Use alternative seal
	Extruded material on static side of seal 	Uneven support surface. Undersize back-up ring	Machine surface. Correct back-up size

EXAMPLES OF SEAL FAILURES AND THEIR CAUSES

TYPE OF FAILURE	VISIBLE CONDITION	PROBABLE CAUSE	POSSIBLE CURE
FRACTURING	Chunks of material torn from dynamic side 	Excessive back pressure	Check relief valves
	Pressure side of seal burned and broken 	Explosion of residual air at high pressure. "Dieseling"	Check maximum pressure. Bleed air from system
	Long cracks in the "V" portion of the seal 	Frequent high pressure shocks or spikes. Low temperature start-up	Use alternative style seal. Warm system before applying pressure
	Breaking off of entire dynamic side 	Deterioration of material and/or fluid	Use alternative material or seal. Flush system

For a professional analysis of seal failure, send your damaged seals to our Engineering Department.

SEAL FAILURE INSPECTION CHECK LIST

When trying to determine the cause of a seal failure, it is imperative that all aspects of the situation be investigated. Often, a seal failure points to another part of the hydraulic system that has failed or been compromised in some way. To help you determine where the potential cause of a failure lies, we have developed a seal failure check list. By filling in the necessary information, you should be able to determine the cause of a failure and decide what measures to take to assure future trouble-free operation. If you have any questions regarding this form, please contact our sales staff.

Please Fill This Out Completely

1. Describe the application:
   A. Type: ❑ Telescopic ❑ Piston-rod cylinder ❑ Pump/Motor ❑ Other _____
   B. Fluid Medium: Type: _____
   Pressure: normal: _____psi Temperature: system: _____°F ambient: _____°F
   min: _____psi min: _____°F
   max: _____psi max: _____°F
   C. Speed: Cycles/min: _____Length of stroke: _____in Average speed: _____

2. Inspect the application before seal removal:
   A. Amount of leakage: ❑ Slight ❑ Moderate ❑ Heavy leakage
   B. Condition of area: ❑ Clean ❑ Dusty ❑ Mud packed
   ❑ Painted ❑ Other _____
   C. Leakage source: ❑ Between wiper lip and rod ❑ Wiper blown out
   ❑ At gland bolt holes ❑ At gland OD
   ❑ Between piston and rod ❑ Across piston seal ❑ Other _____

3. Inspect external cylinder conditions:
   ❑ Collision that caused a pressure spike in cylinder ❑ Cylinder dented ❑ Side loading present

4. Remove seals and inspect internal cylinder conditions
   A. Shaft: ❑ Rod diameter out of tolerance (check entire length) ❑ Rod is scratched or scarred
   ❑ Eccentricity of rod and cylinder head ❑ Surface finish (RMS) is too smooth or too rough
   B. Bore: ❑ Bore diameter out of tolerance (check entire length) ❑ Bore is scratched or scarred
   ❑ Bore is out of round ❑ Surface finish (RMS) is too smooth or too rough
   ❑ Eccentricity of piston head and cylinder bore
   C. Groove: ❑ Groove dimensions are out of tolerance ❑ Surface is nicked or scratched
   ❑ Surface is dirty or rusted ❑ Surface finish (RMS) is too smooth or too rough
   D. Bearing surfaces: q Improper support causing eccentricity ❑ Abnormal wear of wear ring and/or bearing surfaces

5. Inspect the seals for signs of failure:
   A. Describe the failed seal
   i. Seal type: ❑ Piston ❑ Rod ❑ Static
   Part Number: _____Size: _____Material: _____Profile: _____
   Companion parts: _____
   ii. Operation: ❑ Dynamic: ❑ Rotary ❑ Reciprocating ❑ Oscillating
   ❑ Static: ❑ Radial ❑ Face

   B. Describe the conditions of failure
   i. Service length until failure: _____
   ii. Describe seal condition: See Chart in Master Seal Catalog

   _____
   _____
   _____
   _____

Inches		Millimeters
Fractions	Decimals	
—	.0004	.01
—	.004	.10
—	.01	.25
1/64	.0156	.397
—	.0197	.50
—	.0295	.75
1/32	.03125	.794
—	.0394	1.0
3/64	.0469	1.191
—	.059	1.5
1/16	.062	1.588
5/64	.0781	1.984
—	.0787	2.0
3/32	.094	2.381
—	.0984	2.5
7/64	.109	2.778
—	.1181	3.0
1/8	.125	3.175
—	.1378	3.5
9/64	.141	3.572
5/32	.156	3.969
—	.1575	4.0
11/64	.172	4.366
—	.177	4.5
3/16	.1875	4.763
—	.1969	5.0
13/64	.203	5.159
—	.2165	5.5
7/32	.219	5.556
15/64	.234	5.953
—	.2362	6.0
1/4	.250	6.350
—	.2559	6.5
17/64	.2656	6.747
—	.2756	7.0
9/32	.281	7.144
—	.2953	7.5
19/64	.297	7.541
5/16	.312	7.938
—	.315	8.0
21/64	.328	8.334
—	.335	8.5
11/32	.344	8.731
—	.3543	9.0
23/64	.359	9.128

Inches		Millimeters
Fractions	Decimals	
—	.374	9.5
3/8	.375	9.525
25/64	.391	9.922
—	.3937	10.0
13/32	.406	10.319
—	.413	10.5
27/64	.422	10.716
—	.4331	11.0
7/16	.438	11.113
29/64	.453	11.509
15/32	.469	11.906
—	.4724	12.0
31/64	.484	12.303
—	.492	12.5
1/2	.500	12.700
—	.5118	13.0
33/64	.5156	13.097
17/32	.531	13.494
35/64	.547	13.891
—	.5512	14.0
9/16	.563	14.288
—	.571	14.5
37/64	.578	14.684
—	.5906	15.0
19/32	.594	15.081
39/64	.609	15.478
5/8	.625	15.875
—	.6299	16.0
41/64	.6406	16.272
—	.6496	16.5
21/32	.658	16.669
—	.6693	17.0
43/64	.672	17.066
11/16	.6875	17.463
45/64	.703	17.859
—	.7087	18.0
23/32	.719	18.256
—	.7283	18.5
47/64	.734	18.653
—	.7480	19.0
3/4	.750	19.050
49/64	.7656	19.447
25/32	.781	19.844
—	..7874	20.0
51/64	.797	20.241

Inches		Millimeters
Fractions	Decimals	
13/16	.8125	20.638
—	.8268	21.0
53/64	.828	21.034
27/32	.844	21.431
55/64	.859	21.828
—	.8661	22.0
7/8	.875	22.225
57/64	.8906	22.622
—	.9055	23.0
29/32	.9062	23.019
59/64	.922	23.416
15/16	.9375	23.813
—	.9449	24.0
61/64	.953	24.209
31/32	.969	24.606
—	.9843	25.0
63/64	.9844	25.003
1	1.000	25.400
—	1.0236	26.0
1-1/32	1.0312	26.194
1-1/16	1.062	26.988
—	1.063	27.0
1-3/32	1.094	27.781
—	1.1024	28.0
1-1/8	1.125	28.575
—	1.1417	29.0
1-5/32	1.156	29.369
—	1.1811	30.0
1-3/16	1.1875	30.163
1-7/32	1.219	30.956
—	1.2205	31.0
1-1/4	1.250	31.750
—	1.2598	32.0
1-9/32	1.281	32.544
—	1.2992	33.0
1-5/16	1.312	33.338
—	1.3386	34.0
1-11/32	1.344	34.131
1-3/8	1.375	34.925
—	1.3779	35.0
1-13/32	1.406	35.719
—	1.4173	36.0
1-7/16	1.438	36.513
—	1.4567	37.0
1-15/32	1.469	37.306

Inches		Millimeters
Fractions	Decimals	
—	1.4961	38.0
1-1/2	1.500	38.100
1-17/32	1.531	38.894
—	1.5354	39.0
1-9/16	1.562	39.688
—	1.5748	40.0
1-19/32	1.594	40.481
—	1.6142	41.0
1-5/8	1.625	41.275
—	1.6535	42.0
1-21/32	1.6562	42.069
1-11/16	1.6875	42.863
—	1.6929	43.0
1-23/32	1.719	43.656
—	1.7323	44.0
1-3/4	1.750	44.450
—	1.7717	45.0
1-25/32	1.781	45.244
—	1.8110	46.0
1-13/16	1.8125	46.038
1-27/32	1.844	46.831
—	1.8504	47.0
1-7/8	1.875	47.625
—	1.8898	48.0
1-29/32	1.9062	48.419
—	1.9291	49.0
1-15/16	1.9375	49.213
—	1.9685	50.0
1-31/32	1.969	50.006
2	2.000	50.800
—	2.0079	51.0
2-1/32	2.03125	51.594
—	2.0472	52.0
2-1/6	2.062	52.388
—	2.0866	53.0
2-3/32	2.094	53.181
2-1/8	2.125	53.975
—	2.126	54.0
2-5/32	2.156	54.769
—	2.165	55.0
2-3/16	2.1875	55.563
—	2.2047	56.0
2-7/32	2.219	56.356
—	2.244	57.0
2-1/4	2.250	57.150

