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## INCH SEALS





















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# SEAL PROFILE INDEX

## INCH SEALS









Type	Prefix	Seal Cross Section	Seal Name	Material	Page #
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## INCH SEALS

Type	Prefix	Seal Cross Section	Seal Name	Material	Page #
PISTON SEALS W/ENERGIZER	PSU		Style PSU Piston Seals	Urethane	<b>94</b>
	SPR		Style SPR Cast Iron Piston Rings	Cast Iron	<b>95 - 98</b>
BEARINGS & WEAR RINGS	606 - 625		Style 606 - 625 Nylon Wear Rings	Nylon	<b>100 - 118</b>
	617		Style 617 Phenolic Wear Rings	Phenolic	<b>114</b>
	614		Style 614 Nylon Rod Bearings	Nylon	<b>115 - 116</b>
	615		Style 615 Phenolic Rod Bearings	Phenolic	<b>117</b>
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WIPER RINGS	ST		Style ST Wiper Rings	Urethane / Fluorocarbon	<b>119 - 120</b>
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	BT		Style BT Wiper Rings	Polyester	<b>124</b>
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# SEAL PROFILE INDEX

## INCH SEALS





















Type	Prefix	Seal Cross Section	Seal Name	Material	Page #
O-RINGS	568		Style 568 O-Rings	Nitrile, Fluorocarbon, Silicone, Ethylene, Propylene, PTFE, Urethane	137 - 140
	580		Style 580 O-Rings	Nitrile	137 - 140
	QR		Quad-Rings®	Nitrile	137 - 140
RETAINER RINGS	VH, WH, WHM, WHT		Spiral Internal Retainer Rings	Steel	141 - 142
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Type	Prefix	Seal Cross Section	Seal Name	Material	Page #
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	MRTU		Style MRTU Rod-Seals	Urethane	149 - 150
	MUSN		Style MUSN Symmetrical U-Seals	Nitrile	151 - 152
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	MUUL		Style MUUL Loaded Symmetrical U-Seals	Urethane Rubber Expander	155 - 157
	MRTUB		Rod U-Seals w/ Back-up Rings	Urethane U-Seal Rubber Expander Polyacetal Back-up	158
ROD BUFFER SEALS	MKR		Style MKR Buffer Seals	Bronze Filled PTFE Nitrile Energizer	159 - 160
	MYR		Style MYR Buffer Seals	Urethane Buffer Nylon Back-up	161
	MYBR		Style MYBR Buffer Seals	Filled PTFE Buffer Nitrile Energizer	162
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## METRIC SEALS

Type	Prefix	Seal Cross Section	Seal Name	Material	Page #
U-TYPE PISTON SEALS	MPU		Style MPU Type Piston Seals	Urethane	<b>164 - 165</b>
	MGF		Style MGF Flexible Guide Bearings	Fabric Reinforced PTFE	<b>166</b>
WEAR RINGS	MGB		Style MGB Flexible Guide Bearings	Bronze Filled PTFE	<b>167</b>
	MDU		Style DU Rod Bushings	Bronze Lining PTFE/Lead Overlay Steel Backing	<b>168 - 169</b>
ROD BUSH- ING	MDS		Style MDS Link Pin Dust Seals	Urethane Lip Steel Case	<b>170</b>
DUST SEAL	MPS		Style MPS Two Piece Piston Seals	Carbon Graphite / PTFE Nitrile Energizer	<b>171 - 172</b>
	MPSU		Style MPSU Two Piece Piston Seals	Urethane Nitrile Energizer	<b>173</b>
	MCPS		Style MCPS Four Piece Piston Seals	PTFE Piston Seal Nitrile Energizer Nylon Back-up Rings	<b>174</b>
	MPSA		Style MPSA Five Piece Piston Seals	Nitrile Piston Seal Polyacetal Back-up Rings Polyacetal Bearings	<b>175 - 176</b>
	MPSB		Style MPSB Five Piece Piston Seals	Nitrile / Fabric Polyacetal Bearings	<b>177</b>
PISTON SEALS	MCW		Style MCW Metal Clad Wipers	Urethane / Metal	<b>178</b>
	MCWA		Style MCWA Metal Clad Wipers	Urethane / Metal	<b>179</b>
	MCWI		Style MCWI Metal Clad Wipers	Urethane / Metal	<b>180</b>
	MCKBI		Style MCKBI Metal Clad Wipers	Urethane / Metal	<b>181</b>
	MCKB		Style MCKB Metal Clad Wipers	Nitrile / Metal	<b>182</b>
	MCWE		Style MCWE Metal Clad Wipers	Urethane / Metal	<b>183</b>
	MDK		Style MDK Snap-In Wipers	Nitrile	<b>184</b>
	MSW		Style MSW Snap-In Wipers	Urethane	<b>185</b>
	MSWE		Style MSWE Snap-In Wipers	Urethane	<b>186</b>
	MSWH		Style MSWH Snap-In Wipers	Urethane	<b>187</b>
WIPERS					

# SEAL PROFILE INDEX

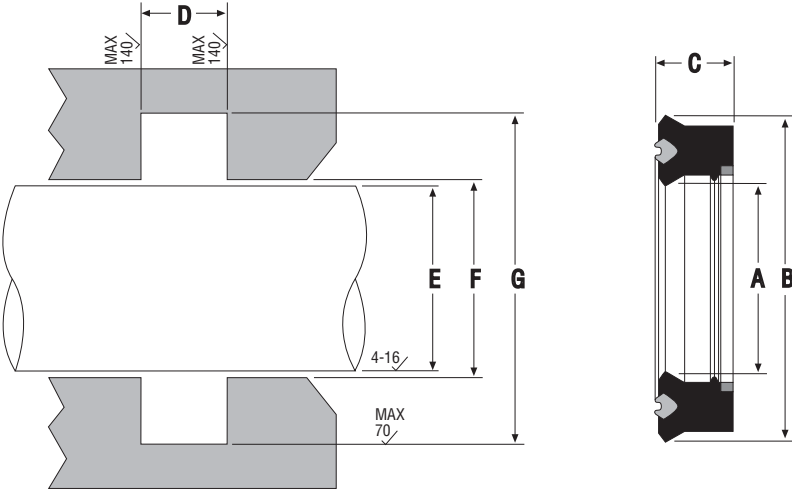
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## METRIC SEALS

Type	Prefix	Seal Cross Section	Seal Name	Material	Page #
WIPERS	MSWP		Style MSWP Snap-In Wipers	Urethane	<b>188</b>
RETAINER RINGS	M300		Internal Retainer Rings (Tru-Arc Type)	Steel	<b>189</b>
	M310		External Retainer Rings (Tru-Arc Type)	Steel	<b>190</b>

# SUPER DUTY ROD U-SEALS

Featuring high pressure and high shock load capability, this seal utilizes the same twin lip design found in Hercules' 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 to provide sealing in pressures up to 10,000 PSI.



### HERCULES PART NUMBERS

**RTUB 18 - 1.50 - 25**

Type of Seal
Cross Section
Inside Diameter
Height

<b>SEAL INFORMATION</b>	
MATERIAL	92A URETHANE SEAL 70A RUBBER ENERGIZER POLYACETAL ANTI-EXTRUSION RING
TEMPERATURE RANGE	-50° TO +230° F
PRESSURE RANGE	0 TO 10,000 PSI
MAXIMUM VELOCITY	180 FPM

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
RTUB18-1.50-25	1.5	1.875	0.25	0.275 +0.010/-0	1.500 -0.0010/-0.0034	1.501 +0.003/-0	1.875 +0.003/-0.003
RTUB18-1.50-31	1.5	1.875	0.313	0.344 +0.010/-0	1.500 -0.0010/-0.0034	1.501 +0.003/-0	1.875 +0.003/-0.003
RTUB25-1.50-37	1.5	2	0.375	0.413 +0.010/-0	1.500 -0.0010/-0.0034	1.501 +0.003/-0	2.000 +0.004/-0.004
RTUB18-1.75-25	1.75	2.125	0.25	0.275 +0.010/-0	1.750 -0.0010/-0.0034	1.751 +0.003/-0	2.125 +0.004/-0.004
RTUB18-1.75-37	1.75	2.125	0.375	0.413 +0.010/-0	1.750 -0.0010/-0.0034	1.751 +0.003/-0	2.125 +0.004/-0.004
RTUB25-1.75-37	1.75	2.25	0.375	0.413 +0.010/-0	1.750 -0.0010/-0.0034	1.751 +0.003/-0	2.250 +0.004/-0.004
RTUB18-2.00-37	2	2.375	0.375	0.413 +0.010/-0	2.000 -0.0012/-0.0041	2.001 +0.004/-0	2.375 +0.004/-0.004
RTUB25-2.00-37	2	2.5	0.375	0.413 +0.010/-0	2.000 -0.0012/-0.0041	2.001 +0.004/-0	2.500 +0.004/-0.004
RTUB25-2.25-37	2.25	2.75	0.375	0.413 +0.010/-0	2.250 -0.0012/-0.0041	2.251 +0.004/-0	2.750 +0.004/-0.004
RTUB25-2.37-37	2.375	2.875	0.375	0.413 +0.010/-0	2.375 -0.0012/-0.0041	2.376 +0.004/-0	2.875 +0.004/-0.004
RTUB25-2.50-37	2.5	3	0.375	0.413 +0.010/-0	2.500 -0.0012/-0.0041	2.501 +0.004/-0	3.000 +0.004/-0.004
RTUB25-2.75-37	2.75	3.25	0.375	0.413 +0.010/-0	2.750 -0.0012/-0.0041	2.751 +0.004/-0	3.250 +0.004/-0.004
RTUB25-3.00-37	3	3.5	0.375	0.413 +0.010/-0	3.000 -0.0012/-0.0041	3.001 +0.004/-0	3.500 +0.004/-0.004
RTUB31-3.00-50	3	3.625	0.5	0.550 +0.010/-0	3.000 -0.0012/-0.0041	3.001 +0.004/-0	3.625 +0.004/-0.004
RTUB37-3.00-62	3	3.75	0.625	0.688 +0.010/-0	3.000 -0.0012/-0.0041	3.001 +0.004/-0	3.750 +0.004/-0.004
RTUB25-3.25-37	3.25	3.75	0.375	0.413 +0.010/-0	3.250 -0.0014/-0.0048	3.251 +0.004/-0	3.750 +0.004/-0.004
RTUB25-3.50-37	3.5	4	0.375	0.413 +0.010/-0	3.500 -0.0014/-0.0048	3.501 +0.004/-0	4.000 +0.004/-0.004
RTUB31-3.50-50	3.5	4.125	0.5	0.550 +0.010/-0	3.500 -0.0014/-0.0048	3.501 +0.004/-0	4.125 +0.004/-0.004
RTUB25-4.00-37	4	4.5	0.375	0.413 +0.010/-0	4.000 -0.0014/-0.0048	4.001 +0.004/-0	4.500 +0.004/-0.004
RTUB25-4.00-56	4	4.5	0.563	0.618 +0.010/-0	4.000 -0.0014/-0.0048	4.001 +0.004/-0	4.500 +0.004/-0.004

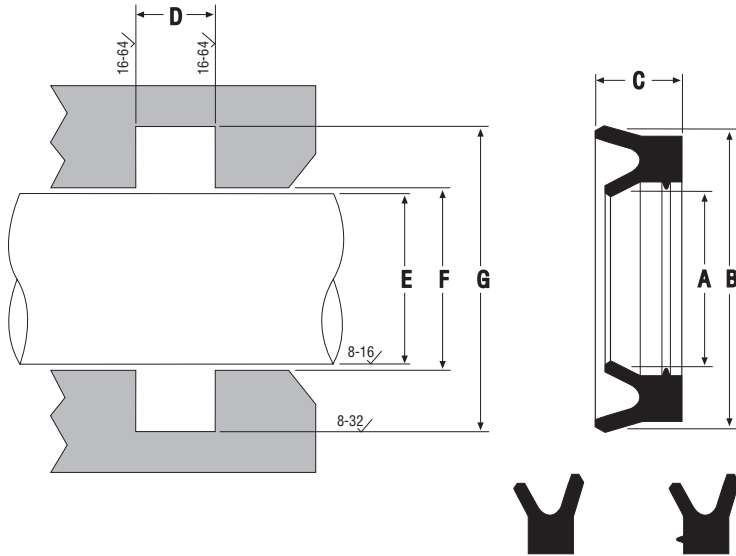


## SUPER DUTY ROD U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
RTUB31-4.00-56	4	4.625	0.563	0.618 +0.010/-0	4.000 -0.0014/-0.0048	4.001 +0.015/-0	4.625 +0.004/-0.004
RTUB37-4.00-62	4	4.75	0.625	0.688 +0.010/-0	4.000 -0.0014/-0.0048	4.001 +0.015/-0	4.750 +0.005/-0.005
RTUB25-4.50-37	4.5	5	0.375	0.413 +0.010/-0	4.500 -0.0014/-0.0048	4.501 +0.015/-0	5.000 +0.005/-0.005
RTUB25-4.50-56	4.5	5	0.563	0.618 +0.010/-0	4.500 -0.0014/-0.0048	4.501 +0.015/-0	5.000 +0.005/-0.005
RTUB31-4.50-62	4.5	5.125	0.625	0.688 +0.010/-0	4.500 -0.0014/-0.0048	4.501 +0.015/-0	5.125 +0.005/-0.005
RTUB37-4.50-62	4.5	5.25	0.625	0.688 +0.010/-0	4.500 -0.0014/-0.0048	4.501 +0.015/-0	5.250 +0.005/-0.005
RTUB25-5.00-56	5	5.5	0.563	0.618 +0.010/-0	5.000 -0.0017/-0.0056	5.001 +0.015/-0	5.500 +0.005/-0.005
RTUB31-5.00-62	5	5.625	0.625	0.688 +0.010/-0	5.000 -0.0017/-0.0056	5.001 +0.015/-0	5.625 +0.005/-0.005
RTUB37-5.00-62	5	5.75	0.625	0.688 +0.010/-0	5.000 -0.0017/-0.0056	5.001 +0.015/-0	5.750 +0.005/-0.005
RTUB25-5.50-56	5.5	6	0.563	0.618 +0.010/-0	5.500 -0.0017/-0.0056	5.501 +0.015/-0	6.000 +0.005/-0.005
RTUB25-6.00-56	6	6.5	0.563	0.618 +0.010/-0	6.000 -0.0017/-0.0056	6.001 +0.015/-0	6.500 +0.005/-0.005
RTUB37-6.00-62	6	6.75	0.625	0.688 +0.010/-0	6.000 -0.0017/-0.0056	6.001 +0.015/-0	6.750 +0.005/-0.005

# HEAVY DUTY ROD U-SEALS

These seals are specifically designed and engineered to attain maximum life and reliability in dynamic rod sealing. In addition, some of these rod seals employ a second sealing lip on the inside diameter. Advantages of this lip are reduced leakage, less friction, and increased stability with second lip. Air and other contaminants are prevented from entering the cylinder as well.



**HERCULES PART NUMBERS**

**DRU 12 - 0.62 - 18**

Type of Seal
Cross Section
Inside Diameter
Height

<b>SEAL INFORMATION</b>	
MATERIAL	92A URETHANE
TEMPERATURE RANGE	-40° TO +230° F
PRESSURE RANGE	0 TO 6,000 PSI
MAXIMUM VELOCITY	100 FPM

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
DRU12-0.62-18	0.625	0.875	0.188	0.218 +0.015/-0	0.625 +0/-0.003	0.626 +0.003/-0	0.875 +0.005/-0
DRU18-0.75-25	0.750	1.125	0.250	0.281 +0.015/-0	0.750 +0/-0.003	0.751 +0.003/-0	1.125 +0.005/-0
DRU18-0.75-31	0.750	1.125	0.313	0.343 +0.015/-0	0.750 +0/-0.003	0.751 +0.003/-0	1.125 +0.005/-0
DRU12-0.75-12	0.750	1.000	0.125	0.156 +0.015/-0	0.750 +0/-0.003	0.751 +0.003/-0	1.000 +0.005/-0
DRU12-0.87-12	0.875	1.125	0.125	0.156 +0.015/-0	0.875 +0/-0.003	0.876 +0.003/-0	1.125 +0.005/-0
DRU18-0.87-18	0.875	1.250	0.188	0.218 +0.015/-0	0.875 +0/-0.003	0.876 +0.003/-0	1.250 +0.005/-0
DRU18-0.87-25	0.875	1.250	0.250	0.218 +0.015/-0	0.875 +0/-0.003	0.876 +0.003/-0	1.250 +0.005/-0
DRU12-1.00-12	1.000	1.250	0.125	0.156 +0.015/-0	1.000 +0/-0.003	1.001 +0.003/-0	1.250 +0.005/-0
DRU12-1.00-25	1.000	1.250	0.250	0.281 +0.015/-0	1.000 +0/-0.003	1.001 +0.003/-0	1.250 +0.005/-0
DRU18-1.00-31	1.000	1.375	0.312	0.343 +0.015/-0	1.000 +0/-0.003	1.001 +0.003/-0	1.375 +0.005/-0
DRU25-1.00-25	1.000	1.500	0.250	0.281 +0.015/-0	1.000 +0/-0.003	1.001 +0.003/-0	1.500 +0.007/-0
DRU25-1.00-37	1.000	1.500	0.375	0.406 +0.015/-0	1.000 +0/-0.003	1.001 +0.003/-0	1.500 +0.007/-0
DRU18-1.12-25	1.125	1.500	0.250	0.281 +0.015/-0	1.125 +0/-0.003	1.126 +0.003/-0	1.500 +0.007/-0
DRU18-1.12-31	1.125	1.500	0.312	0.343 +0.015/-0	1.125 +0/-0.003	1.126 +0.003/-0	1.500 +0.007/-0
DRU18-1.12-37	1.125	1.500	0.375	0.406 +0.015/-0	1.125 +0/-0.003	1.126 +0.003/-0	1.500 +0.007/-0
DRU25-1.12-25	1.125	1.625	0.250	0.281 +0.015/-0	1.125 +0/-0.003	1.126 +0.003/-0	1.625 +0.007/-0
DRU18-1.25-31	1.250	1.625	0.312	0.343 +0.015/-0	1.250 +0/-0.003	1.251 +0.003/-0	1.625 +0.007/-0
DRU18-1.25-37	1.250	1.625	0.375	0.406 +0.015/-0	1.250 +0/-0.003	1.251 +0.003/-0	1.625 +0.007/-0
DRU25-1.25-25	1.250	1.750	0.250	0.281 +0.015/-0	1.250 +0/-0.003	1.251 +0.003/-0	1.750 +0.007/-0
DRU25-1.25-31	1.250	1.750	0.312	0.343 +0.015/-0	1.250 +0/-0.003	1.251 +0.003/-0	1.750 +0.007/-0
DRU25-1.25-37	1.250	1.750	0.375	0.406 +0.015/-0	1.250 +0/-0.003	1.251 +0.003/-0	1.750 +0.007/-0
DRU18-1.37-31	1.375	1.750	0.312	0.343 +0.015/-0	1.375 +0/-0.003	1.376 +0.003/-0	1.750 +0.007/-0
DRU25-1.37-37	1.375	1.875	0.375	0.406 +0.015/-0	1.375 +0/-0.003	1.376 +0.003/-0	1.875 +0.007/-0
DRU31-1.37-37	1.375	2.000	0.375	0.406 +0.015/-0	1.375 +0/-0.003	1.376 +0.003/-0	2.000 +0.008/-0
DRU18-1.50-25	1.500	1.875	0.250	0.281 +0.015/-0	1.500 +0/-0.003	1.501 +0.003/-0	1.875 +0.007/-0
DRU18-1.50-31	1.500	1.875	0.312	0.343 +0.015/-0	1.500 +0/-0.003	1.501 +0.003/-0	1.875 +0.007/-0
DRU18-1.50-37	1.500	1.875	0.375	0.406 +0.015/-0	1.500 +0/-0.003	1.501 +0.003/-0	1.875 +0.007/-0
DRU25-1.50-31	1.500	2.000	0.312	0.343 +0.015/-0	1.500 +0/-0.003	1.501 +0.003/-0	2.000 +0.008/-0
DRU25-1.50-37	1.500	2.000	0.375	0.406 +0.015/-0	1.500 +0/-0.003	1.501 +0.003/-0	2.000 +0.008/-0
DRU18-1.62-37	1.625	2.000	0.375	0.406 +0.015/-0	1.625 +0/-0.003	1.626 +0.003/-0	2.000 +0.008/-0
DRU25-1.62-31	1.625	2.125	0.312	0.343 +0.015/-0	1.625 +0/-0.003	1.626 +0.003/-0	2.125 +0.008/-0

## HEAVY DUTY ROD U-SEALS

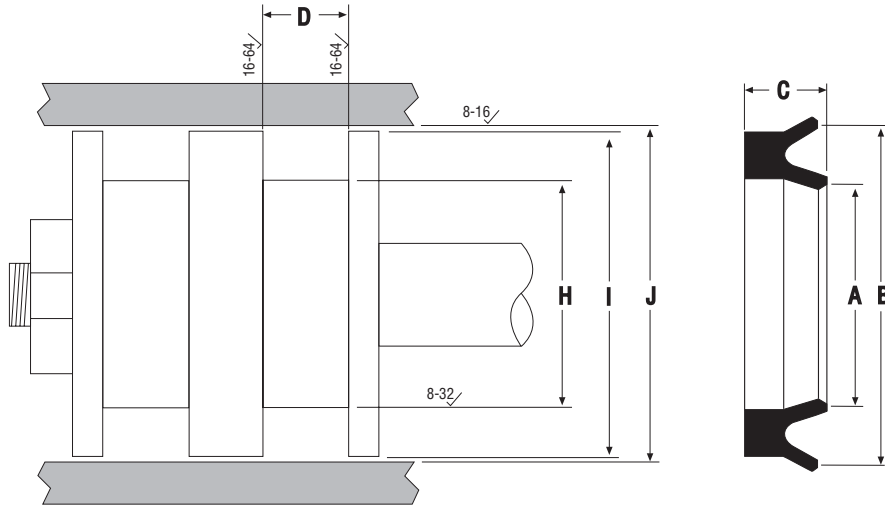
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
DRU18-1.75-25	1.750	2.125	0.250	0.281 +0.015/-0	1.750 +0/-0.003	1.751 +0.003/-0	2.125 +0.008/-0
DRU18-1.75-31	1.750	2.125	0.312	0.343 +0.015/-0	1.750 +0/-0.003	1.751 +0.003/-0	2.125 +0.008/-0
DRU18-1.75-37	1.750	2.125	0.375	0.406 +0.015/-0	1.750 +0/-0.003	1.751 +0.003/-0	2.125 +0.008/-0
DRU25-1.75-31	1.750	2.250	0.312	0.343 +0.015/-0	1.750 +0/-0.003	1.751 +0.003/-0	2.250 +0.008/-0
DRU25-1.75-37	1.750	2.250	0.375	0.406 +0.015/-0	1.750 +0/-0.003	1.751 +0.003/-0	2.250 +0.008/-0
DRU31-1.75-37	1.750	2.375	0.375	0.406 +0.015/-0	1.750 +0/-0.003	1.751 +0.003/-0	2.375 +0.008/-0
DRU31-1.75-50	1.750	2.375	0.500	0.531 +0.015/-0	1.750 +0/-0.003	1.751 +0.003/-0	2.375 +0.008/-0
DRU18-1.87-31	1.875	2.250	0.312	0.343 +0.015/-0	1.875 +0/-0.003	1.876 +0.003/-0	2.250 +0.008/-0
DRU18-1.87-37	1.875	2.250	0.375	0.406 +0.015/-0	1.875 +0/-0.003	1.876 +0.003/-0	2.250 +0.008/-0
DRU25-1.87-37	1.875	2.375	0.375	0.406 +0.015/-0	1.875 +0/-0.003	1.876 +0.003/-0	2.375 +0.008/-0
DRU18-2.00-25	2.000	2.375	0.250	0.281 +0.015/-0	2.000 +0/-0.003	2.001 +0.004/-0	2.375 +0.008/-0
DRU18-2.00-31	2.000	2.375	0.312	0.343 +0.015/-0	2.000 +0/-0.003	2.001 +0.004/-0	2.375 +0.008/-0
DRU18-2.00-37	2.000	2.375	0.375	0.406 +0.015/-0	2.000 +0/-0.003	2.001 +0.004/-0	2.375 +0.008/-0
DRU25-2.00-25	2.000	2.500	0.250	0.281 +0.015/-0	2.000 +0/-0.003	2.001 +0.004/-0	2.500 +0.008/-0
DRU25-2.00-31	2.000	2.500	0.312	0.343 +0.015/-0	2.000 +0/-0.003	2.001 +0.004/-0	2.500 +0.008/-0
DRU25-2.00-37	2.000	2.500	0.375	0.406 +0.015/-0	2.000 +0/-0.003	2.001 +0.004/-0	2.500 +0.008/-0
DRU31-2.00-37	2.000	2.625	0.375	0.406 +0.015/-0	2.000 +0/-0.003	2.001 +0.004/-0	2.625 +0.008/-0
DRU31-2.00-50	2.000	2.625	0.500	0.531 +0.015/-0	2.000 +0/-0.003	2.001 +0.004/-0	2.625 +0.008/-0
DRU37-2.00-37	2.000	2.750	0.375	0.406 +0.015/-0	2.000 +0/-0.003	2.001 +0.004/-0	2.750 +0.008/-0
DRU37-2.00-50	2.000	2.750	0.500	0.531 +0.015/-0	2.000 +0/-0.003	2.001 +0.004/-0	2.750 +0.008/-0
DRU25-2.12-37	2.125	2.625	0.375	0.406 +0.015/-0	2.125 +0/-0.003	2.126 +0.004/-0	2.625 +0.008/-0
DRU31-2.12-50	2.125	2.375	0.500	0.531 +0.015/-0	2.125 +0/-0.003	2.126 +0.004/-0	2.375 +0.008/-0
DRU18-2.25-31	2.250	2.625	0.312	0.343 +0.015/-0	2.250 +0/-0.003	2.251 +0.004/-0	2.625 +0.008/-0
DRU18-2.25-37	2.250	2.625	0.375	0.406 +0.015/-0	2.250 +0/-0.003	2.251 +0.004/-0	2.625 +0.008/-0
DRU25-2.25-37	2.250	2.750	0.375	0.406 +0.015/-0	2.250 +0/-0.003	2.251 +0.004/-0	2.750 +0.008/-0
DRU31-2.25-37	2.250	2.875	0.375	0.406 +0.015/-0	2.250 +0/-0.003	2.251 +0.004/-0	2.875 +0.008/-0
DRU31-2.25-50	2.250	2.875	0.500	0.531 +0.015/-0	2.250 +0/-0.003	2.251 +0.004/-0	2.875 +0.008/-0
DRU25-2.37-37	2.375	2.875	0.375	0.406 +0.015/-0	2.375 +0/-0.003	2.376 +0.004/-0	2.875 +0.008/-0
DRU31-2.37-37	2.375	3.000	0.375	0.406 +0.015/-0	2.375 +0/-0.003	2.376 +0.004/-0	3.000 +0.008/-0
DRU31-2.37-50	2.375	3.000	0.500	0.531 +0.015/-0	2.375 +0/-0.003	2.376 +0.004/-0	3.000 +0.008/-0
DRU18-2.50-31	2.500	2.875	0.312	0.343 +0.015/-0	2.500 +0/-0.003	2.501 +0.004/-0	2.875 +0.008/-0
DRU18-2.50-37	2.500	2.875	0.375	0.406 +0.015/-0	2.500 +0/-0.003	2.501 +0.004/-0	2.875 +0.008/-0
DRU25-2.50-25	2.500	3.000	0.250	0.281 +0.015/-0	2.500 +0/-0.003	2.501 +0.004/-0	3.000 +0.008/-0
DRU25-2.50-31	2.500	3.000	0.312	0.343 +0.015/-0	2.500 +0/-0.003	2.501 +0.004/-0	3.000 +0.008/-0
DRU25-2.50-37	2.500	3.000	0.375	0.406 +0.015/-0	2.500 +0/-0.003	2.501 +0.004/-0	3.000 +0.008/-0
DRU31-2.50-50	2.500	3.125	0.500	0.531 +0.015/-0	2.500 +0/-0.003	2.501 +0.004/-0	3.125 +0.008/-0
DRU25-2.62-37	2.625	3.125	0.375	0.406 +0.015/-0	2.625 +0/-0.003	2.626 +0.004/-0	3.125 +0.008/-0
DRU25-2.75-37	2.750	3.250	0.375	0.406 +0.015/-0	2.750 +0/-0.003	2.751 +0.004/-0	3.250 +0.009/-0
DRU31-2.75-37	2.750	3.375	0.375	0.406 +0.015/-0	2.750 +0/-0.003	2.751 +0.004/-0	3.375 +0.009/-0
DRU31-2.75-50	2.750	3.375	0.500	0.531 +0.015/-0	2.750 +0/-0.003	2.751 +0.004/-0	3.375 +0.009/-0
DRU37-2.75-62	2.750	3.500	0.625	0.656 +0.015/-0	2.750 +0/-0.003	2.751 +0.004/-0	3.500 +0.009/-0
DRU25-3.00-37	3.000	3.500	0.375	0.406 +0.015/-0	3.000 +0/-0.004	3.001 +0.004/-0	3.500 +0.009/-0
DRU31-3.00-37	3.000	3.625	0.375	0.406 +0.015/-0	3.000 +0/-0.004	3.001 +0.004/-0	3.625 +0.009/-0
DRU31-3.00-50	3.000	3.625	0.500	0.531 +0.015/-0	3.000 +0/-0.004	3.001 +0.004/-0	3.625 +0.009/-0
DRU37-3.00-37	3.000	3.750	0.375	0.406 +0.015/-0	3.000 +0/-0.004	3.001 +0.004/-0	3.750 +0.009/-0
DRU37-3.00-50	3.000	3.750	0.500	0.531 +0.015/-0	3.000 +0/-0.004	3.001 +0.004/-0	3.750 +0.009/-0
DRU37-3.00-62	3.000	3.750	0.625	0.656 +0.015/-0	3.000 +0/-0.004	3.001 +0.004/-0	3.750 +0.009/-0
DRU37-3.12-62	3.125	3.875	0.625	0.656 +0.015/-0	3.125 +0/-0.004	3.126 +0.004/-0	3.875 +0.009/-0
DRU25-3.25-37	3.250	3.750	0.375	0.406 +0.015/-0	3.250 +0/-0.004	3.251 +0.004/-0	3.750 +0.009/-0
DRU25-3.31-37	3.312	3.813	0.375	0.406 +0.015/-0	3.312 +0/-0.004	3.313 +0.004/-0	3.813 +0.009/-0
DRU25-3.37-37	3.375	3.875	0.375	0.406 +0.015/-0	3.375 +0/-0.004	3.376 +0.004/-0	3.875 +0.009/-0
DRU31-3.37-50	3.375	4.000	0.500	0.531 +0.015/-0	3.375 +0/-0.004	3.376 +0.004/-0	4.000 +0.009/-0
DRU25-3.50-37	3.500	4.000	0.375	0.406 +0.015/-0	3.500 +0/-0.004	3.501 +0.004/-0	4.000 +0.009/-0
DRU37-3.50-37	3.500	4.250	0.375	0.406 +0.015/-0	3.500 +0/-0.004	3.501 +0.004/-0	4.250 +0.009/-0
DRU37-3.50-50	3.500	4.250	0.500	0.531 +0.015/-0	3.500 +0/-0.004	3.501 +0.004/-0	4.250 +0.009/-0
DRU37-3.50-62	3.500	4.250	0.625	0.656 +0.015/-0	3.500 +0/-0.004	3.501 +0.004/-0	4.250 +0.009/-0
DRU37-3.62-37	3.625	4.375	0.375	0.406 +0.015/-0	3.625 +0/-0.004	3.626 +0.004/-0	4.375 +0.009/-0
DRU25-3.75-37	3.750	4.250	0.375	0.406 +0.015/-0	3.750 +0/-0.004	3.751 +0.004/-0	4.250 +0.009/-0

# HEAVY DUTY ROD U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
DRU25-3.75-59	3.750	4.250	0.594	0.625 +0.015/-0	3.750 +0/-0.004	3.751 +0.004/-0	4.250 +0.009/-0
DRU31-3.75-50	3.750	4.375	0.500	0.531 +0.015/-0	3.750 +0/-0.004	3.751 +0.004/-0	4.375 +0.009/-0
DRU25-4.00-25	4.000	4.500	0.250	0.281 +0.015/-0	4.000 +0/-0.004	4.001 +0.004/-0	4.500 +0.009/-0
DRU25-4.00-37	4.000	4.500	0.375	0.406 +0.015/-0	4.000 +0/-0.004	4.001 +0.004/-0	4.500 +0.009/-0
DRU25-4.00-56	4.000	4.500	0.563	0.532 +0.015/-0	4.000 +0/-0.004	4.001 +0.004/-0	4.500 +0.009/-0
DRU31-4.00-37	4.000	4.625	0.375	0.406 +0.015/-0	4.000 +0/-0.004	4.001 +0.004/-0	4.625 +0.009/-0
DRU31-4.00-50	4.000	4.625	0.500	0.531 +0.015/-0	4.000 +0/-0.004	4.001 +0.004/-0	4.625 +0.009/-0
DRU37-4.00-37	4.000	4.750	0.375	0.406 +0.015/-0	4.000 +0/-0.004	4.001 +0.004/-0	4.750 +0.009/-0
DRU37-4.00-50	4.000	4.750	0.500	0.531 +0.015/-0	4.000 +0/-0.004	4.001 +0.004/-0	4.750 +0.009/-0
DRU37-4.00-62	4.000	4.750	0.625	0.656 +0.015/-0	4.000 +0/-0.004	4.001 +0.004/-0	4.750 +0.009/-0
DRU37-4.25-50	4.250	5.000	0.500	0.531 +0.015/-0	4.250 +0/-0.004	4.251 +0.004/-0	5.000 +0.010/-0
DRU37-4.25-62	4.250	5.000	0.625	0.656 +0.015/-0	4.250 +0/-0.004	4.251 +0.004/-0	5.000 +0.010/-0
DRU37-4.37-50	4.375	5.125	0.500	0.531 +0.015/-0	4.375 +0/-0.004	4.376 +0.004/-0	5.125 +0.010/-0
DRU43-4.50-48	4.500	5.375	0.488	0.512 +0.015/-0	4.500 +0/-0.004	4.501 +0.004/-0	5.375 +0.010/-0
DRU25-4.50-56	4.500	5.000	0.563	0.593 +0.015/-0	4.500 +0/-0.004	4.501 +0.004/-0	5.000 +0.010/-0
DRU31-4.50-37	4.500	5.125	0.375	0.406 +0.015/-0	4.500 +0/-0.004	4.501 +0.004/-0	5.125 +0.010/-0
DRU37-4.50-50	4.500	5.250	0.500	0.531 +0.015/-0	4.500 +0/-0.004	4.501 +0.004/-0	5.250 +0.010/-0
DRU37-4.50-62	4.500	5.250	0.625	0.656 +0.015/-0	4.500 +0/-0.004	4.501 +0.004/-0	5.250 +0.010/-0
DRU43-4.50-43	4.500	5.375	0.438	0.468 +0.015/-0	4.500 +0/-0.004	4.501 +0.004/-0	5.375 +0.010/-0
DRU25-4.75-56	4.750	5.250	0.563	0.593 +0.015/-0	4.750 +0/-0.004	4.751 +0.004/-0	5.250 +0.010/-0
DRU37-4.75-37	4.750	5.500	0.375	0.406 +0.015/-0	4.750 +0/-0.004	4.751 +0.004/-0	5.500 +0.010/-0
DRU37-4.75-62	4.750	5.500	0.625	0.656 +0.015/-0	4.750 +0/-0.004	4.751 +0.004/-0	5.500 +0.010/-0
DRU43-4.75-75	4.750	5.625	0.750	0.781 +0.015/-0	4.750 +0/-0.004	4.751 +0.004/-0	5.625 +0.010/-0
DRU37-4.87-50	4.875	5.625	0.500	0.531 +0.015/-0	4.875 +0/-0.004	4.876 +0.004/-0	5.625 +0.010/-0
DRU25-5.00-56	5.000	5.500	0.563	0.532 +0.015/-0	5.000 +0/-0.004	5.001 +0.004/-0	5.500 +0.010/-0
DRU37-5.00-62	5.000	5.750	0.625	0.656 +0.015/-0	5.000 +0/-0.004	5.001 +0.004/-0	5.750 +0.010/-0
DRU50-5.00-75	5.000	6.000	0.750	0.781 +0.015/-0	5.000 +0/-0.004	5.001 +0.004/-0	6.000 +0.010/-0
DRU25-5.25-59	5.250	5.750	0.594	0.625 +0.015/-0	5.250 +0/-0.004	5.251 +0.004/-0	5.750 +0.010/-0
DRU37-5.25-62	5.250	6.000	0.625	0.687 +0.015/-0	5.250 +0/-0.004	5.251 +0.004/-0	6.000 +0.010/-0
DRU25-5.50-56	5.500	6.000	0.563	0.593 +0.015/-0	5.500 +0/-0.004	5.501 +0.004/-0	6.000 +0.010/-0
DRU50-5.50-75	5.500	6.500	0.750	0.781 +0.015/-0	5.500 +0/-0.004	5.501 +0.004/-0	6.500 +0.010/-0
DRU37-5.75-62	5.750	6.500	0.625	0.656 +0.015/-0	5.750 +0/-0.004	5.751 +0.004/-0	6.500 +0.010/-0
DRU37-6.00-62	6.000	6.750	0.625	0.656 +0.015/-0	6.000 +0/-0.004	6.001 +0.004/-0	6.750 +0.010/-0
DRU37-6.50-50	6.500	7.250	0.500	0.531 +0.015/-0	6.500 +0/-0.004	6.501 +0.004/-0	7.250 +0.011/-0
DRU37-6.50-62	6.500	7.250	0.625	0.656 +0.015/-0	6.500 +0/-0.004	6.501 +0.004/-0	7.250 +0.011/-0
DRU25-6.75-59	6.750	7.250	0.594	0.625 +0.015/-0	6.750 +0/-0.004	6.751 +0.004/-0	7.250 +0.011/-0
DRU50-7.00-62	7.000	8.000	0.625	0.656 +0.015/-0	7.000 +0/-0.005	7.001 +0.004/-0	8.000 +0.011/-0
DRU50-7.00-69	7.000	8.000	0.685	0.747 +0.015/-0	7.000 +0/-0.005	7.001 +0.004/-0	8.000 +0.011/-0
DRU50-7.00-75	7.000	8.000	0.750	0.781 +0.015/-0	7.000 +0/-0.005	7.001 +0.004/-0	8.000 +0.011/-0
DRU75-8.00-62	8.000	9.500	0.625	0.656 +0.015/-0	8.000 +0/-0.005	8.001 +0.004/-0	9.500 +0.012/-0
DRU25-8.12-59	8.125	8.625	0.594	0.625 +0.015/-0	8.125 +0/-0.005	8.126 +0.004/-0	8.625 +0.011/-0
DRU50-8.50-50	8.500	9.500	0.500	0.531 +0.015/-0	8.500 +0/-0.005	8.501 +0.004/-0	9.500 +0.012/-0
DRU50-9.00-62	9.000	10.000	0.625	0.656 +0.015/-0	9.000 +0/-0.005	9.001 +0.004/-0	10.000 +0.012/-0
DRU50-9.00-75	9.000	10.000	0.750	0.781 +0.015/-0	9.000 +0/-0.005	9.001 +0.004/-0	10.000 +0.012/-0
DRU50-9.50-65	9.500	10.500	0.656	0.689 +0.015/-0	9.500 +0/-0.005	9.501 +0.004/-0	10.500 +0.012/-0
DRU50-9.50-62	9.500	10.500	0.625	0.656 +0.015/-0	9.500 +0/-0.005	9.501 +0.004/-0	10.500 +0.012/-0
DRU50-9.50-75	9.500	10.500	0.750	0.781 +0.015/-0	9.500 +0/-0.005	9.501 +0.004/-0	10.500 +0.012/-0
DRU25-9.75-59	9.750	10.250	0.594	0.625 +0.015/-0	9.750 +0/-0.005	9.751 +0.004/-0	10.250 +0.012/-0
DRU50-10.00-62	10.000	11.000	0.625	0.656 +0.015/-0	10.000 +0/-0.006	10.001 +0.004/-0	11.000 +0.012/-0
DRU50-10.00-75	10.000	11.000	0.750	0.781 +0.015/-0	10.000 +0/-0.006	10.001 +0.004/-0	11.000 +0.012/-0
DRU50-12.00-62	12.000	13.000	0.625	0.656 +0.015/-0	12.000 +0/-0.006	12.001 +0.004/-0	13.000 +0.012/-0
DRU50-12.00-75	12.000	13.000	0.750	0.781 +0.015/-0	12.000 +0/-0.006	12.001 +0.004/-0	13.000 +0.012/-0
DRU62-13.50-100	13.500	14.750	1.000	1.031 +0.015/-0	13.500 +0/-0.006	13.501 +0.004/-0	14.750 +0.012/-0

# HEAVY DUTY PISTON U-SEALS

Specifically enhanced for piston applications, these u-seals offer extended service life and maximum reliability.



## HERCULES PART NUMBERS

**DPU 12 - 1.00 - 25**

Type of Seal | Cross Section | Inside Diameter | Height

## SEAL INFORMATION

MATERIAL	92A URETHANE
TEMPERATURE RANGE	-40° TO +230° F
PRESSURE RANGE	0 TO 6,000 PSI
MAXIMUM VELOCITY	200 FPM

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
DPU21-0.25-37	0.250	0.688	0.375	0.406 +0.015/-0	0.250 +0/-0.004	0.687 +0/-0.003	0.688 +0.003/-0
DPU12-0.75-12	0.750	1.000	0.125	0.156 +0.015/-0	0.750 +0/-0.005	0.999 +0/-0.003	0.750 +0.003/-0
DPU25-0.75-37	0.750	1.250	0.375	0.406 +0.015/-0	0.750 +0/-0.005	1.249 +0/-0.003	1.250 +0.003/-0
DPU12-1.00-25	1.000	1.250	0.250	0.281 +0.015/-0	1.000 +0/-0.005	1.249 +0/-0.003	1.250 +0.003/-0
DPU25-1.00-35	1.000	1.500	0.357	0.388 +0.015/-0	1.000 +0/-0.005	1.499 +0/-0.003	1.500 +0.003/-0
DPU25-1.00-37	1.000	1.500	0.375	0.406 +0.015/-0	1.000 +0/-0.005	1.499 +0/-0.003	1.500 +0.003/-0
DPU25-1.12-31	1.125	1.625	0.312	0.343 +0.015/-0	1.125 +0/-0.005	1.624 +0/-0.003	1.625 +0.003/-0
DPU31-1.12-50	1.125	1.750	0.500	0.531 +0.015/-0	1.125 +0/-0.005	1.749 +0/-0.003	1.750 +0.003/-0
DPU25-1.25-25	1.250	1.625	0.250	0.281 +0.015/-0	1.250 +0/-0.007	1.624 +0/-0.003	1.624 +0.003/-0
DPU18-1.25-31	1.250	1.625	0.312	0.343 +0.015/-0	1.250 +0/-0.007	1.624 +0/-0.003	1.625 +0.003/-0
DPU25-1.25-37	1.250	1.750	0.375	0.406 +0.015/-0	1.250 +0/-0.007	1.749 +0/-0.003	1.750 +0.003/-0
DPU31-1.25-47	1.250	1.875	0.469	0.500 +0.015/-0	1.250 +0/-0.007	1.874 +0/-0.003	1.875 +0.003/-0
DPU31-1.37-31	1.375	1.750	0.312	0.343 +0.015/-0	1.375 +0/-0.007	1.749 +0/-0.004	1.750 +0.003/-0
DPU31-1.37-37	1.375	2.000	0.375	0.406 +0.015/-0	1.375 +0/-0.007	1.999 +0/-0.004	2.000 +0.003/-0
DPU31-1.37-43	1.375	2.000	0.438	0.468 +0.015/-0	1.375 +0/-0.007	1.999 +0/-0.004	2.000 +0.003/-0
DPU31-1.37-44	1.375	2.000	0.440	0.471 +0.015/-0	1.375 +0/-0.007	1.999 +0/-0.004	2.000 +0.003/-0
DPU31-1.37-50	1.375	2.000	0.500	0.531 +0.015/-0	1.375 +0/-0.007	1.999 +0/-0.004	2.000 +0.003/-0
DPU25-1.50-31	1.500	2.000	0.313	0.343 +0.015/-0	1.500 +0/-0.007	1.999 +0/-0.004	2.000 +0.003/-0
DPU25-1.50-37	1.500	2.000	0.375	0.406 +0.015/-0	1.500 +0/-0.007	1.999 +0/-0.004	2.000 +0.003/-0
DPU32-1.62-39	1.620	2.260	0.390	0.421 +0.015/-0	1.620 +0/-0.007	2.259 +0/-0.004	2.260 +0.003/-0
DPU31-1.62-50	1.625	2.250	0.500	0.531 +0.015/-0	1.625 +0/-0.007	2.249 +0/-0.004	2.250 +0.003/-0
DPU18-1.75-31	1.750	2.125	0.312	0.343 +0.015/-0	1.750 +0/-0.007	2.124 +0/-0.004	2.125 +0.003/-0
DPU25-1.75-37	1.750	2.250	0.375	0.406 +0.015/-0	1.750 +0/-0.007	2.249 +0/-0.004	2.250 +0.003/-0
DPU37-1.75-62	1.750	2.500	0.625	0.656 +0.015/-0	1.750 +0/-0.007	2.499 +0/-0.004	2.500 +0.003/-0
DPU31-1.87-37	1.875	2.500	0.375	0.406 +0.015/-0	1.875 +0/-0.007	2.499 +0/-0.004	2.500 +0.003/-0
DPU18-2.00-37	2.000	2.375	0.375	0.413 +0.015/-0	2.000 +0/-0.008	2.374 +0/-0.004	2.374 +0.003/-0
DPU25-2.00-37	2.000	2.500	0.375	0.406 +0.015/-0	2.000 +0/-0.008	2.499 +0/-0.004	2.500 +0.003/-0
DPU38-2.00-48	2.000	2.765	0.486	0.517 +0.015/-0	2.000 +0/-0.008	2.764 +0/-0.004	2.765 +0.003/-0
DPU25-2.06-25	2.062	2.563	0.250	0.281 +0.015/-0	2.062 +0/-0.008	2.562 +0/-0.004	2.563 +0.003/-0
DPU25-2.06-34	2.062	2.563	0.344	0.375 +0.015/-0	2.062 +0/-0.008	2.562 +0/-0.004	2.563 +0.003/-0
DPU18-2.12-18	2.125	2.500	0.188	0.219 +0.015/-0	2.125 +0/-0.008	2.499 +0/-0.004	2.500 +0.003/-0
DPU18-2.12-31	2.125	2.500	0.312	0.343 +0.015/-0	2.125 +0/-0.008	2.499 +0/-0.004	2.500 +0.003/-0
DPU18-2.12-37	2.125	2.500	0.375	0.406 +0.015/-0	2.125 +0/-0.008	2.499 +0/-0.004	2.500 +0.003/-0

# HEAVY DUTY PISTON U-SEALS

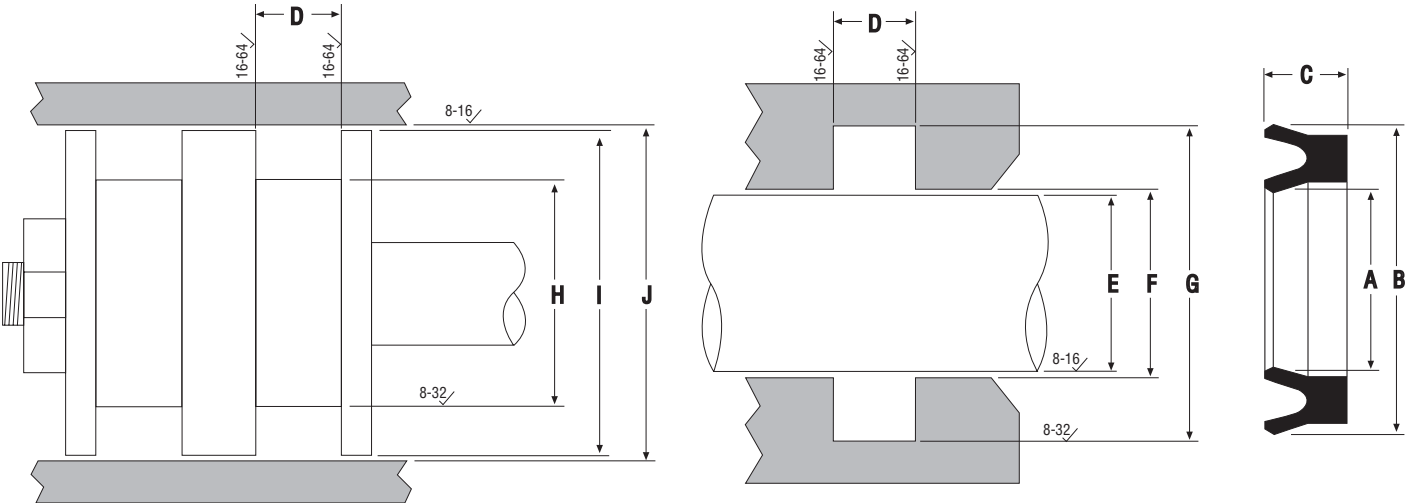
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
DPU25-2.25-31	2.250	2.750	0.312	0.343 +0.015/-0	2.250 +0/-0.008	2.749 +0/-0.004	2.750 +0.003/-0
DPU25-2.25-37	2.250	2.750	0.375	0.406 +0.015/-0	2.250 +0/-0.008	2.749 +0/-0.004	2.750 +0.003/-0
DPU37-2.25-62	2.250	3.000	0.625	0.656 +0.015/-0	2.250 +0/-0.008	2.999 +0/-0.004	3.000 +0.003/-0
DPU31-2.37-37	2.375	3.000	0.375	0.406 +0.015/-0	2.375 +0/-0.008	2.999 +0/-0.004	3.000 +0.003/-0
DPU31-2.37-50	2.375	3.000	0.500	0.531 +0.015/-0	2.375 +0/-0.008	2.999 +0/-0.004	3.000 +0.003/-0
DPU25-2.50-37	2.500	3.000	0.375	0.406 +0.015/-0	2.500 +0/-0.008	2.999 +0/-0.004	3.000 +0.003/-0
DPU37-2.50-43	2.500	3.250	0.438	0.468 +0.015/-0	2.500 +0/-0.008	3.249 +0/-0.004	3.250 +0.003/-0
DPU37-2.50-62	2.500	3.250	0.625	0.656 +0.015/-0	2.500 +0/-0.008	3.249 +0/-0.004	3.250 +0.003/-0
DPU38-2.50-48	2.500	3.260	0.486	0.517 +0.015/-0	2.500 +0/-0.008	3.259 +0/-0.004	3.260 +0.003/-0
DPU25-2.75-37	2.750	3.250	0.375	0.406 +0.015/-0	2.750 +0/-0.008	3.249 +0/-0.004	3.250 +0.003/-0
DPU37-2.75-37	2.750	3.500	0.375	0.406 +0.015/-0	2.750 +0/-0.008	3.499 +0/-0.004	3.500 +0.003/-0
DPU37-2.75-62	2.750	3.500	0.625	0.656 +0.015/-0	2.750 +0/-0.008	3.499 +0/-0.004	3.500 +0.003/-0
DPU25-3.00-37	3.000	3.500	0.375	0.406 +0.015/-0	3.000 +0/-0.009	3.499 +0/-0.004	3.500 +0.003/-0
DPU37-3.00-37	3.000	3.750	0.375	0.406 +0.015/-0	3.000 +0/-0.009	3.749 +0/-0.004	3.750 +0.003/-0
DPU37-3.00-47	3.000	3.750	0.469	0.500 +0.015/-0	3.000 +0/-0.009	3.749 +0/-0.004	3.750 +0.003/-0
DPU37-3.00-50	3.000	3.750	0.500	0.531 +0.015/-0	3.000 +0/-0.009	3.749 +0/-0.004	3.750 +0.003/-0
DPU18-3.12-37	3.125	3.500	0.375	0.406 +0.015/-0	3.125 +0/-0.009	3.499 +0/-0.004	3.500 +0.003/-0
DPU25-3.13-37	3.125	3.625	0.375	0.406 +0.015/-0	3.125 +0/-0.009	3.624 +0/-0.004	3.625 +0.003/-0
DPU25-3.25-37	3.250	3.750	0.375	0.406 +0.015/-0	3.250 +0/-0.009	3.749 +0/-0.004	3.750 +0.003/-0
DPU37-3.25-37	3.250	4.000	0.375	0.406 +0.015/-0	3.250 +0/-0.009	3.999 +0/-0.004	4.000 +0.004/-0
DPU37-3.25-50	3.250	4.000	0.500	0.531 +0.015/-0	3.250 +0/-0.009	3.999 +0/-0.004	4.000 +0.004/-0
DPU37-3.25-62	3.250	4.000	0.625	0.656 +0.015/-0	3.250 +0/-0.009	3.999 +0/-0.004	4.000 +0.004/-0
DPU31-3.37-37	3.375	4.000	0.375	0.406 +0.015/-0	3.375 +0/-0.009	3.999 +0/-0.004	4.000 +0.004/-0
DPU31-3.37-50	3.375	4.000	0.500	0.531 +0.015/-0	3.375 +0/-0.009	3.999 +0/-0.004	4.000 +0.004/-0
DPU25-3.50-37	3.500	4.000	0.375	0.406 +0.015/-0	3.500 +0/-0.009	3.999 +0/-0.004	4.000 +0.004/-0
DPU37-3.50-37	3.500	4.250	0.375	0.406 +0.015/-0	3.500 +0/-0.009	4.249 +0/-0.004	4.250 +0.004/-0
DPU62-3.50-56	3.500	4.750	0.563	0.594 +0.015/-0	3.500 +0/-0.009	4.749 +0/-0.004	4.750 +0.004/-0
DPU25-3.62-37	3.625	4.125	0.375	0.406 +0.015/-0	3.625 +0/-0.009	4.124 +0/-0.004	4.125 +0.004/-0
DPU31-3.62-37	3.625	4.250	0.375	0.406 +0.015/-0	3.625 +0/-0.009	4.249 +0/-0.004	4.250 +0.004/-0
DPU31-3.62-50	3.625	4.250	0.500	0.531 +0.015/-0	3.625 +0/-0.009	4.249 +0/-0.004	4.250 +0.004/-0
DPU25-3.75-37	3.750	4.250	0.375	0.406 +0.015/-0	3.750 +0/-0.009	4.249 +0/-0.004	4.250 +0.004/-0
DPU37-3.75-37	3.750	4.500	0.375	0.406 +0.015/-0	3.750 +0/-0.009	4.499 +0/-0.004	4.500 +0.004/-0
DPU37-3.75-50	3.750	4.500	0.500	0.531 +0.015/-0	3.750 +0/-0.009	4.499 +0/-0.004	4.500 +0.004/-0
DPU37-3.75-62	3.750	4.500	0.625	0.656 +0.015/-0	3.750 +0/-0.009	4.499 +0/-0.004	4.500 +0.004/-0
DPU31-3.87-50	3.825	4.500	0.500	0.531 +0.015/-0	3.875 +0/-0.009	4.499 +0/-0.004	4.500 +0.004/-0
DPU25-4.00-37	4.000	4.500	0.375	0.406 +0.015/-0	4.000 +0/-0.009	4.499 +0/-0.004	4.500 +0.004/-0
DPU25-4.00-56	4.000	4.500	0.563	0.594 +0.015/-0	4.000 +0/-0.009	4.499 +0/-0.004	4.500 +0.004/-0
DPU50-4.12-59	4.125	5.125	0.590	0.649 +0.015/-0	4.125 +0/-0.009	5.124 +0/-0.004	5.125 +0.004/-0
DPU37-4.25-37	4.250	5.000	0.375	0.406 +0.015/-0	4.250 +0/-0.009	4.999 +0/-0.004	5.000 +0.004/-0
DPU37-4.25-50	4.250	5.000	0.500	0.531 +0.015/-0	4.250 +0/-0.009	4.999 +0/-0.004	5.000 +0.004/-0
DPU37-4.25-62	4.250	5.000	0.625	0.656 +0.015/-0	4.250 +0/-0.009	4.999 +0/-0.004	5.000 +0.004/-0
DPU37-4.37-50	4.375	5.125	0.500	0.531 +0.015/-0	4.375 +0/-0.009	5.124 +0/-0.004	5.125 +0.004/-0
DPU25-4.50-37	4.500	5.000	0.375	0.406 +0.015/-0	4.500 +0/-0.009	4.999 +0/-0.004	5.000 +0.004/-0
DPU25-4.50-43	4.500	5.000	0.438	0.468 +0.015/-0	4.500 +0/-0.009	4.999 +0/-0.004	5.000 +0.004/-0
DPU25-4.50-56	4.500	5.000	0.563	0.594 +0.015/-0	4.500 +0/-0.009	4.999 +0/-0.004	5.000 +0.004/-0
DPU37-4.50-37	4.500	5.250	0.375	0.406 +0.015/-0	4.500 +0/-0.009	5.249 +0/-0.004	5.250 +0.004/-0
DPU37-4.50-50	4.500	5.250	0.500	0.531 +0.015/-0	4.500 +0/-0.009	5.249 +0/-0.004	5.250 +0.004/-0
DPU37-4.75-50	4.750	5.500	0.500	0.531 +0.015/-0	4.750 +0/-0.009	5.499 +0/-0.004	5.500 +0.004/-0
DPU37-4.75-62	4.750	5.500	0.625	0.656 +0.015/-0	4.750 +0/-0.009	5.499 +0/-0.004	5.500 +0.004/-0
DPU25-5.00-37	5.000	5.500	0.375	0.406 +0.015/-0	5.000 +0/-0.010	5.499 +0/-0.004	5.500 +0.004/-0
DPU25-5.00-56	5.000	5.500	0.563	0.594 +0.015/-0	5.000 +0/-0.010	5.499 +0/-0.004	5.500 +0.004/-0
DPU37-5.00-50	5.000	5.750	0.500	0.531 +0.015/-0	5.000 +0/-0.010	5.749 +0/-0.004	5.750 +0.004/-0
DPU50-5.00-50	5.000	6.000	0.500	0.531 +0.015/-0	5.000 +0/-0.010	5.999 +0/-0.004	6.000 +0.004/-0
DPU37-5.25-37	5.250	6.000	0.375	0.406 +0.015/-0	5.250 +0/-0.010	5.999 +0/-0.004	6.000 +0.004/-0
DPU37-5.25-50	5.250	6.000	0.500	0.531 +0.015/-0	5.250 +0/-0.010	5.999 +0/-0.004	6.000 +0.004/-0
DPU37-5.25-62	5.250	6.000	0.625	0.656 +0.015/-0	5.250 +0/-0.010	5.999 +0/-0.004	6.000 +0.004/-0
DPU50-5.25-62	5.250	6.250	0.625	0.656 +0.015/-0	5.250 +0/-0.010	6.249 +0/-0.004	6.250 +0.004/-0
DPU31-5.37-50	5.375	6.000	0.500	0.531 +0.015/-0	5.375 +0/-0.010	5.999 +0/-0.004	6.000 +0.004/-0

## HEAVY DUTY PISTON U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
DPU25-5.50-25	5.500	6.000	0.250	0.281 +.015/-0	5.500 +0/-0.010	5.999 +0/-0.004	6.000 +0.004/-0
DPU25-5.50-37	5.500	6.000	0.375	0.406 +.015/-0	5.500 +0/-0.010	5.999 +0/-0.004	6.000 +0.004/-0
DPU25-5.50-50	5.500	6.000	0.500	0.531 +.015/-0	5.500 +0/-0.010	5.999 +0/-0.004	6.000 +0.004/-0
DPU25-5.50-56	5.500	6.000	0.563	0.594 +.015/-0	5.500 +0/-0.010	5.999 +0/-0.004	6.000 +0.004/-0
DPU37-5.50-37	5.500	6.250	0.375	0.406 +.015/-0	5.500 +0/-0.010	6.249 +0/-0.004	6.250 +0.004/-0
DPU50-5.50-62	5.500	6.500	0.625	0.656 +.015/-0	5.500 +0/-0.010	6.499 +0/-0.004	6.500 +0.004/-0
DPU37-5.75-37	5.750	6.500	0.375	0.406 +.015/-0	5.750 +0/-0.010	6.499 +0/-0.004	6.500 +0.004/-0
DPU37-5.75-62	5.750	6.500	0.625	0.656 +.015/-0	5.750 +0/-0.010	6.499 +0/-0.004	6.500 +0.004/-0
DPU37-6.00-50	6.000	6.750	0.500	0.531 +.015/-0	6.000 +0/-0.010	6.749 +0/-0.004	6.750 +0.005/-0
DPU50-6.00-75	6.000	7.000	0.750	0.781 +.015/-0	6.000 +0/-0.010	6.999 +0/-0.004	7.000 +0.005/-0
DPU37-6.25-37	6.250	7.000	0.375	0.406 +.015/-0	6.250 +0/-0.010	6.999 +0/-0.004	7.000 +0.005/-0
DPU37-6.25-50	6.250	7.000	0.500	0.531 +.015/-0	6.250 +0/-0.010	6.999 +0/-0.004	7.000 +0.005/-0
DPU37-6.25-62	6.250	7.000	0.625	0.656 +.015/-0	6.250 +0/-0.010	6.999 +0/-0.004	7.000 +0.005/-0
DPU37-6.50-62	6.500	7.250	0.625	0.656 +.015/-0	6.500 +0/-0.010	7.249 +0/-0.004	7.250 +0.005/-0
DPU50-6.50-62	6.500	7.500	0.625	0.656 +.015/-0	6.500 +0/-0.010	7.499 +0/-0.004	7.500 +0.005/-0
DPU50-6.50-75	6.500	7.500	0.750	0.781 +.015/-0	6.500 +0/-0.010	7.499 +0/-0.004	7.500 +0.005/-0
DPU37-6.75-50	6.750	7.500	0.500	0.531 +.015/-0	6.750 +0/-0.010	7.499 +0/-0.004	7.500 +0.005/-0
DPU50-7.00-50	7.000	8.000	0.500	0.500 +.015/-0	7.000 +0/-0.011	7.999 +0/-0.004	8.000 +0.005/-0
DPU50-7.00-75	7.000	8.000	0.750	0.781 +.015/-0	7.000 +0/-0.011	7.999 +0/-0.004	8.000 +0.005/-0
DPU37-7.25-37	7.250	8.000	0.375	0.406 +.015/-0	7.250 +0/-0.011	7.999 +0/-0.004	8.000 +0.005/-0
DPU37-7.25-50	7.250	8.000	0.500	0.531 +.015/-0	7.250 +0/-0.011	7.999 +0/-0.004	8.000 +0.005/-0
DPU37-7.25-62	7.250	8.000	0.625	0.656 +.015/-0	7.250 +0/-0.011	7.999 +0/-0.004	8.000 +0.005/-0
DPU50-7.50-62	7.500	8.500	0.625	0.656 +.015/-0	7.500 +0/-0.011	8.499 +0/-0.004	8.500 +0.005/-0
DPU50-7.50-75	7.500	8.500	0.750	0.781 +.015/-0	7.500 +0/-0.011	8.499 +0/-0.004	8.500 +0.005/-0
DPU50-8.00-75	8.000	9.000	0.750	0.781 +.015/-0	8.000 +0/-0.011	8.999 +0/-0.004	9.000 +0.005/-0
DPU50-9.00-62	9.000	10.000	0.625	0.656 +.015/-0	9.000 +0/-0.011	9.999 +0/-0.004	10.000 +0.005/-0
DPU50-9.00-75	9.000	10.000	0.750	0.781 +.015/-0	9.000 +0/-0.011	9.999 +0/-0.004	10.000 +0.005/-0
DPU62-9.25-75	9.250	10.500	0.750	0.781 +.015/-0	9.250 +0/-0.011	10.499 +0/-0.004	10.500 +0.005/-0
DPU50-10.00-62	10.000	11.000	0.625	0.656 +.015/-0	10.000 +0/-0.011	10.999 +0/-0.004	11.000 +0.005/-0
DPU50-10.00-75	10.000	11.000	0.750	0.750 +.015/-0	10.000 +0/-0.011	10.999 +0/-0.004	11.000 +0.005/-0
DPU50-11.00-62	11.000	12.000	0.625	0.656 +.015/-0	11.000 +0/-0.012	11.999 +0/-0.004	12.000 +0.006/-0
DPU50-11.00-75	11.000	12.000	0.750	0.781 +.015/-0	11.000 +0/-0.012	11.999 +0/-0.004	12.000 +0.006/-0

# HEAVY DUTY SYMMETRICAL U-SEALS

Conveniently designed for either piston or rod sealing, these symmetrical u-seals are manufactured from the same tough urethane material found in our Heavy Duty Rod and Piston u-seals.



**HERCULES PART NUMBERS**

**DSU 12 - 0.18 - 12**

Type of Seal: DSU  
 Cross Section: 12  
 Inside Diameter: 0.18  
 Height: 12

SEAL INFORMATION	
MATERIAL	92A URETHANE
TEMPERATURE RANGE	-40° TO +230° F
PRESSURE RANGE	0 TO 4,000 PSI
MAXIMUM VELOCITY	200 FPM

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
DSU12-0.18-12	0.188	0.438	0.125	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	0.188	0.438	0.250	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	0.250	0.500	0.188	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
DSU18-0.25-25	0.250	0.625	0.250	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	0.250	0.625	0.312	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
DSU12-0.37-12	0.375	0.625	0.125	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	0.375	0.625	0.250	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
DSU18-0.37-31	0.375	0.750	0.312	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
DSU12-0.50-12	0.500	0.750	0.125	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
DSU18-0.50-31	0.500	0.875	0.312	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
DSU25-0.50-25	0.500	1.000	0.250	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	0.500	1.000	0.375	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
DSU12-0.56-12	0.563	0.813	0.125	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
DSU18-0.56-18	0.563	0.938	0.188	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
DSU12-0.62-12	0.625	0.875	0.125	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	0.625	0.875	0.250	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
DSU18-0.62-18	0.625	1.000	0.188	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	0.625	1.000	0.250	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	0.625	1.000	0.312	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
DSU25-0.62-25	0.625	1.125	0.250	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	0.625	1.125	0.375	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	0.688	1.188	0.375	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
DSU12-0.75-12	0.750	1.000	0.125	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









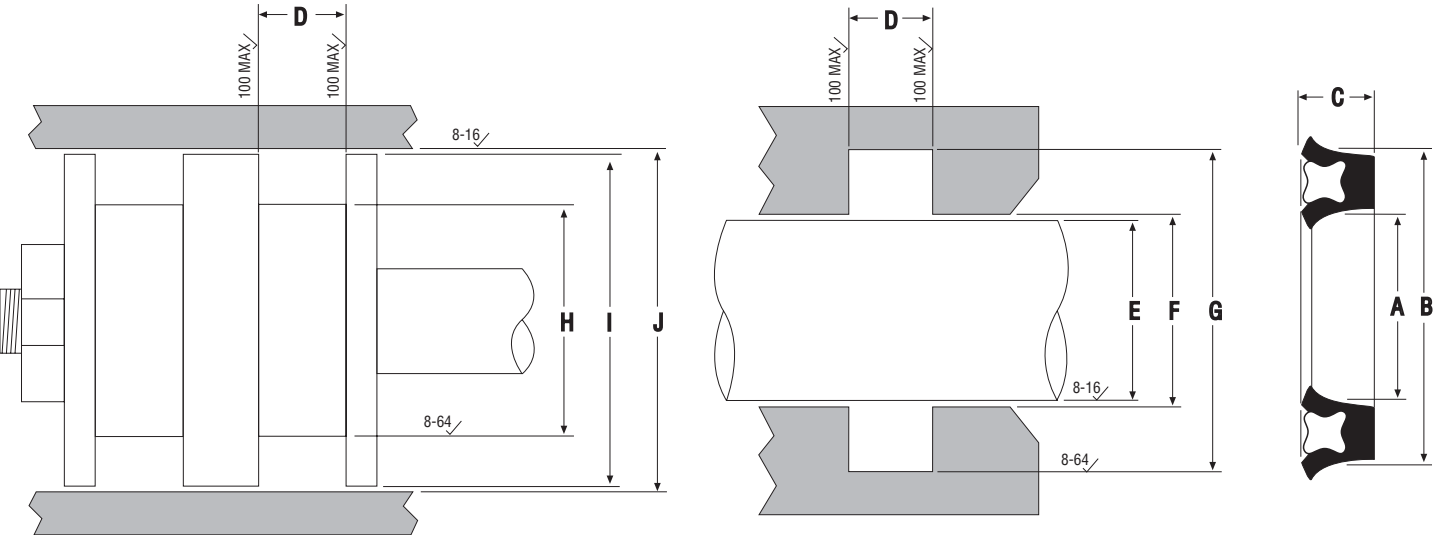


## HEAVY DUTY SYMMETRICAL U-SEALS

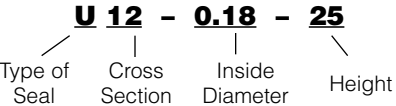
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
DSU50-6.50-50	6.500	7.500	0.500	0.531 +0.015/-0	6.500 +0/-0.004	6.501 +0.004/-0	7.500 +0.011/-0	6.500 +0/-0.010	7.499 +0/-0.004	7.500 +0.005/-0
DSU50-6.50-75	6.500	7.500	0.750	0.781 +0.015/-0	6.500 +0/-0.004	6.501 +0.004/-0	7.500 +0.011/-0	6.500 +0/-0.010	7.499 +0/-0.004	7.500 +0.005/-0
DSU37-6.75-50	6.750	7.500	0.500	0.531 +0.015/-0	6.750 +0/-0.004	6.751 +0.004/-0	7.500 +0.011/-0	6.750 +0/-0.010	7.499 +0/-0.004	7.500 +0.005/-0
DSU50-6.75-62	6.750	7.750	0.625	0.656 +0.015/-0	6.750 +0/-0.004	6.751 +0.004/-0	7.750 +0.011/-0	6.750 +0/-0.010	7.749 +0/-0.004	7.750 +0.005/-0
DSU50-6.75-75	6.750	7.750	0.750	0.781 +0.015/-0	6.750 +0/-0.004	6.751 +0.004/-0	7.750 +0.011/-0	6.750 +0/-0.010	7.749 +0/-0.004	7.750 +0.005/-0
DSU25-7.00-56	7.000	7.500	0.563	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
DSU37-7.00-50	7.000	7.750	0.500	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	7.000	7.750	0.625	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
DSU50-7.00-62	7.000	8.000	0.625	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	7.000	8.000	0.750	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
DSU37-7.25-50	7.250	8.000	0.500	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
DSU50-7.50-75	7.500	8.500	0.750	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
DSU37-7.75-50	7.750	8.500	0.500	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
DSU50-7.75-75	7.750	8.750	0.750	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	8.000	9.000	0.625	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	8.000	9.000	0.750	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
DSU37-8.25-50	8.250	9.000	0.500	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
DSU37-8.25-62	8.250	9.000	0.625	0.656 +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
DSU25-8.50-37	8.500	9.000	0.375	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
DSU25-8.50-56	8.500	9.000	0.563	0.593 +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
DSU37-8.50-62	8.500	9.250	0.625	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
DSU50-9.00-62	9.000	10.000	0.625	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	9.000	10.000	0.750	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
DSU50-10.00-62	10.000	11.000	0.625	0.656 +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
DSU50-10.00-75	10.000	11.000	0.750	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	11.000	12.000	0.750	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	12.000	13.000	0.750	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
DSU75-12.50-100	12.500	14.000	1.000	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
DSU50-15.00-75	15.000	16.000	0.750	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	17.000	18.000	0.750	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

# 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 enhance low pressure sealing. These seals provide excellent piston or rod sealing.



**HERCULES PART NUMBERS**



**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 rectangular 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

SEAL INFORMATION	
MATERIAL	95A URETHANE 70A NITRILE EXPANDER
TEMPERATURE RANGE	-65° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
MAXIMUM VELOCITY	100 FPM

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U12-0.12	0.125	0.375	0.125	0.138 +0.010/-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	0.141	0.391	0.125	0.138 +0.010/-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	0.188	0.437	0.125	0.138 +0.010/-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	0.188	0.437	0.250	0.275 +0.010/-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
U18-0.18-SQB	0.188	0.563	0.188	0.207 +0.010/-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
U12-0.25-25B	0.250	0.500	0.250	0.275 +0.010/-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	0.250	0.500	0.125	0.138 +0.010/-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
U18-0.25-SQB	0.250	0.625	0.188	0.207 +0.010/-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
U25-0.25	0.250	0.750	0.250	0.275 +0.010/-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
U31-0.25	0.250	0.875	0.312	0.344 +0.010/-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
U12-0.28-25B	0.281	0.531	0.250	0.275 +0.010/-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
U12-0.31-25B	0.312	0.563	0.250	0.275 +0.010/-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	0.312	0.563	0.125	0.138 +0.010/-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
U18-0.31-SQB	0.312	0.688	0.188	0.207 +0.010/-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
U12-0.37	0.375	0.625	0.125	0.138 +0.010/-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-SQB	0.375	0.625	0.125	0.138 +0.010/-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
U18-0.37	0.375	0.750	0.188	0.207 +0.010/-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

# STYLE 800 POLYURETHANE U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U18-0.37-31B	0.375	0.750	0.312	0.344 +0.010/-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
U25-0.37	0.375	0.875	0.250	0.275 +0.010/-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
U31-0.37	0.375	1.000	0.312	0.344 +0.010/-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
U12-0.43	0.438	0.688	0.125	0.138 +0.010/-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	0.438	0.688	0.250	0.275 +0.010/-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	0.438	0.688	0.125	0.138 +0.010/-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
U18-0.43	0.438	0.813	0.188	0.207 +0.010/-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
U25-0.43	0.438	0.938	0.250	0.275 +0.010/-0	0.438 +0/-0.002	0.439 +0.003/-0	0.938 +0.003/-0	0.438 +0/-0.003	0.937 +0/-0.002	0.938 +0.003/-0
U31-0.43	0.438	1.062	0.312	0.344 +0.010/-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
U12-0.50-25B	0.500	0.750	0.250	0.275 +0.010/-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	0.500	0.750	0.125	0.138 +0.010/-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
U18-0.50	0.500	0.875	0.188	0.207 +0.010/-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	0.500	0.875	0.312	0.344 +0.010/-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
U25-0.50	0.500	1.000	0.250	0.275 +0.010/-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	0.500	1.000	0.375	0.413 +0.010/-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
U31-0.50	0.500	1.125	0.312	0.344 +0.010/-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
U37-0.50	0.500	1.250	0.375	0.413 +0.010/-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
U12-0.56	0.563	0.813	0.125	0.138 +0.010/-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	0.563	0.813	0.125	0.138 +0.010/-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
U18-0.56	0.563	0.938	0.188	0.207 +0.010/-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
U25-0.56	0.563	1.062	0.250	0.275 +0.010/-0	0.563 +0/-0.002	0.564 +0.003/-0	1.062 +0.003/-0	0.563 +0/-0.003	1.061 +0/-0.002	1.062 +0.003/-0
U12-0.62-25B	0.625	0.875	0.250	0.275 +0.010/-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	0.625	0.875	0.250	0.275 +0.010/-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	0.625	0.875	0.125	0.138 +0.010/-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
U18-0.62-31B	0.625	1.000	0.312	0.344 +0.010/-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	0.625	1.000	0.312	0.344 +0.010/-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	0.625	1.000	0.188	0.207 +0.010/-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
U25-0.62	0.625	1.125	0.250	0.275 +0.010/-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	0.625	1.125	0.375	0.413 +0.010/-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
U31-0.62	0.625	1.250	0.312	0.344 +0.010/-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
U12-0.68	0.688	0.938	0.125	0.138 +0.010/-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	0.688	0.938	0.250	0.275 +0.010/-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
U18-0.68	0.688	1.062	0.188	0.207 +0.010/-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
U25-0.68	0.688	1.188	0.250	0.275 +0.010/-0	0.688 +0/-0.002	0.689 +0.003/-0	1.188 +0.003/-0	0.688 +0/-0.003	1.187 +0/-0.002	1.188 +0.003/-0
U12-0.75-18B	0.750	1.000	0.188	0.207 +0.010/-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	0.750	1.000	0.250	0.275 +0.010/-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	0.750	1.000	0.250	0.275 +0.010/-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	0.750	1.000	0.125	0.138 +0.010/-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
U18-0.75-31B	0.750	1.125	0.312	0.344 +0.010/-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	0.750	1.125	0.188	0.207 +0.010/-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
U25-0.75	0.750	1.250	0.250	0.275 +0.010/-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	0.750	1.250	0.375	0.413 +0.010/-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	0.750	1.250	0.250	0.275 +0.010/-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
U31-0.75	0.750	1.375	0.312	0.344 +0.010/-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	0.750	1.375	0.500	0.550 +0.010/-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
U12-0.81-SQB	0.813	1.063	0.125	0.138 +0.010/-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
U12-0.81	0.813	1.062	0.125	0.138 +0.010/-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
U18-0.81	0.813	1.188	0.188	0.207 +0.010/-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	0.813	1.188	0.312	0.344 +0.010/-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
U25-0.81	0.813	1.312	0.250	0.275 +0.010/-0	0.813 +0/-0.002	0.814 +0.003/-0	1.312 +0.003/-0	0.813 +0/-0.003	1.311 +0/-0.002	1.312 +0.003/-0
U25-0.81-37B	0.813	1.312	0.375	0.413 +0.010/-0	0.813 +0/-0.002	0.814 +0.003/-0	1.312 +0.003/-0	0.813 +0/-0.003	1.311 +0/-0.002	1.312 +0.003/-0
U37-0.81	0.813	1.562	0.375	0.413 +0.010/-0	0.813 +0/-0.002	0.815 +0.004/-0	1.562 +0.005/-0	0.813 +0/-0.005	1.561 +0/-0.002	1.563 +0.004/-0
U12-0.87-25B	0.875	1.125	0.250	0.275 +0.010/-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	0.875	1.125	0.250	0.275 +0.010/-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	0.875	1.125	0.125	0.138 +0.010/-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
U18-0.87-31B	0.875	1.250	0.312	0.344 +0.010/-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	0.875	1.250	0.188	0.207 +0.010/-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
U25-0.87-37B	0.875	1.375	0.375	0.413 +0.010/-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	0.875	1.375	0.375	0.413 +0.010/-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	0.875	1.375	0.250	0.275 +0.010/-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
U31-0.87	0.875	1.500	0.312	0.344 +0.010/-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
U37-0.75	0.875	1.500	0.375	0.413 +0.010/-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
U37-0.87	0.875	1.625	0.375	0.413 +0.010/-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

# STYLE 800 POLYURETHANE U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U12-0.93	0.938	1.188	0.125	0.138 +0.010/-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	0.938	1.188	0.250	0.275 +0.010/-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
U18-0.93	0.938	1.312	0.188	0.207 +0.010/-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
U25-0.93	0.938	1.437	0.250	0.275 +0.010/-0	0.938 +0/-0.002	0.939 +0.003/-0	1.437 +0.003/-0	0.938 +0/-0.003	1.436 +0/-0.002	1.437 +0.003/-0
U37-0.93	0.938	1.687	0.375	0.413 +0.010/-0	0.938 +0/-0.002	0.940 +0.004/-0	1.687 +0.005/-0	0.938 +0/-0.005	1.685 +0/-0.002	1.687 +0.004/-0
U12-1.00	1.000	1.250	0.125	0.138 +0.010/-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	1.000	1.250	0.188	0.207 +0.010/-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	1.000	1.250	0.250	0.275 +0.010/-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	1.000	1.250	0.250	0.275 +0.010/-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	1.000	1.250	0.125	0.138 +0.010/-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
U15-1.00	1.000	1.312	0.156	0.172 +0.010/-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	1.000	1.312	0.234	0.257 +0.010/-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	1.000	1.312	0.156	0.172 +0.010/-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
U18-1.00-25B	1.000	1.375	0.250	0.275 +0.010/-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	1.000	1.375	0.312	0.344 +0.010/-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	1.000	1.375	0.312	0.344 +0.010/-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	1.000	1.375	0.375	0.413 +0.010/-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	1.000	1.375	0.188	0.207 +0.010/-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
U25-1.00-37B	1.000	1.500	0.375	0.413 +0.010/-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	1.000	1.500	0.250	0.275 +0.010/-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
U28-1.00	1.000	1.562	0.281	0.309 +0.010/-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
U31-1.00	1.000	1.625	0.312	0.344 +0.010/-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	1.000	1.625	0.375	0.413 +0.010/-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	1.000	1.625	0.500	0.550 +0.010/-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
U37-1.00	1.000	1.750	0.375	0.413 +0.010/-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	1.000	1.750	0.625	0.688 +0.010/-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
U50-1.00	1.000	2.000	0.500	0.550 +0.010/-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
U12-1.06-25B	1.062	1.312	0.250	0.275 +0.010/-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	1.062	1.312	0.125	0.138 +0.010/-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
U18-1.06-31B	1.062	1.437	0.312	0.344 +0.010/-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
U25-1.06	1.062	1.562	0.250	0.275 +0.010/-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
U12-1.12-25B	1.125	1.375	0.250	0.275 +0.010/-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	1.125	1.375	0.250	0.275 +0.010/-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-SQB	1.125	1.375	0.125	0.138 +0.010/-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
U15-1.12	1.125	1.437	0.156	0.172 +0.010/-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
U18-1.12-25B	1.125	1.500	0.250	0.275 +0.010/-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	1.125	1.500	0.312	0.344 +0.010/-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	1.125	1.500	0.312	0.344 +0.010/-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	1.125	1.500	0.375	0.413 +0.010/-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	1.125	1.500	0.188	0.207 +0.010/-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
U25-1.12	1.125	1.625	0.250	0.275 +0.010/-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	1.125	1.625	0.375	0.413 +0.010/-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
U31-1.12-37B	1.125	1.750	0.375	0.413 +0.010/-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	1.125	1.750	0.312	0.344 +0.010/-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
U37-1.12	1.125	1.875	0.375	0.413 +0.010/-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
U12-1.18	1.188	1.437	0.125	0.138 +0.010/-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	1.188	1.437	0.188	0.207 +0.010/-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	1.188	1.437	0.250	0.275 +0.010/-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
U15-1.18	1.188	1.500	0.156	0.172 +0.010/-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
U18-1.18	1.188	1.562	0.188	0.207 +0.010/-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	1.188	1.562	0.250	0.275 +0.010/-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	1.188	1.562	0.312	0.344 +0.010/-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
U25-1.18	1.188	1.687	0.250	0.275 +0.010/-0	1.188 +0/-0.002	1.189 +0.003/-0	1.687 +0.003/-0	1.188 +0/-0.003	1.686 +0/-0.002	1.687 +0.003/-0
U31-1.18	1.188	1.812	0.312	0.344 +0.010/-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
U12-1.25-18B	1.250	1.500	0.188	0.207 +0.010/-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	1.250	1.500	0.250	0.275 +0.010/-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	1.250	1.500	0.250	0.275 +0.010/-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	1.250	1.500	0.125	0.138 +0.010/-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
U15-1.25	1.250	1.562	0.156	0.172 +0.010/-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
U18-1.25-25B	1.250	1.625	0.250	0.275 +0.010/-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	1.250	1.625	0.266	0.292 +0.010/-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	1.250	1.625	0.312	0.344 +0.010/-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	1.250	1.625	0.375	0.413 +0.010/-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



## STYLE 800 POLYURETHANE U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U18-1.25-SQB	1.250	1.625	0.188	0.207 +0.010/-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
U25-1.25-37B	1.250	1.750	0.375	0.413 +0.010/-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	1.250	1.750	0.375	0.413 +0.010/-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	1.250	1.750	0.250	0.275 +0.010/-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
U31-1.25	1.250	1.875	0.312	0.344 +0.010/-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	1.250	1.875	0.375	0.413 +0.010/-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	1.250	1.875	0.500	0.550 +0.010/-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	1.250	1.875	0.312	0.344 +0.010/-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
U37-1.25	1.250	2.000	0.375	0.413 +0.010/-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	1.250	2.000	0.625	0.688 +0.010/-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
U50-1.25	1.250	2.250	0.500	0.550 +0.010/-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
U62-1.25	1.250	2.500	0.625	0.688 +0.010/-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
U12-1.31-18B	1.312	1.562	0.188	0.207 +0.010/-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	1.563 +0.002/-0
U12-1.31	1.312	1.562	0.125	0.138 +0.010/-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	1.563 +0.002/-0
U18-1.31	1.312	1.687	0.188	0.207 +0.010/-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	1.312	1.687	0.312	0.344 +0.010/-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
U25-1.31	1.312	1.812	0.250	0.275 +0.010/-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	1.312	1.812	0.375	0.413 +0.010/-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
U18-1.37	1.375	1.750	0.188	0.207 +0.010/-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
U12-1.37-18D	1.375	1.625	0.188	0.207 +0.010/-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	1.375	1.625	0.250	0.275 +0.010/-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	1.375	1.625	0.125	0.138 +0.010/-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
U15-1.37	1.375	1.687	0.156	0.172 +0.010/-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
U18-1.37-25B	1.375	1.750	0.250	0.275 +0.010/-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	1.375	1.750	0.312	0.344 +0.010/-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	1.375	1.750	0.375	0.413 +0.010/-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	1.375	1.750	0.188	0.207 +0.010/-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
U25-1.37	1.375	1.875	0.250	0.275 +0.010/-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	1.375	1.875	0.375	0.413 +0.010/-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	1.375	1.875	0.250	0.275 +0.010/-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
U31-1.37-37B	1.375	2.000	0.375	0.413 +0.010/-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	1.375	2.000	0.500	0.550 +0.010/-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	1.375	2.000	0.500	0.550 +0.010/-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	1.375	2.000	0.312	0.344 +0.010/-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
U37-1.37	1.375	2.125	0.375	0.413 +0.010/-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
U12-1.43-25B	1.438	1.687	0.250	0.275 +0.010/-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	1.438	1.687	0.125	0.138 +0.010/-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
U18-1.06	1.438	1.437	0.188	0.207 +0.010/-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
U18-1.43	1.438	1.812	0.188	0.207 +0.010/-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
U25-1.43	1.438	1.937	0.250	0.275 +0.010/-0	1.438 +0/-0.002	1.439 +0.003/-0	1.937 +0.003/-0	1.438 +0/-0.003	1.936 +0/-0.002	1.937 +0.003/-0
U25-1.50-37B	1.500	2.000	0.375	0.413 +0.010/-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
U12-1.50-18B	1.500	1.750	0.188	0.207 +0.010/-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	1.500	1.750	0.250	0.275 +0.010/-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	1.500	1.750	0.125	0.138 +0.010/-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
U15-1.50-31B	1.500	1.812	0.312	0.344 +0.010/-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
U18-1.50-25B	1.500	1.875	0.250	0.275 +0.010/-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	1.500	1.875	0.266	0.292 +0.010/-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	1.500	1.875	0.297	0.326 +0.010/-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	1.500	1.875	0.312	0.344 +0.010/-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	1.500	1.875	0.375	0.413 +0.010/-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	1.500	1.875	0.375	0.413 +0.010/-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
U25-1.50-31B	1.500	2.000	0.312	0.344 +0.010/-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	1.500	2.000	0.375	0.413 +0.010/-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	1.500	2.000	0.500	0.550 +0.010/-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	1.500	2.000	0.250	0.275 +0.010/-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
U31-1.50	1.500	2.125	0.312	0.344 +0.010/-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	1.500	2.125	0.375	0.413 +0.010/-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	1.500	2.125	0.500	0.550 +0.010/-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	1.500	2.125	0.500	0.550 +0.010/-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
U31-1.50HT	1.500	2.125	0.312	0.344 +0.010/-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
U37-1.50	1.500	2.250	0.375	0.413 +0.010/-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	1.500	2.250	0.500	0.550 +0.010/-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	1.500	2.250	0.625	0.688 +0.010/-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