METRIC / INCH CONVERSION TABLE

Inches		Millimeters
Fractions	Decimals	
2-9/32	2.281	57.944
—	2.2835	58.0
2-5/16	2.312	58.738
—	2.3228	59.0
2-11/32	2.344	59.531
—	2.3622	60.0
2-3/8	2.375	60.325
—	2.4016	61.0
2-13/32	2.406	61.119
2-7/16	2.438	61.913
—	2.4409	62.0
2-15/32	2.469	62.706
—	2.4803	63.0
2-1/2	2.500	63.500
—	2.5197	64.0
2-17/32	2.531	64.294
—	2.559	65.0
2-9/16	2.562	65.088
2-19/32	2.594	65.881
—	2.5984	66.0
2-5/8	2.625	66.675
—	2.638	67.0
2-21/32	2.656	67.469
—	2.6772	68.0
2-11/16	2.6875	68.263
—	2.7165	69.0
2-23/32	2.719	69.056
2-3/4	2.750	69.850
—	2.7559	70.0
2-25/32	2.781	70.6439
—	2.7953	71.0
2-13/16	2.8125	71.4376
—	2.8346	72.0
2-27/32	2.844	72.2314
—	2.8740	73.0
2-7/8	2.875	73.025
2-29/32	2.9062	73.819
—	2.9134	74.0
2-15/16	2.9375	74.613
—	2.9527	75.0
2-31/32	2.969	75.406
—	2.9921	76.0
3	3.000	76.200
3-1/32	3.0312	76.994
—	3.0315	77.0

Inches		Millimeters
Fractions	Decimals	
3-1/16	3.062	77.788
—	3.0709	78.0
3-3/32	3.094	78.581
—	3.1102	79.0
3-1/8	3.125	79.581
—	3.1496	80.0
3-5/32	3.156	80.169
3-3/16	3.1875	80.963
—	3.1890	81.0
3-7/32	3.219	81.756
—	3.2283	82.0
3-1/4	3.250	82.550
—	3.2677	83.0
3-9/32	3.281	83.344
—	3.3071	84.0
3-5/16	3.312	84.1377
3-11/32	3.344	84.9314
—	3.3464	85.0
3-3/8	3.375	85.725
—	3.3858	86.0
3-13/32	3.406	86.519
—	3.4252	87.0
3-7/16	3.438	87.313
—	3.4648	88.0
3-15/32	3.469	88.108
3-1/2	3.500	88.900
—	3.5039	89.0
3-17/32	3.531	89.694
—	3.5433	90.0
3-9/16	3.562	90.4877
—	3.5827	91.0
3-19/32	3.594	91.281
—	3.622	92.0
3-5/8	3.625	92.075
3-21/32	3.656	92.869
—	3.6614	93.0
3-11/16	3.6875	93.663
—	3.7008	94.0
3-23/32	3.719	94.456
—	3.7401	95.0
3-3/4	3.750	95.250
—	3.7795	96.0
3-25/32	3.781	96.044
3-13/16	3.8125	96.838
—	3.8189	97.0

Inches		Millimeters
Fractions	Decimals	
3-27/32	3.844	97.631
—	3.8583	98.0
3-7/8	3.875	98.425
—	3.8976	99.0
3-29/32	3.9062	99.219
—	3.9370	100.0
3-15/16	3.9375	100.013
3-31/32	3.969	100.806
—	3.9764	101.0
4	4.000	101.600
4-1/16	4.062	103.188
4-1/8	4.125	104.775
—	4.1338	105.0
4-3/16	4.1875	106.363
4-1/4	4.250	107.950
4-5/16	4.312	109.538
—	4.3307	110.0
4-3/8	4.375	111.125
4-7/16	4.438	112.713
4-1/2	4.500	114.300
—	4.5275	115.0
4-9/16	4.562	115.888
4-5/8	4.625	117.475
4-11/16	4.6875	119.063
—	4.7244	120.0
4-3/4	4.750	120.650
4-13/16	4.8125	122.238
4-7/8	4.875	123.825
—	4.9212	125.0
4-15/16	4.9375	125.413
5	5.000	127.000
—	5.1181	130.0
5-1/4	5.250	133.350
5-1/2	5.500	139.700
—	5.5118	140.0
5-3/4	5.750	146.050
—	5.9055	150.0
6	6.000	152.400
6-1/4	6.250	158.750
—	6.2992	160.0
6-1/2	6.500	165.100
—	6.6929	170.0
6-3/4	6.750	171.450
7	7.000	177.800
—	7.0866	180.0

Inches		Millimeters
Fractions	Decimals	
—	7.4803	190.0
7-1/2	7.500	190.500
—	7.8740	200.0
8	8.000	203.200
—	8.2677	210.0
8-1/2	8.500	215.900
—	8.6614	220.0
9	9.000	228.600
—	9.0551	230.0
—	9.4488	240.0
9-1/2	9.500	241.300
—	9.8425	250.0
10	10.000	254.00
—	10.2362	260.0
—	10.6299	270.0
11	11.000	279.40
—	11.0236	280.0
—	11.4173	290.0
—	11.8110	300.0
12	12.000	304.80
13	13.000	330.20
—	13.7795	350.0
14	14.000	355.60
15	15.000	381.00
—	15.7480	400.0
16	16.000	406.40
17	17.000	431.80
—	17.7165	450.0
18	18.000	457.20
19	19.000	482.60
—	19.6850	500.0
20	20.000	508.00

Piston - Rod Cylinder Force

Working Pressure of Hydraulic Fluid PSI

BORE	AREA	ROD	SIZE	50	100	250	500	1000	1500	2000	3000	5000
	PUSH	—		88	177	443	885	1,770	2,655	3.540	5,310	8,850
1-1/2	PULL	STD	5/8	73	146	365	730	1,460	2,190	2,920	4,380	7,300
	PULL	2:1	1	49	98	245	490	980	1,470	1,960	2,940	4,900
	PUSH	—		157	314	785	1,570	3,140	4,710	6,280	9,420	15,700
2	PULL	STD	1	118	236	590	1,180	2,360	3,540	4,720	7,080	11,800
	PULL	2:1	1-3/8	83	166	415	830	1,660	2,490	3,320	4,980	8,300
	PUSH	—		246	491	1,228	2,455	4,910	7,265	9,820	14,730	24,550
2-1/2	PULL	STD	1	206	412	1,030	2,060	4,120	6,180	8,240	12,360	20,600
	PULL	2:1	1-3/4	125	250	625	1,250	2,500	3,750	5,000	7,500	12,500
	PUSH	—		415	830	2,075	4,150	8,300	12,450	16,600	24,900	41,500
3-1/2	PULL	STD	1-3/8	341	681	1,703	3,405	6,810	10,215	13,620	20,430	34,050
	PULL	2:1	2	258	515	1,288	2,575	5,150	7,725	10,300	15,450	25,750
	PUSH	—		628	1,257	3,143	6,285	12,570	18,855	25,140	37,710	62,850
4	PULL	STD	1-3/4	508	1,016	2,540	5,080	10,160	15,240	20,320	30,480	50,800
	PULL	2:1	2-1/2	383	766	1,916	3,830	7,660	11,490	15,320	22,980	38,300
	PUSH	—		982	1,964	4,910	9,820	19,640	29,460	39,280	58,920	98,200
5	PULL	STD	2	825	1,649	4,123	8,245	16,490	24,735	32,980	49,470	82,450
	PULL	2:1	3-1/2	500	1,001	2,503	5,005	10,010	15,015	20,020	30,030	50,050
	PUSH	—		1,413	2,827	7,068	14,135	28,270	42,405	56,540	84,810	141,350
6	PULL	STD	2-1/2	1,168	2,336	5,840	11,680	23,360	35,040	46,720	70,080	116,800
	PULL	2:1	4	786	1,571	3,928	7,855	15,710	23,565	31,420	47,130	78,550
	PUSH	—		1,924	3,849	9,623	19,245	38,490	57,735	76,980	115,470	192,450
7	PULL	STD	3	1,571	3,142	7,855	15,710	31,420	47,130	62,840	94,260	157,100
	PULL	2:1	5	942	1,885	4,713	9,425	18,850	28,275	37,700	56,550	94,250
	PUSH	—		2,514	5,027	12,568	25,135	50,270	75,405	100,540	150,810	251,350
8	PULL	STD	3-1/2	2,032	4,064	10,160	20,320	40,640	60,960	81,280	121,920	203,200
	PULL	2:1	5-1/2	1,326	2,651	6,628	13,255	26,510	39,765	53,020	79,530	132,550
	PUSH	—		3,927	7,854	19,635	39,270	78,540	117,810	157,080	235,620	392,700
10	PULL	STD	4-1/2	3,132	6,264	15,660	31,320	62,640	93,960	125,280	187,920	313,200
	PULL	2:1	7	2,003	4,006	10,015	20,030	40,060	60,090	80,120	120,180	200,300

This table is a ready reference of forces available from either end from various cylinder and rod sizes at a range of pressures. For pressures intermediate between those shown, add force values from two or more pressures whose sum equals the given operating pressure. Values neglect friction and back pressure on the return side.

FLUID MOTOR TORQUE

In Inch Pounds

	Horsepower												
RPM	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**15**	**20**	**25**
1	63,025	126,050	189,076	252,100	315,125	378,150	441,175	504,200	567,225	630,250	945,375	1,260,507	1,575,634
2	31,512	63,025	94,538	126,050	157,563	189,075	220,588	252,100	283,613	315,125	472,688	630,250	787,813
3	21,009	42,017	63,025	84,036	105,042	126,050	147,058	168,067	189,075	210,083	315,125	420,167	525,208
4	15,756	31,512	47,269	63,025	78,781	94,538	110,294	126,050	141,806	157,563	236,344	315,125	393,906
5	12,605	25,210	37,815	50,420	63,025	75,630	88,236	100,840	113,445	126,050	189,076	252,100	315,125
6	10,506	21,009	31,513	42,017	52,521	63,025	73,529	84,033	94,538	105,040	157,563	210,083	262,604
7	9,004	18,007	27,011	36,016	45,018	54,021	63,025	72,029	81,032	90,036	135,054	180,071	225,089
8	7,878	15,756	23,634	31,512	39,391	47,269	55,147	63,025	70,903	78,780	118,172	157,563	196,953
9	7,003	14,006	21,010	28,011	35,014	42,017	49,019	56,022	63,025	70,030	105,042	140,056	175,069
10	6,303	12,605	18,908	25,210	31,512	37,815	44,118	50,420	56,723	63,025	94,538	126,050	157,563
20	3,151	6,303	9,454	12,605	15,756	18,908	22,059	25,210	28,316	31,512	47,269	63,025	78,781
25	2,521	5,042	7,563	10,084	12,605	15,126	17,647	20,168	22,689	25,210	37,815	50,420	63,025
30	2,101	4,202	6,303	8,403	10,504	12,605	14,705	16,807	18,908	21,009	31,513	42,017	52,521
40	1,576	3,151	4,727	6,303	7,878	9,454	11,029	12,605	14,181	15,756	23,634	31,513	39,391
50	1,261	2,521	3,782	5,042	6,303	7,563	8,824	10,084	11,345	12,605	18,908	25,210	31,513
60	1,050	2,101	3,151	4,202	5,252	6,303	7,353	8,403	9,454	10,504	15,756	21,009	26,260
70	900	1,801	2,701	3,601	4,502	5,402	6,303	7,203	8,103	9,004	13,506	18,007	22,509
75	840	1,681	2,521	3,361	4,202	5,042	5,882	6,723	7,563	8,403	12,605	16,806	21,008
80	788	1,576	2,363	3,151	3,939	4,727	5,515	6,303	7,090	7,878	11,817	15,756	19,695
90	700	1,400	2,101	2,801	3,501	4,202	4,902	5,602	6,303	7,003	10,504	14,006	17,507
100	630	1,261	1,891	2,521	3,151	3,782	4,412	5,042	5,672	6,303	9,453	12,605	15,758
150	420	840	1,261	1,681	2,101	2,251	2,941	3,361	3,781	4,202	6,303	8,403	10,504
200	315	630	945	1,261	1,575	1,891	2,206	2,521	2,836	3,151	4,727	6,303	7,878
250	252	504	756	1,008	1,260	1,531	1,765	2,017	2,269	2,521	3,782	5,042	6,303
300	210	420	630	840	1,050	1,261	1,471	1,681	1,891	2,101	3,151	4,202	5,252
350	180	360	540	720	900	1,080	1,261	1,441	1,621	1,801	2,701	3,601	4,502
400	158	315	473	630	788	945	1,104	1,261	1,418	1,576	2,364	3,151	3,939
450	141	280	420	560	700	840	980	1,120	1,261	1,401	2,101	2,801	3,501
500	126	252	378	504	630	756	882	1,008	1,134	1,261	1,891	2,521	3,151
550	115	229	344	458	573	688	802	917	1,031	1,146	1,719	2,292	2,865
600	105	210	315	420	525	630	735	840	945	1,050	1,576	2,101	2,626
650	97	194	291	388	485	582	679	776	873	970	1,454	1,939	2,424
700	90	180	270	360	450	540	630	720	810	900	1,351	1,801	2,251
750	84	168	252	336	420	504	588	672	756	840	1,261	1,681	2,101
800	79	158	236	315	393	473	551	630	709	788	1,182	1,576	1,970
850	74	148	222	297	371	445	519	593	667	741	1,112	1,483	1,854
900	70	140	210	280	350	420	490	560	630	700	1,050	1,400	1,751
950	66	133	199	265	332	398	464	531	597	663	995	1,327	1,659
1000	63	126	189	252	315	378	441	504	567	630	945	1,261	1,576
1100	57	115	172	229	286	344	401	458	516	573	860	1,146	1,432
1200	53	105	158	210	263	315	368	420	473	525	788	1,050	1,313
1300	48	97	145	194	242	291	339	388	436	485	727	970	1,212
1400	45	90	135	180	225	270	315	360	405	450	675	900	1,125
1500	42	84	126	168	210	252	294	336	378	420	630	840	1,050
1600	39	79	118	158	197	236	276	315	355	394	591	788	985
1700	37	74	111	148	185	222	260	296	334	371	556	741	927
1800	35	70	105	140	175	210	245	280	315	350	525	700	875
1900	33	66	100	133	166	199	232	265	299	332	498	663	829
2000	32	63	95	126	158	189	221	252	284	315	473	630	788
2100	30	60	90	120	150	180	210	240	270	300	450	600	750
2200	29	57	86	115	143	172	201	229	258	286	430	573	716
2300	27	55	82	110	137	164	192	219	247	274	411	548	685
2400	26	53	79	105	131	158	184	210	236	263	394	525	657
2500	25	50	76	101	126	151	176	202	227	252	378	504	630
2750	23	46	69	92	115	138	160	183	206	229	344	458	573
3000	21	42	63	84	105	126	147	168	189	210	315	420	525
3250	19	39	58	78	97	116	136	155	175	194	291	388	485
3500	18	36	54	72	90	108	126	144	162	180	270	360	450
3750	17	34	50	67	84	101	118	134	151	168	252	336	420
4000	16	32	47	63	79	95	110	126	142	158	236	315	394
4250	15	30	44	59	74	89	104	119	133	148	222	297	371
4500	14	28	42	56	70	84	98	112	126	140	210	280	350
4750	13	27	40	53	66	80	93	106	119	133	199	265	332
5000	13	25	38	50	63	76	88	101	113	126	189	252	315
6000	11	21	32	42	53	63	74	84	95	105	158	210	263
7000	9	18	27	36	45	54	63	72	81	90	135	180	225
8000	8	16	24	32	39	47	55	63	71	79	118	158	197
9000	7	14	21	28	35	42	49	56	63	70	105	140	175
10000	6	13	19	25	32	38	44	50	57	63	95	126	158