# STYLE 800 POLYURETHANE U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U43-1.50	1.500	2.375	0.438	0.481 +0.010/-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
U50-1.50	1.500	2.500	0.500	0.550 +0.010/-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
U12-1.56	1.563	1.812	0.125	0.138 +0.010/-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
U18-1.56-37B	1.563	1.937	0.375	0.413 +0.010/-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
U37-1.56	1.563	2.312	0.375	0.413 +0.010/-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
U12-1.62	1.625	1.875	0.125	0.138 +0.010/-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	1.625	1.875	0.125	0.138 +0.010/-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
U18-1.62	1.625	2.000	0.188	0.207 +0.010/-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	1.625	2.000	0.250	0.275 +0.010/-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	1.625	2.000	0.312	0.344 +0.010/-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	1.625	2.000	0.375	0.413 +0.010/-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	1.625	2.000	0.375	0.413 +0.010/-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	1.625	2.000	0.188	0.207 +0.010/-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
U25-1.62	1.625	2.125	0.250	0.275 +0.010/-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	1.625	2.125	0.375	0.413 +0.010/-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
U31-1.62	1.625	2.250	0.312	0.344 +0.010/-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	1.625	2.250	0.375	0.413 +0.010/-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	1.625	2.250	0.500	0.550 +0.010/-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
U37-1.62-62B	1.625	2.375	0.625	0.688 +0.010/-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	1.625	2.375	0.375	0.413 +0.010/-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
U12-1.68	1.688	1.937	0.125	0.138 +0.010/-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
U18-1.68	1.688	2.062	0.188	0.207 +0.010/-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
U31-1.68	1.688	2.312	0.312	0.344 +0.010/-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
U25-1.75-SQB	1.750	2.250	0.250	0.275 +0.010/-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
U12-1.75-25B	1.750	2.000	0.250	0.275 +0.010/-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	1.750	2.000	0.250	0.275 +0.010/-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	1.750	2.000	0.125	0.138 +0.010/-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
U18-1.75	1.750	2.125	0.188	0.207 +0.010/-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	1.750	2.125	0.250	0.275 +0.010/-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	1.750	2.125	0.266	0.292 +0.010/-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	1.750	2.125	0.312	0.344 +0.010/-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	1.750	2.125	0.375	0.413 +0.010/-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	1.750	2.125	0.375	0.413 +0.010/-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	1.750	2.125	0.188	0.207 +0.010/-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
U25-1.75	1.750	2.250	0.250	0.275 +0.010/-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	1.750	2.250	0.375	0.413 +0.010/-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
U31-1.75	1.750	2.375	0.312	0.344 +0.010/-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	1.750	2.375	0.375	0.413 +0.010/-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	1.750	2.375	0.500	0.550 +0.010/-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	1.750	2.375	0.500	0.550 +0.010/-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
U37-1.75	1.750	2.500	0.375	0.413 +0.010/-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	1.750	2.500	0.625	0.688 +0.010/-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
U50-1.75	1.750	2.750	0.500	0.550 +0.010/-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
U62-1.75	1.750	3.000	0.625	0.688 +0.010/-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
U12-1.87	1.875	2.125	0.125	0.138 +0.010/-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
U18-1.87-25D	1.875	2.250	0.250	0.275 +0.010/-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	1.875	2.250	0.266	0.292 +0.010/-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	1.875	2.250	0.375	0.413 +0.010/-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	1.875	2.250	0.375	0.413 +0.010/-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	1.875	2.250	0.188	0.207 +0.010/-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
U25-1.87	1.875	2.375	0.250	0.275 +0.010/-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	1.875	2.375	0.375	0.413 +0.010/-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
U31-1.87	1.875	2.500	0.312	0.344 +0.010/-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	1.875	2.500	0.375	0.413 +0.010/-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	1.875	2.500	0.500	0.550 +0.010/-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	1.875	2.500	0.500	0.550 +0.010/-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
U37-1.87	1.875	2.625	0.375	0.413 +0.010/-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
U50-1.87-62B	1.875	2.875	0.625	0.688 +0.010/-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
U31-1.93	1.938	2.562	0.312	0.344 +0.010/-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
U12-2.00	2.000	2.250	0.125	0.138 +0.010/-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	2.000	2.250	0.250	0.275 +0.010/-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
U18-2.00-31B	2.000	2.375	0.312	0.344 +0.010/-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	2.000	2.375	0.375	0.413 +0.010/-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

# STYLE 800 POLYURETHANE U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U18-2.00-SQB	2.000	2.375	0.188	0.207 +0.010/-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
U25-2.00	2.000	2.500	0.250	0.275 +0.010/-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	2.000	2.500	0.312	0.344 +0.010/-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	2.000	2.500	0.375	0.413 +0.010/-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	2.000	2.500	0.375	0.413 +0.010/-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	2.000	2.500	0.250	0.275 +0.010/-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
U31-2.00	2.000	2.625	0.312	0.344 +0.010/-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	2.000	2.625	0.375	0.413 +0.010/-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	2.000	2.625	0.500	0.550 +0.010/-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
U37-2.00-50B	2.000	2.750	0.500	0.550 +0.010/-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	2.000	2.750	0.625	0.688 +0.010/-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	2.000	2.750	0.375	0.413 +0.010/-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
U50-2.00-75B	2.000	3.000	0.750	0.825 +0.010/-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	2.000	3.000	0.500	0.550 +0.010/-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
U18-2.06	2.062	2.437	0.188	0.207 +0.010/-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
U37-2.06	2.062	2.812	0.375	0.413 +0.010/-0	2.062 +0/-0.002	2.064 +0.004/-0	2.812 +0.005/-0	2.062 +0/-0.005	2.810 +0/-0.002	2.812 +0.004/-0
U12-2.12	2.125	2.750	0.125	0.138 +0.010/-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	2.125	2.750	0.250	0.275 +0.010/-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
U18-2.12-25B	2.125	2.500	0.250	0.275 +0.010/-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	2.125	2.500	0.266	0.292 +0.010/-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	2.125	2.500	0.375	0.413 +0.010/-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
U25-2.12	2.125	2.625	0.250	0.275 +0.010/-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	2.125	2.625	0.375	0.413 +0.010/-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
U31-2.12-50B	2.125	2.750	0.500	0.550 +0.010/-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	2.125	2.750	0.312	0.344 +0.010/-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
U37-2.12	2.125	2.875	0.375	0.413 +0.010/-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
U18-2.18-37B	2.188	2.562	0.375	0.413 +0.010/-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
U25-2.18-37B	2.188	2.688	0.375	0.413 +0.010/-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
U28-2.20-50B	2.200	2.770	0.500	0.550 +0.010/-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
U12-2.25	2.250	2.500	0.125	0.138 +0.010/-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	2.250	2.500	0.375	0.413 +0.010/-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
U18-2.12-SQB	2.250	2.500	0.188	0.207 +0.010/-0	2.250 +0/-0.002	2.251 +0.002/-0	2.500 +0.002/-0	2.250 +0/-0.002	2.499 +0/-0.002	2.500 +0.002/-0
U18-2.25-31B	2.250	2.625	0.312	0.344 +0.010/-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	2.250	2.625	0.375	0.413 +0.010/-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	2.250	2.625	0.188	0.207 +0.010/-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
U25-2.25	2.250	2.750	0.250	0.275 +0.010/-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	2.250	2.750	0.375	0.413 +0.010/-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
U31-2.25	2.250	2.875	0.312	0.344 +0.010/-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	2.250	2.875	0.500	0.550 +0.010/-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
U37-2.25	2.250	3.000	0.375	0.413 +0.010/-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	2.250	3.000	0.500	0.550 +0.010/-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	2.250	3.000	0.625	0.688 +0.010/-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	2.250	3.000	0.625	0.688 +0.010/-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	2.250	3.000	0.375	0.413 +0.010/-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
U50-2.25	2.250	3.250	0.500	0.550 +0.010/-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
U31-2.37-50D	2.375	3.000	0.500	0.550 +0.010/-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
U12-2.37	2.375	2.625	0.125	0.138 +0.010/-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	2.375	2.625	0.188	0.207 +0.010/-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
U18-2.37	2.375	2.750	0.188	0.207 +0.010/-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	2.375	2.750	0.250	0.275 +0.010/-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	2.375	2.750	0.375	0.413 +0.010/-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	2.375	2.750	0.500	0.550 +0.010/-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	2.375	2.750	0.188	0.207 +0.010/-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
U25-2.37	2.375	2.875	0.250	0.275 +0.010/-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	2.375	2.875	0.375	0.413 +0.010/-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
U31-2.37	2.375	3.000	0.312	0.344 +0.010/-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	2.375	3.000	0.500	0.550 +0.010/-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
U37-2.37	2.375	3.125	0.375	0.413 +0.010/-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
U50-2.37-SQB	2.375	3.375	0.500	0.550 +0.010/-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
U31-2.50	2.500	3.125	0.313	0.344 +0.010/-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	2.500	3.125	0.500	0.550 +0.010/-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
U12-2.50	2.500	2.750	0.125	0.138 +0.010/-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	2.500	2.750	0.250	0.275 +0.010/-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

# STYLE 800 POLYURETHANE U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U18-2.50-25B	2.500	2.875	0.250	0.275 +0.010/-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	2.500	2.875	0.312	0.344 +0.010/-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	2.500	2.875	0.375	0.413 +0.010/-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-SQB	2.500	2.875	0.188	0.207 +0.010/-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
U25-2.50	2.500	3.000	0.250	0.275 +0.010/-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	2.500	3.000	0.312	0.344 +0.010/-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	2.500	3.000	0.375	0.413 +0.010/-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	2.500	3.000	0.375	0.413 +0.010/-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	2.500	3.000	0.500	0.550 +0.010/-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	2.500	3.000	0.250	0.275 +0.010/-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
U37-2.50-50B	2.500	3.250	0.500	0.550 +0.010/-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	2.500	3.250	0.625	0.688 +0.010/-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	2.500	3.250	0.625	0.688 +0.010/-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	2.500	3.250	0.625	0.688 +0.010/-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	2.500	3.250	0.375	0.413 +0.010/-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
U43-2.50	2.500	3.375	0.438	0.481 +0.010/-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
U50-2.50	2.500	3.500	0.500	0.550 +0.010/-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	2.500	3.500	0.750	0.825 +0.010/-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
U31-2.56	2.563	3.188	0.313	0.344 +0.010/-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	2.625	3.250	0.313	0.344 +0.010/-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	2.625	3.250	0.500	0.550 +0.010/-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
U18-2.62-37B	2.625	3.000	0.375	0.413 +0.010/-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	2.625	3.000	0.375	0.413 +0.010/-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	2.625	3.000	0.188	0.207 +0.010/-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
U25-2.62	2.625	3.125	0.250	0.275 +0.010/-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	2.625	3.125	0.375	0.413 +0.010/-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
U37-2.62	2.625	3.375	0.375	0.413 +0.010/-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	2.625	3.375	0.625	0.688 +0.010/-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
U31-2.75	2.750	3.375	0.313	0.344 +0.010/-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	2.750	3.375	0.500	0.344 +0.010/-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
U12-2.75	2.750	3.000	0.125	0.138 +0.010/-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
U12-2.75-25B	2.750	3.000	0.250	0.275 +0.010/-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
U18-2.75	2.750	3.125	0.188	0.207 +0.010/-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	2.750	3.125	0.375	0.413 +0.010/-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	2.750	3.125	0.188	0.207 +0.010/-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
U25-2.75-37B	2.750	3.250	0.375	0.413 +0.010/-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	2.750	3.250	0.375	0.413 +0.010/-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	2.750	3.250	0.500	0.550 +0.010/-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	2.750	3.250	0.250	0.275 +0.010/-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
U37-2.75	2.750	3.500	0.375	0.413 +0.010/-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
U37-2.75-50D	2.750	3.500	0.500	0.550 +0.010/-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	2.750	3.500	0.625	0.688 +0.010/-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	2.750	3.500	0.625	0.688 +0.010/-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
U50-2.75	2.750	3.750	0.500	0.550 +0.010/-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
U62-2.75	2.750	4.000	0.625	0.688 +0.010/-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
U21-2.81	2.813	3.250	0.219	0.240 +0.010/-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
U37-2.81	2.813	3.562	0.375	0.413 +0.010/-0	2.813 +0/-0.002	2.815 +0.004/-0	3.562 +0.005/-0	2.813 +0/-0.005	3.560 +0/-0.002	3.562 +0.004/-0
U31-2.87	2.875	3.500	0.313	0.344 +0.010/-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	2.875	3.500	0.500	0.550 +0.010/-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
U12-2.87	2.875	3.125	0.125	0.138 +0.010/-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
U18-2.87	2.875	3.250	0.188	0.207 +0.010/-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	2.875	3.250	0.250	0.275 +0.010/-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	2.875	3.250	0.375	0.413 +0.010/-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
U25-2.87	2.875	3.375	0.250	0.275 +0.010/-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	2.875	3.375	0.375	0.413 +0.010/-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
U37-2.93	2.938	3.687	0.375	0.413 +0.010/-0	2.938 +0/-0.002	2.940 +0.004/-0	3.687 +0.005/-0	2.938 +0/-0.005	3.685 +0/-0.002	3.687 +0.004/-0
U100-20.00	20.000	22.000	1.000	1.100 +0.010/-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
U75-20.50	20.500	22.000	0.750	0.825 +0.010/-0	20.500 +0/-0.003	20.502 +0.006/-0	22.000 +0.009/-0	20.500 +0/-0.009	21.998 +0/-0.003	22.000 +0.006/-0
U31-3.00	3.000	3.625	0.313	0.344 +0.010/-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	3.000	3.625	0.500	0.550 +0.010/-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
U12-3.00	3.000	3.250	0.250	0.275 +0.010/-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
U18-3.00	3.000	3.375	0.188	0.207 +0.010/-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	3.000	3.375	0.375	0.413 +0.010/-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

# STYLE 800 POLYURETHANE U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U18-3.00-SQB	3.000	3.375	0.188	0.207 +0.010/-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
U21-3.00	3.000	3.437	0.219	0.240 +0.010/-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
U25-3.00	3.000	3.500	0.250	0.275 +0.010/-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	3.000	3.500	0.375	0.413 +0.010/-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	3.000	3.500	0.375	0.413 +0.010/-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	3.000	3.500	0.250	0.275 +0.010/-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
U37-3.00	3.000	3.750	0.375	0.413 +0.010/-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	3.000	3.750	0.500	0.550 +0.010/-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	3.000	3.750	0.625	0.688 +0.010/-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	3.000	3.750	0.375	0.413 +0.010/-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
U50-3.00	3.000	4.000	0.500	0.550 +0.010/-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	3.000	4.000	0.625	0.688 +0.010/-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	3.000	4.000	0.750	0.825 +0.010/-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	3.000	4.000	0.750	0.825 +0.010/-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
U62-3.00	3.000	4.250	0.625	0.688 +0.010/-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
U31-3.12-SQB	3.125	3.750	0.313	0.344 +0.010/-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
U12-3.12	3.125	3.375	0.125	0.138 +0.010/-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
U18-3.12-37B	3.125	3.500	0.375	0.413 +0.010/-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-SQB	3.125	3.500	0.188	0.207 +0.010/-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
U25-3.12	3.125	3.625	0.250	0.275 +0.010/-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	3.125	3.625	0.375	0.413 +0.010/-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
U37-3.12-SQB	3.125	3.875	0.375	0.413 +0.010/-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
U43-3.12	3.125	4.000	0.438	0.481 +0.010/-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
U28-3.18-50B	3.188	3.750	0.500	0.550 +0.010/-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	0.500	0.550 +0.010/-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
U31-3.25	3.250	3.875	0.313	0.344 +0.010/-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	3.250	3.875	0.500	0.550 +0.010/-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
U12-3.25	3.250	3.500	0.125	0.138 +0.010/-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
U18-3.25	3.250	3.625	0.188	0.207 +0.010/-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	3.250	3.625	0.375	0.413 +0.010/-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
U25-3.25	3.250	3.750	0.250	0.275 +0.010/-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	3.250	3.750	0.375	0.413 +0.010/-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	3.250	3.750	0.375	0.413 +0.010/-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	3.250	3.750	0.500	0.550 +0.010/-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
U37-3.25	3.250	4.000	0.375	0.413 +0.010/-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	3.250	4.000	0.500	0.550 +0.010/-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	3.250	4.000	0.625	0.688 +0.010/-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
U50-3.25	3.250	4.250	0.500	0.550 +0.010/-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
U62-3.25	3.250	4.500	0.625	0.688 +0.010/-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
U31-3.37	3.375	4.000	0.313	0.344 +0.010/-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	3.375	4.000	0.500	0.550 +0.010/-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	3.375	4.000	0.625	0.682 +0.010/-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
U18-3.37-37B	3.375	3.750	0.375	0.413 +0.010/-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	3.375	3.750	0.188	0.207 +0.010/-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
U25-3.37	3.375	3.875	0.250	0.275 +0.010/-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	3.375	3.875	0.250	0.275 +0.010/-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
U37-3.37	3.375	4.125	0.375	0.413 +0.010/-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	3.375	4.125	0.625	0.688 +0.010/-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
U31-3.50	3.500	4.125	0.313	0.344 +0.010/-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	3.500	4.125	0.500	0.550 +0.010/-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	3.500	4.125	0.500	0.550 +0.010/-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
U12-3.50	3.500	3.750	0.125	0.138 +0.010/-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
U18-3.50-37B	3.500	3.875	0.375	0.413 +0.010/-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	3.500	3.875	0.188	0.207 +0.010/-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
U25-3.50	3.500	4.000	0.250	0.275 +0.010/-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	3.500	4.000	0.375	0.413 +0.010/-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	3.500	4.000	0.375	0.413 +0.010/-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	3.500	4.000	0.500	0.550 +0.010/-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	3.500	4.000	0.250	0.275 +0.010/-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
U37-3.50	3.500	4.250	0.375	0.413 +0.010/-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	3.500	4.250	0.500	0.550 +0.010/-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	3.500	4.250	0.625	0.688 +0.010/-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
U50-3.50	3.500	4.500	0.500	0.550 +0.010/-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

## STYLE 800 POLYURETHANE U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U50-3.50-75B	3.500	4.500	0.750	0.825 +0.010/-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	3.500	4.500	0.750	0.825 +0.010/-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
U62-3.50	3.500	4.750	0.625	0.688 +0.010/-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
U75-3.50-SQB	3.500	5.000	0.750	0.825 +0.010/-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
U31-3.62	3.625	4.250	0.313	0.344 +0.010/-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	3.625	4.250	0.500	0.550 +0.010/-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
U12-3.62-18B	3.625	3.875	0.188	0.207 +0.010/-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
U18-3.62-37B	3.625	4.000	0.375	0.413 +0.010/-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	3.625	4.000	0.188	0.207 +0.010/-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
U25-3.62	3.625	4.125	0.250	0.275 +0.010/-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
U37-3.62	3.625	4.375	0.375	0.413 +0.010/-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	3.625	4.375	0.500	0.550 +0.010/-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	3.625	4.375	0.625	0.688 +0.010/-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
U50-3.62	3.625	4.625	0.500	0.550 +0.010/-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
U25-3.69-50B	3.690	4.190	0.500	0.550 +0.010/-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
U31-3.75	3.750	4.375	0.313	0.344 +0.010/-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	3.750	4.375	0.375	0.413 +0.010/-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	3.750	4.375	0.500	0.550 +0.010/-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	3.750	4.375	0.625	0.682 +0.010/-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
U12-3.75	3.750	4.000	0.125	0.138 +0.010/-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
U18-3.75	3.750	4.125	0.188	0.207 +0.010/-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	3.750	4.125	0.375	0.413 +0.010/-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
U25-3.75-37B	3.750	4.250	0.375	0.413 +0.010/-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	3.750	4.250	0.500	0.550 +0.010/-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	3.750	4.250	0.563	0.619 +0.010/-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	3.750	4.250	0.250	0.275 +0.010/-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
U37-3.75	3.750	4.500	0.375	0.413 +0.010/-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	3.750	4.500	0.500	0.550 +0.010/-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	3.750	4.500	0.625	0.688 +0.010/-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	3.750	4.500	0.375	0.413 +0.010/-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
U50-3.75	3.750	4.750	0.500	0.550 +0.010/-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
U62-3.75	3.750	5.000	0.625	0.688 +0.010/-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
U31-3.87	3.875	4.500	0.313	0.344 +0.010/-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	3.875	4.500	0.500	0.550 +0.010/-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
U18-3.87	3.875	4.250	0.188	0.207 +0.010/-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	3.875	4.250	0.375	0.413 +0.010/-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
U25-3.87	3.875	4.375	0.250	0.275 +0.010/-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
U37-3.87	3.875	4.625	0.375	0.413 +0.010/-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
U43-3.87-75B	3.875	4.750	0.750	0.825 +0.010/-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
U31-4.00	4.000	4.625	0.313	0.344 +0.010/-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	4.000	4.625	0.563	0.616 +0.010/-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
U31-4.00-56F	4.000	4.625	0.563	0.616 +0.010/-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
U12-4.00	4.000	4.250	0.125	0.138 +0.010/-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
U18-4.00	4.000	4.375	0.188	0.207 +0.010/-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	4.000	4.375	0.375	0.413 +0.010/-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	4.000	4.375	0.188	0.207 +0.010/-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
U25-4.00-37B	4.000	4.500	0.375	0.413 +0.010/-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	4.000	4.500	0.375	0.413 +0.010/-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	4.000	4.500	0.500	0.550 +0.010/-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	4.000	4.500	0.563	0.619 +0.010/-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	4.000	4.500	0.563	0.619 +0.010/-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	4.000	4.500	0.563	0.619 +0.010/-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	4.000	4.500	0.250	0.275 +0.010/-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
U37-4.00	4.000	4.750	0.375	0.413 +0.010/-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	4.000	4.750	0.500	0.550 +0.010/-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	4.000	4.750	0.625	0.688 +0.010/-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	4.000	4.750	0.625	0.688 +0.010/-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
U50-4.00	4.000	5.000	0.500	0.550 +0.010/-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	4.000	5.000	0.750	0.825 +0.010/-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
U62-4.00	4.000	5.250	0.625	0.688 +0.010/-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
U31-4.12	4.125	4.750	0.313	0.344 +0.010/-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	4.125	4.750	0.563	0.616 +0.010/-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
U18-4.12	4.125	4.500	0.188	0.207 +0.010/-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

# STYLE 800 POLYURETHANE U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U18-4.12-37B	4.125	4.500	0.375	0.413 +0.010/-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	4.125	4.500	0.375	0.413 +0.010/-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
U25-4.12	4.125	4.625	0.250	0.275 +0.010/-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	4.125	4.625	0.375	0.413 +0.010/-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
U37-4.12	4.125	4.875	0.375	0.413 +0.010/-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
U31-4.25	4.250	4.875	0.313	0.344 +0.010/-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	4.250	4.875	0.563	0.616 +0.010/-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
U12-4.25	4.250	4.500	0.125	0.138 +0.010/-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
U18-4.25	4.250	4.625	0.188	0.207 +0.010/-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	4.250	4.625	0.375	0.413 +0.010/-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
U25-4.25	4.250	4.750	0.250	0.275 +0.010/-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	4.250	4.750	0.375	0.413 +0.010/-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	4.250	4.750	0.563	0.619 +0.010/-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
U37-4.25	4.250	5.000	0.375	0.413 +0.010/-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	4.250	5.000	0.500	0.550 +0.010/-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	4.250	5.000	0.625	0.688 +0.010/-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	4.250	5.000	0.625	0.688 +0.010/-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	4.250	5.000	0.375	0.413 +0.010/-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
U50-4.25	4.250	5.250	0.500	0.550 +0.010/-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	4.250	5.250	0.750	0.825 +0.010/-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
U62-4.25	4.250	5.500	0.625	0.688 +0.010/-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
U31-4.37	4.375	5.000	0.313	0.344 +0.010/-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	4.375	5.000	0.500	0.550 +0.010/-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	4.375	5.000	0.563	0.616 +0.010/-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
U12-4.37	4.375	4.625	0.125	0.138 +0.010/-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
U18-4.37	4.375	4.750	0.188	0.207 +0.010/-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	4.375	4.750	0.375	0.413 +0.010/-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
U25-4.37-56B	4.375	4.875	0.563	0.619 +0.010/-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	4.375	4.875	0.250	0.275 +0.010/-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
U37-4.37	4.375	5.125	0.375	0.413 +0.010/-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	4.375	5.125	0.625	0.688 +0.010/-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
U31-4.50	4.500	5.125	0.313	0.344 +0.010/-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	4.500	5.125	0.500	0.550 +0.010/-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	4.500	5.125	0.625	0.682 +0.010/-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
U12-4.50	4.500	4.750	0.125	0.138 +0.010/-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
U18-4.50-37B	4.500	4.875	0.375	0.413 +0.010/-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
U25-4.50	4.500	5.000	0.250	0.275 +0.010/-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	4.500	5.000	0.312	0.344 +0.010/-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	4.500	5.000	0.375	0.413 +0.010/-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	4.500	5.000	0.375	0.413 +0.010/-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	4.500	5.000	0.500	0.550 +0.010/-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	4.500	5.000	0.500	0.550 +0.010/-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	4.500	5.000	0.563	0.619 +0.010/-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	4.500	5.000	0.563	0.619 +0.010/-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	4.500	5.000	0.625	0.688 +0.010/-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
U37-4.50	4.500	5.250	0.375	0.413 +0.010/-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	4.500	5.250	0.625	0.688 +0.010/-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	4.500	5.250	0.375	0.413 +0.010/-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
U43-4.50	4.500	5.375	0.438	0.481 +0.010/-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
U50-4.50	4.500	5.500	0.500	0.550 +0.010/-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	4.500	5.500	0.750	0.825 +0.010/-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	4.500	5.500	0.750	0.825 +0.010/-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
U75-4.50	4.500	6.000	0.750	0.825 +0.010/-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
U25-4.62-56B	4.625	5.125	0.563	0.616 +0.010/-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	4.625	5.125	0.250	0.275 +0.010/-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
U18-4.62	4.625	5.000	0.188	0.207 +0.010/-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	4.625	5.000	0.375	0.413 +0.010/-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
U25-4.62-37B	4.625	5.125	0.250	0.275 +0.010/-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
U37-4.62	4.625	5.375	0.375	0.413 +0.010/-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	4.625	5.375	0.625	0.688 +0.010/-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
U25-4.75	4.750	5.250	0.250	0.275 +0.010/-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	4.750	5.250	0.375	0.413 +0.010/-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	4.750	5.250	0.563	0.616 +0.010/-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

# STYLE 800 POLYURETHANE U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U31-4.75	4.750	5.375	0.313	0.344 +0.010/-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	4.750	5.375	0.625	0.682 +0.010/-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
U12-4.75	4.750	5.000	0.125	0.138 +0.010/-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
U18-4.75	4.750	5.125	0.188	0.207 +0.010/-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
U37-4.75-50B	4.750	5.500	0.500	0.550 +0.010/-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	4.750	5.500	0.625	0.688 +0.010/-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	4.750	5.500	0.375	0.413 +0.010/-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
U43-4.75	4.750	5.625	0.438	0.481 +0.010/-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	4.750	5.625	0.750	0.825 +0.010/-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
U50-4.75	4.750	5.750	0.500	0.550 +0.010/-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	4.750	5.750	0.688	0.756 +0.010/-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
U62-4.75	4.750	6.000	0.625	0.688 +0.010/-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	4.750	6.000	0.750	0.825 +0.010/-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
U25-4.87	4.875	5.375	0.250	0.275 +0.010/-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
U31-4.87	4.875	5.500	0.313	0.344 +0.010/-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
U18-4.87	4.875	5.250	0.188	0.207 +0.010/-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
U37-4.87	4.875	5.625	0.375	0.413 +0.010/-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	4.875	5.625	0.625	0.688 +0.010/-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
U25-5.00	5.000	5.500	0.250	0.275 +0.010/-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	5.000	5.500	0.375	0.413 +0.010/-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	5.000	5.500	0.500	0.550 +0.010/-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	5.000	5.500	0.500	0.550 +0.010/-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	5.000	5.500	0.563	0.616 +0.010/-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
U25-5.00-56D	5.000	5.500	0.563	0.616 +0.010/-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
U31-5.00	5.000	5.625	0.313	0.344 +0.010/-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	5.000	5.625	0.625	0.682 +0.010/-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	5.000	5.625	0.625	0.682 +0.010/-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
U18-5.00	5.000	5.375	0.188	0.207 +0.010/-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	5.000	5.375	0.312	0.344 +0.010/-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	5.000	5.375	0.375	0.413 +0.010/-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
U37-5.00-62B	5.000	5.750	0.625	0.688 +0.010/-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	5.000	5.750	0.375	0.413 +0.010/-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
U50-5.00	5.000	6.000	0.500	0.550 +0.010/-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	5.000	6.000	0.750	0.825 +0.010/-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	5.000	6.000	0.750	0.825 +0.010/-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	5.000	6.000	0.500	0.550 +0.010/-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
U62-5.00	5.000	6.250	0.625	0.688 +0.010/-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
U25-5.12	5.125	5.625	0.250	0.275 +0.010/-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
U31-5.12	5.125	5.750	0.313	0.344 +0.010/-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
U43-5.12	5.125	6.000	0.438	0.481 +0.010/-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
U25-5.25	5.250	5.750	0.250	0.275 +0.010/-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	5.250	5.750	0.375	0.413 +0.010/-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
U25-5.25-37BF	5.250	5.750	0.375	0.413 +0.010/-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	5.250	5.750	0.563	0.616 +0.010/-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
U43-5.25	5.250	6.125	0.438	0.481 +0.010/-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
U31-5.25	5.250	5.875	0.312	0.344 +0.010/-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	5.250	5.875	0.625	0.688 +0.010/-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
U37-5.25	5.250	6.000	0.375	0.413 +0.010/-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	5.250	6.000	0.500	0.550 +0.010/-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	5.250	6.000	0.500	0.550 +0.010/-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	5.250	6.000	0.625	0.688 +0.010/-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	5.250	6.000	0.625	0.688 +0.010/-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	5.250	6.000	0.375	0.413 +0.010/-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
U50-5.25	5.250	6.250	0.500	0.550 +0.010/-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
U62-5.25	5.250	6.500	0.625	0.688 +0.010/-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
U25-5.37	5.375	5.875	0.250	0.275 +0.010/-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
U31-5.37-62B	5.375	6.000	0.625	0.688 +0.010/-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	5.375	6.000	0.312	0.344 +0.010/-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
U37-5.37	5.375	6.125	0.375	0.413 +0.010/-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	5.375	6.125	0.625	0.688 +0.010/-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
U50-5.37-75B	5.375	6.375	0.750	0.825 +0.010/-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
U28-5.43	5.438	6.000	0.281	0.309 +0.010/-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	5.438	6.000	0.563	0.619 +0.010/-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



# STYLE 800 POLYURETHANE U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U25-5.50	5.500	6.000	0.250	0.275 +0.010/-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	5.500	6.000	0.375	0.275 +0.010/-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	5.500	6.000	0.500	0.550 +0.010/-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	5.500	6.000	0.563	0.616 +0.010/-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	5.500	6.000	0.563	0.616 +0.010/-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	5.500	6.000	0.625	0.682 +0.010/-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
U31-5.50-62B	5.500	6.125	0.625	0.688 +0.010/-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	5.500	6.125	0.312	0.344 +0.010/-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
U37-5.50-62B	5.500	6.250	0.625	0.688 +0.010/-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	5.500	6.250	0.375	0.413 +0.010/-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
U50-5.50	5.500	6.500	0.500	0.550 +0.010/-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	5.500	6.500	0.750	0.825 +0.010/-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	5.500	6.500	0.750	0.825 +0.010/-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
U62-5.50	5.500	6.750	0.625	0.688 +0.010/-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
U25-5.62	5.625	6.125	0.250	0.275 +0.010/-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
U31-5.62	5.625	6.250	0.312	0.344 +0.010/-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
U25-5.75	5.750	6.250	0.250	0.275 +0.010/-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	5.750	6.250	0.375	0.413 +0.010/-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	5.750	6.250	0.563	0.616 +0.010/-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
U31-5.75-62B	5.750	6.375	0.625	0.688 +0.010/-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
U37-5.75	5.750	6.500	0.375	0.413 +0.010/-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	5.750	6.500	0.625	0.688 +0.010/-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
U50-5.75	5.750	6.750	0.500	0.550 +0.010/-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
U62-5.75	5.750	7.000	0.625	0.688 +0.010/-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
U31-5.87	5.875	6.500	0.312	0.344 +0.010/-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
U37-5.87	5.875	6.625	0.375	0.413 +0.010/-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	5.875	6.625	0.625	0.688 +0.010/-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
U25-6.00	6.000	6.500	0.250	0.275 +0.010/-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	6.000	6.500	0.375	0.413 +0.010/-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	6.000	6.500	0.563	0.616 +0.010/-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
U25-6.00-56D	6.000	6.500	0.563	0.616 +0.010/-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
U25-6.00-56F	6.000	6.500	0.563	0.616 +0.010/-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
U18-6.00	6.000	6.375	0.188	0.207 +0.010/-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
U31-6.00	6.000	6.625	0.312	0.344 +0.010/-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	6.000	6.625	0.625	0.688 +0.010/-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
U37-6.00-62B	6.000	6.750	0.625	0.688 +0.010/-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	6.000	6.750	0.375	0.413 +0.010/-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
U50-6.00-75B	6.000	7.000	0.750	0.825 +0.010/-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	6.000	7.000	0.750	0.825 +0.010/-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	6.000	7.000	0.500	0.550 +0.010/-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
U62-6.00	6.000	7.250	0.625	0.688 +0.010/-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
U31-6.12	6.125	6.750	0.312	0.344 +0.010/-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
U25-6.25	6.250	6.750	0.250	0.275 +0.010/-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	6.250	6.750	0.250	0.413 +0.010/-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
U31-6.25	6.250	6.875	0.312	0.344 +0.010/-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
U37-6.25	6.250	7.000	0.375	0.413 +0.010/-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	6.250	7.000	0.500	0.550 +0.010/-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	6.250	7.000	0.625	0.688 +0.010/-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
U37-6.25-62F	6.250	7.000	0.625	0.688 +0.010/-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
U50-6.25	6.250	7.250	0.500	0.550 +0.010/-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
U62-6.25	6.250	7.500	0.625	0.688 +0.010/-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
U31-6.37N	6.375	7.000	0.312	0.344 +0.010/-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	6.375	7.000	0.312	0.344 +0.010/-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	6.375	7.000	0.625	0.688 +0.010/-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
U37-6.37	6.375	7.125	0.375	0.413 +0.010/-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
U25-6.50-37D	6.500	7.000	0.375	0.413 +0.010/-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	6.500	7.000	0.563	0.616 +0.010/-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	6.500	7.000	0.250	0.275 +0.010/-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
U31-6.50	6.500	7.125	0.312	0.344 +0.010/-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	6.500	7.125	0.625	0.688 +0.010/-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
U37-6.50	6.500	7.250	0.375	0.413 +0.010/-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	6.500	7.250	0.500	0.550 +0.010/-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	6.500	7.250	0.625	0.688 +0.010/-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

**STYLE 800 POLYURETHANE U-SEALS**

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U50-6.50	6.500	7.500	0.500	0.550 +0.010/-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	6.500	7.500	0.750	0.825 +0.010/-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
U75-6.50	6.500	8.000	0.750	0.825 +0.010/-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
U31-6.62	6.625	7.250	0.312	0.344 +0.010/-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
U25-6.75	6.750	7.250	0.250	0.275 +0.010/-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	6.750	7.250	0.375	0.413 +0.010/-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	6.750	7.250	0.563	0.616 +0.010/-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	6.750	7.250	0.563	0.616 +0.010/-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
U37-6.75-62B	6.750	7.500	0.625	0.688 +0.010/-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
U50-6.75-75B	6.750	7.750	0.750	0.825 +0.010/-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
U37-6.87-62B	6.875	7.625	0.625	0.688 +0.010/-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
U25-7.00	7.000	7.500	0.250	0.275 +0.010/-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	7.000	7.500	0.375	0.413 +0.010/-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	7.000	7.500	0.563	0.616 +0.010/-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
U31-7.00-62B	7.000	7.625	0.625	0.688 +0.010/-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
U37-7.00	7.000	7.750	0.375	0.413 +0.010/-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	7.000	7.750	0.500	0.550 +0.010/-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	7.000	7.750	0.625	0.688 +0.010/-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
U50-7.00	7.000	8.000	0.500	0.550 +0.010/-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	7.000	8.000	0.750	0.825 +0.010/-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
U62-7.00-100B	7.000	8.250	1.000	1.100 +0.010/-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
U75-7.00	7.000	8.500	0.750	0.825 +0.010/-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
U25-7.25	7.250	7.750	0.250	0.275 +0.010/-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
U37-7.25	7.250	8.000	0.375	0.413 +0.010/-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	7.250	8.000	0.500	0.550 +0.010/-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	7.250	8.000	0.625	0.688 +0.010/-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	7.250	8.000	0.375	0.413 +0.010/-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
U50-7.25	7.250	8.250	0.500	0.550 +0.010/-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
U62-7.25	7.250	8.500	0.625	0.688 +0.010/-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
U31-7.37-SQB	7.375	8.000	0.312	0.344 +0.010/-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	7.375	8.000	0.312	0.344 +0.010/-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
U31-7.37	7.375	8.000	0.312	0.344 +0.010/-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
U25-7.50-56B	7.500	8.000	0.563	0.616 +0.010/-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	7.500	8.000	0.250	0.275 +0.010/-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
U37-7.50-50B	7.500	8.250	0.500	0.550 +0.010/-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
U50-7.50	7.500	8.500	0.500	0.550 +0.010/-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	7.500	8.500	0.750	0.825 +0.010/-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
U37-7.62	7.625	8.375	0.375	0.413 +0.010/-0	7.625 +0/-0.002	7.627 +0.004/-0	8.375 +0.005/-0	7.625 +0/-0.005	8.373 +0/-0.002	8.375 +0.004/-0
U25-7.75	7.750	8.250	0.250	0.275 +0.010/-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
U37-7.75	7.750	8.500	0.375	0.413 +0.010/-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	7.750	8.500	0.625	0.688 +0.010/-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
U25-8.00	8.000	8.500	0.250	0.275 +0.010/-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	8.000	8.500	0.563	0.619 +0.010/-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
U25-8.00-56F	8.000	8.500	0.563	0.619 +0.010/-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
U31-8.00-62B	8.000	8.625	0.625	0.688 +0.010/-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
U37-8.00-50D	8.000	8.750	0.500	0.550 +0.010/-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	8.000	8.750	0.625	0.688 +0.010/-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
U50-8.00	8.000	9.000	0.500	0.550 +0.010/-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	8.000	9.000	0.750	0.825 +0.010/-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	8.000	9.000	0.750	0.825 +0.010/-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
U75-8.00	8.000	9.500	0.750	0.825 +0.010/-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
U25-8.12-56B	8.125	8.625	0.563	0.619 +0.010/-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	8.250	8.750	0.563	0.619 +0.010/-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
U37-8.25	8.250	9.000	0.375	0.413 +0.010/-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	8.250	9.000	0.625	0.688 +0.010/-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
U25-8.50	8.500	9.000	0.250	0.275 +0.010/-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	8.500	9.000	0.563	0.619 +0.010/-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
U50-8.50	8.500	9.500	0.500	0.550 +0.010/-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	8.500	9.500	0.750	0.825 +0.010/-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
U62-8.50	8.500	9.750	0.625	0.688 +0.010/-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
U37-8.75-62D	8.750	9.500	0.625	0.688 +0.010/-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
U50-8.75	8.750	9.750	0.500	0.550 +0.010/-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
U50-9.00N	9.000	10.000	0.500	0.550 +0.010/-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

# STYLE 800 POLYURETHANE U-SEALS

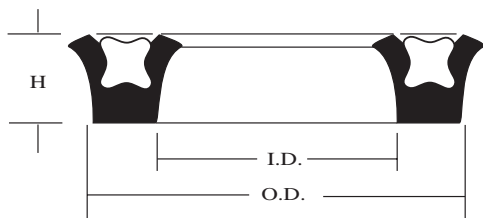
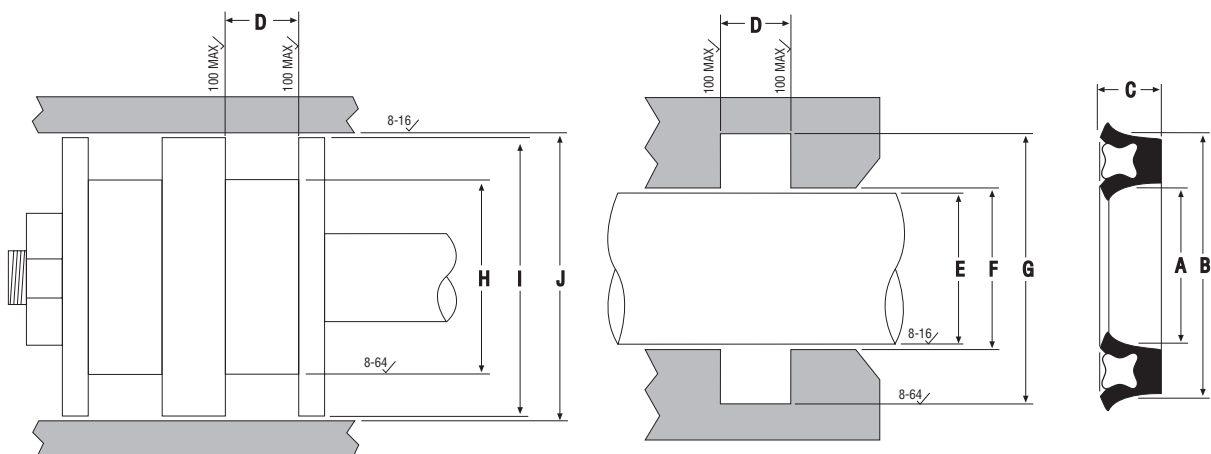
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U25-9.00	9.000	9.500	0.250	0.275 +0.010/-0	9.000 +0/-0.002	9.001 +0.003/-0	9.500 +0.003/-0	9.000 +0/-0.003	9.499 +0/-0.002	9.500 +0.003/-0
U37-9.00	9.000	9.750	0.375	0.413 +0.010/-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	9.000	9.750	0.625	0.688 +0.010/-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
U50-9.00	9.000	10.000	0.500	0.550 +0.010/-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	9.000	10.000	0.750	0.825 +0.010/-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
U62-9.00	9.000	10.250	0.625	0.688 +0.010/-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
U75-9.00	9.000	10.500	0.750	0.825 +0.010/-0	9.000 +0/-0.004	9.002 +0.007/-0	10.500 +0.011/-0	9.000 +0/-0.011	10.498 +0/-0.004	10.500 +0.007/-0
U37-9.25	9.250	10.000	0.375	0.413 +0.010/-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	9.250	10.000	0.500	0.550 +0.010/-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	9.250	10.000	0.625	0.688 +0.010/-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
U37-9.25V	9.250	10.000	0.375	0.413 +0.010/-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
U50-9.25-75B	9.250	10.250	0.750	0.825 +0.010/-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
U34-9.31	9.312	10.000	0.343	0.377 +0.010/-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
U25-9.50	9.500	10.000	0.250	0.275 +0.010/-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	9.500	10.000	0.563	0.619 +0.010/-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
U37-9.50	9.500	10.250	0.375	0.413 +0.010/-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	9.500	10.250	0.625	0.688 +0.010/-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
U50-9.50	9.500	10.500	0.500	0.550 +0.010/-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
U62-9.50	9.500	10.750	0.625	0.688 +0.010/-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
U75-9.50	9.500	11.000	0.750	0.825 +0.010/-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
U25-9.75	9.750	10.250	0.250	0.275 +0.010/-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
U37-9.75-62B	9.750	10.500	0.625	0.688 +0.010/-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
U100-10.00	10.000	12.000	1.000	1.100 +0.010/-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
U37-10.00-62B	10.000	10.750	0.625	0.688 +0.010/-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
U50-10.00-75B	10.000	11.000	0.750	0.825 +0.010/-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
U62-10.00-100B	10.000	11.250	1.000	1.100 +0.010/-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
U75-10.00	10.000	11.500	0.750	0.825 +0.010/-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
U25-10.00	10.000	10.500	0.250	0.275 +0.010/-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	10.250	10.750	0.250	0.275 +0.010/-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
U75-10.50	10.500	12.000	0.750	0.825 +0.010/-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
U37-10.50-62B	10.500	11.250	0.625	0.688 +0.010/-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
U50-10.50	10.500	11.500	0.500	0.550 +0.010/-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	10.625	11.625	0.750	0.825 +0.010/-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
U37-11.00-62B	11.000	11.750	0.625	0.688 +0.010/-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
U50-11.00N	11.000	12.000	0.500	0.550 +0.010/-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
U75-11.00	11.000	12.500	0.750	0.825 +0.010/-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
U50-11.00	11.000	12.000	0.500	0.550 +0.010/-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	11.000	12.000	0.750	0.825 +0.010/-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
U37-11.25	11.250	12.000	0.375	0.413 +0.010/-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	11.250	12.000	0.625	0.688 +0.010/-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
U37-11.50-62B	11.500	12.250	0.625	0.688 +0.010/-0	11.500 +0/-0.002	11.502 +0.004/-0	12.250 +0.005/-0	11.500 +0/-0.005	12.248 +0/-0.002	12.250 +0.004/-0
U50-11.50-75D	11.500	12.500	0.750	0.825 +0.010/-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
U62-11.50-100B	11.500	12.750	1.000	1.100 +0.010/-0	11.500 +0/-0.003	11.502 +0.006/-0	12.750 +0.009/-0	11.500 +0/-0.009	12.748 +0/-0.003	12.750 +0.006/-0
U100-12.00-150D	12.000	14.000	1.500	1.650 +0.010/-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
U37-12.00-62B	12.000	12.750	0.625	0.688 +0.010/-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
U62-12.00	12.000	13.250	0.625	0.682 +0.010/-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
U37-12.25	12.250	13.000	0.375	0.413 +0.010/-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
U75-12.50	12.500	14.000	0.750	0.825 +0.010/-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
U50-12.50-75D	12.500	13.500	0.750	0.825 +0.010/-0	12.500 +0/-0.003	12.502 +0.005/-0	13.500 +0.007/-0	12.500 +0/-0.007	13.498 +0/-0.003	13.500 +0.005/-0
U50-13.00	13.000	14.000	0.500	0.550 +0.010/-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	13.000	14.000	0.750	0.825 +0.010/-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
U43-13.12-SQB	13.125	14.000	0.438	0.481 +0.010/-0	13.125 +0/-0.002	13.127 +0.004/-0	14.000 +0.005/-0	13.125 +0/-0.005	13.998 +0/-0.002	14.000 +0.004/-0
U43-13.12-SQB	13.125	14.000	0.438	0.481 +0.010/-0	13.125 +0/-0.002	13.127 +0.004/-0	14.000 +0.005/-0	13.125 +0/-0.005	13.998 +0/-0.002	14.000 +0.004/-0
U37-13.25	13.250	14.000	0.375	0.413 +0.010/-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
U50-13.50-75D	13.500	14.500	0.750	0.825 +0.010/-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
U25-13.50-53B	13.500	14.000	0.531	0.584 +0.010/-0	13.500 +0/-0.002	13.501 +0.003/-0	14.000 +0.003/-0	13.500 +0/-0.003	13.999 +0/-0.002	14.000 +0.003/-0
U37-13.75	13.750	14.500	0.375	0.413 +0.010/-0	13.750 +0/-0.002	13.752 +0.004/-0	14.500 +0.005/-0	13.750 +0/-0.005	14.498 +0/-0.002	14.500 +0.004/-0
U100-14.00-150D	14.000	16.000	1.500	1.650 +0.010/-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
U50-14.00-75B	14.000	15.000	0.750	0.825 +0.010/-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
U62-14.00-100D	14.000	15.250	1.000	1.100 +0.010/-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
U75-14.00	14.000	15.500	0.750	0.825 +0.010/-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
U37-14.25-62B	14.250	15.000	0.375	0.413 +0.010/-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
U75-14.50	14.500	16.000	0.750	0.825 +0.010/-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

# STYLE 800 POLYURETHANE U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U62-14.75-100B	14.750	16.000	1.000	1.100 +0.010/-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
U100-15.00	15.000	17.000	1.000	1.100 +0.010/-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
U50-15.00-75B	15.000	16.000	0.750	0.825 +0.010/-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	15.000	16.000	0.500	0.550 +0.010/-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	15.500	16.500	0.750	0.825 +0.010/-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
U100-16.00	16.000	18.000	1.000	1.100 +0.010/-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
U75-16.00	16.000	17.500	0.750	0.825 +0.010/-0	16.000 +0/-0.003	16.002 +0.006/-0	17.500 +0.009/-0	16.000 +0/-0.009	17.498 +0/-0.003	17.500 +0.006/-0
U75-16.50	16.500	18.000	0.750	0.825 +0.010/-0	16.500 +0/-0.003	16.502 +0.006/-0	18.000 +0.009/-0	16.500 +0/-0.009	17.998 +0/-0.003	18.000 +0.006/-0
U50-17.00-75B	17.000	18.000	0.750	0.825 +0.010/-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
U100-18.00	18.000	20.000	1.000	1.100 +0.010/-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
U62-18.00-100B	18.000	19.250	1.000	1.100 +0.010/-0	18.000 +0/-0.003	18.002 +0.006/-0	19.250 +0.009/-0	18.000 +0/-0.009	19.248 +0/-0.003	19.250 +0.006/-0
U75-18.00	18.000	19.500	0.750	0.825 +0.010/-0	18.000 +0/-0.003	18.002 +0.006/-0	19.500 +0.009/-0	18.000 +0/-0.009	19.498 +0/-0.003	19.500 +0.006/-0
U100-19.00	19.000	21.000	1.000	1.100 +0.010/-0	19.000 +0/-0.004	19.002 +0.007/-0	21.000 +0.011/-0	19.000 +0/-0.011	20.998 +0/-0.004	21.000 +0.007/-0

## STYLE 800 FLUOROCARBON U-SEALS

Utilizing the same profiles as the Hercules Style 800 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°F to +400°F.