Inches / Minute

PISTON DIAMETER	ROD DIAMETER	FLOW - GPM										
		1	2	3	5	10	12	15	20	25	50	75
1	—	298	596	894	1490							
	1/2	392	784	1176	1960							
1-1/2	—	130	260	392	654	1308						
	5/8	158	316	476	792	1584						
	1	235	470	706	1176	2352						
2	—	73	146	221	368	736	883	1120				
	3/4	85	170	257	428	956	1025	1283				
	1	97	184	294	490	980	1175	1465				
	1-3/8	139	278	418	697	1394	1673	2090				
2-1/2	—	47	94	141	235	470	565	675	940	1175		
	1	56	112	168	280	560	672	840	1120	1400		
	1-3/8	67	134	203	339	678	813	1015	1355	1695		
	1-3/4	92	184	277	463	926	1110	1385	1850	2310		
3	—	32	64	98	163	326	392	490	653	817		
	1	36	72	110	184	368	440	551	735	920		
	1-1/2	43	86	131	218	436	523	655	872	1090		
	2	58	116	176	294	588	705	882	1175	1470		
3-1/2	—	24	48	72	120	240	288	360	480	600	1200	
	1-1/4	27	54	82	137	274	330	411	548	685	1370	
	1-3/4	32	64	96	160	320	384	480	640	800	1600	
	2	35	70	107	178	356	428	534	712	890	1780	
4	—	18	36	55	92	184	220	276	368	460	920	
	1-1/4	20	40	61	102	204	244	306	408	510	1020	
	1-3/4	22	44	68	113	226	273	339	452	565	1130	
	2	24	48	73	122	244	294	366	488	610	1220	
	2-1/2	30	60	90	150	300	362	450	600	750	1500	
5	—	12	24	35	58	116	141	174	232	290	580	870
	1-1/2	13	26	39	64	128	155	193	258	320	640	960
	2	14	28	42	70	140	168	210	280	350	700	1050
	2-1/2	16	32	47	78	156	188	235	315	390	780	1170
	3	18	36	55	92	184	220	275	365	460	920	1380
	3-1/2	22	44	66	111	222	266	333	444	555	1110	1665
6	—	8	16	24	41	82	98	123	162	202	404	606
	1-3/4	9	18	27	45	90	107	135	180	225	450	675
	2-1/2	10	20	30	50	100	118	150	200	250	500	750
	3	11	22	33	54	108	130	165	206	270	540	810
	3-1/2	12	24	37	62	124	148	185	245	310	620	930
	4	15	30	44	73	146	176	220	295	365	730	1095
8	—	4	8	14	23	46	55	69	92	115	230	345
	3-1/2	5-1/2	11	17	28	56	68	85	115	140	280	420
	4	6	12	18	30	60	73	90	122	150	300	450
	5	7-1/2	15	22	38	76	90	114	150	185	375	555
	5-1/2	8-1/2	17	26	43	86	104	129	172	215	430	645
10	—	3	6	9	15	30	35	44	60	73	146	220
	4-1/2	3-1//2	7	11	18	36	44	55	75	92	184	275
	5	4	8	12	20	40	47	60	80	100	200	300
	5-1/2	4-1/2	9	13	21	42	50	63	84	105	210	315
	7	5-1/2	11	17	29	58	69	87	115	145	290	435

This chart is based on the formula $V = \frac{231 \times GPM}{\text{EFF. CYL. AREA (Sq. Inches)}}$

ELECTRIC MOTOR HORSEPOWER

Required to Drive a Hydraulic Pump

	PUMP PRESSURE PSI										
GPM	**100**	**200**	**250**	**300**	**400**	**500**	**750**	**1000**	**1250**	**1500**	**2000**
1/2	.04	.07	.09	.10	.14	.17	.26	.34	.43	.52	.69
1	.07	.14	.17	.21	.28	.34	.52	.69	.86	1.03	1.37
1 1/2	.10	.21	.26	.31	.41	.52	.77	1.03	1.29	1.54	2.06
2	.14	.28	.34	.41	.55	.69	1.03	1.37	1.72	2.06	2.75
2 1/2	.17	.34	.43	.52	.69	.86	1.29	1.72	2.15	2.58	3.43
3	.21	.41	.52	.62	.83	1.03	1.54	2.06	2.57	3.09	4.12
3 1/2	.24	.48	.60	.72	.96	1.20	1.80	2.40	3.00	3.60	4.81
4	.28	.55	.69	.82	1.10	1.37	2.06	2.75	3.43	4.12	5.49
5	.34	.69	.86	1.03	1.32	1.72	2.57	3.43	4.29	5.15	6.86
6	.41	.82	1.03	1.24	1.65	2.06	3.09	4.12	5.15	6.18	8.24
7	.48	.96	1.20	1.44	1.92	2.40	3.60	4.81	6.01	7.21	9.61
8	.55	1.10	1.37	1.65	2.20	2.75	4.12	5.49	6.86	8.24	11.0
9	.62	1.24	1.55	1.85	2.47	3.09	4.63	6.18	7.72	9.27	12.4
10	.69	1.37	1.62	2.06	2.75	3.43	5.15	6.86	8.58	10.3	13.8
11	.76	1.51	1.89	2.27	3.02	3.78	5.66	7.55	9.44	11.3	15.1
12	.83	1.65	2.06	2.47	3.30	4.12	6.18	8.24	10.3	12.4	16.5
13	.89	1.79	2.23	2.68	3.57	4.46	6.69	8.92	11.2	13.4	17.8
14	.96	1.92	2.40	2.88	3.84	4.81	7.21	9.61	12.0	14.4	19.2
15	1.03	2.06	2.57	3.09	4.12	5.15	7.72	10.3	12.9	15.4	20.6
16	1.10	2.20	2.75	3.30	4.39	5.49	8.24	11.0	13.7	16.5	22.0
17	1.17	2.33	2.92	3.50	4.68	5.83	8.75	11.7	14.6	17.5	23.3
18	1.24	2.47	3.09	3.71	4.94	6.18	9.27	12.4	15.4	18.5	24.7
19	1.30	2.61	3.26	3.91	5.22	6.52	9.78	13.0	16.3	19.6	26.1
20	1.37	2.75	3.43	4.12	5.49	6.86	10.3	13.7	17.2	21.6	27.5
25	1.72	3.43	4.29	5.15	6.86	8.58	12.9	17.2	21.5	25.8	34.3
30	2.06	4.12	5.15	6.18	8.24	10.3	15.4	20.6	25.7	30.9	41.2
35	2.40	4.81	6.01	7.21	9.61	12.0	18.0	24.0	30.0	36.0	48.0
40	2.75	5.49	6.86	8.24	11.0	13.7	20.6	27.5	34.3	41.2	54.9
45	3.09	6.18	7.72	9.27	12.4	15.4	23.2	31.0	38.6	46.3	61.8
50	3.43	6.86	8.58	10.3	13.7	17.2	25.7	34.3	42.9	51.5	68.6
55	3.78	7.55	9.44	11.3	15.1	18.9	28.3	37.8	47.2	56.6	75.5
60	4.12	8.24	10.3	12.4	16.5	20.6	30.9	41.2	51.5	61.8	83.4
65	4.46	8.92	11.2	13.4	17.8	22.3	33.5	44.6	55.8	66.9	89.2
70	4.81	9.61	12.0	14.4	19.2	24.0	36.0	48.0	60.1	72.1	96.1
75	5.15	10.3	12.9	15.4	20.6	25.7	38.6	51.4	64.3	77.2	103.0
80	5.49	11.0	13.7	16.5	22.0	27.5	41.2	54.9	68.6	82.4	109.8
90	6.18	12.4	15.4	18.5	24.7	30.9	46.3	61.8	77.2	92.7	123.6
100	6.86	13.7	17.2	20.6	27.5	34.4	51.5	68.6	85.8	103.0	137.3

This chart is based on the formula $HP = \frac{GPM \times PSI}{1714 \times EFFICIENCY}$

For the purposes of this chart, pump efficiency was assumed to be 85%.

As horsepower varies directly with flow or pressure, multiply proportionately to determine values not shown. For instance, at 4000 PSI multiply 2000 PSI values by 2.

Diam.	Circum.	Area	Diam.	Circum.	Area	Diam.	Circum.	Area	Diam.	Circum.	Area	Diam.	Circum.	Area
			1	3.1416	.7854	5	15.708	19.635	12	37.699	113.10	24	75.398	452.39
1/64	.04909	.00019	1/16	3.3379	.8866	1/8	16.101	20.629	1/4	38.485	117.86	1/4	76.184	461.86
1/32	.09818	.00077	1/8	3.5343	.9940	1/4	16.493	21.648	1/2	39.270	122.72	1/2	76.969	471.44
3/64	.14726	.00173	3/16	3.7306	1.1075	3/8	16.886	22.691	3/4	40.055	127.68	3/4	77.764	481.11
1/16	.1965	.00307	1/4	3.9270	1.2272	1/2	17.279	23.758	13	40.841	132.73	25	78.540	490.87
5/64	.24544	.00479	5/16	4.1233	1.3530	5/8	17.671	24.850	1/4	41.626	137.89	1/4	79.325	500.74
3/32	.29452	.00690	3/8	4.3197	1.4849	3/4	18.064	25.967	1/2	42.412	143.14	1/2	80.111	510.71
7/64	.34361	.00940	7/16	4.5160	1.6230	7/8	18.457	27.109	3/4	43.197	148.49	3/4	80.896	520.77
1/8	.39270	.01227	1/2	4.7124	1.7671	6	18.850	28.274	14	43.982	153.94	26	81.681	530.93
9/64	.44179	.01553	9/16	4.9087	1.9175	1/8	19.242	29.465	1/4	44.768	159.48	1/4	82.467	541.19
5/32	.49087	.01917	5/8	5.1051	2.0739	1/4	19.635	30.680	1/2	45.553	165.13	1/2	83.252	551.55
11/64	.53996	.02320	11/16	5.3014	2.2365	3/8	20.028	31.919	3/4	46.338	170.87	3/4	84.038	562.00
3/16	.58905	.02761	3/4	5.4978	2.4053	1/2	20.420	33.183	15	47.124	176.71	27	84.823	572.56
13/64	.63814	.03241	13/16	5.6941	2.5802	5/8	20.813	34.472	1/4	47.909	182.65	1/4	85.608	583.21
7/32	.68722	.03758	7/8	5.8905	2.7612	3/4	21.206	35.785	1/2	48.695	188.69	1/2	86.394	593.96
15/64	.73631	.04314	15/16	6.0868	2.9483	7/8	21.598	37.122	3/4	49.480	194.83	3/4	87.179	604.81
1/4	.78540	.04909	2	6.2832	3.1416	7	21.991	38.485	16	50.265	201.06	28	87.965	615.75
17/64	.83449	.05542	1/16	6.4795	3.3410	1/8	22.384	39.871	1/4	51.051	207.39	1/4	88.750	626.80
9/32	.88357	.06213	1/8	6.6759	3.5466	1/4	22.776	41.282	1/2	51.836	213.82	1/2	89.535	637.94
19/64	.93266	.06922	3/16	6.8722	3.7583	3/8	23.169	42.718	3/4	52.622	220.35	3/4	90.321	649.18
5/16	.98175	.07670	1/4	7.0686	3.9761	1/2	23.562	44.179	17	53.407	226.98	29	91.106	660.52
21/64	1.03084	.08456	5/16	7.2649	4.2000	5/8	23.955	45.664	1/4	54.192	233.71	1/4	91.892	671.96
11/32	1.0799	.09281	3/8	7.4613	4.4301	3/4	24.347	47.173	1/2	54.978	240.53	1/2	92.677	683.49
23/64	1.1290	.10143	7/16	7.6576	4.6664	7/8	24.740	48.707	3/4	55.763	247.45	3/4	93.462	695.13
3/8	1.1781	.11045	1/2	7.8540	4.9087	8	25.133	50.265	18	56.549	254.47	30	94.248	708.86
25/64	1.2272	.11984	9/16	8.0503	5.1572	1/8	25.525	51.849	1/4	57.334	261.59	1/4	95.033	718.69
13/32	1.2763	.12962	5/8	8.2467	5.4119	1/4	25.918	53.456	1/2	58.119	268.80	1/2	95.819	730.62
27/64	1.3254	.13978	11/16	8.4430	5.6727	3/8	26.311	55.088	3/4	58.905	276.12	3/4	96.604	742.64
7/16	1.3744	.15033	3/4	8.6394	5.9396	1/2	26.704	56.745	19	59.690	283.53	31	97.389	754.77
29/64	1.4235	.16126	13/16	8.8357	6.2126	5/8	27.096	58.426	1/4	60.476	291.04	1/4	98.175	766.99
15/32	1.4726	.17257	7/8	9.0321	6.4918	3/4	27.489	60.132	1/2	61.261	298.65	1/2	98.960	779.31
31/64	1.5217	.18427	15/16	9.2284	6.7771	7/8	27.882	61.862	3/4	62.046	306.35	3/4	99.746	791.73
1/2	1.5708	.19635	3	9.4248	7.0686	9	28.274	63.617	20	62.832	314.16	32	100.531	804.25
17/32	1.6690	.22166	1/8	9.8175	7.6699	1/8	28.667	65.397	1/4	63.617	322.06	1/4	101.316	816.86
9/16	1.7671	.24850	1/4	10.210	8.2958	1/4	29.060	67.201	1/2	64.403	330.06	1/2	102.102	829.58
19/32	1.8653	.27688	3/8	10.603	8.9462	3/8	29.452	69.029	3/4	65.188	338.16	3/4	102.887	842.39
5/8	1.9635	.30680	1/2	10.996	9.6211	1/2	29.845	70.882	21	65.973	346.36	33	103.673	855.30
21/32	2.0617	.33824	5/8	11.388	10.321	5/8	30.238	72.760	1/4	66.759	354.66	1/4	104.458	868.31
11/16	2.1598	.37122	3/4	11.781	11.045	3/4	30.631	74.662	1/2	67.544	363.05	1/2	105.243	881.41
23/32	2.2580	.40574	7/8	12.174	11.793	7/8	31.023	76.589	3/4	68.330	371.54	3/4	106.029	894.62
3/4	2.3562	.44179	4	12.566	12.566	10	31.416	78.540	22	69.115	380.13	34	106.814	907.92
25/32	2.4544	.47937	1/8	12.959	13.364	1/4	32.201	82.516	1/4	69.900	388.82	1/4	107.600	921.32
13/16	2.5525	.51849	1/4	13.352	14.186	1/2	32.987	86.590	1/2	70.686	397.61	1/2	108.385	934.82
27/32	2.6507	.55914	3/8	13.744	15.033	3/4	33.772	90.763	3/4	71.471	406.49	3/4	109.170	948.42
7/8	2.7489	.60132	1/2	14.137	15.904	11	34.558	95.033	23	72.257	415.48	35	109.956	962.11
29/32	2.8471	.64504	5/8	14.530	16.800	1/4	35.343	99.402	1/4	73.042	424.56	1/4	110.741	975.91
15/16	2.9452	.69029	3/4	14.923	17.721	1/2	36.128	103.87	1/2	73.827	433.74	1/2	111.527	989.80
31/32	3.0434	.73708	7/8	15.315	18.665	3/4	36.914	108.43	3/4	74.613	443.01	3/4	112.312	1003.8

BASIC FORMULAS

FORMULA FOR:	WORD FORMULA	LETTER FORMULA
FLUID PRESSURE In Pounds/Square Inch	PRESSURE = FORCE (pounds) / UNIT AREA (Square Inches)	$P = \frac{F}{A}$ or psi = $\frac{F}{A}$
FLUID FLOW RATE In Gallons/Minute	FLOW RATE = VOLUME (Gallons) / UNIT TIME (Minutes)	$Q = \frac{V}{T}$
FLUID POWER In Horsepower	HORSEPOWER = PRESSURE (PSI) X FLOW (GPM) / 1714	$HP = \frac{PQ}{1714}$

FLUID FORMULAS

VELOCITY THROUGH PIPING In Feet/Second Velocity	VELOCITY = .3208 x FLOW RATE THROUGH I.D. (GPM) / INTERNAL AREA (Square Inches)	$V = \frac{.3208Q}{A}$
COMPRESSIBILITY OF OIL In Additional Required Oil To Reach Pressure	ADDITIONAL VOLUME = PRESSURE (PSI) x VOLUME OF OIL UNDER PRESSURE / 250,000 (Approx.)	$VA = \frac{PV}{250{,}000}$ * Approximately 1/2% per 1000 psi
COMPRESSIBILITY OF A FLUID	COMPRESSIBILITY = 1 / BULK MODULUS OF THE FLUID	$C(\beta) = \frac{1}{BM}$
SPECIFIC GRAVITY OF A FLUID	SPECIFIC GRAVITY = WEIGHT OF ONE CUBIC FOOT OF FLUID / WEIGHT OF ONE CUBIC FOOT OF WATER	$SG = \frac{W}{62.4283}$
VALVE (CV) FLOW FACTOR	VALVE FACTOR (CV) = FLOW RATE (GPM) x $\sqrt{\text{SPECIFIC GRAVITY}}$ / PRESSURE DROP (PSI)	$CV = \frac{Q\sqrt{SG}}{\Delta P}$
VISCOSITY IN CENTISTOKES	For Viscosities of 32 to 100 Saybolt Universal Seconds: CENTISTOKES = .2253 x SUS – 194.4 / SUS	$CS = .2253\ SUS - \frac{194.4}{SUS}$
VISCOSITY IN CENTISTOKES	For Viscosities of 100 to 240 Saybolt Universal Seconds: CENTISTOKES = .2193 x SUS – 134.6 / SUS	$CS = .2193\ SUS - \frac{134.6}{SUS}$
VISCOSITY IN CENTISTOKES	For Viscosities Greater Than 240 Saybolt Universal Seconds: CENTISTOKES = SUS / 4.635	$CS = \frac{SUS}{4.635}$

NOTE: Saybolt Universal Seconds is often abbreviated SSU.