### HERCULES PART NUMBERS

**U 12 - 1.00 - 25**

Type of Seal: U  
Cross Section: 12  
Inside Diameter: 1.00  
Height: 25

SEAL INFORMATION	
MATERIAL	90A FLUOROCARBON
TEMPERATURE RANGE	-20° TO +400° F
PRESSURE RANGE	0 TO 2,000 PSI
MAXIMUM VELOCITY	100 FPM

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U12-0.25V	0.250	0.500	0.125	0.138 +0.010/-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
U12-031V	0.3125	0.5625	0.125	0.138 +0.010/-0	0.312 +0/-0.001	0.313 +0.002/-0	0.562 +0.002/-0	0.312 +0/-0.001	0.561 +0/-0.001	0.500 +0.002/-0
U12-0.37V	0.375	0.625	0.125	0.138 +0.010/-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
U12-050V	0.500	0.750	0.125	0.138 +0.010/-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	0.500	0.750	0.250	0.275 +0.010/-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
U12-062V	0.625	0.750	0.125	0.138 +0.010/-0	0.625 +0/-0.001	0.626 +0.002/-0	0.750 +0.002/-0	0.625 +0/-0.001	0.749 +0/-0.001	0.750 +0.002/-0
U12-0.62-25BV	0.625	0.875	0.250	0.275 +0.010/-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
U12-0.75V	0.750	1.000	0.125	0.138 +0.010/-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
U12-0.75-25BV	0.750	1.000	0.250	0.275 +0.010/-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	0.875	1.125	0.125	0.138 +0.010/-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
U12-1.00V	1.000	1.250	0.125	0.138 +0.010/-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
U12-1.00-25BV	1.000	1.250	0.250	0.275 +0.010/-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
U12-1.25V	1.250	1.500	0.125	0.138 +0.010/-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
U12-1.37V	1.375	1.625	0.125	0.138 +0.010/-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
U12-1.37-25DV	1.375	1.625	0.250	0.275 +0.010/-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
U12-1.50V	1.500	1.750	0.125	0.138 +0.010/-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

# STYLE 800 FLUOROCARBON U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U12-1.50-25BV	1.500	1.750	0.250	0.275 +0.010/-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	1.750	2.000	1.1250	0.138 +0.010/-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	2.000	2.250	0.125	0.138 +0.010/-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
U15-1.00V	1.000	1.312	0.156	0.172 +0.010/-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
U15-1.37V	1.375	1.687	0.156	0.172 +0.010/-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
U18-0.37V	0.375	0.750	0.188	0.207 +0.010/-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	0.500	0.875	0.312	0.344 +0.010/-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	0.625	1.000	0.188	0.207 +0.010/-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	0.750	1.125	0.312	0.344 +0.010/-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
U18-1.00V	1.000	1.375	0.188	0.207 +0.010/-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
U18-1.00-31BV	1.000	1.375	0.312	0.344 +0.010/-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
U18-1.12V	1.125	1.500	0.188	0.207 +0.010/-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
U18-1.12-31BV	1.125	1.500	0.312	0.344 +0.010/-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
U18-1.25V	1.250	1.625	0.188	0.207 +0.010/-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
U18-1.25-31BV	1.250	1.625	0.312	0.344 +0.010/-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
U18-1.37V	1.375	1.750	0.188	0.207 +0.010/-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
U18-1.37-25BV	1.375	1.750	0.250	0.275 +0.010/-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	1.375	1.750	0.312	0.344 +0.010/-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
U18-1.50V	1.500	1.875	0.188	0.207 +0.010/-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	1.500	1.875	0.375	0.413 +0.010/-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
U18-1.62V	1.625	2.000	0.188	0.207 +0.010/-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
U18-1.62-37BV	1.625	2.000	0.375	0.413 +0.010/-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
U18-1.75V	1.750	2.125	0.188	0.207 +0.010/-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
U18-1.75-37BV	1.750	2.125	0.375	0.413 +0.010/-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
U18-1.87-37BV	1.875	2.250	0.375	0.413 +0.010/-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
U18-2.00V	2.000	2.375	0.188	0.207 +0.010/-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
U18-2.00-37BV	2.000	2.375	0.375	0.413 +0.010/-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
U18-2.12V	2.125	2.500	0.188	0.207 +0.010/-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
U18-2.12-37BV	2.125	2.500	0.375	0.413 +0.010/-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
U18-2.25V	2.250	2.625	0.188	0.207 +0.010/-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
U18-2.50V	2.500	2.875	0.188	0.207 +0.010/-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
U18-2.50-37BV	2.500	2.875	0.375	0.413 +0.010/-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
U18-2.62V	2.625	3.000	0.188	0.207 +0.010/-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
U18-2.62-37BV	2.625	3.000	0.375	0.413 +0.010/-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	2.750	3.125	0.188	0.207 +0.010/-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	2.875	3.250	0.188	0.207 +0.010/-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
U18-3.00V	3.000	3.375	0.188	0.207 +0.010/-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
U18-3.00-37BV	3.000	3.375	0.375	0.413 +0.010/-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	3.250	3.625	0.375	0.413 +0.010/-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	3.500	3.875	0.375	0.413 +0.010/-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
U25-0.62V	0.625	1.125	0.250	0.275 +0.010/-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	0.750	1.250	0.375	0.413 +0.010/-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	0.875	1.375	0.375	0.413 +0.010/-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
U25-1.00V	1.000	1.500	0.250	0.275 +0.010/-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
U25-1.12V	1.125	1.625	0.250	0.275 +0.010/-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
U25-1.12-37BV	1.125	1.625	0.375	0.413 +0.010/-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
U25-1.25V	1.250	1.750	0.250	0.275 +0.010/-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
U25-1.25-37BV	1.250	1.750	0.375	0.413 +0.010/-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
U25-1.50V	1.500	2.000	0.250	0.275 +0.010/-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
U25-1.50-37BV	1.500	2.000	0.375	0.413 +0.010/-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
U25-1.75V	1.750	2.250	0.250	0.275 +0.010/-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
U25-1.75-37BV	1.750	2.250	0.375	0.413 +0.010/-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
U25-2.00V	2.000	2.500	0.250	0.275 +0.010/-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	2.000	2.500	0.375	0.413 +0.010/-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
U25-2.12-37BV	2.125	2.625	0.375	0.413 +0.010/-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
U25-2.25V	2.250	2.750	0.250	0.275 +0.010/-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
U25-2.25-37BV	2.250	2.750	0.375	0.413 +0.010/-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
U25-2.50V	2.500	3.000	0.250	0.275 +0.010/-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
U25-2.50-37BV	2.500	3.000	0.375	0.413 +0.010/-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	2.625	3.125	0.375	0.413 +0.010/-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
U25-2.75V	2.750	3.250	0.250	0.275 +0.010/-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
U25-2.75-37BV	2.750	3.250	0.375	0.413 +0.010/-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
U25-3.00V	3.000	3.500	0.250	0.275 +0.010/-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

# STYLE 800 FLUOROCARBON U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U25-3.00-37BV	3.000	3.500	0.375	0.413 +0.010/-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
U25-3.25V	3.250	3.750	0.250	0.275 +0.010/-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
U25-3.25-37BV	3.250	3.750	0.375	0.413 +0.010/-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
U25-3.50V	3.500	4.000	0.250	0.275 +0.010/-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
U25-3.50-37BV	3.500	4.000	0.375	0.413 +0.010/-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
U25-3.75V	3.750	4.250	0.250	0.275 +0.010/-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	4.750 +0.003/-0
U25-3.75-37BV	3.750	4.250	0.375	0.413 +0.010/-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
U25-4.00V	4.000	4.500	0.250	0.275 +0.010/-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	4.000	4.500	0.563	0.619 +0.010/-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
U25-4.25V	4.250	4.750	0.250	0.275 +0.010/-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
U25-4.25-56BV	4.250	4.750	0.563	0.619 +0.010/-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	4.500	5.000	0.250	0.275 +0.010/-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	4.750	5.250	0.563	0.616 +0.010/-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
U25-5.00V	5.000	5.500	0.250	0.275 +0.010/-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
U25-5.00-37BV	5.000	5.500	0.375	0.413 +0.010/-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	5.000	5.500	0.563	0.616 +0.010/-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
U31-1.00V	1.000	1.625	0.312	0.344 +0.010/-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	1.250	1.875	0.312	0.344 +0.010/-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
U31-1.37V	1.375	2.000	0.313	0.344 +0.010/-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
U31-1.37-50BV	1.375	2.000	0.500	0.550 +0.010/-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	1.500	2.125	0.313	0.344 +0.010/-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
U31-1.75V	1.750	2.375	0.312	0.344 +0.010/-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
U31-1.75-50BV	1.750	2.375	0.500	0.550 +0.010/-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
U31-2.00V	2.000	2.625	0.312	0.344 +0.010/-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
U31-2.00-50BV	2.000	2.625	0.500	0.550 +0.010/-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	2.250	2.875	0.312	0.344 +0.010/-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
U31-2.37V	2.375	3.000	0.312	0.344 +0.010/-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
U31-2.37-50BV	2.375	3.000	0.500	0.550 +0.010/-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	2.500	3.125	0.313	0.344 +0.010/-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
U31-2.62V	2.625	3.250	0.313	0.344 +0.010/-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
U31-2.62-50BV	2.625	3.250	0.500	0.550 +0.010/-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
U31-2.75V	2.750	3.375	0.313	0.344 +0.010/-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
U31-2.75-50BV	2.750	3.375	0.500	0.344 +0.010/-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	3.000	3.625	0.313	0.344 +0.010/-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	3.250	3.875	0.313	0.344 +0.010/-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	3.500	4.125	0.313	0.344 +0.010/-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
U31-4.00V	4.000	4.625	0.313	0.344 +0.010/-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
U31-4.37V	4.375	5.000	0.313	0.344 +0.010/-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
U31-4.37-50BV	4.375	5.000	0.500	0.550 +0.010/-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	5.375	6.000	0.313	0.344 +0.010/-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	6.375	7.000	0.312	0.344 +0.010/-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	7.375	8.000	0.312	0.344 +0.010/-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
U37-1.75-62BV	1.750	2.500	0.625	0.688 +0.010/-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	2.750	3.500	0.625	0.688 +0.010/-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	3.000	3.750	0.625	0.688 +0.010/-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	3.250	4.000	0.375	0.413 +0.010/-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
U37-3.25-62BV	3.250	4.000	0.625	0.688 +0.010/-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	3.500	4.250	0.625	0.688 +0.010/-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	3.750	4.500	0.625	0.688 +0.010/-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	4.000	4.750	0.625	0.688 +0.010/-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
U37-4.25V	4.250	5.000	0.375	0.413 +0.010/-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
U37-4.25-62BV	4.250	5.000	0.625	0.688 +0.010/-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	4.500	5.250	0.625	0.688 +0.010/-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
U37-4.62-62BV	4.625	5.375	0.625	0.688 +0.010/-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
U37-4.75-62BV	4.750	5.500	0.625	0.688 +0.010/-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
U37-5.00V	5.000	5.750	0.375	0.413 +0.010/-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
U37-5.00-62BV	5.000	5.750	0.625	0.688 +0.010/-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
U37-5.25V	5.250	6.000	0.375	0.413 +0.010/-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
U37-5.25-62DV	5.250	6.000	0.625	0.688 +0.010/-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
U37-5.50V	5.500	6.250	0.375	0.413 +0.010/-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
U37-5.50-62BV	5.500	6.250	0.625	0.688 +0.010/-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
U37-6.00V	6.000	6.750	0.375	0.413 +0.010/-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
U37-6.00-62BV	6.000	6.750	0.625	0.688 +0.010/-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

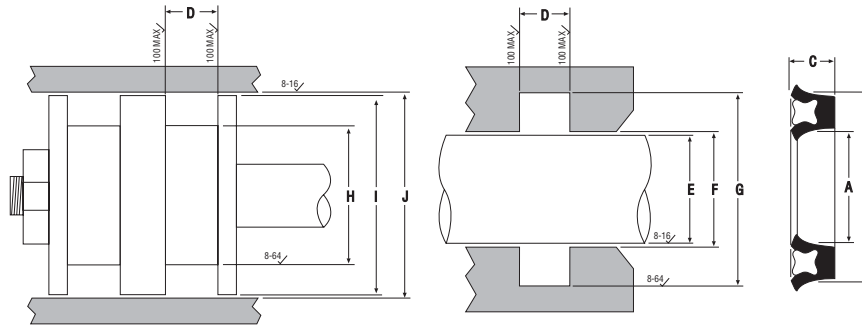
# STYLE 800 FLUOROCARBON U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U37-6.25V	6.250	7.000	0.375	0.413 +0.010/-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
U37-6.25-50DV	6.250	7.000	0.500	0.550 +0.010/-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	6.250	7.000	0.625	0.688 +0.010/-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	6.500	7.250	0.375	0.413 +0.010/-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
U37-7.25V	7.250	8.000	0.375	0.413 +0.010/-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
U37-7.25-62BV	7.250	8.000	0.625	0.688 +0.010/-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	9.250	10.000	0.375	0.413 +0.010/-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
U50-3.50V	3.500	4.500	0.500	0.550 +0.010/-0	3.500 +0/-0.002	3.502 +0.004/-0	4.500 +0.005/-0	3.500 +0/-0.005	3.498 +0/-0.002	4.500 +0.004/-0
U50-4.00V	4.00	5.00	0.500	0.550 +0.010/-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	5.00	6.00	0.500	0.550 +0.010/-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
U50-6.00V	6.00	7.00	0.500	0.550 +0.010/-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
U50-6.00-75DV	6.00	7.00	0.750	0.825 +0.010/-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	7.00	8.00	0.500	0.550 +0.010/-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	8.00	9.00	0.500	0.550 +0.010/-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	9.00	10.00	0.500	0.550 +0.010/-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



# HIGH TEMPERATURE STYLE 800 U-SEALS

These Style 800 U-seals will operate comfortably at temperatures up to 250°F as opposed to 220°F for standard seals or polyurethane.



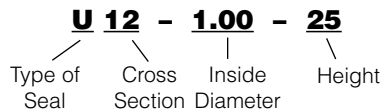
**STANDARD -**  
Height and cross section are equal, thus giving a square seal.  
Utilizes type "D" lip  
Typical Part Number: U25-2.50

**DEEP -**  
Utilizes the same "D" lip, but the seal height is greater than the cross section, thus giving a rectangular 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

## HERCULES PART NUMBERS

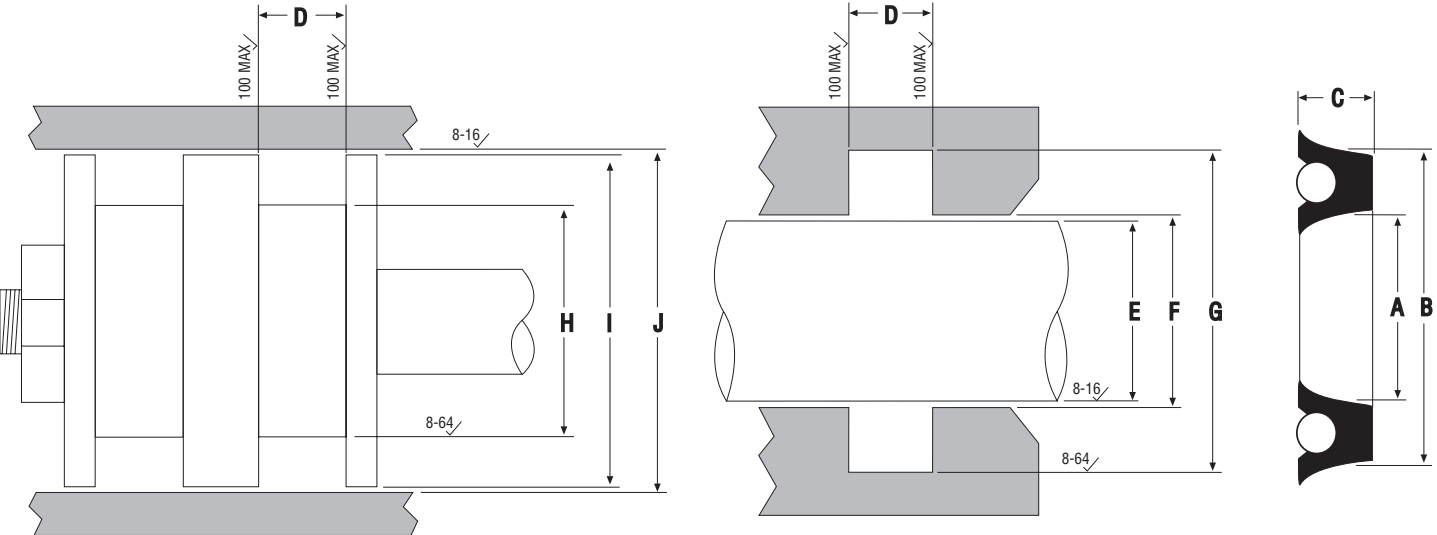


SEAL INFORMATION	
MATERIAL	95 A URETHANE
TEMPERATURE RANGE	-65° TO +250° F
PRESSURE RANGE	0 TO 5,000 PSI

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U12-1.00-SQBHT	1.000	1.250	0.125	0.138 +0.010/-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
U12-1.00-25BHT	1	1.25	0.25	0.275 +0.010/-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-SQBHT	1.125	1.375	0.125	0.138 +0.010/-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
U12-1.12-25BHT	1.125	1.375	0.250	0.275 +0.010/-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-SQBHT	1-1/4	1-1/2	1/8	0.138 +0.010/-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
U12-1.25-25BHT	1.250	1.500	0.250	0.275 +0.010/-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
U18-1.00-31BHT	1	1-3/8	5/16	0.344 +0.010/-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 +0.010/-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
U18-1.12-31BHT	1-1/8	1-1/2	5/16	0.344 +0.010/-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-SQBHT	1-1/4	1-5/8	3/16	0.207 +0.010/-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
U18-1.25-31BHT	1.250	1.625	0.312	0.344 +0.010/-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
U18-1.31-31BHT	1.312	1.687	0.312	0.344 +0.010/-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 +0.010/-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
U18-1.75-37BHT	1-3/4	2-1/8	3/8	0.413 +0.010/-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
U25-1.25-SQBHT	1-1/4	1-3/4	1/4	0.275 +0.010/-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	1.250	1.750	0.375	0.413 +0.010/-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-SQBHT	1-1/2	2	1/4	0.275 +0.010/-0	1.500 +0/-0.002	1.501 +0.003/-0	2.000 +0.003/-0	1.500 +0/-0.002	1.999 +0/-0.002	2.000 +0.003/-0
U25-1.50-37B	1.500	2.000	0.375	0.413 +0.010/-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 +0.010/-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-SQBHT	2.000	2.500	0.250	0.275 +0.010/-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
U25-2.00-37BHT	2.000	2.500	0.375	0.413 +0.010/-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
U12-2.25-SQBHT	2.250	2.500	0.125	0.138 +0.010/-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	2.250	2.500	0.375	0.413 +0.010/-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
U25-2.50-SQBHT	2-1/2	3	1/4	0.275 +0.010/-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	2.500	3.000	0.375	0.413 +0.010/-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
U25-2.62-37B	2.625	3.125	0.375	0.413 +0.010/-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	3.000	3.500	0.250	0.275 +0.010/-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	3.000	3.500	0.375	0.413 +0.010/-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
U25-3.25-37B	3.250	3.750	0.375	0.413 +0.010/-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
U25-3.50-37B	3.500	4.000	0.375	0.413 +0.010/-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 +0.010/-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
U31-1.50HT	1-1/2	2-1/8	5/16	0.344 +0.010/-0	1.500 +0/-0.002	1.501 +0.003/-0	2.125 +0.003/-0	1.500 +0/-0.003	2.124 +0/-0.002	2.125 +0.003/-0

# STYLE 850 POLYURETHANE U-SEALS

Style 850 u-seals offer excellent resistance to extrusion and abrasion in either piston or rod sealing applications. The round cross-section expander energizes the seal to provide sealing from 0 to 5000 psi.

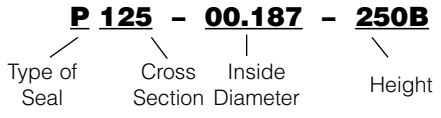


**STANDARD -**  
 Height and cross section are equal, giving a square seal. Utilizes type "D" lip  
 Typical Part Number: P125-00.062

**DEEP -**  
 Utilizes the same "D" lip, but the seal height is greater than the cross section, giving a rectangular shape.  
 Typical Part Number: P125-00.500-250D

**TYPE B -**  
 Same dimensions as the DEEP seal. Beveled lip design provides better film breaking. Utilizes type "B" lip  
 Typical Part Number: P125-00.125-250B

**HERCULES PART NUMBERS**



SEAL INFORMATION	
MATERIAL	95A URETHANE 70A NITRILE EXPANDER
TEMPERATURE RANGE	-65° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
MAXIMUM VELOCITY	100 FPM

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
P125-00.062	0.062	0.312	0.125	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	0.125	0.375	0.250	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	0.188	0.438	0.250	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	0.250	0.500	0.250	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
P125-00.250-250B	0.250	0.500	0.250	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
P312-00.250	0.250	0.875	0.312	0.343 +0.015/-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
P125-00.312-250B	0.313	0.563	0.250	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	0.375	0.625	0.125	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	0.375	0.625	0.188	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
P187-00.375	0.375	0.750	0.188	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
P312-00.375	0.375	1.000	0.312	0.343 +0.015/-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
P187-00.437	0.438	0.813	0.188	0.206 +0.015/-0	0.437 +0/-0.002	0.438 +0.002/-0	0.812 +0.002/-0	0.437 +0/-0.002	0.812 +0/-0.002	0.812 +0.002/-0
P125-00.500	0.500	0.750	0.125	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	0.500	0.750	0.125	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	0.500	0.750	0.250	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
P125-00.500-250D	0.500	0.750	0.250	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
P187-00.500	0.500	0.875	0.188	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	0.500	0.875	0.312	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
P250-00.500	0.500	1.000	0.250	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	0.500	1.000	0.375	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	0.500	1.000	0.375	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

# STYLE 850 POLYURETHANE U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
P375-00.500	0.500	1.250	0.375	0.412 +0.015/-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
P187-00.562	0.563	0.938	0.188	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
P125-00.615-SQB	0.563	0.688	0.125	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	0.625	0.875	0.125	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	0.625	0.875	0.188	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	0.625	0.875	0.250	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
P125-00.625-250D	0.625	0.875	0.250	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
P187-00.625-312B	0.625	1.000	0.312	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
P187-00.625-312D	0.625	1.000	0.312	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
P250-00.625	0.625	1.125	0.250	0.275 +0.015/-0	0.625 +0/-0.002	0.626 +0.003/-0	1.125 +0.003/-0	0.625 +0/-0.002	1.124 +0/-0.002	1.125 +0.003/-0
P250-00.625-375B	0.625	1.125	0.375	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
P250-00.625-375D	0.625	1.125	0.375	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
P125-00.687	0.688	0.938	0.125	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
P250-00.687	0.688	1.188	0.250	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
P125-00.750	0.750	1.000	0.125	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	0.750	1.000	0.125	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	0.750	1.000	0.250	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	0.750	1.000	0.250	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
P187-00.750	0.750	1.125	0.188	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	0.750	1.125	0.312	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	0.750	1.125	0.312	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
P250-00.750	0.750	1.250	0.250	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	0.750	1.250	0.375	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
P250-00.750-375D	0.750	1.250	0.375	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
P312-00.750	0.750	1.375	0.312	0.343 +0.015/-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
P375-00.750	0.750	1.500	0.375	0.412 +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
P125-00.812	0.813	1.063	0.125	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	0.813	1.063	0.250	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	0.875	1.125	0.125	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	0.875	1.125	0.250	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
P187-00.875-312B	0.875	1.250	0.312	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	0.875	1.250	0.375	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
P250-00.875-375B	0.875	1.375	0.375	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
P312-00.875	0.875	1.500	0.312	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
P375-00.875	0.875	1.625	0.375	0.412 +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
P125-00.937	0.938	1.188	0.125	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
P187-00.937	0.938	1.313	0.188	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	0.938	1.313	0.312	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
P250-00.937	0.938	1.438	0.250	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
P125-01.000	1.000	1.250	0.125	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
P125-01.000-156B	1.000	1.250	0.156	0.172 +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	1.000	1.250	0.188	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	1.000	1.250	0.250	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	1.000	1.250	0.250	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
P156-01.000	1.000	1.313	0.156	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
P187-01.000	1.000	1.375	0.188	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
P187-01.000-312B	1.000	1.375	0.312	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	1.000	1.375	0.312	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
P250-01.000	1.000	1.500	0.250	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	1.000	1.500	0.375	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
P312-01.000-500B	1.000	1.625	0.500	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	1.000	1.625	0.500	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
P500-01.000	1.000	2.000	0.500	0.550 +0.015/-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
P125-01.062-250B	1.062	1.312	0.250	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
P250-01.062	1.063	1.563	0.250	0.275 +0.015/-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
P250-01.093	1.094	1.594	0.250	0.275 +0.015/-0	1.093 +0/-0.002	1.094 +0.003/-0	1.593 +0.003/-0	1.093 +0/-0.003	1.592 +0/-0.002	1.593 +0.003/-0
P125-01.125	1.125	1.375	0.125	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
P125-01.125-250B	1.125	1.375	0.250	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
P187-01.125	1.125	1.500	0.188	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
P125-01.125-187B	1.125	1.375	0.188	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
P187-01.125-187B	1.125	1.500	0.188	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	1.125	1.500	0.312	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
P250-01.125	1.125	1.625	0.250	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

# STYLE 850 POLYURETHANE U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
P250-01.125-375B	1.125	1.625	0.375	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
P125-01.187	1.188	1.438	0.125	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	1.188	1.438	0.250	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
P156-01.187	1.188	1.500	0.156	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
P187-01.187	1.188	1.563	0.188	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
P250-01.187	1.188	1.688	0.250	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
P312-01.187	1.188	1.813	0.312	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
P125-01.250	1.250	1.500	0.125	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	1.250	1.500	0.188	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	1.250	1.500	0.250	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
P187-01.250-250B	1.250	1.625	0.250	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	1.250	1.625	0.312	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	1.250	1.625	0.312	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	1.250	1.625	0.375	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
P250-01.250	1.250	1.750	0.250	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	1.250	1.750	0.375	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
P312-01.250-500B	1.250	1.875	0.500	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
P312-01.250-500D	1.250	1.875	0.500	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
P375-01.250	1.250	2.000	0.375	0.412 +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
P375-01.250-625D	1.250	2.000	0.625	0.688 +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
P375-01.312	1.312	2.062	0.375	0.412 +0.015/-0	1.312 +0/-0.002	1.314 +0.004/-0	2.062 +0.005/-0	1.312 +0/-0.005	2.060 +0/-0.002	2.062 +0.004/-0
P125-01.312	1.313	1.563	0.125	0.138 +0.015/-0	1.312 +0/-0.001	1.313 +0.002/-0	1.562 +0.002/-0	1.312 +0/-0.002	1.562 +0/-0.001	1.562 +0.002/-0
P187-01.312	1.313	1.688	0.188	0.206 +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	1.313	1.688	0.312	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
P312-01.312	1.313	1.938	0.312	0.343 +0.015/-0	1.312 +0/-0.002	1.314 +0.003/-0	1.937 +0.004/-0	1.312 +0/-0.004	1.935 +0/-0.002	1.937 +0.003/-0
P125-01.375	1.375	1.625	0.125	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	1.375	1.625	0.250	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
P156-01.375	1.375	1.688	0.156	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
P187-01.375	1.375	1.750	0.188	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	1.375	1.750	0.312	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	1.375	1.750	0.312	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
P250-01.375	1.375	1.875	0.250	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	1.375	1.875	0.375	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
P312-01.375	1.375	2.000	0.312	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	1.375	2.000	0.500	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
P312-01.375-500D	1.375	2.000	0.500	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
P375-01.375	1.375	2.125	0.375	0.412 +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	1.375	2.125	0.625	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
P125-01.500	1.500	1.750	0.125	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	1.500	1.750	0.250	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	1.500	1.750	0.250	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
P187-01.500	1.500	1.875	0.188	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	1.500	1.875	0.188	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	1.500	1.875	0.375	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
P250-01.500	1.500	2.000	0.250	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	1.500	2.000	0.250	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	1.500	2.000	0.375	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	1.500	2.000	0.375	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
P312-01.500	1.500	2.125	0.312	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	1.500	2.125	0.500	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	1.500	2.125	0.500	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
P375-01.500	1.500	2.250	0.375	0.412 +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	1.500	2.250	0.625	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
P500-01.500	1.500	2.500	0.500	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
P187-01.625	1.625	2.000	0.188	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	1.625	2.000	0.250	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	1.625	2.000	0.312	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	1.625	2.000	0.375	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	1.625	2.000	0.375	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
P250- 01.625	1.625	2.125	0.250	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	1.625	2.125	0.375	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
P312-01.625	1.625	2.250	0.312	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
P375-01.625	1.625	2.375	0.375	0.412 +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

## STYLE 850 POLYURETHANE U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
P125-01.750	1.750	2.000	0.125	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
P187-01.750	1.750	2.125	0.188	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
P125-01.750-250D	1.750	2.000	0.250	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
P187-01.750-230B	1.750	2.125	0.230	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
P187-01.750-312B	1.750	2.125	0.312	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	1.750	2.125	0.375	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
P250-01.750	1.750	2.250	0.250	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	1.750	2.250	0.375	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
P312-01.750	1.750	2.375	0.312	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
P312-01.750-500BFM	1.750	2.375	0.500	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
P312-01.750-500B	1.750	2.375	0.500	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	1.750	2.375	0.500	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
P375-01.750	1.750	2.500	0.375	0.412 +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
P375-01.750-625B	1.750	2.500	0.625	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
P500-01.750-750B	1.750	2.750	0.750	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
P625-01.750	1.750	3.000	0.625	0.688 +0.015/-0	1.750 +0/-0.003	1.753 +0.006/-0	3.000 +0.007/-0	1.750 +0/-0.009	2.997 +0/-0.003	3.000 +0.006/-0
P125-01.875	1.875	2.125	0.125	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
P187-01.875-375B	1.875	2.250	0.375	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	1.875	2.250	0.375	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
P250-01.875	1.875	2.375	0.250	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	1.875	2.375	0.375	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
P312-01.875	1.875	2.500	0.312	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	1.875	2.500	0.500	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
P125-02.000	2.000	2.250	0.125	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	2.000	2.250	0.250	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	2.000	2.250	0.250	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
P187-02.000	2.000	2.375	0.188	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	2.000	2.375	0.230	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
P187-02.000-312B	2.000	2.375	0.312	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	2.000	2.375	0.375	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
P250-02.000	2.000	2.500	0.250	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	2.000	2.500	0.250	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	2.000	2.500	0.375	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	2.000	2.500	0.375	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
P312-02.000	2.000	2.625	0.312	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	2.000	2.625	0.500	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	2.000	2.625	0.500	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
P375-02.000	2.000	2.750	0.375	0.412 +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	2.000	2.750	0.625	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	2.000	2.750	0.625	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
P500-02.000-750B	2.000	3.000	0.750	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
P187-02.125	2.125	2.500	0.188	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	2.125	2.500	0.188	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
P187-02.125-375B	2.125	2.500	0.375	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
P250-02.125-375B	2.125	2.625	0.375	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
P187-02.250-375B	2.250	2.625	0.375	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	2.250	2.625	0.375	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
P250-02.250	2.250	2.750	0.250	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	2.250	2.750	0.375	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	2.250	2.750	0.375	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
P312-02.250	2.250	2.875	0.312	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	2.250	2.875	0.500	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
P375-02.250-625B	2.250	3.000	0.625	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	2.250	3.000	0.625	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
P187-02.375	2.375	2.750	0.188	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	2.375	2.750	0.375	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
P250-02.375	2.375	2.875	0.250	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	2.375	2.875	0.375	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
P312-02.375	2.375	3.000	0.312	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	2.375	3.000	0.500	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	2.375	3.000	0.500	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
P375-02.375-625B	2.375	3.125	0.625	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
P500-02.375	2.375	3.375	0.500	0.550 +0.015/-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

# STYLE 850 POLYURETHANE U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
P125-02.500-250B	2.500	2.750	0.250	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
P125-02.500-250D	2.500	2.750	0.250	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
P187-02.500-250B	2.500	2.875	0.250	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	2.500	2.875	0.375	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	2.500	2.875	0.375	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
P250-02.500	2.500	3.000	0.250	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	2.500	3.000	0.375	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	2.500	3.000	0.375	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
P312-02.500	2.500	3.125	0.312	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	2.500	3.125	0.500	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
P375-02.500	2.500	3.250	0.375	0.412 +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	2.500	3.250	0.625	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	2.500	3.250	0.625	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
P500-02.500	2.500	3.500	0.500	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	2.500	3.500	0.750	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
P187-02.625	2.625	3.000	0.188	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
P187-02.625-375B	2.625	3.000	0.375	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	2.625	3.000	0.375	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
P250-02.625-375B	2.625	3.125	0.375	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
P250-02.625-375D	2.625	3.125	0.375	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
P312-02.625-500D	2.625	3.250	0.500	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
P375-02.625-625B	2.625	3.375	0.625	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
P125-02.750-250B	2.750	3.000	0.250	0.275 +0.015/-0	2.750 +0/-0.001	2.751 +0.002/-0	3.000 +0.002/-0	2.750 +0/-0.002	2.999 +0/-0.001	3.000 +0.002/-0
P187-02.750-187B	2.750	3.125	0.188	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	2.750	3.125	0.375	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	2.750	3.125	0.375	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
P250-02.750	2.750	3.250	0.250	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	2.750	3.250	0.375	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
P250-02.750-375D	2.750	3.250	0.375	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
P312-02.750	2.750	3.375	0.312	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
P312-02.750-500B	2.750	3.375	0.500	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
P375-02.750	2.750	3.500	0.375	0.412 +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	2.750	3.500	0.625	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
P625-02.750	2.750	4.000	0.625	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
P187-02.875	2.875	3.250	0.188	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
P250-02.875-375B	2.875	3.375	0.375	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
P125-03.000	3.000	3.250	0.125	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
P187-03.000	3.000	3.375	0.188	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	3.000	3.375	0.375	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
P187-03.000-375D	3.000	3.375	0.375	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
P250-03.000	3.000	3.500	0.250	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	3.000	3.500	0.375	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	3.000	3.500	0.375	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
P312-03.000-500B	3.000	3.625	0.500	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
P312-03.000-562D	3.000	3.625	0.563	0.618 +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
P375-03.000	3.000	3.750	0.375	0.412 +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	3.000	3.750	0.625	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	3.000	3.750	0.625	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
P500-03.000	3.000	4.000	0.500	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	3.000	4.000	0.750	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
P187-03.125-187B	3.125	3.500	0.188	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	3.125	3.500	0.375	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
P312-03.125	3.125	3.750	0.312	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
P187-03.250	3.250	3.625	0.188	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
P250-03.250	3.250	3.750	0.250	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	3.250	3.750	0.375	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	3.250	3.750	0.375	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
P312-03.250-500B	3.250	3.875	0.500	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
P312-03.250-500D	3.250	3.875	0.500	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
P375-03.250	3.250	4.000	0.375	0.412 +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
P375-03.250-625B	3.250	4.000	0.625	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	3.250	4.000	0.625	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
P500-03.250-750B	3.250	4.250	0.750	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

# STYLE 850 POLYURETHANE U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
P625-03.250	3.250	4.500	0.625	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
P187-03.375	3.375	3.750	0.188	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	3.375	3.750	0.188	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	3.375	3.750	0.375	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
P187-03.375-375D	3.375	3.750	0.375	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
P312-03.375	3.375	4.000	0.312	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	3.375	4.000	0.500	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	3.375	4.000	0.500	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
P375-03.375-625B	3.375	4.125	0.625	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
P187-03.500	3.500	3.875	0.188	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	3.500	3.875	0.375	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	3.500	3.875	0.375	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
P250-03.500	3.500	4.000	0.250	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	3.500	4.000	0.313	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	3.500	4.000	0.375	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	3.500	4.000	0.375	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
P312-03.500-500B	3.500	4.125	0.500	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
P312-03.500-500D	3.500	4.125	0.500	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
P375-03.500	3.500	4.250	0.375	0.412 +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	3.500	4.250	0.625	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	3.500	4.250	0.625	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
P500-03.500-750B	3.500	4.500	0.750	0.825 +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
P187-03.625	3.625	4.000	0.188	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	3.625	4.000	0.375	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	3.625	4.000	0.375	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
P250-03.625	3.625	4.125	0.250	0.275 +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
P250-03.625-375B	3.625	4.125	0.375	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
P312-03.625-500B	3.625	4.250	0.500	0.550 +0.015/-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
P375-03.625-625B	3.625	4.375	0.625	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
P187-03.750	3.750	4.125	0.188	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	3.750	4.125	0.375	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
P250-03.750	3.750	4.250	0.250	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	3.750	4.250	0.375	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
P312-03.750	3.750	4.375	0.312	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	3.750	4.375	0.375	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
P312-03.750-625B	3.750	4.375	0.625	0.688 +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
P375-03.750	3.750	4.500	0.375	0.412 +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	3.750	4.500	0.625	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
P500-03.750	3.750	4.750	0.500	0.550 +0.015/-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
P500-03.750-690B	3.750	4.750	0.690	0.759 +0.015/-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
P250-03.875-375D	3.875	4.375	0.375	0.413 +0.015/-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
P312-03.875-500D	3.875	4.500	0.500	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
P187-04.000-375B	4.000	4.375	0.375	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	4.000	4.375	0.375	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
P250-04.000	4.000	4.500	0.250	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	4.000	4.500	0.313	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	4.000	4.500	0.375	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	4.000	4.500	0.375	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	4.000	4.500	0.563	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
P312-04.000	4.000	4.625	0.312	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	4.000	4.625	0.563	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
P312-04.000-562D	4.000	4.625	0.563	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
P375-04.000-625B	4.000	4.750	0.625	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
P500-04.000	4.000	5.000	0.500	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
P187-04.125	4.125	4.500	0.188	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
P250-04.125-562B	4.125	4.625	0.563	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
P187-04.250-375B	4.250	4.625	0.375	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	4.250	4.625	0.375	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
P250-04.250	4.250	4.750	0.250	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	4.250	4.750	0.375	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	4.250	4.750	0.563	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	4.250	4.750	0.563	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
P312-04.250-562B	4.250	4.875	0.563	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 DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
P312-04.250-562D	4.250	4.875	0.563	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
P375-04.250	4.250	5.000	0.375	0.412 +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	4.250	5.000	0.375	0.412 +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	4.250	5.000	0.625	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	4.250	5.000	0.625	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
P500-04.250	4.250	5.250	0.500	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
P187-04.375-375D	4.375	4.750	0.375	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
P250-04.375	4.375	4.875	0.250	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
P250-04.375-562D	4.375	5.000	0.563	0.618 +0.015/-0	4.375 +0/-0.002	4.377 +0.003/-0	5.000 +0.003/-0	4.375 +0/-0.003	4.998 +0/-0.002	5.000 +0.003/-0
P312-04.375	4.375	5.000	0.312	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	4.375	5.000	0.500	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	4.375	5.000	0.563	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
P250-04.500	4.500	5.000	0.250	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
P250-04.500-312BHN	4.500	5.000	0.313	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	4.500	5.000	0.375	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	4.500	5.000	0.375	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	4.500	5.000	0.563	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
P375-04.500	4.500	5.250	0.375	0.412 +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	4.500	5.250	0.625	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
P500-04.500	4.500	5.500	0.500	0.550 +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
P375-04.625	4.625	5.375	0.375	0.412 +0.015/-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
P125-04.750	4.750	5.000	0.125	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
P250-04.750	4.750	5.250	0.250	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	4.750	5.250	0.375	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	4.750	5.250	0.563	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	4.750	5.250	0.563	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
P312-04.750	4.750	5.375	0.312	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	4.750	5.375	0.625	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
P375-04.750	4.750	5.500	0.375	0.412 +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	4.750	5.500	0.625	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	4.750	5.500	0.625	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
P500-04.750	4.750	5.750	0.500	0.550 +0.015/-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
P500-04.750-750B	4.750	5.750	0.750	0.825 +0.015/-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
P625-04.750	4.750	6.000	0.625	0.688 +0.015/-0	4.750 +0/-0.003	4.753 +0.006/-0	6.000 +0.007/-0	4.750 +0/-0.007	5.997 +0/-0.003	6.000 +0.006/-0
P312-04.875	4.875	5.500	0.312	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
P250-05.000	5.000	5.500	0.250	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	5.000	5.500	0.375	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	5.000	5.500	0.375	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
P250-05.000-562B	5.000	5.500	0.563	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	5.000	5.500	0.563	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
P281-05.000-343BHN	5.000	5.563	0.344	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
P312-05.000	5.000	5.625	0.312	0.343 +0.015/-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
P375-05.000-625B	5.000	5.750	0.625	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
P500-05.000	5.000	6.000	0.500	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	5.000	6.000	0.750	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
P250-05.250	5.250	5.750	0.250	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
P250-05.250-562D	5.250	5.750	0.563	0.618 +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
P312-05.250	5.250	5.875	0.312	0.343 +0.015/-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
P375-05.250	5.250	6.000	0.375	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
P375-05.250-500D	5.250	6.000	0.500	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	5.250	6.000	0.625	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	5.250	6.000	0.625	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
P500-05.250-750B	5.250	6.250	0.750	0.825 +0.015/-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
P375-05.375	5.375	6.125	0.375	0.412 +0.015/-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
P187-05.500-375B	5.500	5.875	0.375	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
P250-05.500	5.500	6.000	0.250	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	5.500	6.000	0.375	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	5.500	6.000	0.375	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	5.500	6.000	0.563	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	5.500	6.000	0.563	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
P312-05.500	5.500	6.125	0.312	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	5.500	6.125	0.375	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
P375-05.500	5.500	6.250	0.375	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



## STYLE 850 POLYURETHANE U-SEALS

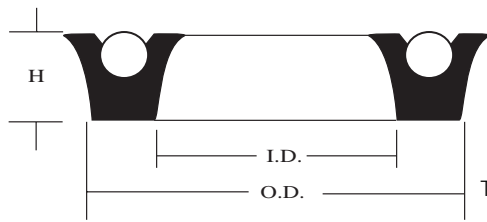
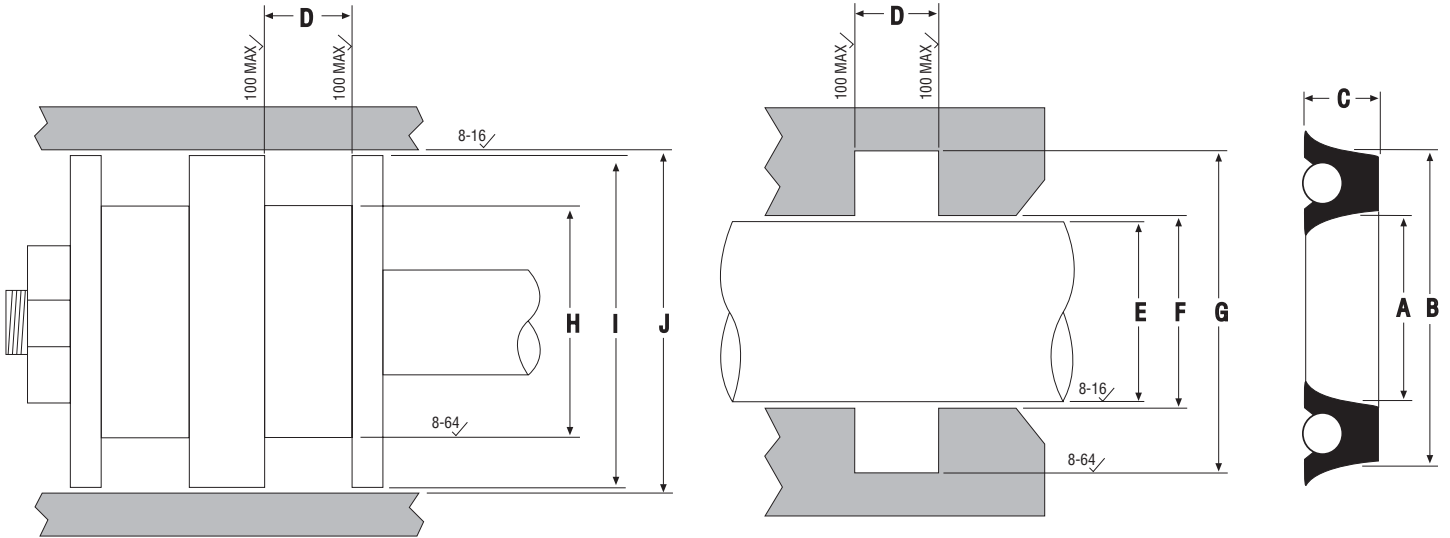
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
P375-05.500-625B	5.500	6.250	0.625	0.688 +0.015/-0	5.500 +0/-0.002	5.502 +0.004/-0	6.250 +0.005/-0	5.500 +0/-0.005	6.248 +0/-0.002	6.250 +0.004/-0
P500-05.500	5.500	6.500	0.500	0.550 +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
P250-05.750-562B	5.750	6.250	0.563	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	5.750	6.250	0.563	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
P375-05.750	5.750	6.500	0.375	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	5.750	6.500	0.625	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	5.750	6.500	0.625	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
P500-05.750	5.750	6.750	0.500	0.550 +0.015/-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
P312-05.875	5.875	6.500	0.312	0.343 +0.015/-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
P375-05.875	5.875	6.625	0.375	0.412 +0.015/-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
P250-06.000	6.000	6.500	0.250	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	6.000	6.500	0.375	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	6.000	6.500	0.563	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	6.000	6.500	0.563	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
P312-06.000	6.000	6.625	0.312	0.343 +0.015/-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
P375-06.000	6.000	6.750	0.375	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	6.000	6.750	0.625	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
P500-06.000	6.000	7.000	0.500	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	6.000	7.000	0.750	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
P312-06.125	6.125	6.750	0.312	0.343 +0.015/-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
P250-06.250-562B	6.250	6.750	0.563	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
P312-06.250	6.250	6.875	0.312	0.343 +0.015/-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
P375-06.250	6.250	7.000	0.375	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	6.250	7.000	0.500	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	6.250	7.000	0.625	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
P312-06.375-625B	6.375	7.000	0.625	0.688 +0.015/-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
P312-06.375-625D	6.375	7.000	0.625	0.688 +0.015/-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
P250-06.500	6.500	7.000	0.250	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	6.500	7.000	0.375	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	6.500	7.000	0.375	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	6.500	7.000	0.563	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
P312-06.500	6.500	7.125	0.312	0.343 +0.015/-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
P375-06.500	6.500	7.250	0.375	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	6.500	7.250	0.625	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
P250-06.750-562D	6.750	7.250	0.563	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
P375-06.750-625B	6.750	7.500	0.625	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
P250-07.000-375B	7.000	7.500	0.375	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	7.000	7.500	0.563	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
P250-07.000-562D	7.000	7.500	0.563	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
P312-07.000	7.000	7.625	0.312	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
P375-07.000-625B	7.000	7.750	0.625	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
P375-07.000-625D	7.000	7.750	0.625	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
P500-07.000	7.000	8.000	0.500	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	7.000	8.000	0.750	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	7.000	8.000	0.750	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
P250-07.250-562B	7.250	7.750	0.563	0.618 +0.015/-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
P312-07.250	7.250	7.875	0.312	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
P375-07.250-625B	7.250	8.000	0.625	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	7.250	8.000	0.625	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
P312-07.375	7.375	8.000	0.312	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
P250-07.500	7.500	8.000	0.250	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	7.500	8.000	0.563	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	7.500	8.000	0.563	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
P312-07.500	7.500	8.125	0.312	0.343 +0.015/-0	7.500 +0/-0.002	7.502 +0.003/-0	8.125 +0.004/-0	7.500 +0/-0.004	8.123 +0/-0.002	8.125 +0.003/-0
P375-07.500	7.500	8.250	0.375	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
P375-0.7500-625B	7.500	8.250	0.625	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
P375-07.500-625D	7.500	8.250	0.625	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
P500-07.500	7.500	8.500	0.500	0.550 +0.015/-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
P375-07.625	7.625	8.375	0.375	0.412 +0.015/-0	7.625 +0/-0.002	7.627 +0.004/-0	8.375 +0.005/-0	7.625 +0/-0.005	8.373 +0/-0.002	8.375 +0.004/-0
P312-07.875-625B	7.875	8.500	0.625	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
P250-08.000-562B	8.000	8.500	0.563	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
P312-08.000	8.000	8.625	0.312	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
P375-08.000	8.000	8.750	0.375	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

# STYLE 850 POLYURETHANE U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
P375-08.000-500D	8.000	8.750	0.500	0.550 +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
P500-08.000	8.000	9.000	0.500	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	8.000	9.000	0.750	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
P500-08.000-750D	8.000	9.000	0.750	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
P250-08.250-562B	8.250	8.750	0.563	0.618 +0.015/-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
P375-08.250-625B	8.250	9.000	0.625	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
P250-08.500-562B	8.500	9.000	0.563	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
P500-08.500	8.500	9.500	0.500	0.550 +0.015/-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
P375-08.687	8.688	9.438	0.375	0.412 +0.015/-0	8.687 +0/-0.002	8.689 +0.004/-0	9.437 +0.005/-0	8.687 +0/-0.005	9.435 +0/-0.002	9.437 +0.004/-0
P250-08.750	8.750	9.250	0.250	0.275 +0.015/-0	8.750 +0/-0.002	8.751 +0.003/-0	9.250 +0.003/-0	8.750 +0/-0.003	9.249 +0/-0.002	9.250 +0.003/-0
P375-08.750	8.750	9.500	0.375	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
P375-08.750-625D	8.750	9.500	0.625	0.688 +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
P375-09.000	9.000	9.750	0.375	0.412 +0.015/-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
P375-09.000-625B	9.000	9.750	0.625	0.688 +0.015/-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
P375-09.000-625D	9.000	9.750	0.625	0.688 +0.015/-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
P500-09.000	9.000	10.000	0.500	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
P500-09.000-750B	9.000	10.000	0.750	0.825 +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
P500-09.250-750B	9.250	10.250	0.750	0.825 +0.015/-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
P375-09.500	9.500	10.250	0.375	0.412 +0.015/-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
P250-09.750	9.750	10.250	0.250	0.275 +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
P250-09.750-562B	9.750	10.250	0.563	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
P375-09.750	9.750	10.500	0.375	0.412 +0.015/-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
P250-10.000-562B	10.000	10.500	0.563	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
P375-10.000	10.000	10.750	0.375	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
P500-10.000-750B	10.000	11.000	0.750	0.825 +0.015/-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
P375-10.500-625B	10.500	11.250	0.625	0.688 +0.015/-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
P500-11.000-750B	11.000	12.000	0.750	0.825 +0.015/-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
P375-11.250	11.250	12.000	0.375	0.412 +0.015/-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
P500-11.500-750B	11.500	12.500	0.750	0.825 +0.015/-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
P375-12.000	12.000	12.750	0.375	0.412 +0.015/-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
P375-12.250	12.250	13.000	0.375	0.412 +0.015/-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
P250-12.750-562B	12.750	13.250	0.563	0.618 +0.015/-0	12.750 +0/-0.002	12.751 +0.003/-0	13.250 +0.003/-0	12.750 +0/-0.003	13.249 +0/-0.002	13.250 +0.003/-0
P500-13.500-750B	13.500	14.500	0.750	0.825 +0.015/-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

# STYLE 850 FLUOROCARBON U-SEALS

Utilizing the same profiles as the Hercules Style 850 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°F to +400°F. **NOTE:** If you are not sure of fluid/seal compatibility, please refer to the fluid compatibility chart or contact our Engineering Department.



### HERCULES PART NUMBERS

**P 125 - 00.625 - SQBV**

Type of Seal      Cross Section Diameter      Height

SEAL INFORMATION	
MATERIAL	90 A FLUOROCARBON
TEMPERATURE RANGE	-20° TO +400° F
PRESSURE RANGE	0 TO 2,000 PSI



**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 rectangular shape.  
Typical Part Number:  
P250-02.500-375D

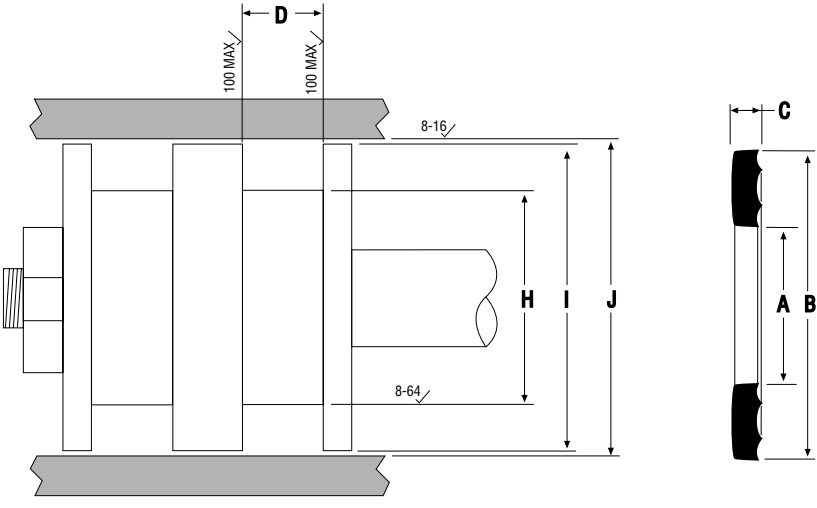


**TYPE B -**  
Same dimensions as the DEEP seal. Beveled lip design provides better film breaking.  
Utilizes type "B" lip  
Typical Part Number:  
P250-02.500-375B

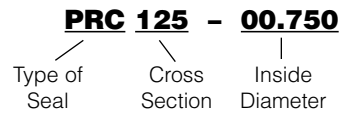
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
P125-00.500V	0.500	0.750	0.125	0.138 +0.015/-0	0.500 +0/-0.001	0.501 +0.002/-0	0.750 +0.002/-0	0.500 +0/-0.002	0.749 +0/-0.001	0.750 +0.002/-0
P125-00.625-SQBV	0.625	0.875	0.125	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	1.000	1.313	0.156	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	1.375	1.688	0.156	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	1.750	2.125	0.188	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	2.000	2.375	0.188	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	2.500	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	3.000	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
P250-01.187V	1.188	1.688	0.250	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
P250-03.500-SQBV	3.500	4.000	0.250	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
P250-03.500-312BV	3.500	4.000	0.313	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
P250-04.000-SQBV	4.000	4.500	0.250	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
P250-04.000-312BV	4.000	4.500	0.313	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
P250-04.500-SQBV	4.500	5.000	0.250	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
P250-04.500-312BV	4.500	5.000	0.313	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
P281-05.000-SQBV	5.000	5.563	0.281	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
P281-05.000-343BV	5.000	5.563	0.344	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
P312-05.500-SQBV	5.500	6.125	0.312	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
P312-05.500-375BV	5.500	6.125	0.375	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

# STYLE 855 PRC RINGS

Used as a companion to our Style 850 u-seals, Style 855 PRC rings convert a uni-directional u-seal into a bi-directional seal.  
 NOTE: Height dimension refers to the required increased in Style 850 groove width.



### HERCULES PART NUMBERS



SEAL INFORMATION	
MATERIAL	95A URETHANE 70A NITRILE EXPANDER
TEMPERATURE RANGE	-65° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
MAXIMUM VELOCITY	180 FPM

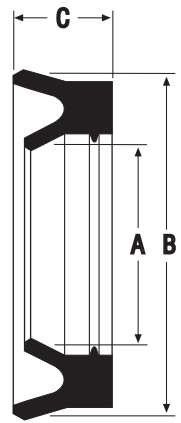
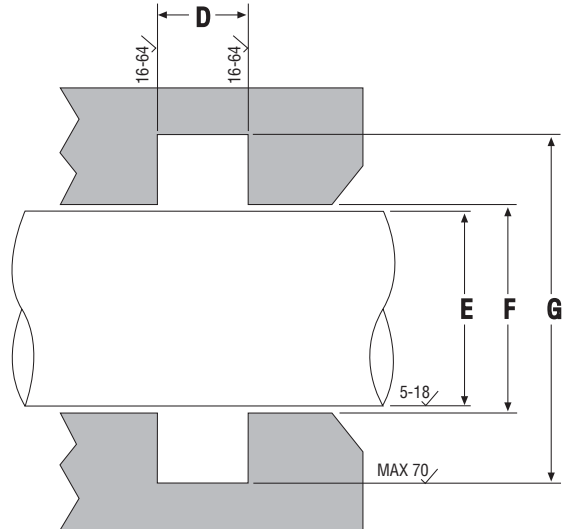
PRC PART NUMBER	ACCOMPANYING STYLE 850 PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH W/ STYLE 850	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
PRC125-00.750	P125-00.750-125B	0.750	1.000	0.065	0.203 +0.015/-0	0.750 +0/-0.002	0.999 +0/-0.001	1.000 +0.002/-0
	P125-00.750-250B	0.750	1.000	0.065	0.340 +0.015/-0	0.750 +0/-0.002	0.999 +0/-0.001	1.000 +0.002/-0
PRC125-01.000	P125-01.000-156B	1.000	1.250	0.065	0.237 +0.015/-0	1.000 +0/-0.002	1.249 +0/-0.001	1.250 +0.002/-0
	P125-01.000-187B	1.000	1.250	0.065	0.271 +0.015/-0	1.000 +0/-0.002	1.249 +0/-0.001	1.250 +0.002/-0
	P125-01.000-250B	1.000	1.250	0.065	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	1.250	1.500	0.065	0.271 +0.015/-0	1.250 +0/-0.002	1.499 +0/-0.001	1.500 +0.002/-0
	P125-01.250-250B	1.250	1.500	0.065	0.340 +0.015/-0	1.250 +0/-0.002	1.499 +0/-0.001	1.500 +0.002/-0
PRC125-01.500	P125-01.500-250B	1.500	1.750	0.065	0.340 +0.015/-0	1.500 +0/-0.002	1.749 +0/-0.001	1.750 +0.002/-0
PRC125-02.000	P125-02.000-250B	2.000	2.250	0.065	0.340 +0.015/-0	2.000 +0/-0.002	2.249 +0/-0.001	2.250 +0.002/-0
PRC187-01.000	P187-01.000-312B	1.000	1.375	0.109	0.453 +0.015/-0	1.000 +0/-0.002	1.374 +0/-0.002	1.375 +0.002/-0
PRC187-01.125	P187-01.125-187B	1.125	1.500	0.109	0.315 +0.015/-0	1.125 +0/-0.002	1.499 +0/-0.002	1.500 +0.002/-0
PRC187-01.375	P187-01.125-312B	1.125	1.500	0.109	0.453 +0.015/-0	1.125 +0/-0.002	1.499 +0/-0.002	1.500 +0.002/-0
	P187-01.375-312B	1.375	1.750	0.109	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	1.500	1.875	0.109	0.315 +0.015/-0	1.500 +0/-0.002	1.874 +0/-0.002	1.875 +0.002/-0
	P187-01.500-375B	1.500	1.875	0.109	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	1.625	2.000	0.109	0.453 +0.015/-0	1.625 +0/-0.002	1.999 +0/-0.002	2.000 +0.002/-0
	P187-01.625-375B	1.625	2.000	0.109	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	1.750	2.125	0.109	0.362 +0.015/-0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/-0
	P187-01.750-312B	1.750	2.125	0.109	0.453 +0.015/-0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/-0
	P187-01.750-375B	1.750	2.125	0.109	0.522 +0.015/-0	1.750 +0/-0.002	2.124 +0/-0.002	2.125 +0.002/-0
PRC187-02.000	P187-02.000-230B	2.000	2.375	0.109	0.362 +0.015/-0	2.000 +0/-0.002	2.374 +0/-0.002	2.375 +0.002/-0
	P187-02.000-312B	2.000	2.375	0.109	0.453 +0.015/-0	2.000 +0/-0.002	2.374 +0/-0.002	2.375 +0.002/-0
	P187-02.000-375B	2.000	2.375	0.109	0.522 +0.015/-0	2.000 +0/-0.002	2.374 +0/-0.002	2.375 +0.002/-0
PRC187-02.375	P187-02.375-375B	2.375	2.750	0.109	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	2.625	3.000	0.109	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	3.000	3.375	0.109	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	3.125	3.500	0.109	0.315 +0.015/-0	3.125 +0/-0.002	3.499 +0/-0.002	3.500 +0.002/-0
	P187-03.125-375B	3.125	3.500	0.109	0.522 +0.015/-0	3.125 +0/-0.002	3.499 +0/-0.002	3.500 +0.002/-0
PRC187-03.375	P187-03.375-187B	3.375	3.750	0.109	0.315 +0.015/-0	3.375 +0/-0.002	3.749 +0/-0.002	3.750 +0.002/-0
	P187-03.375-375B	3.375	3.750	0.109	0.522 +0.015/-0	3.375 +0/-0.002	3.749 +0/-0.002	3.750 +0.002/-0
PRC187-03.625	P187-03.625-375B	3.625	4.000	0.109	0.522 +0.015/-0	3.625 +0/-0.002	3.999 +0/-0.002	4.000 +0.002/-0
PRC187-04.000	P187-04.000-375B	4.000	4.375	0.109	0.522 +0.015/-0	4.000 +0/-0.002	4.374 +0/-0.002	4.375 +0.002/-0
PRC250-01.000	P250-01.000-375B	1.000	1.500	0.137	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	1.500	2.000	0.137	0.412 +0.015/-0	1.500 +0/-0.003	1.999 +0/-0.002	2.000 +0.003/-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 DIA.	I PISTON DIA.	J BORE DIA.
	P250-01.500-375B	1.500	2.000	0.137	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	1.750	2.250	0.137	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	2.000	2.500	0.137	0.412 +0.015/-0	2.000 +0/-0.003	2.499 +0/-0.002	2.500 +0.003/-0
	P250-02.000-375B	2.000	2.500	0.137	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	2.250	2.750	0.137	0.550 +0.015/-0	2.250 +0/-0.003	2.749 +0/-0.002	2.750 +0.003/-0
	P250-02.500-375B	2.500	3.000	0.137	0.550 +0.015/-0	2.500 +0/-0.003	2.999 +0/-0.002	3.000 +0.003/-0
PRC250-02.750	P250-02.750-375B	2.750	3.250	0.137	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	3.000	3.500	0.137	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	3.250	3.750	0.137	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	3.500	4.000	0.137	0.550 +0.015/-0	3.500 +0/-0.003	3.999 +0/-0.002	4.000 +0.003/-0
PRC250-03.750	P250-03.750-375B	3.750	4.250	0.137	0.550 +0.015/-0	3.750 +0/-0.003	4.249 +0/-0.002	4.250 +0.003/-0
PRC250-04.000	P250-04.000-375B	4.000	4.500	0.137	0.550 +0.015/-0	4.000 +0/-0.003	4.499 +0/-0.002	4.500 +0.003/-0
	P250-04.000-562B	4.000	4.500	0.137	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	4.250	4.750	0.137	0.550 +0.015/-0	4.250 +0/-0.003	4.749 +0/-0.002	4.750 +0.003/-0
	P250-04.250-562B	4.250	4.750	0.137	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	4.500	5.000	0.137	0.550 +0.015/-0	4.500 +0/-0.003	4.999 +0/-0.002	5.000 +0.003/-0
	P250-04.500-562B	4.500	5.000	0.137	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	5.000	5.500	0.137	0.550 +0.015/-0	5.000 +0/-0.003	5.499 +0/-0.002	5.500 +0.003/-0
	P250-05.000-562B	5.000	5.500	0.137	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	5.500	6.000	0.137	0.550 +0.015/-0	5.500 +0/-0.003	5.999 +0/-0.002	6.000 +0.003/-0
	P250-05.500-562B	5.500	6.000	0.137	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	6.000	6.500	0.137	0.550 +0.015/-0	6.000 +0/-0.003	6.499 +0/-0.002	6.500 +0.003/-0
	P250-06.000-562B	6.000	6.500	0.137	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	6.500	7.000	0.137	0.550 +0.015/-0	6.500 +0/-0.003	6.999 +0/-0.002	7.000 +0.003/-0
	P250-06.500-562B	6.500	7.000	0.137	0.756 +0.015/-0	6.500 +0/-0.003	6.999 +0/-0.002	7.000 +0.003/-0
PRC250-07.000	P250-07.000-375B	7.000	7.500	0.137	0.550 +0.015/-0	7.000 +0/-0.003	7.499 +0/-0.002	7.500 +0.003/-0
	P250-07.000-562B	7.000	7.500	0.137	0.756 +0.015/-0	7.000 +0/-0.003	7.499 +0/-0.002	7.500 +0.003/-0
PRC312-01.875	P312-01.875-500B	1.875	2.500	0.160	0.715 +0.015/-0	1.875 +0/-0.004	2.498 +0/-0.002	2.500 +0.003/-0
PRC312-02.375	P312-02.375-500B	2.375	3.000	0.160	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	3.375	4.000	0.160	0.715 +0.015/-0	3.375 +0/-0.004	3.998 +0/-0.002	4.000 +0.003/-0
PRC312-06.375	P312-06.375-625B	6.375	7.000	0.160	0.853 +0.015/-0	6.375 +0/-0.004	6.998 +0/-0.002	7.000 +0.003/-0
PRC375-02.000	P375-02.000-625B	2.000	2.750	0.207	0.895 +0.015/-0	2.000 +0/-0.005	2.748 +0/-0.002	2.750 +0.004/-0
PRC375-02.250	P375-02.250-625B	2.250	3.000	0.207	0.895 +0.015/-0	2.250 +0/-0.005	2.998 +0/-0.002	3.000 +0.004/-0
PRC375-02.500	P375-02.500-625B	2.500	3.250	0.207	0.895 +0.015/-0	2.500 +0/-0.005	3.248 +0/-0.002	3.250 +0.004/-0
PRC375-02.750	P375-02.750-625B	2.750	3.500	0.207	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	3.250	4.000	0.207	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	3.500	4.250	0.207	0.895 +0.015/-0	3.500 +0/-0.005	4.248 +0/-0.002	4.250 +0.004/-0
PRC375-03.750	P375-03.750-625B	3.750	4.500	0.207	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	4.250	5.000	0.207	0.620 +0.015/-0	4.250 +0/-0.005	4.998 +0/-0.002	5.000 +0.004/-0
	P375-04.250-625B	4.250	5.000	0.207	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	5.250	6.000	0.207	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	5.500	6.250	0.207	0.895 +0.015/-0	5.500 +0/-0.005	6.248 +0/-0.002	6.250 +0.004/-0
PRC375-05.750	P375-05.750-625B	5.750	6.500	0.207	0.895 +0.015/-0	5.750 +0/-0.005	6.498 +0/-0.002	6.500 +0.004/-0
PRC375-06.250	P375-06.250-625B	6.250	7.000	0.207	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	7.250	8.000	0.207	0.895 +0.015/-0	7.250 +0/-0.005	7.998 +0/-0.002	8.000 +0.004/-0
PRC375-08.250	P375-08.250-625B	8.250	9.000	0.207	0.895 +0.015/-0	8.250 +0/-0.005	8.998 +0/-0.002	9.000 +0.004/-0
PRC500-03.500	P500-03.500-750B	3.500	4.500	0.275	1.100 +0.015/-0	3.500 +0/-0.007	4.498 +0/-0.003	4.500 +0.005/-0
PRC500-05.000	P500-05.000-750B	5.000	6.000	0.275	1.100 +0.015/-0	5.000 +0/-0.007	5.998 +0/-0.003	6.000 +0.005/-0
PRC500-06.000	P500-06.000-750B	6.000	7.000	0.275	1.100 +0.015/-0	6.000 +0/-0.007	6.998 +0/-0.003	7.000 +0.005/-0
PRC500-07.000	P500-07.000-750B	7.000	8.000	0.275	1.100 +0.015/-0	7.000 +0/-0.007	7.998 +0/-0.003	8.000 +0.005/-0
PRC500-08.000	P500-08.000-750B	8.000	9.000	0.275	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	9.000	10.000	0.275	1.100 +0.015/-0	9.000 +0/-0.007	9.998 +0/-0.003	10.000 +0.005/-0

# ASYMMETRIC TWIN LIP ROD U-SEALS

This seal's twin lip design helps solve difficult rod sealing problems by providing lower friction, increased stability, and higher dynamic lip force, while reducing air penetration from outside the cylinder.



### HERCULES PART NUMBERS

**RTU 12 - 0.75 - 25**  
 Type of Seal | Cross Section | Inside Diameter | Height

SEAL INFORMATION	
MATERIAL	92A URETHANE
TEMPERATURE RANGE	-40° TO +230° F
PRESSURE RANGE	0 TO 5,000 PSI
MAXIMUM VELOCITY	90 FPM

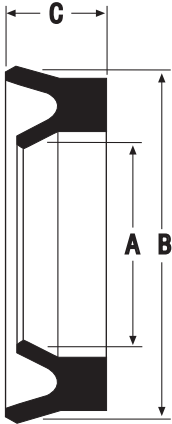
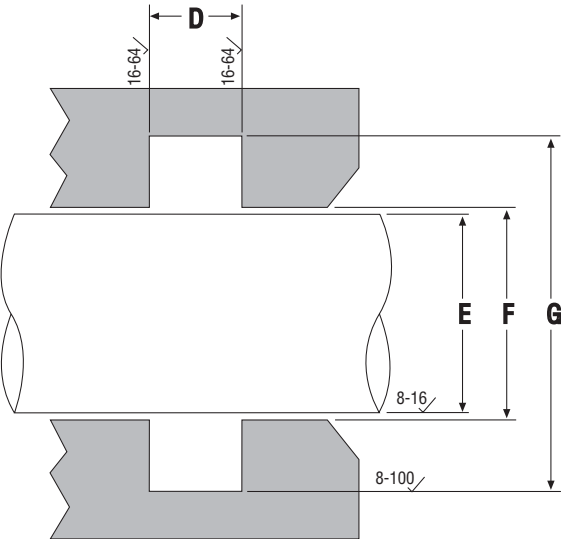
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
RTU12-0.75-25	0.750	1.000	0.250	0.275 +0.010/-0	0.750 -0.0008/-0.0028	0.751 +0.015/-0	1.000 ±0.003
RTU12-0.87-25	0.875	1.125	0.250	0.275 +0.010/-0	0.875 -0.0008/-0.0028	0.876 +0.015/-0	1.125 ±0.003
RTU12-1.00-18	1.000	1.250	0.188	0.207 +0.010/-0	1.000 -0.0008/-0.0028	1.001 +0.015/-0	1.250 ±0.003
RTU12-1.00-25	1.000	1.250	0.250	0.275 +0.010/-0	1.000 -0.0008/-0.0028	1.001 +0.015/-0	1.250 ±0.003
RTU18-1.00-31	1.000	1.375	0.312	0.344 +0.010/-0	1.000 -0.0008/-0.0028	1.001 +0.015/-0	1.375 ±0.003
RTU25-1.00-37	1.000	1.500	0.375	0.413 +0.010/-0	1.000 -0.0008/-0.0028	1.001 +0.015/-0	1.500 ±0.003
RTU18-1.12-31	1.125	1.500	0.313	0.344 +0.010/-0	1.125 -0.0008/-0.0028	1.126 +0.015/-0	1.500 ±0.003
RTU18-1.25-23	1.250	1.625	0.234	0.257 +0.010/-0	1.250 -0.0010/-0.0034	1.251 +0.015/-0	1.625 ±0.003
RTU12-1.25-25	1.250	1.500	0.250	0.275 +0.010/-0	1.250 -0.0010/-0.0034	1.251 +0.015/-0	1.500 ±0.003
RTU18-1.25-31	1.250	1.625	0.312	0.344 +0.010/-0	1.250 -0.0010/-0.0034	1.251 +0.015/-0	1.625 ±0.003
RTU25-1.25-37	1.250	1.750	0.375	0.413 +0.010/-0	1.250 -0.0010/-0.0034	1.251 +0.015/-0	1.750 ±0.003
RTU12-1.37-18	1.375	1.625	0.188	0.207 +0.010/-0	1.000 -0.0008/-0.0028	1.001 +0.015/-0	1.625 ±0.003
RTU18-1.37-31	1.375	1.750	0.313	0.344 +0.010/-0	1.375 -0.0010/-0.0034	1.376 +0.015/-0	1.750 ±0.003
RTU18-1.50-25	1.500	1.875	0.250	0.275 +0.010/-0	1.500 -0.0010/-0.0034	1.501 +0.015/-0	1.875 ±0.003
RTU12-1.50-25	1.500	1.750	0.250	0.275 +0.010/-0	1.500 -0.0010/-0.0034	1.501 +0.015/-0	1.750 ±0.003
RTU18-1.50-31	1.500	1.875	0.312	0.344 +0.010/-0	1.500 -0.0010/-0.0034	1.501 +0.015/-0	1.875 ±0.003
RTU25-1.50-37	1.500	2.000	0.375	0.413 +0.010/-0	1.500 -0.0010/-0.0034	1.501 +0.015/-0	2.000 ±0.004
RTU18-1.62-31	1.625	2.000	0.312	0.344 +0.010/-0	1.625 -0.0010/-0.0034	1.626 +0.015/-0	2.000 ±0.003
RTU18-1.75-31	1.750	2.125	0.312	0.344 +0.010/-0	1.750 -0.0010/-0.0034	1.751 +0.015/-0	2.125 ±0.004
RTU25-1.75-37	1.750	2.000	0.375	0.413 +0.010/-0	1.750 -0.0010/-0.0034	1.751 +0.015/-0	2.250 ±0.004
RTU12-2.00-25	2.000	2.250	0.250	0.275 +0.010/-0	2.000 -0.0010/-0.0034	2.001 +0.015/-0	2.250 ±0.003
RTU18-2.00-31	2.000	2.375	0.312	0.344 +0.010/-0	2.000 -0.0012/-0.0041	2.001 +0.015/-0	2.375 ±0.004
RTU25-2.00-37	2.000	2.500	0.375	0.413 +0.010/-0	2.000 -0.0012/-0.0041	2.001 +0.015/-0	2.500 ±0.004
RTU25-2.25-37	2.250	2.750	0.375	0.413 +0.010/-0	2.250 -0.0012/-0.0041	2.251 +0.015/-0	2.750 ±0.004
RTU25-2.50-28	2.500	3.000	0.281	0.309 +0.010/-0	2.500 -0.0012/-0.0041	2.501 +0.015/-0	3.000 ±0.004
RTU18-2.50-31	2.500	2.875	0.312	0.344 +0.010/-0	2.500 -0.0012/-0.0041	2.501 +0.015/-0	2.875 ±0.004
RTU25-2.50-37	2.500	3.000	0.375	0.413 +0.010/-0	2.500 -0.0012/-0.0041	2.501 +0.015/-0	3.000 ±0.004
RTU25-2.75-37	2.750	3.250	0.375	0.413 +0.010/-0	2.750 -0.0012/-0.0041	2.751 +0.015/-0	3.250 ±0.004
RTU18-3.00-37	3.000	3.375	0.375	0.413 +0.010/-0	3.000 -0.0012/-0.0041	3.001 +0.015/-0	3.375 ±0.004
RTU25-3.00-37	3.000	3.500	0.375	0.413 +0.010/-0	3.000 -0.0012/-0.0041	3.001 +0.015/-0	3.500 ±0.004
RTU25-3.00-75	3.000	3.500	0.750	0.825 +0.010/-0	3.000 -0.0012/-0.0041	3.001 +0.015/-0	3.500 ±0.004
RTU18-3.12-62	3.125	3.500	0.625	0.688 +0.010/-0	3.125 -0.0012/-0.0041	3.126 +0.015/-0	3.500 ±0.004
RTU25-3.25-37	3.250	3.750	0.375	0.413 +0.010/-0	3.250 -0.0014/-0.0048	3.251 +0.015/-0	3.750 ±0.004
RTU18-3.50-37	3.500	3.875	0.375	0.413 +0.010/-0	3.500 -0.0014/-0.0048	3.501 +0.015/-0	3.875 ±0.004

## ASYMMETRIC TWIN LIP ROD U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
RTU25-3.50-37	3.500	4.000	0.375	0.413 +0.010/-0	3.500 -0.0014/-0.0048	3.501 +0.015/-0	4.000 ±0.004
RTU18-4.00-37	4.000	4.375	0.375	0.413 +0.010/-0	4.000 -0.0014/-0.0048	4.001 +0.015/-0	4.375 ±0.004
RTU25-4.00-37	4.000	4.500	0.375	0.413 +0.010/-0	4.000 -0.0014/-0.0048	4.001 +0.015/-0	4.500 ±0.004
RTU25-4.00-75	4.000	4.500	0.750	0.825 +0.010/-0	4.000 -0.0014/-0.0048	4.001 +0.015/-0	4.500 ±0.004
RTU25-4.50-37	4.500	5.000	0.375	0.413 +0.010/-0	4.500 -0.0014/-0.0048	4.501 +0.015/-0	5.000 ±0.005
RTU25-5.00-37	5.000	5.500	0.375	0.413 +0.010/-0	5.000 -0.0017/-0.0056	5.001 +0.015/-0	5.500 ±0.005
RTU25-5.00-75	5.000	5.500	0.750	0.825 +0.010/-0	5.000 -0.0017/-0.0056	5.001 +0.015/-0	5.500 ±0.005
RTU25-5.50-37	5.500	6.000	0.375	0.413 +0.010/-0	5.500 -0.0017/-0.0056	5.501 +0.015/-0	6.000 ±0.005
RTU25-6.00-75	6.000	6.500	0.750	0.825 +0.010/-0	6.000 -0.0017/-0.0056	6.001 +0.015/-0	6.500 ±0.005
RTU25-7.00-75	7.000	7.500	0.781	0.859 +0.010/-0	7.000 -0.0017/-0.0056	7.001 +0.015/-0	7.500 ±0.006
RTU25-8.12-75	8.125	8.625	0.750	0.825 +0.010/-0	8.125 -0.0020/-0.0065	8.126 +0.015/-0	8.625 ±0.006
RTU25-9.37-75	9.375	9.875	0.750	0.825 +0.010/-0	9.375 -0.0020/-0.0065	9.376 +0.015/-0	9.875 ±0.006

# URETHANE ROD U-SEALS

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



**HERCULES PART NUMBERS**

**RU 25 - 1.50 - 37**

Type of Seal      Cross Section      Inside Diameter      Height

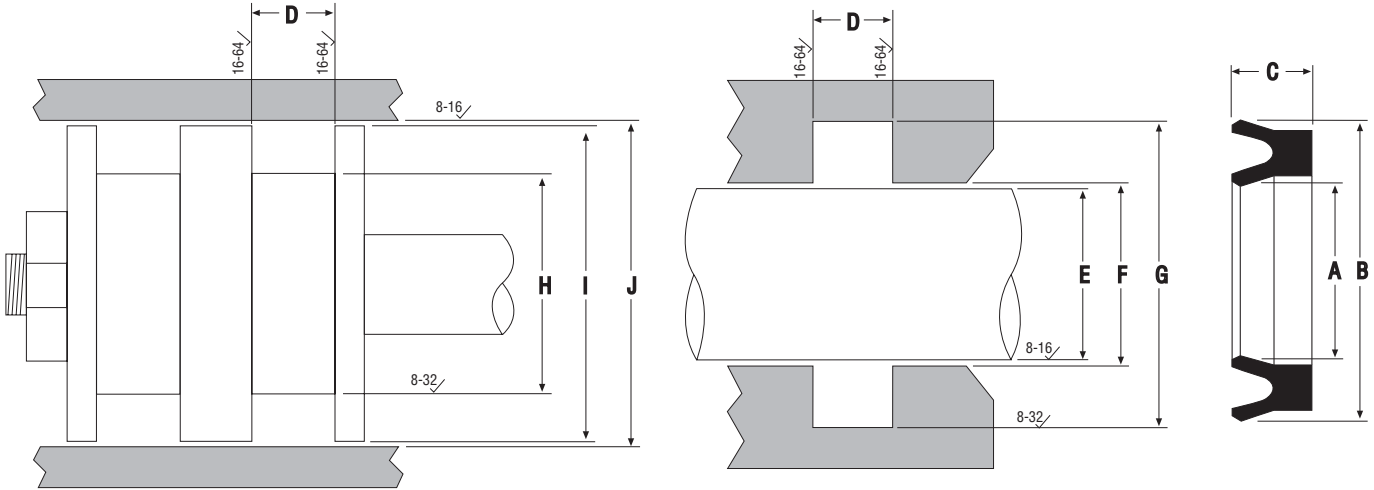
<b>SEAL INFORMATION</b>	
MATERIAL	95A URETHANE
TEMPERATURE RANGE	-65° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
MAXIMUM VELOCITY	180 FPM

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
RU25-1.50-37	1.500	2.000	0.375	0.413 +0.010/-0	1.500 +0/-0.002	1.501 +0.003/-0	2.000 +0.003/-0
RU25-1.75-37	1.750	2.250	0.375	0.413 +0.010/-0	1.750 +0/-0.002	1.751 +0.003/-0	2.250 +0.003/-0
RU25-1.75-50	1.750	2.250	0.500	0.550 +0.010/-0	1.750 +0/-0.002	1.751 +0.003/-0	2.250 +0.003/-0
RU25-2.00-37	2.000	2.500	0.375	0.413 +0.010/-0	2.000 +0/-0.002	2.001 +0.003/-0	2.500 +0.003/-0
RU25-2.50-37	2.500	3.000	0.375	0.413 +0.010/-0	2.500 +0/-0.002	2.501 +0.003/-0	3.000 +0.003/-0
RU25-3.00-37	3.000	3.500	0.375	0.413 +0.010/-0	3.000 +0/-0.002	3.001 +0.003/-0	3.500 +0.003/-0
RU25-3.56-37	3.563	4.063	0.375	0.413 +0.010/-0	3.562 +0/-0.002	3.563 +0.003/-0	4.062 +0.003/-0
RU25-4.50-56	4.500	5.000	0.563	0.619 +0.010/-0	4.500 +0/-0.002	4.501 +0.003/-0	5.000 +0.003/-0
RU31-2.62-62	2.625	3.250	0.625	0.688 +0.010/-0	2.625 +0/-0.002	2.627 +0.003/-0	3.250 +0.004/-0
RU31-3.37-50	3.375	4.000	0.500	0.550 +0.010/-0	3.375 +0/-0.002	3.377 +0.003/-0	4.000 +0.004/-0
RU31-3.75-62	3.750	4.375	0.625	0.688 +0.010/-0	3.750 +0/-0.002	3.752 +0.003/-0	4.375 +0.004/-0
RU31-4.62-62	4.625	5.250	0.625	0.688 +0.010/-0	4.625 +0/-0.002	4.627 +0.003/-0	5.250 +0.004/-0
RU31-5.75-62	5.750	6.375	0.625	0.688 +0.010/-0	5.750 +0/-0.002	5.752 +0.003/-0	6.375 +0.004/-0
RU31-6.75-62	6.750	7.375	0.625	0.688 +0.010/-0	6.750 +0/-0.002	6.752 +0.003/-0	7.375 +0.004/-0
RU37-4.25-50	4.250	5.000	0.500	0.550 +0.010/-0	4.250 +0/-0.002	4.252 +0.004/-0	5.000 +0.005/-0
RU37-4.25-62	4.250	5.000	0.625	0.688 +0.010/-0	4.250 +0/-0.002	4.252 +0.004/-0	5.000 +0.005/-0
RU37-4.50-62	4.500	5.250	0.625	0.688 +0.010/-0	4.500 +0/-0.002	4.502 +0.004/-0	5.250 +0.005/-0
RU43-3.87-75	3.875	4.750	0.750	0.825 +0.010/-0	3.875 +0/-0.002	3.877 +0.004/-0	4.750 +0.006/-0
RU43-4.75-75	4.750	5.625	0.750	0.825 +0.010/-0	4.750 +0/-0.002	4.752 +0.004/-0	5.625 +0.006/-0
RU50-4.00-75	4.000	5.000	0.750	0.825 +0.010/-0	4.000 +0/-0.003	4.002 +0.005/-0	5.000 +0.007/-0