PUMP FORMULAS

PUMP OUTLET FLOW In Gallons/Minute	FLOW = RPM X PUMP DISPLACEMENT (Cu. In./Rev.) / 231	$Q = \frac{nd}{231}$	
PUMP INPUT POWER In Horsepower Required	HORSEPOWER INPUT = FLOW RATE OUTPUT (GPM) X PRESSURE (psi) / 1714 X EFFICIENCY (Overall)	$HP_{IN} = \frac{QP}{1714\ Eff}$ or $\frac{GPM\ X\ psi}{1714\ Eff}$	
PUMP EFFICIENCY Overall in Percent	OVERALL EFFICIENCY = OUTPUT HORSEPOWER / INPUT HORSEPOWER X 100	$Eff_{OV} = \frac{HP_{OUT}}{HP_{IN}} X\ 100$	
	OVERALL EFFICIENCY = VOLUMETRIC Eff. X MECHANICAL Eff.	$Eff_{OV} = Eff_{VOL.} X\ Eff_{MECH.}$	
PUMP EFFICIENCY Overall in Percent	VOLUMETRIC EFFICIENCY = ACTUAL FLOW RATE OUTPUT (GPM) / THEORETICAL FLOW RATE OUTPUT (GPM) X 100	$Eff_{VOL} = \frac{O_{ACT.}}{O_{THEO.}} X\ 100$	
PUMP EFFICIENCY Mechanical in Percent	MECHANICAL EFFICIENCY = THEORETICAL TORQUE TO DRIVE / ACTUAL TORQUE TO DRIVE X 100	$Eff_{MEC} = \frac{T_{THEO.}}{T_{ACT.}} X\ 100$	
PUMP LIFE B_{10} BEARING LIFE	B_{10} HOURS OF BEARING LIFE = RATED LIFE HOURS X RATED SPEED (RPM) / NEW SPEED (RPM) X (RATED PRESSURE (PSI) / NEW PRESSURE (PSI))^3	$B_{10} = \text{RATED HRS. X } \frac{RPM_R}{RPM_N} X \left(\frac{PR}{PN}\right)^3$	

ACTUATOR FORMULAS

FORMULA FOR:	WORD FORMULA	LETTER FORMULA
CYLINDER AREA In Square Inches	AREA = π X RADIUS^2 (Inches)	$A = \pi r^2$
	= $\frac{\pi \text{ X DIAMETER}^2 \text{ (Inches)}}{4}$	$A = \frac{\pi D^2}{4}$ or $A = .785D^2$
CYLINDER FORCE In Pounds, Push or Pull	FORCE = PRESSURE (psi) X NET AREA (Square Inches)	F = psi X A or F = PA
CYLINDER VELOCITY or SPEED In Feet/Second	VELOCITY = $\frac{231 \text{ X FLOW RATE (GPM)}}{12 \text{ X } 60 \text{ X NET AREA (Square Inches)}}$	$F = \frac{231Q}{720A}$ or $V = \frac{.3208Q}{A}$
CYLINDER VOLUME CAPACITY In Gallons of Fluid	VELOCITY = $\frac{\pi \text{ X RADIUS}^2 \text{ (Inches) X STROKE (Inches)}}{231}$	$V = \frac{\pi r^2 l}{231}$
	= $\frac{\text{NET AREA (Square Inches) X STROKE (Inches)}}{231}$	$V = \frac{A l}{231}$ l = Length of Stroke
CYLINDER FLOW RATE In Gallons Per Minute	FLOW RATE = $\frac{12 \text{ X } 60 \text{ X VELOCITY (Feet/Sec.) X NET AREA (Sq. Inches)}}{231}$	$Q = \frac{720vA}{231}$ or $Q = 3.117vA$
FLUID MOTOR TORQUE In Inch Pounds	TORQUE = $\frac{\text{PRESSURE (psi) X F.M. DISPLACEMENT (Cu. In./Rev.)}}{2\pi}$	$T = \frac{psi\ d}{2\pi}$ or $T = \frac{Pd}{2\pi}$
	= $\frac{\text{HORSEPOWER X } 63025}{\text{RPM}}$	$T = \frac{63025\ HP}{n}$
	= $\frac{\text{FLOW RATE (GPM) X PRESSURE (psi) X } 36.77}{\text{RPM}}$	$T = \frac{36.77QP}{n}$ or $T = \frac{36.77Qpsi}{n}$
FLUID MOTOR TORQUE/100 psi In Inch Pounds	TORQUE/100 psi = $\frac{\text{F.M. DISPLACEMENT (Cu. Inches/Revolution)}}{.0628}$	$T_{100psi} = \frac{d}{.0628}$
FLUID MOTOR SPEED In Revolutions/Minute	SPEED = $\frac{231 \text{ X FLOW RATE (GPM)}}{\text{F.M. DISPLACEMENT (Cu. Inches/Revolution)}}$	$n = \frac{231Q}{d}$
FLUID MOTOR POWER In Horsepower Output	HORSEPOWER = $\frac{\text{TORQUE OUTPUT (Inch Pounds) X RPM}}{63025}$	$HP = \frac{Tn}{63025}$

THERMAL FORMULAS

RESERVOIR COOLING CAPACITY Based on Adequate Air Circulation	HEAT (BTU/HR) = 2 X TEMPERATURE DIFFERENCE BETWEEN RESERVOIR WALLS AND AIR (°F) X AREA OF RESERVOIR (Sq. Ft.)	BTU/HR = 2.0 X ΔT X A
HEAT IN HYDRAULIC OIL (approx.) Due to System Inefficiency (SG=.89-.92)	HEAT (BTU/HR) = FLOW RATE (GPM) X 210 X TEMPERATURE DIFFERENCE (°F)	BTU/HR = Q X 210 X ΔT
HEAT IN FRESH WATER (approx.)	HEAT (BTU/HR) = FLOW RATE (GPM) X 500 X TEMPERATURE DIFFERENCE (°F)	BTU/HR = Q X 500 X ΔT

NOTE: One British Thermal Unit (BTU) is the amount of heat required to raise the temperature of one pound of water one degree. One Horsepower = 2545 BTU/HR.

ACCUMULATOR FORMULAS

PRESSURE or VOLUME w/ Constant "T" (Temperature)	ORIGINAL PRESSURE X ORIGINAL VOLUME = FINAL PRESSURE X FINAL VOLUME	$P_1 V_1 = P_2 V_2$ Isothermic
PRESSURE or TEMPERATURE w/ Constant "V" (Volume)	ORIGINAL PRESSURE X FINAL TEMPERATURE = FINAL PRESSURE X ORIGINAL TEMPERATURE	$P_1 T_2 = P_2 T_1$ Isochoric
VOLUME or TEMPERATURE w/ Constant "P" (Pressure)	ORIGINAL VOLUME X FINAL TEMPERATURE = FINAL VOLUME X ORIGINAL TEMPERATURE	$V_1 T_2 = V_2 T_1$ Isobaric
PRESSURE or VOLUME	ORIGINAL PRESSURE X ORIGINAL VOLUME^n = FINAL PRESSURE X FINAL VOLUME^n	$P_1 V_1^n = P_2 V_2^n$
w/ Temperature Change Due to Heat of Compression	$\frac{\text{FINAL TEMP.}}{\text{ORIG. TEMP.}} = \left(\frac{\text{ORIG. VOLUME}}{\text{FINAL VOLUME}}\right)^{n-1} = \left(\frac{\text{FINAL PRESSURE}}{\text{ORIG. PRESSURE}}\right)^{n-1/n}$	$\frac{T_2}{T_1} = \left(\frac{V_1}{V_2}\right)^{n-1} = \left(\frac{P_2}{P_1}\right)^{n-1/n}$

NOTE: Where "P" = psia (ABSOLUTE) = psig (GAUGE PRESSURE) + 14.7 psi and n= 1.4 for air.

VOLUME & CAPACITY EQUIVALENTS

	Cubic Inches	Cubic Feet	Cubic Yards	Liters	U.S. Gallons	Imperial Gallons	Water at Max. Density 39.2°F 4°C	
							Pounds of Water	Kilograms of Water
Cu Inches	1	.0005787	.00002143	.016384	.004329	.0036065	.0361275	.0163872
Cu Feet	1728	1	.037037	28.317	7.48052	6.23210	62.4283	28.3170
Cu Yards	46,656	27	1	764.56	201.974	168.266	1685.56	764.559
Liters	61.0234	.0353145	.001308	1	.264170	.220083	2.20462	1
U.S. Gallons	231	.133681	.004951	3.78543	1	.833111	8.34545	3.78543
Imp. Gallons	277.274	.160459	.0059429	4.54374	1.20032	1	10.0172	4.54373
Lbs Water	27.6798	.0160184	.0005929	.453592	.119825	.0998281	1	.453593

To Convert	Into	Multiply By
Atmospheres	cm Mercury	76.009
Atmospheres	ft. Water (39°F)	33.899
Atmospheres	in. Mercury	29.925
Atmospheres	kgf / Sq. cm	1.0332
Atmospheres	kgf / Sq. Meter	10.332×10^{3}
Atmospheres	psi (lb. / Sq. in.)	14.696
Bar	Atmospheres	986.92×10^{-3}
Bar	Newtons / Sq. Meter	100.0×10^{3}
Bar	psi (lb. / Sq. in.)	14.504
Barrels (oil)	Gallons, U.S.	42.0
BTU	Calories	252.16
BTU	ft.-lb.	778.17
BTU	hp-hr.	393.01×10^{-6}
BTU	kgf Meters	107.59
BTU	kW-hr.	293.07×10^{-6}
BTU / min.	ft.-lb. / sec.	12.969
BTU / min.	Horsepower	23.581×10^{-3}
BTU / min.	Kilowatts	17.584×10^{-3}
BTU / min.	Watts	17.584
Centimeters	Inches	393.7×10^{-3}
Centimeters	Meters	10.0×10^{-3}
Centimeters	Millimeters	10.0
cm / sec.	ft. / min.	1.9685
cm / sec.	ft. / sec.	32.808×10^{-3}
cm / sec.	km / hr.	36.0×10^{-3}
cm / sec.	Meters / min.	600.0×10^{-3}
cm / sec.	Miles / min.	372.82×10^{-6}
cm / sec.	mph (mi. / hr.)	22.369×10^{-3}
cm / sec. / sec.	ft. / sec. / sec.	32.808×10^{-3}
cm Mercury	Atmospheres	13.156×10^{-3}
cm Mercury	ft. Water (39°F)	445.98×10^{-3}
cm Mercury	kgf / Sq. Meter	135.94
cm Mercury	lb. / Sq. ft.	27.842
cm Mercury	psi (lb. / Sq. in.)	193.35×10^{-3}
Cubic cm	Cubic Feet	35.315×10^{-6}
Cubic cm	Cubic Inches	61.024×10^{-3}
Cubic cm	Cubic Meters	1.0×10^{-6}
Cubic cm	Cubic Yards	1.308×10^{-6}
Cubic cm	Gallons, U.S.	264.17×10^{-6}
Cubic cm	Liters	1.0×10^{-3}
Cubic cm	Pints (liq)	2.1134×10^{-3}
Cubic cm	Quarts (liq)	1.0567×10^{-3}
Cubic Feet	Cubic cm	28.317×10^{3}
Cubic Feet	Cubic Inches	1.728×10^{3}
Cubic Feet	Cubic Meters	28.317×10^{-3}
Cubic Feet	Cubic Yards	37.037×10^{-3}
Cubic Feet	Gallons, U.S.	7.4805
Cubic Feet	Liters	28.317
Cubic Feet	Pints (liq)	59.844
Cubic Feet	Quarts (liq)	29.922

To Convert	Into	Multiply By
Cubic ft. / min	Cubic cm / sec.	471.95
Cubic ft. / min	gal. / min.	7.4805
Cubic ft. / min	gal. / sec.	124.68×10^{-3}
Cubic ft. / min	lb. Water / min.	62.428
Cubic ft. / min	Liters / sec.	471.95×10^{-3}
Cubic Inches	Cubic cm	16.387
Cubic Inches	Cubic Feet	578.7×10^{-6}
Cubic Inches	Cubic Meters	16.387×10^{-6}
Cubic Inches	Cubic Yards	21.433×10^{-6}
Cubic Inches	Gallons, U.S.	4.329×10^{-3}
Cubic Inches	Liters	16.387×10^{-3}
Cubic Inches	Pints (liq)	34.632×10^{-3}
Cubic Inches	Quarts (liq)	17.316×10^{-3}
Cubic Meters	Cubic cm	1.0×10^{6}
Cubic Meters	Cubic Feet	35.315
Cubic Meters	Cubic Inches	61.024×10^{3}
Cubic Meters	Cubic Yards	1.308
Cubic Meters	Gallons, U.S.	264.17
Cubic Meters	Liters	1.0×10^{3}
Cubic Meters	Pints (liq)	2.1134×10^{3}
Cubic Meters	Quarts (liq)	1.0567×10^{3}
Cubic Yards	Cubic cm	764.55×10^{3}
Cubic Yards	Cubic Feet	27.0
Cubic Yards	Cubic Inches	46.656×10^{3}
Cubic Yards	Cubic Meters	764.55×10^{-3}
Cubic Yards	Gallons, U.S.	201.97
Decimeters	Meters	100.0×10^{-3}
Degrees (angle)	Minutes (angle)	60.0
Degrees (angle)	Radians	17.453×10^{-3}
Degrees (angle)	Seconds (angle)	3.6×10^{3}
Degrees / sec.	Radians / sec.	17.453×10^{-3}
Degrees / sec.	rpm (Rev. / min.)	16.667×10^{-3}
Degrees / sec.	rpm (Rev. / min.)	2.7778×10^{-3}
Feet	Centimeters	30.48
Feet	Inches	12.0
Feet	Meters	304.8×10^{-3}
Feet	Yards	333.33×10^{-3}
ft. / min.	cm / sec.	508.0×10^{-3}
ft. / min.	ft. / sec.	16.667×10^{-3}
ft. / min.	km / hr.	18.288×10^{-3}
ft. / min.	Meters / min.	304.8×10^{-3}
ft. / min.	mph (mi. / hr.)	11.364×10^{-3}
ft. / sec. / sec.	cm. / sec. / sec.	30.48
ft. / sec. / sec.	Meters / sec. / sec.	304.8×10^{-3}
ft. Water (39°F)	Atmospheres	29.5×10^{-3}
ft. Water (39°F)	in. Mercury	882.77×10^{-3}
ft. Water (39°F)	kgf / Sq. cm	30.48×10^{-3}
ft. Water (39°F)	lb. / Sq. ft.	62.428
ft. Water (39°F)	psi (lb. / Sq. in.)	433.53×10^{-3}
ft.-lb.	BTU	1.2851×10^{-3}

To Convert	Into	Multiply By
ft.-lb.	Calories	324.05×10^{-3}
ft.-lb.	hp-hr.	505.05×10^{-9}
ft.-lb.	kgf-Meters	138.25×10^{-3}
ft.-lb.	kW-hr.	376.62×10^{-9}
ft.-lb.	Newton-meters	1.3558
ft.-lb. / min.	BTU / min.	1.2851×10^{-3}
ft.-lb. / min.	Calories / min.	324.05×10^{-3}
ft.-lb. / min.	ft.-lb. / sec.	16.667×10^{-3}
ft.-lb. / min.	Horsepower	30.303×10^{-6}
ft.-lb. / min.	Kilowatts	22.597×10^{-6}
ft.-lb. / sec.	BTU / min.	77.104×10^{-3}
ft.-lb. / sec.	Calories / min.	19.443
ft.-lb. / sec.	Horsepower	1.8182×10^{-3}
ft.-lb. / sec.	Kilowatts	1.3558×10^{-3}
gal. / min.	Cubic ft. / hr.	8.0208
gal. / min.	Cubic ft. / sec.	2.228×10^{-3}
gal. / min.	Liters / sec.	63.09×10^{-3}
gal. Water (39°F)	lb. Water (39°F)	8.3454
Gallons, Imp.	Gallons, U.S.	1.201
Gallons, U.S.	Cubic cm	3.7854×10^{3}
Gallons, U.S.	Cubic Feet	133.68×10^{-3}
Gallons, U.S.	Cubic Inches	231.0
Gallons, U.S.	Cubic Meters	3.7854×10^{-3}
Gallons, U.S.	Gallons, Imp.	832.67×10^{-3}
Gallons, U.S.	Liters	3.7854
Gallons, U.S.	Pints (liq)	8.0
Gallons, U.S.	Quarts (liq)	4.0
Horsepower	BTU / min.	42.407
Horsepower	Calories / min.	10.694×10^{3}
Horsepower	ft.-lb. / min.	33.0×10^{3}
Horsepower	ft.-lb. / sec.	550.0
Horsepower	Kilowatts	745.7×10^{-3}
Horsepower	Metric Horsepower	1.0139
Horsepower	Watts	745.7
hp.-hr.	BTU	2.5444×10^{3}
hp.-hr.	Calories	641.62×10^{3}
hp.-hr.	ft.-lb.	1.98×10^{6}
hp.-hr.	kgf-Meters	273.74×10^{3}
hp.-hr.	kW-hr.	745.7×10^{-3}
in. Mercury	Atmospheres	33.417×10^{-3}
in. Mercury	ft. Water (39°F)	1.1328
in. Mercury	kgf / Sq. cm	34.528×10^{-3}
in. Mercury	lb. / Sq. ft.	70.718
in. Mercury	psi (lb. / Sq. in.)	491.1×10^{-3}
in. Water (39°F)	Atmospheres	2.4583×10^{-3}
in. Water (39°F)	in. Mercury	73.564×10^{-3}
in. Water (39°F)	kgf / Sq. cm	2.54×10^{-3}
in. Water (39°F)	lb. / Sq. ft.	5.2023
in. Water (39°F)	psi (lb. / Sq. in.)	36.127×10^{-3}
in.-lb.	Newton-meters	112.98×10^{-3}