# SYMMETRICAL URETHANE U-SEALS

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



## HERCULES PART NUMBERS

**HU 12 - 0.37 - 25**

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
MAXIMUM VELOCITY	180 FPM

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
HU12-0.37-25	0.375	0.625	0.250	0.275 +0.015/-0	0.375 +0/-0.003	0.376 +0.003/-0	0.625 +0.003/-0	0.375 +0/-0.004	0.624 +0/-0.003	0.625 +0.003/-0
HU18-0.37-31	0.375	0.750	0.312	0.343 +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
HU21-0.50-25	0.500	0.938	0.250	0.275 +0.015/-0	0.500 +0/-0.003	0.501 +0.003/-0	0.938 +0.003/-0	0.500 +0/-0.004	0.937 +0/-0.003	0.938 +0.003/-0
HU12-0.62-18	0.625	0.875	0.188	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
HU12-0.62-12	0.625	0.875	0.125	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
HU25-0.62-37	0.625	1.125	0.375	0.413 +0.015/-0	0.625 +0/-0.003	0.626 +0.003/-0	1.125 +0.003/-0	0.625 +0/-0.004	1.124 +0/-0.003	1.125 +0.003/-0
HU12-0.75-25	0.750	1.000	0.250	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
HU25-0.75-37	0.750	1.250	0.375	0.413 +0.015/-0	0.750 +0/-0.003	0.751 +0.003/-0	1.250 +0.003/-0	0.750 +0/-0.004	1.249 +0/-0.003	1.250 +0.003/-0
HU12-0.87-25	0.875	1.125	0.250	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
HU18-0.87-25	0.875	1.250	0.250	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
HU25-0.93-56	0.938	1.438	0.563	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
HU15-1.00-21	1.000	1.313	0.219	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
HU12-1.00-25	1.000	1.250	0.250	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
HU18-1.00-25	1.000	1.375	0.250	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
HU25-1.00-25	1.000	1.500	0.250	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	1.000	1.500	0.312	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	1.000	1.500	0.375	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
HU31-1.00-31	1.000	1.625	0.312	0.343 +0.015/-0	1.000 +0/-0.003	1.001 +0.003/-0	1.625 +0.003/-0	1.000 +0/-0.004	1.624 +0/-0.003	1.625 +0.003/-0
HU12-1.12-12	1.125	1.375	0.125	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
HU18-1.12-18	1.125	1.500	0.188	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	1.125	1.500	0.250	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
HU25-1.12-25	1.125	1.625	0.250	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
HU25-1.12-37	1.125	1.625	0.375	0.413 +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

# SYMMETRICAL URETHANE U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
HU31-1.12-31	1.125	1.750	0.312	0.343 +0.015/-0	1.125 +0/-0.003	1.126 +0.003/-0	1.750 +0.003/-0	1.125 +0/-0.004	1.749 +0/-0.003	1.750 +0.003/-0
HU12-1.25-25	1.250	1.500	0.250	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
HU18-1.25-18	1.250	1.625	0.188	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	1.250	1.625	0.250	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	1.250	1.625	0.312	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	1.250	1.625	0.375	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
HU25-1.25-25	1.250	1.750	0.250	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	1.250	1.750	0.375	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
HU31-1.25-37	1.250	1.875	0.375	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
HU15-1.37-21	1.375	1.688	0.219	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
HU18-1.37-18	1.375	1.750	0.188	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
HU25-1.37-37	1.375	1.875	0.375	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
HU25-1.37-56	1.375	1.875	0.563	0.619 +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
HU31-1.37-31	1.375	2.000	0.312	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
HU31-1.37-37	1.375	2.000	0.375	0.413 +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
HU12-1.50-25	1.500	1.750	0.250	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
HU18-1.50-25	1.500	1.875	0.250	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	1.500	1.875	0.312	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
HU25-1.50-31	1.500	2.000	0.312	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	1.500	2.000	0.375	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
HU18-1.62-18	1.625	2.000	0.188	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	1.625	2.000	0.312	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	1.750	2.125	0.188	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	1.750	2.125	0.250	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	1.750	2.125	0.375	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
HU25-1.75-25	1.750	2.250	0.250	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	1.750	2.250	0.375	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
HU31-1.75-31	1.750	2.375	0.312	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
HU37-1.75-37	1.750	2.500	0.375	0.413 +0.015/-0	1.750 +0/-0.003	1.751 +0.003/-0	2.500 +0.003/-0	1.750 +0/-0.004	2.499 +0/-0.003	2.500 +0.003/-0
HU31-1.87-50	1.875	2.500	0.500	0.550 +0.015/-0	1.875 +0/-0.003	1.876 +0.003/-0	2.500 +0.003/-0	1.875 +0/-0.004	2.499 +0/-0.003	2.500 +0.003/-0
HU50-1.87-50	1.875	2.875	0.500	0.550 +0.015/-0	1.875 +0/-0.003	1.876 +0.003/-0	2.875 +0.003/-0	1.875 +0/-0.004	2.874 +0/-0.003	2.875 +0.003/-0
HU12-2.00-12	2.000	2.250	0.125	0.138 +0.015/-0	2.000 +0/-0.003	2.001 +0.003/-0	2.250 +0.003/-0	2.000 +0/-0.004	2.249 +0/-0.003	2.250 +0.003/-0
HU18-2.00-18	2.000	2.375	0.188	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	2.000	2.375	0.250	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	2.000	2.375	0.312	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	2.000	2.375	0.375	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
HU25-2.00-25	2.000	2.500	0.250	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	2.000	2.500	0.312	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	2.000	2.500	0.375	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	2.000	2.500	0.500	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
HU31-2.00-50	2.000	2.625	0.500	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
HU18-2.12-18	2.125	2.500	0.188	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	2.125	2.500	0.375	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
HU31-2.12-75	2.125	2.750	0.750	0.825 +0.015/-0	2.125 +0/-0.003	2.126 +0.003/-0	2.750 +0.003/-0	2.125 +0/-0.004	2.749 +0/-0.003	2.750 +0.003/-0
HU25-2.18-37	2.188	2.688	0.375	0.413 +0.015/-0	2.188 +0/-0.003	2.189 +0.003/-0	2.688 +0.003/-0	2.188 +0/-0.004	2.687 +0/-0.003	2.688 +0.003/-0
HU25-2.25-25	2.250	2.750	0.250	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
HU25-2.25-31	2.250	2.750	0.312	0.343 +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	2.250	2.750	0.375	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
HU31-2.25-50	2.250	2.875	0.500	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
HU37-2.25-50	2.250	3.000	0.500	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
HU21-2.50-28	2.500	2.938	0.281	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
HU18-2.50-18	2.500	2.875	0.188	0.207 +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
HU18-2.50-25	2.500	2.875	0.250	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	2.500	2.875	0.375	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
HU25-2.50-25	2.500	3.000	0.250	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	2.500	3.000	0.375	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
HU31-2.50-50	2.500	3.125	0.500	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
HU37-2.50-43	2.500	3.250	0.438	0.482 +0.015/-0	2.500 +0/-0.003	2.501 +0.003/-0	3.250 +0.003/-0	2.500 +0/-0.004	3.249 +0/-0.003	3.250 +0.003/-0
HU18-2.62-31	2.625	3.000	0.312	0.343 +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
HU18-2.62-37	2.625	3.000	0.375	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
HU25-2.62-37	2.625	3.125	0.375	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
HU37-2.62-62	2.625	3.375	0.625	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
HU25-2.75-25	2.750	3.250	0.250	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

# SYMMETRICAL URETHANE U-SEALS

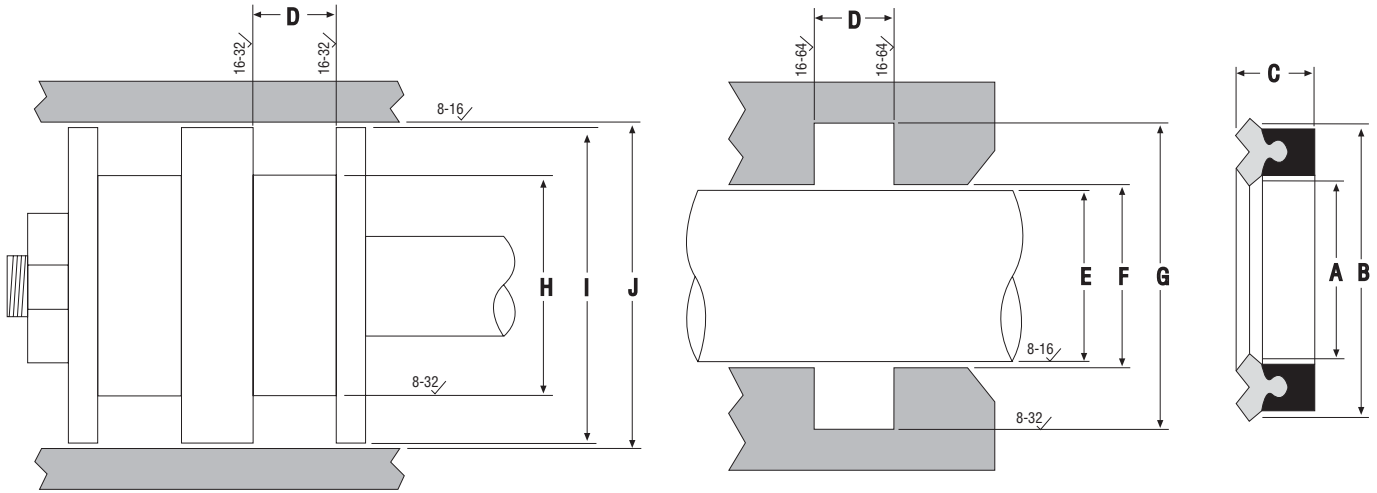
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
HU25-2.75-37	2.750	3.250	0.375	0.413 +0.015/-0	2.750 +0/-0.003	2.751 +0.003/-0	3.250 +0.003/-0	2.750 +0/-0.004	3.249 +0/-0.003	3.250 +0.003/-0
HU37-2.75-50	2.750	3.500	0.500	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	2.750	3.500	0.625	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
HU21-3.00-28	3.000	3.438	0.281	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
HU18-3.00-18	3.000	3.375	0.188	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
HU25-3.00-25	3.000	3.500	0.250	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	3.000	3.500	0.375	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
HU31-3.00-50	3.000	3.625	0.500	0.550 +0.015/-0	3.000 +0/-0.003	3.001 +0.003/-0	3.625 +0.003/-0	3.000 +0/-0.004	3.624 +0/-0.003	3.625 +0.003/-0
HU37-3.00-62	3.000	3.750	0.625	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
HU50-3.00-50	3.000	4.000	0.500	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
HU37-3.12-62	3.125	3.875	0.375	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
HU18-3.12-37	3.125	3.500	0.375	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
HU18-3.25-37	3.250	3.625	0.375	0.413 +0.015/-0	3.250 +0/-0.003	3.251 +0.003/-0	3.625 +0.003/-0	3.250 +0/-0.004	3.624 +0/-0.003	3.625 +0.003/-0
HU25-3.25-31	3.250	3.750	0.312	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	3.250	3.750	0.375	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
HU37-3.25-37	3.250	4.000	0.375	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	3.250	4.000	0.500	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
HU25-3.37-37	3.375	3.875	0.375	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
HU37-3.37-87	3.375	4.125	0.875	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
HU25-3.50-31	3.500	4.000	0.313	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	3.500	4.000	0.375	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	3.500	4.000	0.500	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
HU18-3.62-37	3.625	4.000	0.375	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
HU31-3.62-37	3.625	4.250	0.375	0.413 +0.015/-0	3.625 +0/-0.003	3.626 +0.003/-0	4.250 +0.003/-0	3.625 +0/-0.004	4.249 +0/-0.003	4.250 +0.003/-0
HU25-3.75-37	3.750	4.250	0.375	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
HU37-3.75-37	3.750	4.500	0.375	0.413 +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
HU37-3.75-50	3.750	4.500	0.500	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	3.750	4.500	0.625	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
HU18-3.87-18	3.875	4.250	0.188	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
HU18-3.87-37	3.875	4.250	0.375	0.413 +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
HU31-3.87-50	3.875	4.500	0.500	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
HU43-3.87-1	3.875	4.750	1.000	1.100 +0.015/-0	3.875 +0/-0.003	3.876 +0.003/-0	4.750 +0.003/-0	3.875 +0/-0.004	4.749 +0/-0.003	4.750 +0.003/-0
HU25-4.00-31	4.000	4.500	0.313	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
HU25-4.00-25	4.000	4.500	0.250	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
HU25-4.00-37	4.000	4.500	0.375	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	4.000	4.500	0.500	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	4.000	4.500	0.563	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
HU50-4.00-50	4.000	5.000	0.500	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	4.000	5.000	0.625	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
HU50-4.00-75	4.000	5.000	0.750	0.825 +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
HU31-4.12-50	4.125	4.750	0.500	0.550 +0.015/-0	4.125 +0/-0.003	4.126 +0.003/-0	4.750 +0.003/-0	4.125 +0/-0.004	4.749 +0/-0.003	4.750 +0.003/-0
HU25-4.25-25	4.250	4.750	0.250	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
HU37-4.25-37	4.250	5.000	0.375	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	4.250	5.000	0.500	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	4.250	5.000	0.625	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
HU25-4.37-37	4.375	4.875	0.375	0.413 +0.015/-0	4.375 +0/-0.003	4.376 +0.003/-0	4.875 +0.003/-0	4.375 +0/-0.004	4.874 +0/-0.003	4.875 +0.003/-0
HU37-4.37-50	4.375	5.125	0.500	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
HU25-4.50-31	4.500	5.000	0.313	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
HU18-4.50-37	4.500	4.875	0.375	0.413 +0.015/-0	4.500 +0/-0.003	4.501 +0.003/-0	4.875 +0.003/-0	4.500 +0/-0.004	4.874 +0/-0.003	4.875 +0.003/-0
HU25-4.50-25	4.500	5.000	0.250	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
HU25-4.50-37	4.500	5.000	0.375	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	4.500	5.000	0.500	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	4.500	5.000	0.563	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
HU37-4.50-37	4.500	5.250	0.375	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	4.500	5.250	0.500	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
HU31-4.62-62	4.625	5.250	0.625	0.688 +0.015/-0	4.625 +0/-0.003	4.626 +0.003/-0	5.250 +0.003/-0	4.625 +0/-0.004	5.249 +0/-0.003	5.250 +0.003/-0
HU25-4.75-25	4.750	5.250	0.250	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
HU37-4.75-50	4.750	5.500	0.500	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
HU25-4.87-37	4.875	5.375	0.375	0.413 +0.015/-0	4.875 +0/-0.003	4.876 +0.003/-0	5.375 +0.003/-0	4.875 +0/-0.004	5.374 +0/-0.003	5.375 +0.003/-0
HU28-5.00-34	5.000	5.563	0.281	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
HU25-5.00-25	5.000	5.500	0.250	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	5.000	5.500	0.375	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	5.000	5.500	0.563	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

# SYMMETRICAL URETHANE U-SEALS

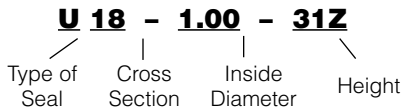
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
HU37-5.00-37	5.000	5.750	0.375	0.413 +0.015/-0	5.000 +0/-0.003	5.001 +0.003/-0	5.750 +0.003/-0	5.000 +0/-0.004	5.749 +0/-0.003	5.750 +0.003/-0
HU37-5.00-50	5.000	5.750	0.500	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
HU50-5.00-50	5.000	6.000	0.500	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	5.000	6.000	0.750	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
HU62-5.00-50	5.000	6.250	0.500	0.550 +0.015/-0	5.000 +0/-0.003	5.001 +0.003/-0	6.250 +0.003/-0	5.000 +0/-0.004	6.249 +0/-0.003	6.250 +0.003/-0
HU50-5.12-75	5.125	6.125	0.750	0.825 +0.015/-0	5.125 +0/-0.003	5.126 +0.003/-0	6.125 +0.003/-0	5.125 +0/-0.004	6.124 +0/-0.003	6.125 +0.003/-0
HU31-5.25-62	5.250	5.875	0.625	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
HU37-5.25-37	5.250	6.000	0.375	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	5.250	6.000	0.500	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	5.250	6.000	0.625	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
HU31-5.37-37	5.375	6.000	0.375	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	5.375	6.000	0.500	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	5.375	6.000	0.625	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	5.500	6.125	0.313	0.344 +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
HU25-5.50-25	5.500	6.000	0.250	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	5.500	6.000	0.375	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	5.500	6.000	0.563	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
HU37-5.50-62	5.500	6.250	0.625	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
HU25-5.75-25	5.750	6.250	0.250	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
HU25-5.75-37	5.750	6.250	0.375	0.413 +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
HU37-5.75-37	5.750	6.500	0.375	0.413 +0.015/-0	5.750 +0/-0.003	5.751 +0.003/-0	6.500 +0.003/-0	5.750 +0/-0.004	6.499 +0/-0.003	6.500 +0.003/-0
HU25-6.00-56	6.000	6.500	0.563	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
HU37-6.00-50	6.000	6.750	0.500	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
HU50-6.00-50	6.000	7.000	0.500	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
HU37-6.25-37	6.250	7.000	0.375	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	6.250	7.000	0.500	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	6.250	7.000	0.625	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
HU31-6.37-75	6.375	7.000	0.750	0.825 +0.015/-0	6.375 +0/-0.003	6.376 +0.003/-0	7.000 +0.003/-0	6.375 +0/-0.004	6.999 +0/-0.003	7.000 +0.003/-0
HU25-6.50-25	6.500	7.000	0.250	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
HU31-6.50-62	6.500	7.125	0.625	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
HU37-6.50-37	6.500	7.250	0.375	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	6.500	7.250	0.625	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
HU37-7.00-50	7.000	7.750	0.500	0.550 +0.015/-0	7.000 +0/-0.003	7.001 +0.003/-0	7.750 +0.003/-0	7.000 +0/-0.004	7.749 +0/-0.003	7.750 +0.003/-0
HU50-7.00-50	7.000	8.000	0.500	0.550 +0.015/-0	7.000 +0/-0.003	7.001 +0.003/-0	8.000 +0.003/-0	7.000 +0/-0.004	7.999 +0/-0.003	8.000 +0.003/-0
HU37-7.25-37	7.250	8.000	0.375	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	7.250	8.000	0.625	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
HU25-7.50-56	7.500	8.000	0.563	0.619 +0.015/-0	7.500 +0/-0.003	7.501 +0.003/-0	8.000 +0.003/-0	7.500 +0/-0.004	7.999 +0/-0.003	8.000 +0.003/-0
HU37-8.62-62	8.625	9.375	0.625	0.688 +0.015/-0	8.625 +0/-0.003	8.626 +0.003/-0	9.375 +0.003/-0	8.625 +0/-0.004	9.374 +0/-0.003	9.375 +0.003/-0

# Z-SEALS™

The Z-Seal™ combines 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.



## HERCULES PART NUMBERS



SEAL INFORMATION	
MATERIAL	95A URETHANE BASE 70A NITRILE SEAL
TEMPERATURE RANGE	-35° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI
MAXIMUM VELOCITY	180 FPM

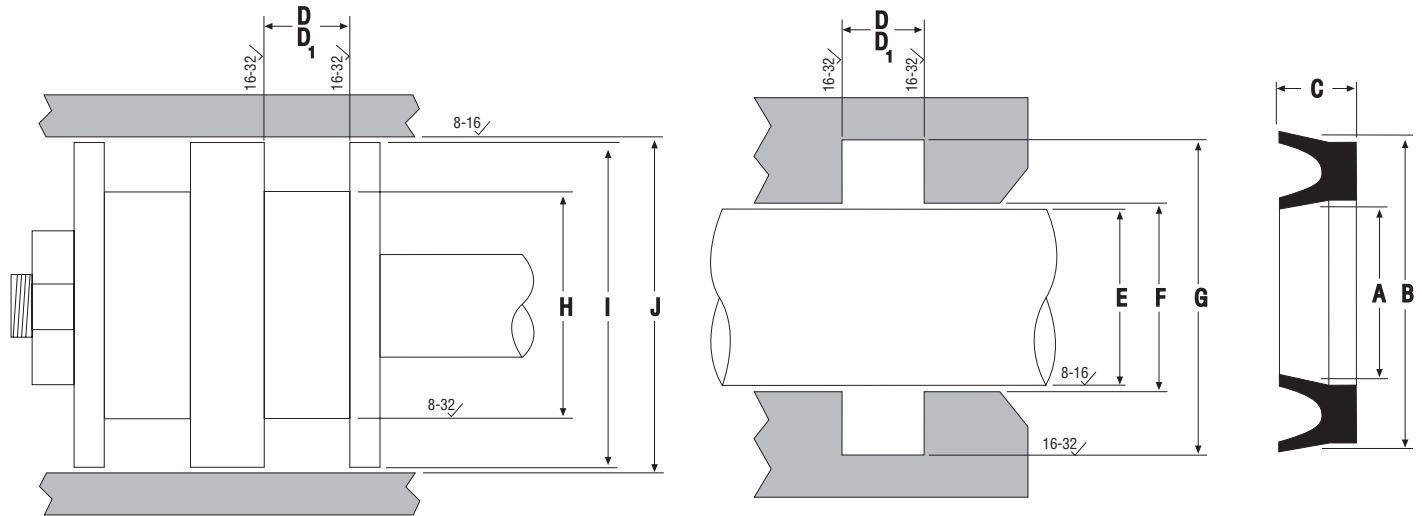
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U12-0.87-25Z	0.875	1.125	0.250	0.275 +0.010/-0	0.875 +0/-0.002	0.876 +0.002/-0	1.125 +0.002/-0	0.875 +0/-0.002	1.124 +0/-0.002	1.125 +0.002/-0
U12-1.00-25DZ	1.000	1.250	0.250	0.275 +0.010/-0	1.000 +0/-0.002	1.001 +0.002/-0	1.250 +0.002/-0	1.000 +0/-0.002	1.249 +0/-0.002	1.250 +0.002/-0
U18-1.00-31Z	1.000	1.375	0.312	0.344 +0.010/-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
U25-1.00-37Z	1.000	1.500	0.375	0.413 +0.010/-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
U12-1.12-25DZ	1.125	1.375	0.250	0.275 +0.010/-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
U18-1.12-31Z	1.125	1.500	0.312	0.344 +0.010/-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
U12-1.25-25DZ	1.250	1.500	0.250	0.275 +0.010/-0	1.250 +0/-0.002	1.251 +0.002/-0	1.500 +0.002/-0	1.250 +0/-0.002	1.499 +0/-0.002	1.500 +0.002/-0
U18-1.25-31Z	1.250	1.625	0.312	0.344 +0.010/-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
U18-1.25-37Z	1.250	1.625	0.375	0.413 +0.010/-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
U25-1.25-37Z	1.250	1.750	0.375	0.413 +0.010/-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
U18-1.37-31DZ	1.375	1.500	0.312	0.344 +0.010/-0	1.375 +0/-0.002	1.376 +0.002/-0	1.500 +0.002/-0	1.375 +0/-0.002	1.499 +0/-0.002	1.500 +0.002/-0
U31-1.37-50Z	1.375	2.000	0.500	0.550 +0.010/-0	1.375 +0/-0.002	1.376 +0.003/-0	2.000 +0.004/-0	1.375 +0/-0.004	1.999 +0/-0.002	2.000 +0.003/-0
U15-1.50-31DZ	1.500	1.813	0.312	0.344 +0.010/-0	1.500 +0/-0.002	1.501 +0.002/-0	1.813 +0.002/-0	1.500 +0/-0.002	1.812 +0/-0.002	1.813 +0.002/-0
U18-1.50-37DZ	1.500	1.875	0.375	0.413 +0.010/-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
U18-1.50-37Z	1.500	1.875	0.375	0.413 +0.010/-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
U25-1.50-37Z	1.500	2.000	0.375	0.413 +0.010/-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
U18-1.62-37Z	1.625	2.000	0.375	0.413 +0.010/-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
U18-1.75-25Z	1.750	2.125	0.250	0.275 +0.010/-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
U18-1.75-37Z	1.750	2.125	0.375	0.413 +0.010/-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
U25-1.75-37Z	1.750	2.250	0.375	0.413 +0.010/-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
U18-1.87-37Z	1.875	2.250	0.375	0.413 +0.010/-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
U31-1.87-50Z	1.875	2.500	0.500	0.550 +0.010/-0	1.875 +0/-0.002	1.876 +0.003/-0	2.500 +0.004/-0	1.875 +0/-0.004	2.499 +0/-0.002	2.500 +0.003/-0
U18-2.00-37Z	2.000	2.375	0.375	0.413 +0.010/-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

# Z-SEALS™

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
U25-2.00-37Z	2.000	2.500	0.375	0.413 +0.010/-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
U25-2.25-37Z	2.250	2.750	0.375	0.413 +0.010/-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
U37-2.25-62ZF	2.250	3.000	0.625	0.688 +0.010/-0	2.250 +0/-0.002	2.251 +0.004/-0	3.000 +0.005/-0	2.250 +0/-0.005	2.999 +0/-0.002	3.000 +0.004/-0
U18-2.50-37Z	2.500	2.875	0.375	0.413 +0.010/-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
U25-2.50-37Z	2.500	3.000	0.375	0.413 +0.010/-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
U37-2.50-62Z	2.500	3.250	0.625	0.688 +0.010/-0	2.500 +0/-0.002	2.501 +0.004/-0	3.250 +0.005/-0	2.500 +0/-0.005	3.249 +0/-0.002	3.250 +0.004/-0
U18-2.62-37Z	2.625	3.000	0.375	0.413 +0.010/-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
U25-2.62-37Z	2.625	3.125	0.375	0.413 +0.010/-0	2.625 +0/-0.002	2.626 +0.002/-0	3.125 +0.002/-0	2.625 +0/-0.002	3.124 +0/-0.002	3.125 +0.002/-0
U25-2.75-37Z	2.750	3.250	0.375	0.413 +0.010/-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
U37-2.75-62Z	2.750	3.500	0.625	0.688 +0.010/-0	2.750 +0/-0.002	2.751 +0.004/-0	3.500 +0.005/-0	2.750 +0/-0.005	3.499 +0/-0.002	3.500 +0.004/-0
U25-3.00-37Z	3.000	3.500	0.375	0.413 +0.010/-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
U37-3.00-62Z	3.000	3.750	0.625	0.688 +0.010/-0	3.000 +0/-0.002	3.001 +0.004/-0	3.750 +0.005/-0	3.000 +0/-0.005	3.749 +0/-0.002	3.750 +0.004/-0
U25-3.25-37Z	3.250	3.750	0.375	0.413 +0.010/-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
U37-3.25-62Z	3.250	4.000	0.625	0.688 +0.010/-0	3.250 +0/-0.002	3.251 +0.004/-0	4.000 +0.005/-0	3.250 +0/-0.005	3.999 +0/-0.002	4.000 +0.004/-0
U25-3.50-37Z	3.500	4.000	0.375	0.413 +0.010/-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
U25-3.75-37Z	3.750	4.250	0.375	0.413 +0.010/-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
U37-3.75-62Z	3.750	4.500	0.625	0.688 +0.010/-0	3.750 +0/-0.002	3.751 +0.004/-0	4.500 +0.005/-0	3.750 +0/-0.005	4.499 +0/-0.002	4.500 +0.004/-0
U18-4.00-37ZF	4.000	4.375	0.375	0.413 +0.010/-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
U37-4.00-62Z	4.000	4.750	0.625	0.688 +0.010/-0	4.000 +0/-0.002	4.001 +0.004/-0	4.750 +0.005/-0	4.000 +0/-0.005	4.749 +0/-0.002	4.750 +0.004/-0
U25-4.00-37Z	4.000	4.500	0.375	0.413 +0.010/-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
U37-4.25-62Z	4.250	5.000	0.625	0.688 +0.010/-0	4.250 +0/-0.002	4.251 +0.004/-0	5.000 +0.005/-0	4.250 +0/-0.005	4.999 +0/-0.002	5.000 +0.004/-0
U31-4.50-62Z	4.500	5.125	0.625	0.688 +0.010/-0	4.500 +0/-0.002	4.501 +0.004/-0	5.125 +0.005/-0	4.500 +0/-0.005	5.124 +0/-0.002	5.125 +0.004/-0
U25-4.50-37Z	4.500	5.000	0.375	0.413 +0.010/-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
U25-4.62-56Z	4.625	5.125	0.563	0.619 +0.010/-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
U37-4.75-62Z	4.750	5.500	0.625	0.688 +0.010/-0	4.750 +0/-0.002	4.751 +0.004/-0	5.500 +0.005/-0	4.750 +0/-0.005	5.499 +0/-0.002	5.500 +0.004/-0
U37-5.25-62Z	5.250	6.000	0.625	0.688 +0.010/-0	5.250 +0/-0.002	5.251 +0.004/-0	6.000 +0.005/-0	5.250 +0/-0.005	5.999 +0/-0.002	6.000 +0.004/-0
U25-5.50-56ZF	5.500	6.000	0.563	0.619 +0.010/-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
U37-5.75-62Z	5.750	6.500	0.625	0.688 +0.010/-0	5.750 +0/-0.002	5.751 +0.004/-0	6.500 +0.005/-0	5.750 +0/-0.005	6.499 +0/-0.002	6.500 +0.004/-0
U25-6.00-56ZF	6.000	6.500	0.563	0.619 +0.010/-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
U37-6.00-56Z	6.000	6.750	0.563	0.616 +0.010/-0	6.000 +0/-0.002	6.001 +0.004/-0	6.750 +0.005/-0	6.000 +0/-0.005	6.749 +0/-0.002	6.750 +0.004/-0
U37-6.25-62Z	6.250	7.000	0.625	0.688 +0.010/-0	6.250 +0/-0.002	6.251 +0.004/-0	7.000 +0.005/-0	6.250 +0/-0.005	6.999 +0/-0.002	7.000 +0.004/-0

# STYLE 870 U-SEALS

Style 870 u-seals are precision molded from Nitrile synthetic rubber and conform to the sizes with dash numbers required by Army-Navy spec. AN6226.



## HERCULES PART NUMBERS

**870 - 01**  
 Type of Seal      AN Dash Number

## SEAL INFORMATION

MATERIAL	70A NITRILE
TEMPERATURE RANGE	-40° TO +240° F
PRESSURE RANGE	0 TO 800 PSI w/o BU 0 TO 2000 PSI w/ BU

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE W/O BU	D1 GROOVE W/ BU	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
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
870-14	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
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

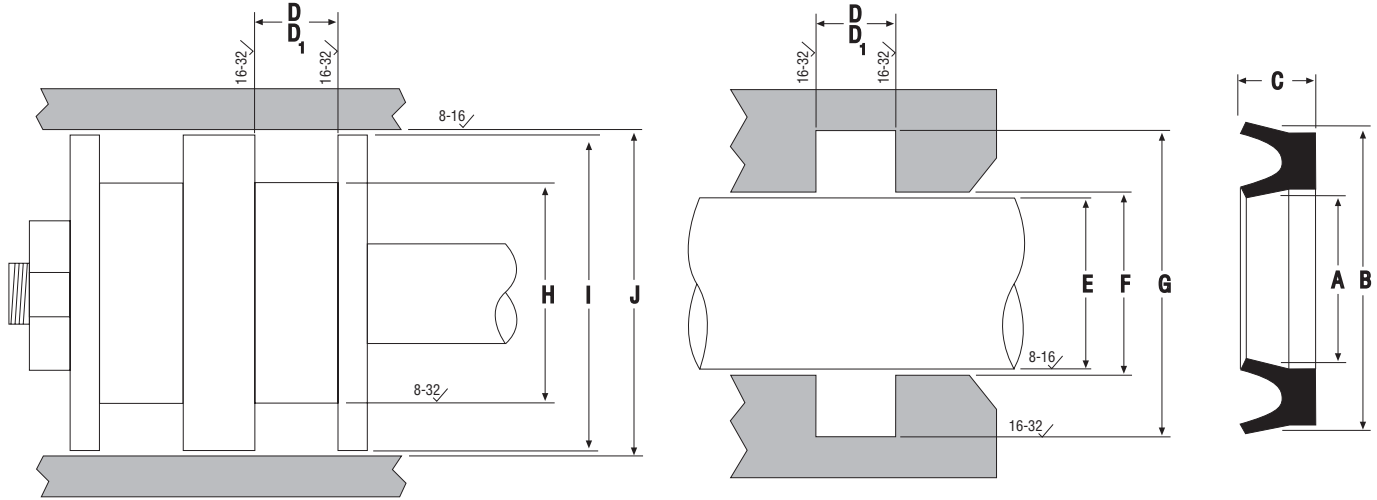
# STYLE 870 U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE W/O BU	D1 GROOVE W/ BU	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
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	2.750 +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
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
870-9X10	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
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
870-2.62X3.12	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
870-3.12X3.62	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
870-6X7X.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
870-6.12X7	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



# STYLE HRU U-SEALS

Style HRU u-seals are precision molded from 80 Durometer Nitrile 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".



## HERCULES PART NUMBERS

### HRU 09 - 0.12 - 09

Type of Seal: HRU  
 Cross Section: 09  
 Inside Diameter: 0.12  
 Height: 09

## SEAL INFORMATION

MATERIAL	80A NITRILE
TEMPERATURE RANGE	-40° TO +250° F
PRESSURE RANGE	0 TO 1000 PSI w/o BU 0 TO 2500 PSI w/ BU

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE W/O BU	D1 GROOVE W/ BU	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
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
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
HRU09-0.25-09V	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
HRU09-0.25-09	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
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
HRU18-0.25-18	1/4	5/8	3/16	0.219 ±0.010	0.281 ±0.010	0.250 +0/-0.001	0.251 +0.002/-0	0.625 +0.002/-0	0.250 +0/-0.001	0.623 +0/-0.001	0.625 +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
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
HRU09-0.43-09EP	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
HRU09-0.43-09	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
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
HRU12-0.50-12V	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
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
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
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
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
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
HRU12-0.62-12V	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
HRU12-0.62-12VL	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
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
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
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
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
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
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

# STYLE HRU U-SEALS

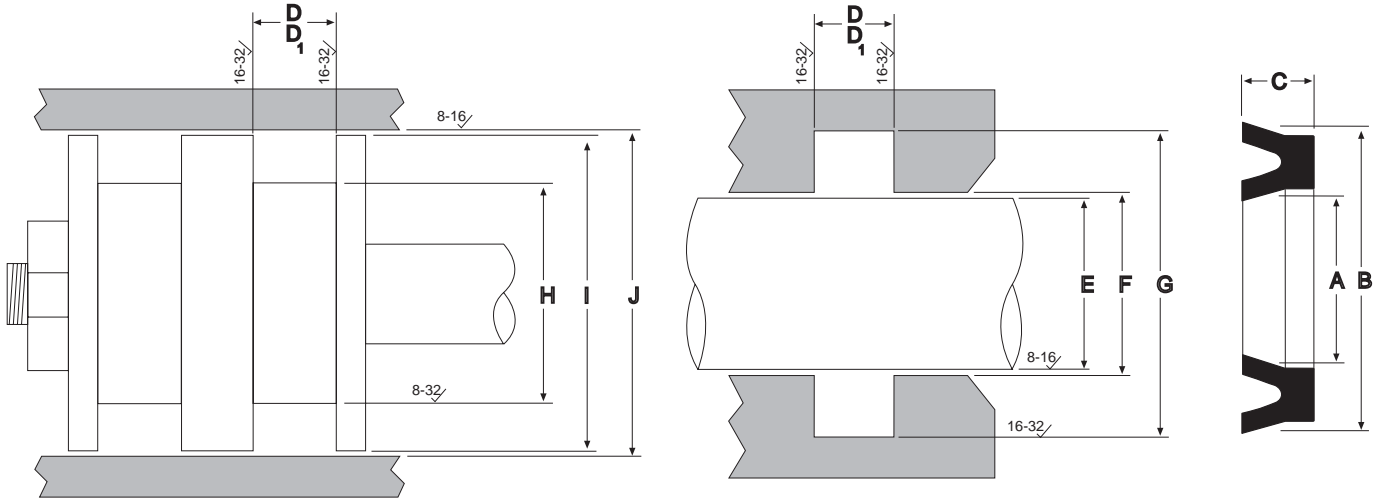
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE W/O BU	D1 GROOVE W/ BU	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
HRU12-0.75-12	3/4	1	1/8	0.156 ±0.010	0.219 ±0.010	0.750 +0/-0.001	0.751 +0.002/-0	1.000 +0.002/-0	0.750 +0/-0.001	0.998 +0/-0.001	1.000 +0.003/-0
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
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
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
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
HRU25-0.93-25	15/16	1-7/16	1/4	0.281 ±0.010	0.344 ±0.010	0.937 +0/-0.001	0.938 +0.002/-0	1.437 +0.002/-0	0.937 +0/-0.001	1.435 +0/-0.001	1.437 +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
HRU12-1.00-15V	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
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
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
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
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
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
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
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
HRU15-1.18-15	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
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
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	1.560 +0/-0.001	1.562 +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
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
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
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
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
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
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
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
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
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
HRU18-1.62-18V	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
HRU18-1.62-18VL	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
HRU18-1.62-18	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
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
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
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
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
HRU18-2.00-18V	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
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
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
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
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
HRU18-2.12-18	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
HRU18-2.37-18	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
HRU21-2.50-21V	2-1/2	2-15/16	7/32	0.25 ±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
HRU21-2.50-21	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
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
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
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
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
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
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
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
HRU21-2.81-21V	2-13/16	3-1/4	7/32	0.25 ±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
HRU21-2.81-21	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
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
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
HRU21-3.00-21V	3	3-7/16	7/32	0.25 ±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
HRU18-3.00-18	3	3-3/8	3/16	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
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

# STYLE HRU 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 DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
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
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
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
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
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
HRU25-3.50-25	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
HRU25-3.75-25	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
HRU25-4.00-25-90D	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
HRU25-4.00-25	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
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
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
HRU28-4.43-28	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
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
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
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
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
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
HRU28-5.00-28	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
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
HRU31-5.37-31	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
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
HRU28-5.43-28	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
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
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
HRU25-5.50-37	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
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
HRU31-6.37-31V	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
HRU31-6.37-31	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
HRU28-6.43-28V	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
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
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
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
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
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
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
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
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	12.000 +0.004/-0	11.000 +0/-0.004	11.998 +0/-0.004	12.000 +0.005/-0
HRU50-11.00-50V	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
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
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

# STYLE HSU U-SEALS

Style HSU U-seals are precision molded from 90 Durometer Nitrile rubber for abrasion resistance and Fluorocarbon for heat resistance in standard applications. These seals are commonly found in industrial cylinders as piston, rod, or cushion seals. The 90 durometer fluorocarbon is also available for heat and chemical resistance.



**HERCULES PART NUMBERS**

**HSU 12 - 0.75 - 12 - 90D**

Type of Seal: HSU  
 Cross Section: 12  
 Inside Diameter: 0.75  
 Height: 12  
 90 Duro: 90D

SEAL INFORMATION	
MATERIAL	90A NITRILE
TEMPERATURE RANGE	-40° TO +250° F
PRESSURE RANGE	0 TO 1000 PSI w/o BU 0 TO 2500 PSI w/ BU

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE W/O BU	D1 GROOVE W/ BU	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
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
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	1.56 +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	1.56 +0/-0.001	1.562 +0.003/-0
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
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
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
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

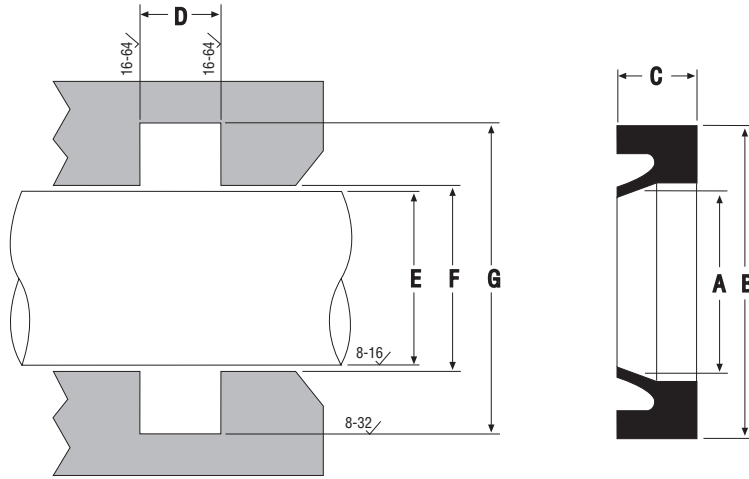
## STYLE HSU U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE W/O BU	D1 GROOVE W/ BU	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
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
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 +0.005/-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 +0.005/-0
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 +0.004/-0	10.000 +0.004/-0	9.312 +0/-0.004	9.998 +0/-0.004	10.000 +0.005/-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 +0.004/-0	10.000 +0.004/-0	9.312 +0/-0.004	9.998 +0/-0.004	10.000 +0.005/-0
HSU37-11.25-37-90D	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
HSU37-11.25-37-90DV	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
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
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
HSU50-13.00-50-90DV	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

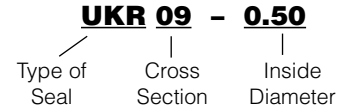
# PNEUMATIC K-STYLE U-SEALS — UKR ROD U-SEALS

## FOR PNEUMATIC APPLICATIONS ONLY

K-Style u-seals are designed to act as a positive sealing, low friction replacement for conventional rubber u-seals. Molded from polyurethane, they provide long life and high extrusion resistance which allows these seals to run smoothly in lubricated or non-lubricated cylinders. The flexible dynamic lip also reduces breakaway friction and promotes steady motion.