To Convert	Into	Multiply By
Inches	Centimeters	2.54
Inches	Millimeters	25.4
kg force / sq cm	Atmospheres	967.84×10^{-3}
kg force / sq cm	ft. Water (39°F)	32.808
kg force / sq cm	in. Mercury	28.962
kg force / sq cm	lb. / Sq. ft.	2.0482×10^{3}
kg force / sq cm	psi (lb. / Sq. in.)	14.223
Kilograms	Dyne	980.66×10^{3}
Kilograms	Grams	1.0×10^{3}
Kilograms	Pounds	2.2046
Kilograms	Tons, Short	1.1023×10^{-3}
Kilometers	Centimeters	100.0×10^{3}
Kilometers	Feet	32.808×10^{6}
Kilometers	Meters	1.0×10^{3}
Kilometers	Miles	621.37×10^{-3}
Kilowatts	BTU / min.	56.869
Kilowatts	Calories / min.	14.34×10^{3}
Kilowatts	ft.-lb. / min.	44.254×10^{3}
Kilowatts	ft.-lb. / sec.	737.56
Kilowatts	Horsepower	1.341
Kilowatts	Watts	1.0×10^{3}
km / hr.	cm / sec.	27.778
km / hr.	ft. / min.	54.681
km / hr.	ft. / sec.	911.34×10^{-3}
km / hr.	Meters / min.	16.667
km / hr.	mph (mi. / hr.)	621.37×10^{-3}
km / hr. / sec.	cm. / sec. / sec.	27.778
km / hr. / sec.	ft. / sec. / sec.	911.34×10^{-3}
km / hr. / sec.	Meters / sec. / sec.	277.78×10^{-3}
kW-hr.	BTU	3.4121×10^{3}
kW-hr.	Calories	860.42×10^{3}
kW-hr.	ft.-lb.	2.6552×10^{6}
kW-hr.	hp-hr.	1.341
kW-hr.	kgf-Meters	367.1×10^{3}
lb. / Cubic ft.	lb. / Cubic in.	578.7×10^{-6}
lb. / Cubic in.	lb. / Cubic ft.	1.728×10^{3}
lb. Water (39°F)	Cubic Feet	16.018×10^{-3}
lb. Water (39°F)	Cubic Inches	27.68
lb. Water (39°F)	Gallons, U.S.	119.83×10^{-3}
lb. Water / min.	Cubic ft. / sec.	266.97×10^{-6}
Liters	Cubic cm	1.0×10^{3}
Liters	Cubic Feet	35.315×10^{-3}
Liters	Cubic Inches	61.024
Liters	Cubic Meters	1.0×10^{-3}
Liters	Gallons, U.S.	264.17×10^{-3}
Liters	Quarts (liq)	1.0567
Liters / min.	gal. / sec.	4.4029×10^{-3}
Meters	Centimeters	100.0
Meters	Feet	3.2808
Meters	Inches	39.37

To Convert	Into	Multiply By
Meters	Kilometers	1.0×10^{-3}
Meters	Millimeters	1.0×10^{3}
Meters / min.	cm / sec.	1.6667
Meters / min.	ft. / min.	3.2808
Meters / min.	ft. / sec.	54.681×10^{-3}
Meters / min.	km / hr.	60.0×10^{-3}
Meters / min.	mph (mi. / hr.)	37.282×10^{-3}
Meters / sec.	ft. / min.	196.85
Meters / sec.	ft. / sec.	3.2808
Meters / sec.	km / hr.	3.6
Meters / sec.	km / min.	60.0×10^{-3}
Meters / sec.	Miles / min.	37.282×10^{-3}
Meters / sec.	mph (mi. / hr.)	2.2369
Microns	Inches	39.37×10^{-6}
Microns	Meters	1.0×10^{-6}
Millimeters	Centimeters	100.0×10^{-3}
Millimeters	Inches	39.37×10^{-3}
Minutes (Angle)	Radians	290.89×10^{-6}
mph (mi. / hr.)	cm / sec.	44.704
mph (mi. / hr.)	ft. / min.	88.0
mph (mi. / hr.)	ft. / sec.	1.4667
mph (mi. / hr.)	km / hr.	1.6093
mph (mi. / hr.)	Meters / min.	26.822
Newtons	Kilograms force	101.97×10^{-3}
Ounces	Grams	28.35
Ounces	Pounds	62.5×10^{-3}
Ounces, Fluid	Cubic Inches	1.8047
Ounces, Fluid	Liters	29.574×10^{-3}
Pounds	Grams	453.59
Pounds	Kilograms	453.59×10^{-3}
Pounds	Newtons	4.4482
Pounds	Ounces	16.0
Pounds	Tons, Short	500.0×10^{-6}
psi (lb. / Sq. in.)	Atmospheres	68.046×10^{-3}
psi (lb. / Sq. in.)	ft. Water (39°F)	2.3067
psi (lb. / Sq. in.)	in. Mercury	2.0363
psi (lb. / Sq. in.)	kgf / Sq. cm	70.307×10^{-3}
Radians	Degrees (angle)	57.296
Tons, Long	Kilograms	1.016×10^{3}
Tons, Long	Pounds	2.24×10^{3}
Tons, Long	Tons, Short	1.12
Tons, Metric	Pounds	2.2046×10^{3}
Tons, Short	Kilograms	907.18
Tons, Short	Tons, Long	892.86×10^{-3}
Tons, Short	Tons, Metric	907.18×10^{-3}
Watt-hr.	BTU	3.4121
Watt-hr.	Calories	860.42
Watt-hr.	ft.-lb.	2.6552×10^{3}
Watt-hr.	hp-hr.	1.341×10^{-3}
Watt-hr.	kgf-Meters	367.1

To Convert	Into	Multiply By
Watt-hr.	kW-hr.	1.0×10^{-3}
Watts	BTU / min.	56.869×10^{-3}
Watts	Calories / min.	14.34
Watts	ft.-lb. / min.	44.254
Watts	ft.-lb. / sec.	737.56×10^{-3}
Watts	Horsepower	1.341×10^{-3}
Watts	Kilowatts	1.0×10^{-3}

Approximate Weights of Materials

Material	lbs. / cu. yd.	tons / cu. yd.
Andesite stone	4,887	2.44
Ashes	1,080	0.52
Asphalt	2,700	1.35
Asphaltum	2,349	1.17
Basalt rock	4,887	2.44
Brick, soft clay	2,718	1.35
Brick, hard clay	3,397	1.69
Brick, pressed	3,806	1.90
Brick, paving	4,246	2.12
Block, paving	3,694	1.84
Bluestone	2,970	1.48
Cement, natural	1,512	0.75
Cement, Portland	2,430	1.21
Cement, Portland, set	4,941	2.47
Cement, Rosendale	1,863	0.93
Cinders	1,080	0.54
Clay, dry	1,701	0.85
Clay, wet	2,970	1.48
Clay & gravel, dry	2,700	1.35
Coal, anthracite	1,536	0.76
Coal, bituminous	1,275	0.64
Coke	837	0.42
Concrete, cinders	2,970	1.48
Concrete, gravel	4,104	2.05
Concrete, limestone	4,050	2.02
Concrete, sandstone	3,915	1.95
Concrete, trap rock	4,185	2.09
Crushed stone	2,700	1.35
Earth, dry, loose	1,890	0.94
Earth, damp, loose	2,106	1.05
Earth, damp, packed	2,592	1.29
Earth & gravel, dry	2,700	1.35
Earth & gravel, wet	3,240	1.62
Earth & sand, dry	2,709	1.35

Material	lbs. / cu. yd.	tons / cu. yd.
Earth & sand, wet	3,240	1.62
Fire Brick	3,915	1.95
Fire Clay	3,510	1.75
Garbage	1,150	0.57
Gravel, dry	2,970	1.48
Gravel, out of water	1,620	0.81
Granite	4,536	2.26
Lime, quick, loose	1,431	0.71
Lime, quick, shaken	1,485	0.70
Limestone, solid	4,400	2.20
Limestone, loose	2,592	1.29
Marble, solid	4,455	2.22
Marble, loose	2,592	1.29
Mortar, set	2,781	1.39
Mud, dry	2,430	1.21
Mud, packed	3,105	1.55
Mud, wet	2,916	1.45
Pitch	1,863	0.93
Plaster of Paris	2,646	1.32
Powder, blasting	1,682	0.84
Quartz	4,374	2.18
Rubbish	199.8	0.09
Sand, dry, loose	2,619	1.30
Sand, wet	3,186	1.59
Sandstone	4,023	2.01
Slag, blank	1,890	0.94
Slag, screenings	2,700	1.35
Slag, machine	2,592	1.29
Slag, sand	1,485	0.74
Shale	4,374	2.18
Slate	4,725	2.31
Tar	1,674	0.83
Tile	2,970	1.43
Trap stone	5,849	2.52

Steel & Aluminum Gauge, Thickness and Weight

Gauge	Thickness (inches)	Weight (lbs./ft^2)
Steel		
3/8”	0.375	15.320
1/4” (approx. 3 Ga.)	0.250	10.200
3/16” (approx. 7 Ga.)	0.188	7.650
8 Ga.	0.164	6.875
9 Ga.	0.149	6.250
10 Ga.	0.134	5.625
11 Ga.	0.120	5.000
12 Ga.	0.105	4.375
13 Ga.	0.090	3.750
14 Ga.	0.075	3.125
Aluminum		
3/8”	0.375	5.18
1/4”	0.250	3.53
3/16”	0.188	2.65
5/32”	0.156	2.25