### HERCULES PART NUMBERS



<b>SEAL INFORMATION</b>	
MATERIAL	95A URETHANE
TEMPERATURE RANGE	-65° TO +220° F
PRESSURE RANGE	0 TO 150 PSI

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
UKR09-0.31	5/16	1/2	3/32	0.125 ±0.010	0.312 +0/- .001	0.313 +.002/-0	0.500 +.002/-0
UKR12-0.31	5/16	9/16	1/8	0.156 ±0.010	0.312 +0/- .001	0.313 +.002/-0	0.562 +.002/-0
UKR12-0.37	3/8	5/8	1/8	0.156 ±0.010	0.375 +0/- .001	0.376 +.002/-0	0.625 +.002/-0
UKR09-0.50	1/2	22/32	3/32	0.125 ±0.010	0.500 +0/- .001	0.501 +.002/-0	0.688 +.002/-0
UKR12-0.50	1/2	3/4	1/8	0.156 ±0.010	0.500 +0/- .001	0.501 +.002/-0	0.750 +.002/-0
UKR12-0.62	5/8	7/8	1/8	0.156 ±0.010	0.625 +0/- .001	0.626 +.002/-0	0.875 +.002/-0
UKR12-0.75	3/4	1	1/8	0.156 ±0.010	0.750 +0/- .001	0.751 +.002/-0	1.000 +.002/-0
UKR12-0.81	13/16	1-1/16	1/8	0.156 ±0.010	0.812 +0/- .001	0.813 +.002/-0	1.062 +.002/-0
UKR12-0.87	7/8	1-1/8	1/8	0.156 ±0.010	0.875 +0/- .001	0.876 +.002/-0	1.125 +.002/-0
UKR12-0.93	15/16	1-3/16	1/8	0.156 ±0.010	0.938 +0/- .001	0.939 +.002/-0	1.188 +.002/-0
UKR15-0.93	15/16	1-1/4	5/32	0.188 ±0.010	0.938 +0/- .001	0.939 +.002/-0	1.250 +.002/-0
UKR12-1.00	1	1-1/4	1/8	0.156 ±0.010	1.000 +0/- .001	1.001 +.002/-0	1.250 +.002/-0
UKR15-1.00	1	1-5/16	5/32	0.188 ±0.010	1.000 +0/- .001	1.001 +.002/-0	1.312 +.002/-0
UKR15-1.06	1-1/16	1-3/8	5/32	0.188 ±0.010	1.062 +0/- .001	1.063 +.002/-0	1.375 +.002/-0
UKR12-1.12	1-1/8	1-3/8	1/8	0.156 ±0.010	1.125 +0/- .001	1.126 +.002/-0	1.375 +.002/-0
UKR15-1.18	1-3/16	1-1/2	5/32	0.188 ±0.010	1.188 +0/- .001	1.189 +.002/-0	1.500 +.002/-0
UKR15-1.25	1-1/4	1-9/16	5/32	0.188 ±0.010	1.250 +0/- .001	1.251 +.002/-0	1.562 +.002/-0
UKR15-1.31	1-5/16	1-5/8	5/32	0.188 ±0.010	1.312 +0/- .001	1.313 +.002/-0	1.625 +.002/-0
UKR15-1.37	1-3/8	1-11/16	5/32	0.188 ±0.010	1.375 +0/- .001	1.376 +.002/-0	1.688 +.002/-0
UKR18-1.37	1-3/8	1-3/4	3/16	0.219 ±0.010	1.375 +0/- .001	1.376 +.002/-0	1.750 +.002/-0
UKR18-1.50	1-1/2	1-7/8	3/16	0.219 ±0.010	1.500 +0/- .001	1.501 +.002/-0	1.875 +.002/-0
UKR18-1.62	1-5/8	2	3/16	0.219 ±0.010	1.625 +0/- .001	1.626 +.002/-0	2.000 +.002/-0
UKR18-1.75	1-3/4	2-1/8	3/16	0.219 ±0.010	1.750 +0/- .001	1.751 +.002/-0	2.125 +.002/-0
UKR18-1.87	1-7/8	2-1/4	3/16	0.219 ±0.010	1.875 +0/- .001	1.876 +.002/-0	2.250 +.002/-0
UKR18-2.00	2	2-3/8	3/16	0.219 ±0.010	2.000 +0/- .001	2.001 +.002/-0	2.375 +.002/-0
UKR18-2.12	2-1/8	2-1/2	3/16	0.219 ±0.010	2.125 +0/- .001	2.126 +.002/-0	2.500 +.002/-0
UKR18-2.25	2-1/4	2-5/8	3/16	0.219 ±0.010	2.250 +0/- .001	2.251 +.002/-0	2.625 +.002/-0
UKR18-2.37	2-3/8	2-3/4	3/16	0.219 ±0.010	2.375 +0/- .001	2.376 +.002/-0	2.750 +.002/-0
UKR18-2.50	2-1/2	2-7/8	3/16	0.219 ±0.010	2.500 +0/- .001	2.501 +.002/-0	2.875 +.003/-0
UKR21-2.50	2-1/2	2	7/32	0.250 ±0.010	2.500 +0/- .001	2.501 +.002/-0	2.938 +.003/-0
UKR21-2.56	2-9/16	3	7/32	0.250 ±0.010	2.562 +0/- .001	2.563 +.002/-0	3.000 +.003/-0
UKR18-2.75	2-3/4	3-1/8	3/16	0.219 ±0.010	2.750 +0/- .001	2.751 +.002/-0	3.125 +.003/-0
UKR21-2.75	2-3/4	3-3/16	7/32	0.250 ±0.010	2.750 +0/- .001	2.751 +.002/-0	3.188 +.003/-0
UKR21-2.81	2-13/16	3-1/4	7/32	0.250 ±0.010	2.812 +0/- .001	2.813 +.002/-0	3.250 +.003/-0
UKR18-3.00	3	3-3/8	3/16	0.219 ±0.010	3.000 +0/- .001	3.001 +.002/-0	3.375 +.003/-0

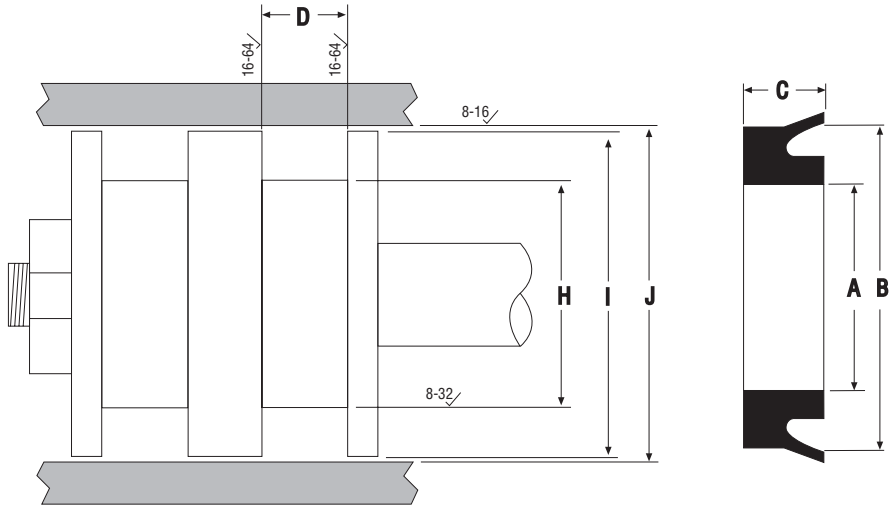
## PNEUMATIC K-STYLE U-SEALS — UKR ROD U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
UKR21-3.00	3	3-7/16	7/32	0.250 ±0.010	3.000 +0/- .001	3.001 +.002/-0	3.437 +.003/-0
UKR21-3.06	3-1/16	3-1/2	7/32	0.250 ±0.010	3.062 +0/- .001	3.063 +.002/-0	3.500 +.003/-0
UKR25-3.50	3-1/2	4	1/4	0.281 ±0.010	3.500 +0/- .001	3.501 +.002/-0	4.000 +.003/-0
UKR25-3.75	3-3/4	4-1/4	1/4	0.281 ±0.010	3.750 +0/- .001	3.751 +.002/-0	4.250 +.003/-0
UKR25-4.00	4	4-1/2	1/4	0.281 ±0.010	4.000 +0/- .001	4.001 +.002/-0	4.500 +.003/-0
UKR25-4.25	4-1/4	4-3/4	1/4	0.281 ±0.010	4.250 +0/- .001	4.251 +.002/-0	4.750 +.003/-0
UKR25-4.50	4-1/2	5	1/4	0.281 ±0.010	4.500 +0/- .001	4.501 +.002/-0	5.000 +.003/-0
UKR25-4.75	4-3/4	5-1/4	1/4	0.281 ±0.010	4.750 +0/- .001	4.751 +.002/-0	5.250 +.003/-0
UKR25-5.00	5	5-1/2	1/4	0.312 ±0.010	5.000 +0/- .001	5.001 +.002/-0	5.500 +.003/-0
UKR31-5.12	5-1/8	5-3/4	5/16	0.344 ±0.010	5.125 +0/- .001	5.126 +.002/-0	5.750 +.003/-0
UKR31-5.37	5-3/8	6	5/16	0.344 ±0.010	5.375 +0/- .001	5.376 +.002/-0	6.000 +.003/-0

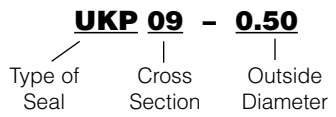
# PNEUMATIC K-STYLE U-SEALS — UKP PISTON U-SEALS

## FOR PNEUMATIC APPLICATIONS ONLY

K-Style u-seals are designed to act as a positive sealing, low friction replacement for conventional rubber u-seals. Molded from polyurethane, they provide long life and high extrusion resistance extrusion which allows these seals to run smoothly in lubricated or non-lubricated cylinders. The flexible dynamic lip also reduces breakaway friction and promotes steady motion.



### HERCULES PART NUMBERS



<b>SEAL INFORMATION</b>	
MATERIAL	95A URETHANE
TEMPERATURE RANGE	-65° TO +220° F
PRESSURE RANGE	0 TO 150 PSI

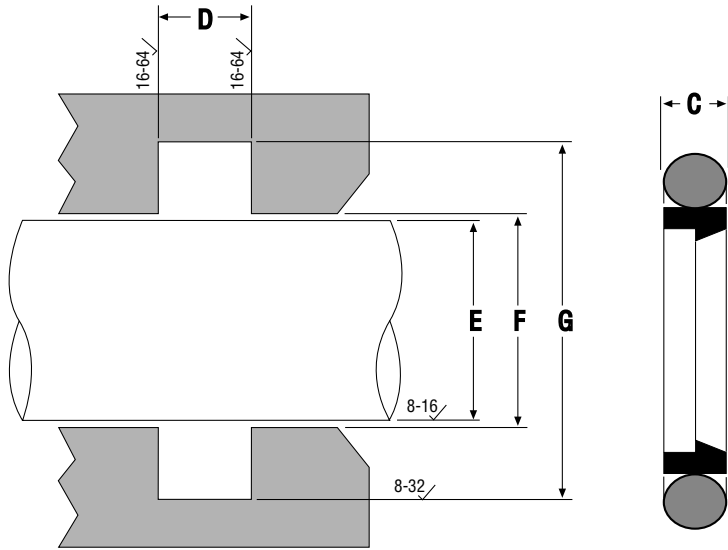
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
UKP09-0.37	3/16	3/8	3/32	0.125 ±0.010	0.188 +0/- .001	0.374 +0/- .001	0.375 +.003/-0
UKP09-0.68	1/2	11/16	3/32	0.125 ±0.010	0.312 +0/- .001	0.686 +0/- .001	0.688 +.003/-0
UKP09-0.50	5/16	1/2	3/32	0.125 ±0.010	0.312 +0/- .001	0.498 +0/- .001	0.500 +.003/-0
UKP12-0.56	5/16	9/16	1/8	0.156 ±0.010	0.312 +0/- .001	0.560 +0/- .001	0.562 +.003/-0
UKP12-0.62	3/8	5/8	1/8	0.156 ±0.010	0.375 +0/- .001	0.623 +0/- .001	0.625 +.003/-0
UKP12-0.75	1/2	3/4	1/8	0.156 ±0.010	0.500 +0/- .001	0.748 +0/- .001	0.750 +.003/-0
UKP12-0.87	5/8	7/8	1/8	0.156 ±0.010	0.625 +0/- .001	0.873 +0/- .001	0.875 +.003/-0
UKP12-1.00	3/4	1	1/8	0.156 ±0.010	0.750 +0/- .001	0.998 +0/- .001	1.000 +.003/-0
UKP12-1.06	13/16	1-1/16	1/8	0.156 ±0.010	0.812 +0/- .001	1.060 +0/- .001	1.062 +.003/-0
UKP12-1.12	7/8	1-1/8	1/8	0.156 ±0.010	0.875 +0/- .001	1.123 +0/- .001	1.125 +.003/-0
UKP12-1.18	15/16	1-3/16	1/8	0.156 ±0.010	0.938 +0/- .001	1.186 +0/- .001	1.188 +.003/-0
UKP15-1.25	15/16	1-1/4	5/32	0.188 ±0.010	0.938 +0/- .001	1.248 +0/- .001	1.250 +.003/-0
UKP12-1.25	1	1-1/4	1/8	0.156 ±0.010	1.000 +0/- .001	1.248 +0/- .001	1.250 +.003/-0
UKP15-1.31	1	1-5/16	5/32	0.188 ±0.010	1.000 +0/- .001	1.310 +0/- .001	1.312 +.003/-0
UKP15-1.37	1-1/16	1-3/8	5/32	0.188 ±0.010	1.062 +0/- .001	1.373 +0/- .001	1.375 +.003/-0
UKP12-1.37	1-1/8	1-3/8	1/8	0.156 ±0.010	1.125 +0/- .001	1.373 +0/- .001	1.375 +.003/-0
UKP15-1.50	1-3/16	1-1/2	5/32	0.188 ±0.010	1.188 +0/- .001	1.498 +0/- .001	1.500 +.003/-0
UKP12-1.50	1-1/4	1-1/2	1/8	0.156 ±0.010	1.250 +0/- .001	1.498 +0/- .001	1.500 +.003/-0
UKP15-1.56	1-1/4	1-9/16	5/32	0.188 ±0.010	1.250 +0/- .001	1.560 +0/- .001	1.562 +.003/-0
UKP15-1.62	1-5/16	1-5/8	5/32	0.188 ±0.010	1.312 +0/- .001	1.623 +0/- .001	1.625 +.003/-0
UKP15-1.68	1-3/8	1-11/16	5/32	0.188 ±0.010	1.375 +0/- .001	1.686 +0/- .001	1.686 +.003/-0
UKP18-1.75	1-3/8	1-3/4	3/16	0.219 ±0.010	1.375 +0/- .001	1.748 +0/- .001	1.750 +.003/-0
UKP18-1.87	1-1/2	1-7/8	3/16	0.219 ±0.010	1.500 +0/- .001	1.873 +0/- .002	1.875 +.003/-0
UKP18-2.00	1-5/8	2	3/16	0.219 ±0.010	1.625 +0/- .002	1.998 +0/- .002	2.000 +.003/-0
UKP12-2.00	1-3/4	2	1/8	0.156 ±0.010	1.750 +0/- .001	1.998 +0/- .001	2.000 +.003/-0
UKP18-2.12	1-3/4	2-1/8	3/16	0.219 ±0.010	1.750 +0/- .002	2.123 +0/- .002	2.125 +.003/-0
UKP18-2.25	1-7/8	2-1/4	3/16	0.219 ±0.010	1.875 +0/- .002	2.248 +0/- .002	2.250 +.003/-0
UKP18-2.37	2	2-3/8	3/16	0.219 ±0.010	1.875 +0/- .002	2.373 +0/- .002	2.375 +.003/-0
UKP12-2.25	2	2-1/4	1/8	0.156 ±0.010	2.000 +0/- .001	2.248 +0/- .001	2.250 +.003/-0
UKP18-2.50	2-1/8	2-1/2	3/16	0.219 ±0.010	2.125 +0/- .002	2.498 +0/- .002	2.500 +.004/-0



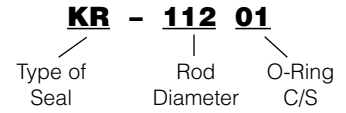
## PNEUMATIC K-STYLE U-SEALS — UKP PISTON U-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
UKP18-2.62	2-1/4	2-5/8	3/16	0.219 ±0.010	2.250 +0/- .002	2.623 +0/- .002	2.625 +.004/-0
UKP18-2.75	2-3/8	2-3/4	3/16	0.219 ±0.010	2.375 +0/- .002	2.748 +0/- .002	2.750 +.004/-0
UKP12-2.75	2-1/2	2-3/4	1/8	0.156 ±0.010	2.500 +0/- .001	2.748 +0/- .001	2.750 +.003/-0
UKP25-3.00	2-1/2	3	1/4	0.281 ±0.010	2.500 +0/- .003	2.998 +0/- .002	3.000 +.004/-0
UKP18-2.87	2-1/2	2-7/8	3/16	0.219 ±0.010	2.500 +0/- .003	2.873 +0/- .002	2.875 +.004/-0
UKP21-2.00	2-1/2	2	7/32	0.250 ±0.010	2.500 +0/- .003	2.936 +0/- .002	2.938 +.004/-0
UKP21-3.00	2-9/16	3	7/32	0.250 ±0.010	2.562 +0/- .003	2.998 +0/- .002	3.000 +.004/-0
UKP25-3.25	2-3/4	3-1/4	1/4	0.281 ±0.010	2.750 +0/- .003	3.248 +0/- .002	3.250 +.004/-0
UKP18-3.12	2-3/4	3-1/8	3/16	0.219 ±0.010	2.750 +0/- .003	3.123 +0/- .002	3.125 +.004/-0
UKP21-3.18	2-3/4	3-3/16	7/32	0.250 ±0.010	2.750 +0/- .003	3.186 +0/- .002	3.188 +.004/-0
UKP21-3.25	2-13/16	3-1/4	7/32	0.250 ±0.010	2.812 +0/- .003	3.248 +0/- .002	3.250 +.004/-0
UKP18-3.37	3	3-3/8	3/16	0.219 ±0.010	3.000 +0/- .003	3.373 +0/- .002	3.375 +.004/-0
UKP21-3.43	3	3-7/16	7/32	0.250 ±0.010	3.000 +0/- .003	3.435 +0/- .002	3.437 +.004/-0
UKP21-3.50	3-1/16	3-1/2	7/32	0.250 ±0.010	3.062 +0/- .003	3.498 +0/- .002	3.500 +.004/-0
UKP25-3.50	3	3-1/2	1/4	0.281 ±0.010	3.000 +0/- .003	3.498 +0/- .002	3.500 +.004/-0
UKP25-4.00	3-1/2	4	1/4	0.281 ±0.010	3.500 +0/- .003	3.996 +0/- .002	4.000 +.004/-0
UKP18-4.00	3-5/8	4	3/16	0.219 ±0.010	3.625 +0/- .003	3.998 +0/- .002	4.000 +.004/-0
UKP25-4.25	3-3/4	4-1/4	1/4	0.281 ±0.010	3.750 +0/- .003	4.248 +0/- .002	4.250 +.004/-0
UKP25-4.50	4	4-1/2	1/4	0.281 ±0.010	4.000 +0/- .003	4.498 +0/- .002	4.500 +.004/-0
UKP25-4.75	4-1/4	4-3/4	1/4	0.281 ±0.010	4.250 +0/- .003	4.748 +0/- .002	4.750 +.004/-0
UKP25-5.00	4-1/2	5	1/4	0.281 ±0.010	4.500 +0/- .003	4.998 +0/- .002	5.000 +.004/-0
UKP25-5.25	4-3/4	5-1/4	1/4	0.281 ±0.010	4.750 +0/- .003	5.248 +0/- .002	5.150 +.004/-0
UKP25-5.50	5	5-1/2	1/4	0.312 ±0.010	5.000 +0/- .003	5.498 +0/- .003	5.500 +.004/-0
UKP25-6.00	5-1/2	6	1/4	0.312 ±0.010	5.500 +0/- .003	5.998 +0/- .003	6.000 +.004/-0
UKP31-6.00	5-3/8	6	5/16	0.344 ±0.010	5.375 +0/- .003	5.998 +0/- .003	6.000 +.004/-0
UKP25-7.00	6-1/2	7	1/4	0.312 ±0.010	6.500 +0/- .003	6.998 +0/- .003	7.000 +.004/-0
UKP31-8.00	7-3/8	8	5/16	0.344 ±0.010	7.375 +0/- .003	7.998 +0/- .003	8.000 +.004/-0
UKP25-8.00	7-1/2	8	1/4	0.312 ±0.010	7.500 +0/- .003	7.998 +0/- .003	8.000 +.004/-0
UKP37-10.0	9-1/4	10	3/8	0.413 ±0.010	9.250 +0/- .003	9.998 +0/- .003	10.000 +.004/-0
UKP25-10.0	9-1/2	10	1/4	0.281 ±0.010	9.500 +0/- .003	9.998 +0/- .003	10.000 +.004/-0

# STYLE KR ROD BUFFER SEALS



## HERCULES PART NUMBERS



SEAL INFORMATION	
MATERIAL	40% BRONZE FILLED PTFE CAP 70A NITRILE ENERGIZER
TEMPERATURE RANGE	-65° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI

PART NUMBER	C SEAL HT.	D GROOVE WIDTH	E NOM. ROD DIA.	F THROAT DIA.	G HOUSING DIA.
KR-11201	0.122 ±0.005	0.126 +0.010/-0	1.125	1.126 +0.004/-0	1.423 +0.003/-0
KR-12501	0.122 ±0.005	0.126 +0.010/-0	1.250	1.251 +0.004/-0	1.548 +0.003/-0
KR-12502	0.155 ±0.005	0.166 +0.010/-0	1.250	1.251 +0.006/-0	1.674 +0.004/-0
KR-13702	0.155 ±0.005	0.166 +0.010/-0	1.375	1.376 +0.006/-0	1.799 +0.004/-0
KR-15001	0.122 ±0.005	0.126 +0.010/-0	1.500	1.501 +0.004/-0	1.798 +0.003/-0
KR-15002	0.155 ±0.005	0.166 +0.010/-0	1.500	1.501 +0.006/-0	1.924 +0.004/-0
KR-17502	0.155 ±0.005	0.166 +0.010/-0	1.750	1.751 +0.006/-0	2.174 +0.004/-0
KR-17503	0.235 ±0.005	0.247 +0.010/-0	1.750	1.751 +0.008/-0	2.366 +0.005/-0
KR-18702	0.155 ±0.005	0.166 +0.010/-0	1.875	1.876 +0.006/-0	2.299 +0.004/-0
KR-20002	0.155 ±0.005	0.166 +0.010/-0	2.000	2.001 +0.006/-0	2.424 +0.004/-0
KR-20003	0.235 ±0.005	0.247 +0.010/-0	2.000	2.001 +0.008/-0	2.616 +0.005/-0
KR-22502	0.155 ±0.005	0.166 +0.010/-0	2.250	2.251 +0.006/-0	2.674 +0.004/-0
KR-25002	0.155 ±0.005	0.166 +0.010/-0	2.500	2.501 +0.006/-0	2.924 +0.004/-0
KR-25003	0.235 ±0.005	0.247 +0.010/-0	2.500	2.501 +0.008/-0	3.116 +0.005/-0
KR-26203	0.235 ±0.005	0.247 +0.010/-0	2.625	2.626 +0.008/-0	3.241 +0.005/-0
KR-27503	0.235 ±0.005	0.247 +0.010/-0	2.750	2.751 +0.008/-0	3.366 +0.005/-0
KR-30002	0.155 ±0.005	0.166 +0.010/-0	3.000	3.001 +0.006/-0	3.424 +0.004/-0
KR-30003	0.235 ±0.005	0.247 +0.010/-0	3.000	3.001 +0.008/-0	3.616 +0.005/-0
KR-32503	0.235 ±0.005	0.247 +0.010/-0	3.250	3.251 +0.008/-0	3.866 +0.005/-0
KR-35003	0.235 ±0.005	0.247 +0.010/-0	3.500	3.501 +0.008/-0	4.116 +0.005/-0
KR-37503	0.235 ±0.005	0.247 +0.010/-0	3.750	3.751 +0.008/-0	4.366 +0.005/-0
KR-40002	0.155 ±0.005	0.166 +0.010/-0	4.000	4.001 +0.006/-0	4.424 +0.004/-0
KR-40003	0.235 ±0.005	0.247 +0.010/-0	4.000	4.001 +0.008/-0	4.616 +0.005/-0
KR-40004	0.305 ±0.005	0.320 +0.010/-0	4.000	4.001 +0.009/-0	4.830 +0.006/-0
KR-45003	0.235 ±0.005	0.247 +0.010/-0	4.500	4.501 +0.008/-0	5.116 +0.005/-0
KR-45004	0.305 ±0.005	0.320 +0.010/-0	4.500	4.501 +0.009/-0	5.330 +0.006/-0
KR-47503	0.235 ±0.005	0.247 +0.010/-0	4.750	4.751 +0.008/-0	5.366 +0.005/-0
KR-50003	0.235 ±0.005	0.247 +0.010/-0	5.000	5.001 +0.008/-0	5.616 +0.005/-0
KR-50004	0.305 ±0.005	0.320 +0.010/-0	5.000	5.001 +0.009/-0	5.830 +0.006/-0
KR-57504	0.305 ±0.005	0.320 +0.010/-0	5.750	5.751 +0.009/-0	6.580 +0.006/-0
KR-60003	0.235 ±0.005	0.247 +0.010/-0	6.000	6.001 +0.008/-0	6.616 +0.005/-0
KR-65003	0.235 ±0.005	0.247 +0.010/-0	6.500	6.501 +0.008/-0	7.116 +0.005/-0
KR-67504	0.305 ±0.005	0.320 +0.010/-0	6.750	6.751 +0.009/-0	7.580 +0.006/-0
KR-70003	0.235 ±0.005	0.247 +0.010/-0	7.000	7.001 +0.008/-0	7.616 +0.005/-0
KR-70004	0.305 ±0.005	0.320 +0.010/-0	7.000	7.001 +0.009/-0	7.830 +0.006/-0

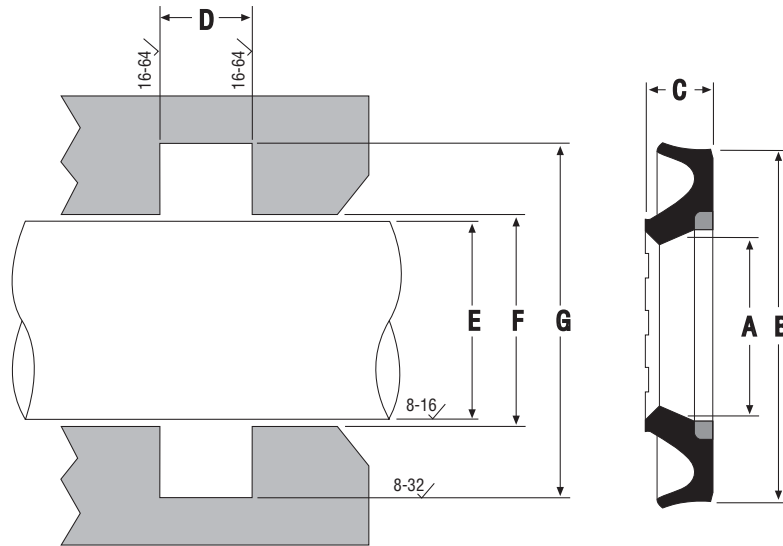
## STYLE DYR ROD BUFFER SEALS

The DYR u-cup style buffer seal offers an asymmetric sealing lip profile, chamfered sealing edges, and pressure relieving capabilities that 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 tandem seal.

### HERCULES PART NUMBERS

**DYR 28 - 1.25 - 12**

Type of Seal: DYR 28  
Cross Section: 1.25  
Inside Diameter: 12  
Height: 12



### SEAL INFORMATION

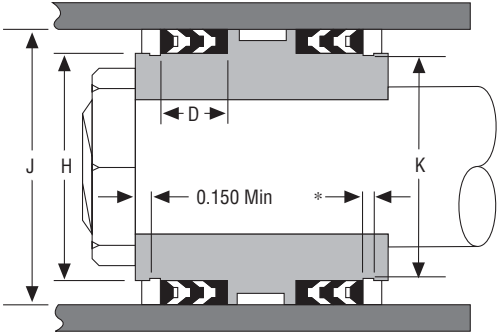
MATERIAL	92A URETHANE POLYACETAL BACK-UP
TEMPERATURE RANGE	-40° TO +212° F
MAXIMUM PRESSURE	8500 PSI
MAXIMUM SPEED	100 FPM

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
DYR28-1.25-12	1-1/4	1-13/16	1/8	0.140 ±0.005	1.250 +0/-0.003	1.251 +0.004/-0	1.819 ±0.004
DYR28-1.50-12	1-1/2	2-1/16	1/8	0.140 ±0.005	1.500 +0/-0.003	1.499 +0.004/-0	2.067 ±0.004
DYR28-1.75-12	1-3/4	2-5/16	1/8	0.140 ±0.005	1.750 +0/-0.003	1.749 +0.004/-0	2.319 ±0.004
DYR28-2.00-12	2	2-9/16	1/8	0.140 ±0.005	2.000 +0/-0.003	1.999 +0.004/-0	2.567 ±0.004
DYR31-2.75-22BU	2-3/4	3-3/8	3/16	0.234 ±0.005	2.750 +0/-0.003	2.749 +0.004/-0	3.402 ±0.004
DYR31-3.00-22BU	3	3-5/8	3/16	0.234 ±0.005	3.000 +0/-0.004	2.999 +0.004/-0	3.649 ±0.004
DYR31-3.50-22BU	3-1/2	4-3/16	3/16	0.234 ±0.005	3.500 +0/-0.004	3.499 +0.004/-0	4.169 ±0.004
DYR31-4.00-22BU	4	4-5/8	3/16	0.234 ±0.005	4.000 +0/-0.004	3.999 +0.004/-0	4.669 ±0.004
DYR34-2.25-22BU	2-1/4	2-15/16	3/16	0.234 ±0.005	2.250 +0/-0.003	2.249 +0.004/-0	2.929 ±0.004
DYR34-2.50-22BU	2-1/2	3-3/16	3/16	0.234 ±0.005	2.500 +0/-0.003	2.499 +0.004/-0	3.177 ±0.004

DYR style buffers with "BU" suffix utilize a polyacetal anti-extrusion ring. Other DYR's do not.

# HYDROLOCK VEE PACKING SETS

These Vee Sets utilize Hytrel & Nylon Vees to cover pressure from 0 to 6000 PSI and provide excellent extrusion resistance. Male & female bearings are molded from glass filled nylon.



**1740= 3Vees    1741= 4Vees    1742= 5Vees**

**Standard Hydrolock Set**  
w/ 1/4" female bearing



**Hydrolock Set**  
w/ 1/2" female bearing



**Hydrolock Set**  
w/ 1" female bearing



<b>SEAL INFORMATION</b>	
MATERIAL	HYTREL & NYLON
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 6,000 PSI

**HERCULES PART NUMBERS**

**HDLV - 1742 - 250 - 100FB**

Type of Seal
# of Vees
Outside Diameter
Bearing Height

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	H GROOVE DIA.	J BORE DIA.	K GUIDE LOCK	*
HDLV-1742-200	1-1/2	2	1	1.000 ±0.005	1.500 +0/-0.005	2.000 +0.010/-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 +0.010/-0	1.500	0.252/0.257
HDLV-1741-250	2	2-1/2	7/8	0.875 ±0.005	2.000 +0/-0.005	2.500 +0.010/-0	1.750	0.252/0.257
HDLV-1742-250	2	2-1/2	1	1.000 ±0.005	2.000 +0/-0.005	2.500 +0.010/-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 +0.010/-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 +0.010/-0	2.000	0.252/0.257
HDLV-1741-275-100FB	2-1/4	2-3/4	1-5/8	1.625 ±0.005	2.250 +0/-0.005	2.750 +0.010/-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 +0.010/-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 +0.010/-0	2.250	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 +0.010/-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 +0.010/-0	2.250	0.252/0.257
HDLV-1742-325	2-3/4	3-1/4	1	1.000 ±0.005	2.750 +0/-0.005	3.250 +0.010/-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 +0.010/-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 +0.010/-0	2.750	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 +0.010/-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 +0.010/-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 +0.010/-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 +0.010/-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 +0.010/-0	3.250	0.377/0.382
HDLV-1741-400-050FB	3-1/2	4	1-1/8	1.125 ±0.005	3.500 +0/-0.005	4.000 +0.010/-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 +0.010/-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 +0.010/-0	3.500	0.377/0.382
HDLV-1742-450	4	4-1/2	1	1.000 ±0.005	4.000 +0/-0.005	4.500 +0.010/-0	3.750	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 +0.010/-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 +0.010/-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 +0.010/-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 +0.010/-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 +0.010/-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 +0.010/-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 +0.010/-0	4.625	0.377/0.382
HDLV-1740-600	5-1/2	6	3/4	0.750 ±0.005	5.500 +0/-0.005	6.000 +0.010/-0	5.125	0.377/0.382
HDLV-1742-600	5-1/2	6	1	1.000 ±0.005	5.500 +0/-0.005	6.000 +0.010/-0	5.125	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 +0.010/-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 +0.010/-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 +0.010/-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 +0.010/-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 +0.010/-0	5.625	0.377/0.382

## HYDROLOCK VEE PACKING SETS

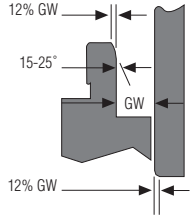
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	H GROOVE DIA.	J BORE DIA.	K GUIDE LOCK	*
HDLV-1742-700	6-1/2	7	1	1.000 ±0.005	6.500 +0/-0.005	7.000 +0.010/-0	6.125	0.377/0.382
HDLV-1742-700-100FB	6-1/2	7	1-3/4	1.750 ±0.005	6.500 +0/-0.005	7.000 +0.010/-0	6.125	0.377/0.382
HDLV-1742-750	7	7-1/2	1	1.000 ±0.005	7.000 +0/-0.005	7.500 +0.010/-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 +0.010/-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 +0.010/-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 +0.010/-0	7.125	0.377/0.382
HDLV-1742-850	8	8-1/2	1	1.000 ±0.005	8.000 +0/-0.005	8.500 +0.010/-0	7.625	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 +0.010/-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 +0.010/-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 +0.010/-0	8.125	0.377/0.382

# VEE PACKING SETS

## GLAND DESIGN

### Gland Tolerances:

Vee Rings are manufactured with sufficient lip interference to accommodate tolerances of +/- .005" on nominal gland diameters. Factors such as extrusion and side loading or deflection must be considered. For applications involving high pressure and/or high surface speeds, it is recommended that bores be held to nominal +.002/-.000" and rods to nominal +/- .001".

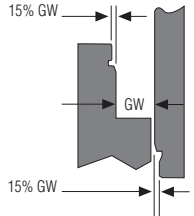


### Installation Chamfers:

Chamfers are recommended on all two-piece gland shoulders or rods, which must move thru the packing assembly. Angles for installation chamfers should be 15 to 25 and allow the initial clearance of 12% of the radial gland width (GW).

### Threaded Surfaces:

Installation of Vee Rings over threaded surfaces is not recommended. When other design criteria requires installation over or thru threaded surfaces, the treads should be recessed 15% of the radial gland width (GW).



### Gland Lengths:

Gland lengths are determined by the overall height of the packing set, which is calculated by using the SET HEIGHT CHARTS shown below.

- Adjustable glands should allow enough adjustment for adequate engagement at maximum set height and .010" compression per vee at minimum set height.
- Two-piece metal to metal glands require packing set height tolerances of +/- .031". The gland should be designed to mate metal to metal at the lowest allowed set height.
- One-piece glands require packing set height tolerances of +/- .031". Gland length should be the maximum allowed set height plus .062". Shim rings totaling .062" should be included in these sets for shimming after installation of the packing. Special gland lengths can be easily accommodated with machined plastic adapters or spacers.

### Surface Finishes:

Static surfaces are the surfaces on which there is no motion between that surface and the packing. Satisfactory sealing can normally be obtained with finishes up to 64 RMS. Low (<1000 PSI) and high pressure (>5000 PSI) should have finishes of 32 RMS or less. Low and high pressure sealing is improved by the addition of a homogeneous Vee. Dynamic surfaces are the surfaces on which there is motion between that surface and the packing. Recommended finishes for dynamic surfaces are 8 to 16 RMS. Rougher surfaces finishes may be acceptable where speed and cycles are low.

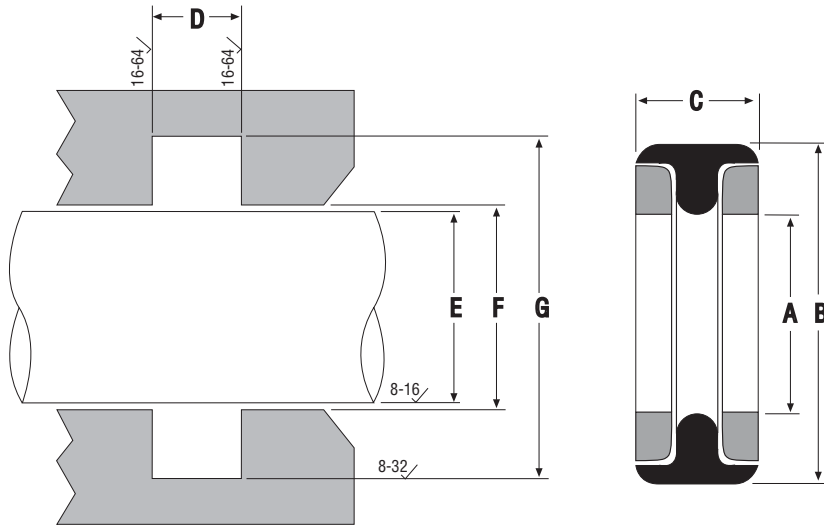
### Spring Loading:

Spring loading can be beneficial in dynamic applications, when manual adjustment of the packing is unacceptable. The load provided by the spring eliminates adjustment problems, while compensating for lip wear. For reciprocating pumps, the spring should exert 25/30 PSI on the packing to overcome the vacuum generated by the suction stroke. Coil and wave springs can be used to improve low pressure sealing in other applications.

<b>VEE RING STACK HEIGHTS WITH TOP &amp; BOTTOM ADAPTORS</b>									
# OF VEES	VEE RING CROSS SECTIONS								
	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

## ROD T-SEALS

T-Seals combine a resilient seal ring with a hard, split back-up ring on each side of the sealing element. They are designed to install in standard o-ring grooves and provide non-spiraling and extrusion resistant sealing to 10,000 P.S.I. with alternative materials.



### HERCULES PART NUMBERS

**TR - 001**

Type of Seal | Size

### HERCULES PART NUMBERS

**TR - 027 - WB**

Type of Seal | Size | Wide Base

### SEAL INFORMATION

MATERIAL	NYLON BACK-UPS 70A NITRILE SEAL
TEMPERATURE RANGE	-65° TO +220° F
PRESSURE RANGE	0 TO 3,000 PSI

WB=Wide base seals replace 1 O-ring and 2 Back-up rings

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
TR-001	3/16	3/8	3/32	0.185 +0.010/-0	0.1875 +0/-0.001	0.1885 +0.003/-0	0.368 +0.004/-0
TR-004	3/8	5/8	1/8	0.185 +0.010/-0	0.375 +0/-0.001	0.376 +0.003/-0	0.616 +0.004/-0
TR-006	1/2	3/4	1/8	0.185 +0.010/-0	0.500 +0/-0.001	0.501 +0.004/-0	0.741 +0.004/-0
TR-007	9/16	13/16	1/8	0.185 +0.010/-0	0.5625 +0/-0.001	0.5635 +0.004/-0	0.803 +0.004/-0
TR-008	5/8	7/8	1/8	0.185 +0.010/-0	0.625 +0/-0.001	0.626 +0.004/-0	0.866 +0.004/-0
TR-009	11/16	15/16	1/8	0.185 +0.010/-0	0.6875 +0/-0.001	0.6885 +0.004/-0	0.928 +0.004/-0
TR-010	3/4	1	1/8	0.185 +0.010/-0	0.750 +0/-0.001	0.751 +0.004/-0	0.990 +0.004/-0
TR-012	7/8	1-1/8	1/8	0.185 +0.010/-0	0.875 +0/-0.001	0.876 +0.004/-0	1.115 +0.004/-0
TR-014	1	1-1/4	1/8	0.185 +0.010/-0	1.000 +0/-0.001	1.001 +0.004/-0	1.240 +0.004/-0
TR-015	1-1/16	1-5/16	1/8	0.185 +0.010/-0	1.0625 +0/-0.001	1.0635 +0.004/-0	1.302 +0.004/-0
TR-016	1-1/8	1-3/8	1/8	0.185 +0.010/-0	1.125 +0/-0.001	1.126 +0.004/-0	1.365 +0.004/-0
TR-017	1-3/16	1-7/16	1/8	0.185 +0.010/-0	1.1875 +0/-0.001	1.1885 +0.004/-0	1.427 +0.004/-0
TR-018	1-1/4	1-1/2	1/8	0.185 +0.010/-0	1.250 +0/-0.001	1.251 +0.004/-0	1.490 +0.004/-0
TR-020	1-3/8	1-5/8	1/8	0.185 +0.010/-0	1.375 +0/-0.001	1.376 +0.004/-0	1.615 +0.004/-0
TR-022	1-1/2	1-3/4	1/8	0.185 +0.010/-0	1.500 +0/-0.001	1.501 +0.004/-0	1.740 +0.004/-0
TR-023	1-1/2	1-7/8	3/16	0.280 +0.010/-0	1.500 +0/-0.001	1.501 +0.004/-0	1.869 +0.004/-0
TR-024	1-5/8	2	3/16	0.280 +0.010/-0	1.625 +0/-0.001	1.626 +0.006/-0	1.994 +0.004/-0
TR-025	1-3/4	2-1/8	3/16	0.280 +0.010/-0	1.750 +0/-0.001	1.751 +0.006/-0	2.119 +0.004/-0
TR-026	1-7/8	2-1/4	3/16	0.280 +0.010/-0	1.875 +0/-0.001	1.876 +0.006/-0	2.244 +0.004/-0
TR-027	2	2-3/8	3/16	0.280 +0.010/-0	2.000 +0/-0.001	2.001 +0.006/-0	2.369 +0.004/-0
TR-027-WB	2	2-3/8	3/16	0.410 +0.010/-0	2.000 +0/-0.001	2.001 +0.006/-0	2.369 +0.004/-0
TR-028	2-1/8	2-1/2	3/16	0.280 +0.010/-0	2.125 +0/-0.001	2.126 +0.006/-0	2.494 +0.004/-0
TR-029	2-1/4	2-5/8	3/16	0.280 +0.010/-0	2.250 +0/-0.001	2.251 +0.006/-0	2.611 +0.004/-0
TR-030	2-3/8	2-3/4	3/16	0.280 +0.010/-0	2.375 +0/-0.002	2.376 +0.006/-0	2.743 +0.004/-0
TR-031	2-1/2	2-7/8	3/16	0.280 +0.010/-0	2.500 +0/-0.002	2.501 +0.006/-0	2.868 +0.004/-0
TR-032	2-5/8	3	3/16	0.280 +0.010/-0	2.625 +0/-0.002	2.626 +0.006/-0	2.993 +0.004/-0
TR-033	2-3/4	3-1/8	3/16	0.280 +0.010/-0	2.750 +0/-0.002	2.751 +0.006/-0	3.118 +0.004/-0
TR-034	2-7/8	3-1/4	3/16	0.280 +0.010/-0	2.875 +0/-0.002	2.876 +0.006/-0	3.243 +0.004/-0
TR-035	3	3-3/8	3/16	0.280 +0.010/-0	3.000 +0/-0.002	3.001 +0.006/-0	3.367 +0.004/-0
TR-036	3-1/8	3-1/2	3/16	0.280 +0.010/-0	3.125 +0/-0.002	3.126 +0.006/-0	3.492 +0.004/-0

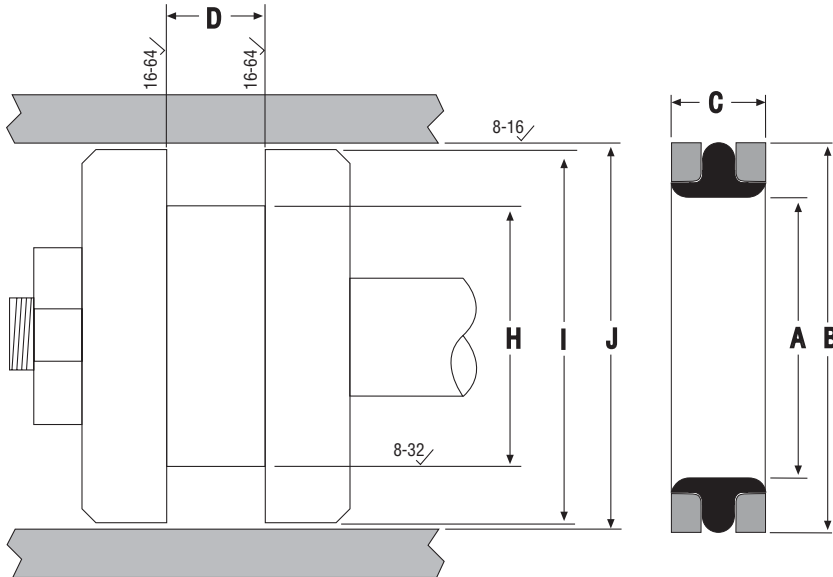
# ROD T-SEALS

<b>PART NUMBER</b>	<b>A NOM. I.D.</b>	<b>B NOM. O.D.</b>	<b>C NOM. HT.</b>	<b>D GROOVE WIDTH</b>		<b>E ROD DIA.</b>		<b>F THROAT DIA.</b>		<b>G HOUSING DIA.</b>	
TR-037	3-1/4	3-5/8	3/16	0.280	+0.010/-0	3.250	+0/-0.002	3.251	+0.006/-0	3.617	+0.004/-0
TR-038	3-3/8	3-3/4	3/16	0.280	+0.010/-0	3.375	+0/-0.002	3.376	+0.006/-0	3.742	+0.004/-0
TR-039	3-1/2	3-7/8	3/16	0.280	+0.010/-0	3.500	+0/-0.002	3.501	+0.006/-0	3.867	+0.004/-0
TR-040	3-5/8	4	3/16	0.280	+0.010/-0	3.625	+0/-0.002	3.626	+0.006/-0	3.992	+0.004/-0
TR-041	3-3/4	4-1/8	3/16	0.280	+0.010/-0	3.750	+0/-0.002	3.751	+0.006/-0	4.117	+0.004/-0
TR-042	3-7/8	4-1/4	3/16	0.280	+0.010/-0	3.875	+0/-0.002	3.876	+0.006/-0	4.242	+0.004/-0
TR-043	4	4-3/8	3/16	0.280	+0.010/-0	4.000	+0/-0.002	4.001	+0.006/-0	4.367	+0.004/-0
TR-045	4-1/4	4-5/8	3/16	0.280	+0.010/-0	4.250	+0/-0.002	4.251	+0.006/-0	4.617	+0.004/-0
TR-046	4-3/8	4-3/4	3/16	0.280	+0.010/-0	4.375	+0/-0.002	4.376	+0.006/-0	4.742	+0.004/-0
TR-047	4-1/2	4-7/8	3/16	0.280	+0.010/-0	4.500	+0/-0.002	4.501	+0.006/-0	4.867	+0.004/-0
TR-048	5	5-1/2	1/4	0.366	+0.010/-0	5.000	+0/-0.002	5.001	+0.008/-0	5.472	+0.004/-0
TR-049	5-1/4	5-3/4	1/4	0.366	+0.010/-0	5.250	+0/-0.002	5.251	+0.008/-0	5.722	+0.004/-0
TR-050	5-1/2	6	1/4	0.366	+0.010/-0	5.500	+0/-0.002	5.501	+0.008/-0	5.972	+0.004/-0
TR-052	6	6-1/2	1/4	0.366	+0.010/-0	6.000	+0/-0.003	6.001	+0.008/-0	6.471	+0.006/-0
TR-058	7-1/2	8	1/4	0.366	+0.010/-0	7.500	+0/-0.003	7.501	+0.008/-0	7.971	+0.006/-0
TR-059	8	8-1/2	1/4	0.366	+0.010/-0	8.000	+0/-0.003	8.001	+0.008/-0	8.471	+0.006/-0
TR-060	9	9-1/2	1/4	0.366	+0.010/-0	9.000	+0/-0.003	9.001	+0.008/-0	9.471	+0.006/-0



# PISTON T-SEALS

T-Seals combine a resilient seal ring with a hard, split back-up ring on each side of the sealing element. They are designed to install in standard o-ring grooves and provide non-spiraling and extrusion resistant sealing to 10,000 P.S.I. with alternative materials.



## HERCULES PART NUMBERS

**TP - 009**

Type of Seal | Size

## HERCULES PART NUMBERS

**TP - 222 - IB**

Type of Seal | O-Ring/Back-up Ring Number | Intermediate Base

## SEAL INFORMATION

MATERIAL	NYLON BACK-UPS 70A NITRILE SEAL
TEMPERATURE RANGE	-65° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI

IB=Wide base seals replace 1 O-ring and 1 Back-up ring  
WB=Wide base seals replace 1 O-ring and 2 Back-up rings

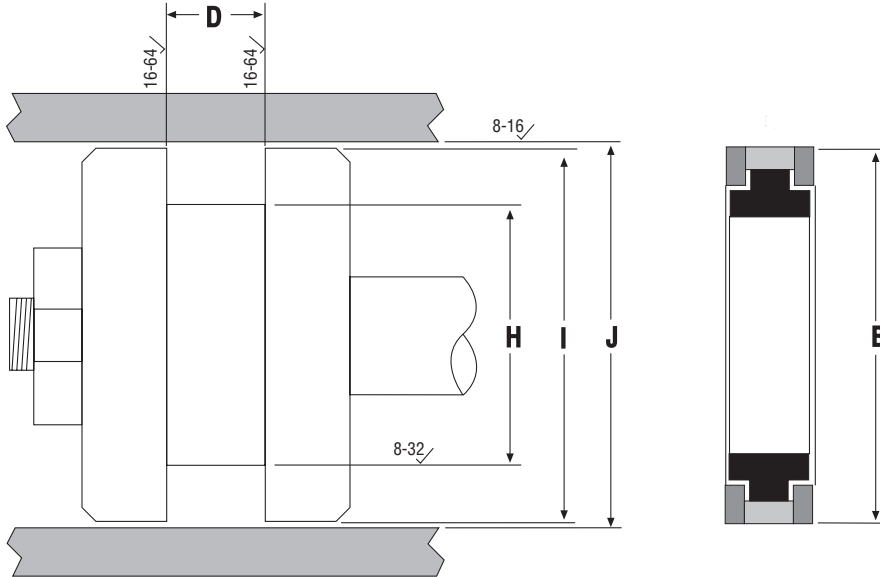
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
TP-009	5/8	7/8	1/8	0.185 +0.010/-0	0.632 +0/-0.002	0.874 +0/-0.004	0.875 +0.001/-0
TP-011	3/4	1	1/8	0.185 +0.010/-0	0.758 +0/-0.002	0.999 +0/-0.004	1.000 +0.002/-0
TP-013	7/8	1-1/8	1/8	0.185 +0.010/-0	0.883 +0/-0.002	1.124 +0/-0.004	1.125 +0.002/-0
TP-014	15/16	1-3/16	1/8	0.185 +0.010/-0	0.945 +0/-0.002	1.1865 +0/-0.004	1.1875 +0.002/-0
TP-015	1	1-1/4	1/8	0.185 +0.010/-0	1.008 +0/-0.002	1.249 +0/-0.004	1.250 +0.002/-0
TP-017	1-1/8	1-3/8	1/8	0.185 +0.010/-0	1.133 +0/-0.002	1.374 +0/-0.004	1.375 +0.002/-0
TP-018	1-3/16	1-7/16	1/8	0.185 +0.010/-0	1.195 +0/-0.002	1.436 +0/-0.004	1.437 +0.002/-0
TP-019	1-1/4	1-1/2	1/8	0.185 +0.010/-0	1.258 +0/-0.002	1.499 +0/-0.004	1.500 +0.002/-0
TP-218-WB	1-1/4	1-1/2	1/8	0.304 +0.010/-0	1.258 +0/-0.002	1.499 +0/-0.004	1.500 +0.002/-0
TP-021	1-3/8	1-5/8	1/8	0.185 +0.010/-0	1.383 +0/-0.002	1.624 +0/-0.004	1.625 +0.002/-0
TP-022	1-1/2	1-3/4	1/8	0.185 +0.010/-0	1.508 +0/-0.002	1.749 +0/-0.004	1.750 +0.002/-0
TP-222-IB	1-1/2	1-3/4	1/8	0.235 +0.010/-0	1.508 +0/-0.002	1.749 +0/-0.004	1.750 +0.002/-0
TP-023	1-1/2	1-7/8	3/16	0.280 +0.010/-0	1.504 +0/-0.002	1.874 +0/-0.006	1.875 +0.002/-0
TP-024	1-5/8	2	3/16	0.280 +0.010/-0	1.629 +0/-0.002	1.999 +0/-0.006	2.000 +0.002/-0
TP-326-IB	1-5/8	2	3/16	0.334 +0.010/-0	1.629 +0/-0.002	1.999 +0/-0.006	2.000 +0.002/-0
TP-025	1-3/4	2-1/8	3/16	0.280 +0.010/-0	1.754 +0/-0.002	2.124 +0/-0.006	2.125 +0.002/-0
TP-026	1-7/8	2-1/4	3/16	0.280 +0.010/-0	1.879 +0/-0.002	2.249 +0/-0.006	2.250 +0.002/-0
TP-328-IB	1-7/8	2-1/4	3/16	0.334 +0.010/-0	1.879 +0/-0.002	2.249 +0/-0.006	2.250 +0.002/-0
TP-328-WB	1-7/8	2-1/4	3/16	0.424 +0.010/-0	1.879 +0/-0.002	2.249 +0/-0.006	2.250 +0.002/-0
TP-027	2	2-3/8	3/16	0.280 +0.010/-0	2.004 +0/-0.002	2.374 +0/-0.006	2.375 +0.002/-0
TP-028	2-1/8	2-1/2	3/16	0.280 +0.010/-0	2.129 +0/-0.002	2.499 +0/-0.006	2.500 +0.002/-0
TP-330-IB	2-1/8	2-1/2	3/16	0.334 +0.010/-0	2.129 +0/-0.002	2.499 +0/-0.006	2.500 +0.002/-0
TP-330-WB	2-1/8	2-1/2	3/16	0.424 +0.010/-0	2.129 +0/-0.002	2.499 +0/-0.006	2.500 +0.002/-0
TP-029	2-1/4	2-5/8	3/16	0.280 +0.010/-0	2.254 +0/-0.002	2.624 +0/-0.006	2.625 +0.002/-0
TP-030	2-3/8	2-3/4	3/16	0.280 +0.010/-0	2.380 +0/-0.004	2.749 +0/-0.006	2.750 +0.003/-0
TP-031	2-1/2	2-7/8	3/16	0.280 +0.010/-0	2.505 +0/-0.004	2.874 +0/-0.006	2.875 +0.003/-0
TP-333-WB	2-1/2	2-7/8	3/16	0.424 +0.010/-0	2.505 +0/-0.004	2.874 +0/-0.006	2.875 +0.003/-0
TP-032	2-5/8	3	3/16	0.280 +0.010/-0	2.630 +0/-0.004	2.999 +0/-0.006	3.000 +0.003/-0
TP-334-IB	2-5/8	3	3/16	0.334 +0.010/-0	2.630 +0/-0.004	2.999 +0/-0.006	3.000 +0.003/-0
TP-334-WB	2-5/8	3	3/16	0.424 +0.010/-0	2.630 +0/-0.004	2.999 +0/-0.006	3.000 +0.003/-0
TP-033	2-3/4	3-1/8	3/16	0.280 +0.010/-0	2.755 +0/-0.004	3.124 +0/-0.006	3.125 +0.003/-0

# PISTON T-SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
TP-034	2-7/8	3-1/4	3/16	0.280 +0.010/-0	2.880 +0/-0.004	3.249 +0/-0.006	3.250 +0.003/-0
TP-035	3-1/8	3-1/2	3/16	0.280 +0.010/-0	3.131 +0/-0.004	3.499 +0/-0.006	3.500 +0.003/-0
TP-338-IB	3-1/8	3-1/2	3/16	0.334 +0.010/-0	3.131 +0/-0.004	3.499 +0/-0.006	3.500 +0.003/-0
TP-338-WB	3-1/8	3-1/2	3/16	0.424 +0.010/-0	3.131 +0/-0.004	3.499 +0/-0.006	3.500 +0.003/-0
TP-036	3-1/4	3-5/8	3/16	0.280 +0.010/-0	3.256 +0/-0.004	3.624 +0/-0.006	3.625 +0.003/-0
TP-037	3-3/8	3-3/4	3/16	0.280 +0.010/-0	3.381 +0/-0.004	3.749 +0/-0.006	3.750 +0.003/-0
TP-038	3-1/2	3-7/8	3/16	0.280 +0.010/-0	3.506 +0/-0.004	3.874 +0/-0.006	3.875 +0.003/-0
TP-039	3-5/8	4	3/16	0.280 +0.010/-0	3.631 +0/-0.004	3.999 +0/-0.006	4.000 +0.003/-0
TP-342-WB	3-5/8	4	3/16	0.424 +0.010/-0	3.631 +0/-0.004	3.999 +0/-0.006	4.000 +0.003/-0
TP-041	3-7/8	4-1/4	3/16	0.280 +0.010/-0	3.881 +0/-0.004	4.249 +0/-0.006	4.250 +0.003/-0
TP-344-WB	3-7/8	4-1/4	3/16	0.424 +0.010/-0	3.881 +0/-0.004	4.249 +0/-0.006	4.250 +0.003/-0
TP-042	4	4-3/8	3/16	0.280 +0.010/-0	4.006 +0/-0.004	4.374 +0/-0.006	4.375 +0.003/-0
TP-043	4-1/8	4-1/2	3/16	0.280 +0.010/-0	4.131 +0/-0.004	4.499 +0/-0.006	4.500 +0.003/-0
TP-346-IB	4-1/8	4-1/2	3/16	0.334 +0.010/-0	4.131 +0/-0.004	4.499 +0/-0.006	4.500 +0.003/-0
TP-346-WB	4-1/8	4-1/2	3/16	0.424 +0.010/-0	4.131 +0/-0.004	4.499 +0/-0.006	4.500 +0.003/-0
TP-347-IB	4-1/4	4-5/8	3/16	0.334 +0.010/-0	4.256 +0/-0.004	4.624 +0/-0.006	4.625 +0.003/-0
TP-045	4-3/8	4-3/4	3/16	0.280 +0.010/-0	4.341 +0/-0.004	4.749 +0/-0.006	4.750 +0.003/-0
TP-046	4-1/2	4-7/8	3/16	0.280 +0.010/-0	4.506 +0/-0.004	4.874 +0/-0.006	4.875 +0.003/-0
TP-047	4-5/8	5	3/16	0.280 +0.010/-0	4.632 +0/-0.004	4.999 +0/-0.008	5.000 +0.003/-0
TP-350-WB	4-5/8	5	3/16	0.424 +0.010/-0	4.632 +0/-0.004	4.999 +0/-0.008	5.000 +0.003/-0
TP-425-IB	4-1/2	5	1/4	0.475 +0.010/-0	4.525 +0/-0.004	4.999 +0/-0.008	5.000 +0.003/-0
TP-425-WB	4-1/2	5	1/4	0.579 +0.010/-0	4.525 +0/-0.004	4.999 +0/-0.008	5.000 +0.003/-0
TP-049	4-3/4	5-1/4	1/4	0.366 +0.010/-0	4.777 +0/-0.004	5.249 +0/-0.008	5.250 +0.003/-0
TP-051	5	5-1/2	1/4	0.366 +0.010/-0	5.027 +0/-0.004	5.499 +0/-0.008	5.500 +0.003/-0
TP-429-IB	5	5-1/2	1/4	0.475 +0.010/-0	5.027 +0/-0.004	5.499 +0/-0.008	5.500 +0.003/-0
TP-053	5-1/4	5-3/4	1/4	0.366 +0.010/-0	5.277 +0/-0.004	5.749 +0/-0.008	5.750 +0.003/-0
TP-054	5-3/8	5-7/8	1/4	0.366 +0.010/-0	5.402 +0/-0.004	5.874 +0/-0.008	5.875 +0.003/-0
TP-055	5-1/2	6	1/4	0.366 +0.010/-0	5.527 +0/-0.004	5.999 +0/-0.008	6.000 +0.003/-0
TP-433-IB	5-1/2	6	1/4	0.475 +0.010/-0	5.527 +0/-0.004	5.999 +0/-0.008	6.000 +0.003/-0
TP-433-WB	5-1/2	6	1/4	0.579 +0.010/-0	5.527 +0/-0.004	5.999 +0/-0.008	6.000 +0.003/-0
TP-057	5-3/4	6-1/4	1/4	0.366 +0.010/-0	5.777 +0/-0.004	6.249 +0/-0.008	6.250 +0.003/-0
TP-435-IB	5-3/4	6-1/4	1/4	0.475 +0.010/-0	5.777 +0/-0.004	6.249 +0/-0.008	6.250 +0.003/-0
TP-058	6	6-1/2	1/4	0.366 +0.010/-0	6.028 +0/-0.006	6.499 +0/-0.008	6.500 +0.004/-0
TP-060	6-1/2	7	1/4	0.366 +0.010/-0	6.528 +0/-0.006	6.999 +0/-0.008	7.000 +0.004/-0
TP-439-IB	6-1/2	7	1/4	0.475 +0.010/-0	6.528 +0/-0.006	6.999 +0/-0.008	7.000 +0.004/-0
TP-439-WB	6-1/2	7	1/4	0.579 +0.010/-0	6.528 +0/-0.006	6.999 +0/-0.008	7.000 +0.004/-0
TP-061	6-3/4	7-1/4	1/4	0.366 +0.010/-0	6.778 +0/-0.006	7.249 +0/-0.008	7.250 +0.004/-0
TP-062	7	7-1/2	1/4	0.366 +0.010/-0	7.028 +0/-0.006	7.499 +0/-0.008	7.500 +0.004/-0
TP-064	7-1/2	8	1/4	0.366 +0.010/-0	7.528 +0/-0.006	7.999 +0/-0.008	8.000 +0.004/-0
TP-443-WB	7-1/2	8	1/4	0.579 +0.010/-0	7.528 +0/-0.006	7.999 +0/-0.008	8.000 +0.004/-0
TP-065	7-3/4	8-1/4	1/4	0.366 +0.010/-0	7.778 +0/-0.006	8.249 +0/-0.008	8.250 +0.004/-0
TP-444-IB	7-3/4	8-1/4	1/4	0.475 +0.010/-0	7.778 +0/-0.006	8.249 +0/-0.008	8.250 +0.004/-0
TP-067	8-1/2	9	1/4	0.366 +0.010/-0	8.528 +0/-0.006	8.999 +0/-0.008	9.000 +0.004/-0
TP-446-IB	8-1/2	9	1/4	0.475 +0.010/-0	8.528 +0/-0.006	8.999 +0/-0.008	9.000 +0.004/-0
TP-068	9	9-1/2	1/4	0.366 +0.010/-0	9.028 +0/-0.006	9.499 +0/-0.009	9.500 +0.004/-0
TP-069	9-1/2	10	1/4	0.366 +0.010/-0	9.528 +0/-0.006	9.999 +0/-0.009	10.000 +0.004/-0
TP-070	10	10-1/2	1/4	0.366 +0.010/-0	10.028 +0/-0.006	10.499 +0/-0.009	10.500 +0.004/-0
TP-448-IB	9-1/2	10	1/4	0.475 +0.010/-0	9.528 +0/-0.006	9.999 +0/-0.009	10.000 +0.004/-0
TP-071	10-1/2	11	1/4	0.366 +0.010/-0	10.528 +0/-0.006	10.999 +0/-0.009	11.000 +0.004/-0
TP-450-IB	10-1/2	11	1/4	0.475 +0.010/-0	10.528 +0/-0.006	10.999 +0/-0.009	11.000 +0.004/-0
TP-072	11	11-1/2	1/4	0.366 +0.010/-0	11.025 +0/-0.006	11.499 +0/-0.009	11.500 +0.004/-0
TP-073	11-1/2	12	1/4	0.366 +0.010/-0	11.528 +0/-0.006	11.999 +0/-0.009	12.000 +0.004/-0
TP-452-WB	11-1/2	12	1/4	0.579 +0.010/-0	11.528 +0/-0.006	11.999 +0/-0.009	12.000 +0.004/-0

# CAPPED PISTON T-SEALS

A heavy duty double-acting assembly, the Capped Piston T-seal exhibits excellent sealability, extrusion resistance, and long-life.



## HERCULES PART NUMBERS

**CPS - 3000**

Type of Seal | Bore Size

### SEAL INFORMATION

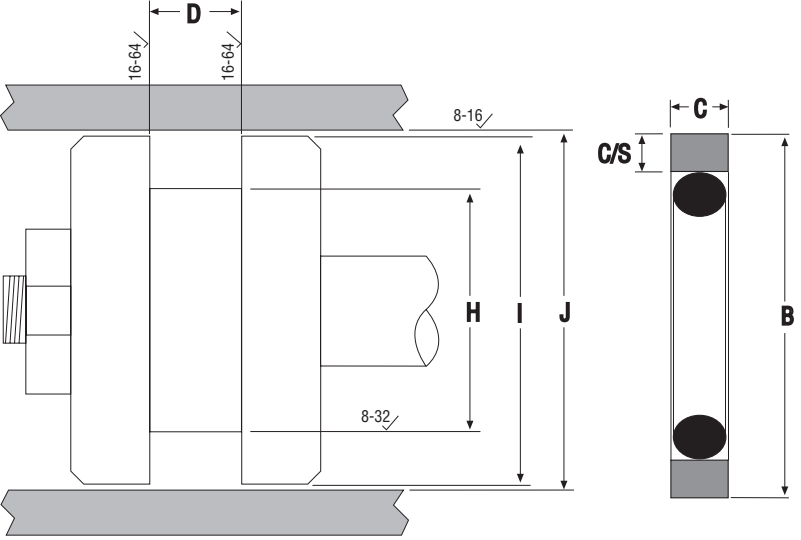
MATERIAL	15% GLASS/5%MoS <sub>2</sub> PTFE CAP NYLON BACK-UP NITRILE ENERGIZER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE	0 TO 6,000 PSI

BR=Bronze Filled PTFE Cap

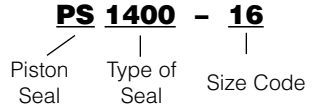
PART NUMBER	B NOM. O.D.	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.		J BORE DIA.
				W/ WR	W/O WR	
CPS-3000	3	0.579 +0.010/-0	2.520 +0/-0.003	2.999 +0/-0.006	2.999 +0/-0.029	3.000 +0.003/-0
CPS-3000BR	3	0.579 +0.010/-0	2.520 +0/-0.003	2.999 +0/-0.006	2.999 +0/-0.029	3.000 +0.003/-0
CPS-3250	3.25	0.579 +0.010/-0	2.770 +0/-0.003	3.249 +0/-0.006	3.249 +0/-0.029	3.250 +0.003/-0
CPS-3500	3.5	0.579 +0.010/-0	3.020 +0/-0.003	3.499 +0/-0.006	3.499 +0/-0.029	3.500 +0.003/-0
CPS-3500BR	3.5	0.579 +0.010/-0	3.020 +0/-0.003	3.499 +0/-0.006	3.499 +0/-0.029	3.500 +0.003/-0
CPS-3750	3.75	0.579 +0.010/-0	3.270 +0/-0.003	3.749 +0/-0.006	3.749 +0/-0.029	3.750 +0.003/-0
CPS-4000	4	0.579 +0.010/-0	3.520 +0/-0.003	3.999 +0/-0.006	3.999 +0/-0.029	4.000 +0.003/-0
CPS-4000BR	4	0.579 +0.010/-0	3.520 +0/-0.003	3.999 +0/-0.006	3.999 +0/-0.029	4.000 +0.003/-0
CPS-4250	4.25	0.579 +0.010/-0	3.770 +0/-0.003	4.249 +0/-0.006	4.249 +0/-0.029	4.250 +0.003/-0
CPS-4500	4.5	0.579 +0.010/-0	4.020 +0/-0.003	4.499 +0/-0.007	4.499 +0/-0.029	4.500 +0.003/-0
CPS-4500BR	4.5	0.579 +0.010/-0	4.020 +0/-0.003	4.499 +0/-0.007	4.499 +0/-0.029	4.500 +0.003/-0
CPS-5000	5	0.750 +0.010/-0	4.270 +0/-0.004	4.999 +0/-0.008	4.999 +0/-0.029	5.000 +0.004/-0
CPS-5250	5.25	0.750 +0.010/-0	4.520 +0/-0.004	5.249 +0/-0.008	5.249 +0/-0.029	5.250 +0.004/-0
CPS-5500	5.5	0.750 +0.010/-0	4.770 +0/-0.004	5.499 +0/-0.008	5.499 +0/-0.029	5.500 +0.004/-0
CPS-5500BR	5.5	0.750 +0.010/-0	4.770 +0/-0.004	5.499 +0/-0.008	5.499 +0/-0.029	5.500 +0.004/-0
CPS-5504BR	5.5	0.579 +0.010/-0	5.020 +0/-0.004	5.499 +0/-0.008	5.499 +0/-0.029	5.500 +0.004/-0
CPS-6000	6	0.750 +0.010/-0	5.270 +0/-0.004	5.999 +0/-0.008	5.999 +0/-0.029	6.000 +0.004/-0
CPS-6015	6.0156	0.750 +0.010/-0	5.285 +0/-0.004	6.014 +0/-0.008	6.014 +0/-0.029	6.015 +0.004/-0
CPS-6250	6.25	0.750 +0.010/-0	5.520 +0/-0.004	6.249 +0/-0.008	6.249 +0/-0.029	6.250 +0.004/-0
CPS-6250BR	6.25	0.750 +0.010/-0	5.520 +0/-0.004	6.249 +0/-0.008	6.249 +0/-0.029	6.250 +0.004/-0
CPS-6500	6.5	0.750 +0.010/-0	5.770 +0/-0.004	6.499 +0/-0.008	6.499 +0/-0.029	6.500 +0.004/-0
CPS-6504BR	6.5	0.579 +0.010/-0	6.020 +0/-0.004	6.499 +0/-0.008	6.499 +0/-0.029	6.500 +0.004/-0
CPS-7000	7	0.750 +0.010/-0	6.270 +0/-0.004	6.999 +0/-0.008	6.999 +0/-0.029	7.000 +0.004/-0
CPS-7000BR	7	0.750 +0.010/-0	6.270 +0/-0.004	6.999 +0/-0.008	6.999 +0/-0.029	7.000 +0.004/-0
CPS-7250BF	7.25	0.750 +0.010/-0	6.520 +0/-0.004	7.249 +0/-0.008	7.249 +0/-0.029	7.250 +0.004/-0
CPS-7500	7.5	0.750 +0.010/-0	6.770 +0/-0.004	7.499 +0/-0.008	7.499 +0/-0.029	7.500 +0.004/-0
CPS-8000	8	0.750 +0.010/-0	7.270 +0/-0.004	7.999 +0/-0.008	7.999 +0/-0.029	8.000 +0.004/-0
CPS-10000	10	0.750 +0.010/-0	9.270 +0/-0.004	9.999 +0/-0.008	9.999 +0/-0.029	10.000 +0.004/-0

# 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 rubber energizer, assures positive contact with the dynamic surface. The PS1400 is designed to fit ANSI/B93.32-1973 groove standards.



### HERCULES PART NUMBERS



SEAL INFORMATION	
MATERIAL	15% GLASS FILLED PTFE SEAL 70A NITRILE ENERGIZER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI

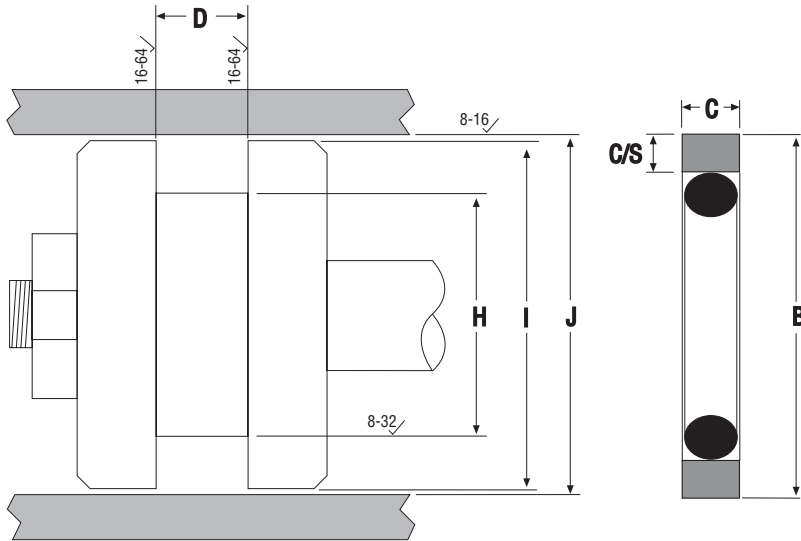
PART NUMBER	B NOM. O.D.	C HT.	C/S SEAL CROSS SECTION	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
PS1400-16	1	0.070 ±0.010	0.070 ±0.005	0.083 ±0.002	0.740 ±0.002	0.997 ±0.001	1.000 ±0.002
PS1400-18	1.125	0.070 ±0.010	0.070 ±0.005	0.083 ±0.002	0.865 ±0.002	1.122 ±0.001	1.125 ±0.002
PS1400-20	1.25	0.070 ±0.010	0.070 ±0.005	0.083 ±0.002	0.990 ±0.002	1.247 ±0.001	1.250 ±0.002
PS1400-22	1.375	0.070 ±0.010	0.070 ±0.005	0.083 ±0.002	1.115 ±0.002	1.372 ±0.001	1.375 ±0.002
PS1400-24	1.5	0.070 ±0.010	0.070 ±0.005	0.083 ±0.002	1.240 ±0.002	1.497 ±0.001	1.500 ±0.002
PS1400-26	1.625	0.109 ±0.010	0.109 ±0.010	0.122 ±0.002	1.233 ±0.002	1.622 ±0.001	1.625 ±0.002
PS1400-28	1.75	0.109 ±0.010	0.109 ±0.010	0.122 ±0.002	1.358 ±0.002	1.747 ±0.001	1.750 ±0.002
PS1400-30	1.875	0.109 ±0.010	0.109 ±0.010	0.122 ±0.002	1.483 ±0.002	1.872 ±0.001	1.875 ±0.002
PS1400-32	2	0.115 ±0.010	0.115 ±0.010	0.129 ±0.002	1.608 ±0.002	1.996 ±0.001	2.000 ±0.002
PS1400-34	2.125	0.115 ±0.010	0.115 ±0.010	0.129 ±0.002	1.733 ±0.002	2.121 ±0.001	2.125 ±0.002
PS1400-36	2.25	0.115 ±0.010	0.115 ±0.010	0.129 ±0.002	1.858 ±0.002	2.246 ±0.001	2.250 ±0.002
PS1400-38	2.375	0.115 ±0.010	0.115 ±0.010	0.129 ±0.002	1.983 ±0.002	2.371 ±0.001	2.375 ±0.002
PS1400-40	2.5	0.115 ±0.010	0.115 ±0.010	0.129 ±0.002	2.108 ±0.002	2.496 ±0.001	2.500 ±0.002
PS1400-44	2.75	0.115 ±0.010	0.115 ±0.010	0.129 ±0.002	2.358 ±0.002	2.746 ±0.001	2.750 ±0.002
PS1400-48	3	0.115 ±0.010	0.115 ±0.010	0.129 ±0.002	2.608 ±0.002	2.996 ±0.001	3.000 ±0.002
PS1400-50	3.125	0.115 ±0.010	0.115 ±0.010	0.129 ±0.002	2.733 ±0.002	3.121 ±0.001	3.125 ±0.002
PS1400-52	3.25	0.115 ±0.010	0.115 ±0.010	0.129 ±0.002	2.858 ±0.002	3.246 ±0.001	3.250 ±0.002
PS1400-54	3.375	0.115 ±0.010	0.115 ±0.010	0.129 ±0.002	2.983 ±0.002	3.371 ±0.001	3.375 ±0.002
PS1400-56	3.5	0.115 ±0.010	0.115 ±0.010	0.129 ±0.002	3.108 ±0.002	3.496 ±0.001	3.500 ±0.002
PS1400-58	3.625	0.115 ±0.010	0.115 ±0.010	0.129 ±0.002	3.233 ±0.002	3.621 ±0.001	3.625 ±0.002
PS1400-60	3.75	0.115 ±0.010	0.115 ±0.010	0.129 ±0.002	3.358 ±0.002	3.746 ±0.001	3.750 ±0.002
PS1400-64	4	0.115 ±0.010	0.115 ±0.010	0.129 ±0.002	3.608 ±0.002	3.996 ±0.001	4.000 ±0.002
PS1400-68	4.25	0.115 ±0.010	0.115 ±0.010	0.129 ±0.002	3.858 ±0.002	4.246 ±0.001	4.250 ±0.002
PS1400-70.4	4.4	0.115 ±0.010	0.115 ±0.010	0.129 ±0.002	4.008 ±0.002	4.396 ±0.001	4.400 ±0.002
PS1400-72	4.5	0.115 ±0.010	0.115 ±0.010	0.129 ±0.002	4.108 ±0.002	4.496 ±0.001	4.500 ±0.002
PS1400-76	4.75	0.115 ±0.010	0.115 ±0.010	0.129 ±0.002	4.358 ±0.002	4.746 ±0.001	4.750 ±0.002
PS1400-80	5	0.115 ±0.010	0.115 ±0.010	0.129 ±0.002	4.608 ±0.002	4.996 ±0.001	5.000 ±0.002
PS1400-84	5.25	0.115 ±0.010	0.115 ±0.010	0.129 ±0.002	4.858 ±0.002	5.246 ±0.001	5.250 ±0.002
PS1400-88	5.5	0.115 ±0.010	0.115 ±0.010	0.129 ±0.002	5.108 ±0.002	5.496 ±0.001	5.500 ±0.002
PS1400-92	5.75	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	5.232 ±0.002	5.746 ±0.001	5.750 ±0.002
PS1400-94	5.875	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	5.357 ±0.002	5.871 ±0.001	5.875 ±0.002
PS1400-96	6	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	5.482 ±0.002	5.996 ±0.001	6.000 ±0.002

## STYLE PS1400 GLASS FILLED PTFE PISTON SEALS

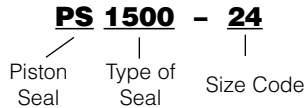
PART NUMBER	B NOM. O.D.	C HT.	C/S SEAL CROSS SECTION	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
PS1400-98	6.125	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	5.607 ±0.002	6.121 ±0.001	6.125 ±0.002
PS1400-100	6.25	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	5.732 ±0.002	6.246 ±0.001	6.250 ±0.002
PS1400-104	6.5	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	5.982 ±0.002	6.496 ±0.001	6.500 ±0.002
PS1400-112	7	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	6.482 ±0.002	6.996 ±0.001	7.000 ±0.002
PS1400-116	7.25	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	6.732 ±0.002	7.246 ±0.001	7.250 ±0.002
PS1400-120	7.5	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	6.982 ±0.002	7.496 ±0.001	7.500 ±0.002
PS1400-128	8	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	7.482 ±0.002	7.996 ±0.001	8.000 ±0.002
PS1400-130	8.125	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	7.607 ±0.002	8.121 ±0.001	8.125 ±0.002
PS1400-132	8.25	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	7.732 ±0.002	8.246 ±0.001	8.250 ±0.002
PS1400-136	8.5	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	7.982 ±0.002	8.496 ±0.001	8.500 ±0.002
PS1400-144	9	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	8.482 ±0.002	8.996 ±0.001	9.000 ±0.002
PS1400-152	9.5	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	8.982 ±0.002	9.496 ±0.001	9.500 ±0.002
PS1400-160	10	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	9.482 ±0.002	9.996 ±0.001	10.000 ±0.002
PS1400-168	10.5	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	9.982 ±0.002	10.496 ±0.001	10.500 ±0.002
PS1400-176	11	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	10.482 ±0.002	10.996 ±0.001	11.000 ±0.002
PS1400-184	11.5	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	10.982 ±0.002	11.496 ±0.001	11.500 ±0.002
PS1400-192	12	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	11.482 ±0.002	11.996 ±0.001	12.000 ±0.002
PS1400-200	12.5	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	11.982 ±0.002	12.496 ±0.001	12.500 ±0.002
PS1400-208	13	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	12.482 ±0.002	12.996 ±0.001	13.000 ±0.002
PS1400-224	14	0.143 ±0.010	0.143 ±0.010	0.159 ±0.002	13.482 ±0.002	13.996 ±0.001	14.000 ±0.002

# 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 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 to permit immediate installation and assembly. Special features include a low friction surface and superior cut strength with the elimination of the "cold flow" characteristics found in PTFE seals.



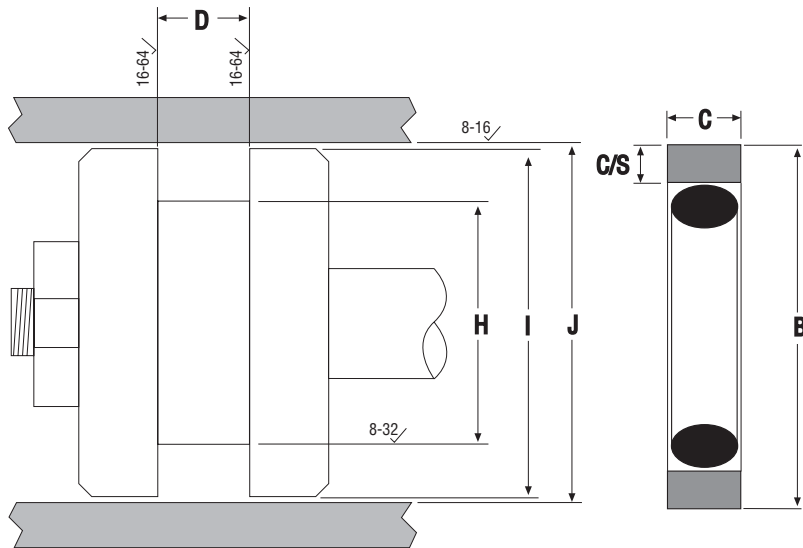
### HERCULES PART NUMBERS



SEAL INFORMATION	
MATERIAL	60D POLYURETHANE SEAL 70A NITRILE ENERGIZER
TEMPERATURE RANGE	-65° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI

PART NUMBER	B NOM. O.D.	C HT.	C/S SEAL CROSS SECTION	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
PS1500-24	1.5	0.070 ±0.005	0.070 ±0.005	0.083 ±0.002	1.240 ±0.002	1.497 ±0.001	1.500 ±0.002
PS1500-28	1.75	0.109 ±0.005	0.109 ±0.005	0.122 ±0.002	1.358 ±0.002	1.747 ±0.001	1.750 ±0.002
PS1500-32	2	0.115 ±0.006	0.115 ±0.006	0.129 ±0.002	1.608 ±0.002	1.996 ±0.001	2.000 ±0.002
PS1500-36	2.25	0.115 ±0.006	0.115 ±0.006	0.129 ±0.002	1.858 ±0.002	2.246 ±0.001	2.250 ±0.002
PS1500-38	2.375	0.115 ±0.006	0.115 ±0.006	0.129 ±0.002	1.983 ±0.002	2.371 ±0.001	2.375 ±0.002
PS1500-40	2.5	0.115 ±0.006	0.115 ±0.006	0.129 ±0.002	2.108 ±0.002	2.496 ±0.001	2.500 ±0.002
PS1500-44	2.75	0.115 ±0.006	0.115 ±0.006	0.129 ±0.002	2.358 ±0.002	2.746 ±0.001	2.750 ±0.002
PS1500-48	3	0.115 ±0.006	0.115 ±0.006	0.129 ±0.002	2.608 ±0.002	2.996 ±0.001	3.000 ±0.002
PS1500-52	3.25	0.115 ±0.006	0.115 ±0.006	0.129 ±0.002	2.858 ±0.002	3.246 ±0.001	3.250 ±0.002
PS1500-56	3.5	0.115 ±0.006	0.115 ±0.006	0.129 ±0.002	3.108 ±0.002	3.496 ±0.001	3.500 ±0.002
PS1500-60	3.75	0.115 ±0.006	0.115 ±0.006	0.129 ±0.002	3.358 ±0.002	3.746 ±0.001	3.750 ±0.002
PS1500-64	4	0.115 ±0.006	0.115 ±0.006	0.129 ±0.002	3.608 ±0.002	3.996 ±0.001	4.000 ±0.002
PS1500-68	4.25	0.115 ±0.006	0.115 ±0.006	0.129 ±0.002	3.858 ±0.002	4.246 ±0.001	4.250 ±0.002
PS1500-72	4.5	0.115 ±0.006	0.115 ±0.006	0.129 ±0.002	4.108 ±0.002	4.496 ±0.001	4.500 ±0.002
PS1500-76	4.75	0.115 ±0.006	0.115 ±0.006	0.129 ±0.002	4.358 ±0.002	4.746 ±0.001	4.750 ±0.002
PS1500-80	5	0.115 ±0.006	0.115 ±0.006	0.129 ±0.002	4.608 ±0.002	4.996 ±0.001	5.000 ±0.002
PS1500-84	5.25	0.115 ±0.006	0.115 ±0.006	0.129 ±0.002	4.858 ±0.002	5.246 ±0.001	5.250 ±0.002
PS1500-88	5.5	0.115 ±0.006	0.115 ±0.006	0.129 ±0.002	5.108 ±0.002	5.496 ±0.001	5.500 ±0.002
PS1500-92	5.75	0.143 ±0.007	0.143 ±0.007	0.159 ±0.002	5.232 ±0.002	5.746 ±0.001	5.750 ±0.002
PS1500-96	6	0.143 ±0.007	0.143 ±0.007	0.159 ±0.002	5.482 ±0.002	5.996 ±0.001	6.000 ±0.002
PS1500-104	6.5	0.143 ±0.007	0.143 ±0.007	0.159 ±0.002	5.982 ±0.002	6.496 ±0.001	6.500 ±0.002
PS1500-112	7	0.143 ±0.007	0.143 ±0.007	0.159 ±0.002	6.482 ±0.002	6.996 ±0.001	7.000 ±0.002
PS1500-136	8.5	0.143 ±0.007	0.143 ±0.007	0.159 ±0.002	7.982 ±0.002	8.494 ±0.001	8.500 ±0.002

# STYLE PS1600 GLASS FILLED PTFE PISTON SEALS



## HERCULES PART NUMBERS

**PS 1600 - 16**

Piston Seal | Type of Seal | Size Code

### SEAL INFORMATION

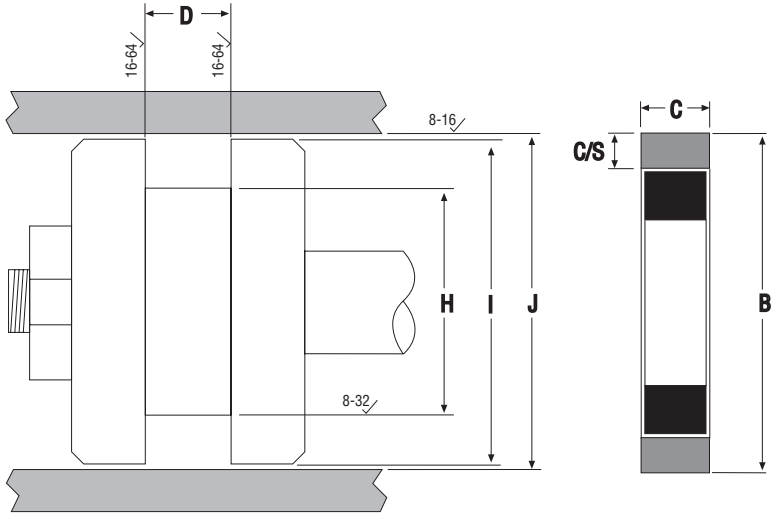
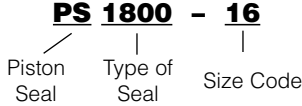
MATERIAL	15% GLASS FILLED PTFE SEAL 70A NITRILE ENERGIZER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI

PART NUMBER	B NOM. O.D.	C HT.	C/S SEAL CROSS SECTION	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
PS1600-16	1	0.088 +0.005/-0	0.055 +0.005/-0	0.094 +0.003/-0	0.787 +0/-0.003	0.999 +0/-0.003	1.000 ±0.001
PS1600-18	1.125	0.088 +0.005/-0	0.055 +0.005/-0	0.094 +0.003/-0	0.912 +0/-0.003	1.124 +0/-0.003	1.125 ±0.001
PS1600-20	1.25	0.088 +0.005/-0	0.055 +0.005/-0	0.094 +0.003/-0	1.037 +0/-0.003	1.249 +0/-0.003	1.250 ±0.001
PS1600-22	1.375	0.088 +0.005/-0	0.055 +0.005/-0	0.094 +0.003/-0	1.162 +0/-0.003	1.374 +0/-0.003	1.375 ±0.001
PS1600-24	1.5	0.088 +0.005/-0	0.055 +0.005/-0	0.094 +0.003/-0	1.287 +0/-0.003	1.499 +0/-0.003	1.500 ±0.001
PS1600-26	1.625	0.088 +0.005/-0	0.055 +0.005/-0	0.094 +0.003/-0	1.412 +0/-0.003	1.624 +0/-0.003	1.625 ±0.001
PS1600-28	1.75	0.088 +0.005/-0	0.055 +0.005/-0	0.094 +0.003/-0	1.473 +0/-0.003	1.749 +0/-0.003	1.750 ±0.001
PS1600-30	1.875	0.120 +0.005/-0	0.060 +0.005/-0	0.126 +0.003/-0	1.598 +0/-0.003	1.874 +0/-0.003	1.875 ±0.001
PS1600-32	2	0.120 +0.005/-0	0.060 +0.005/-0	0.126 +0.003/-0	1.723 +0/-0.003	1.999 +0/-0.003	2.000 ±0.001
PS1600-36	2.25	0.120 +0.005/-0	0.060 +0.005/-0	0.126 +0.003/-0	1.937 +0/-0.003	2.249 +0/-0.003	2.250 ±0.001
PS1600-38	2.375	0.120 +0.005/-0	0.060 +0.005/-0	0.126 +0.003/-0	2.098 +0/-0.003	2.374 +0/-0.003	2.375 ±0.001
PS1600-40	2.5	0.120 +0.005/-0	0.060 +0.005/-0	0.126 +0.003/-0	2.223 +0/-0.003	2.499 +0/-0.003	2.500 ±0.001
PS1600-44	2.75	0.150 +0.005/-0	0.090 +0.005/-0	0.157 +0.003/-0	2.348 +0/-0.003	2.749 +0/-0.004	2.750 ±0.001
PS1600-48	3	0.150 +0.005/-0	0.090 +0.005/-0	0.157 +0.003/-0	2.603 +0/-0.003	2.999 +0/-0.004	3.000 ±0.001
PS1600-52	3.25	0.150 +0.005/-0	0.090 +0.005/-0	0.157 +0.003/-0	2.853 +0/-0.003	3.249 +0/-0.004	3.250 ±0.001
PS1600-56	3.5	0.150 +0.005/-0	0.090 +0.005/-0	0.157 +0.003/-0	3.103 +0/-0.003	3.499 +0/-0.004	3.500 ±0.001
PS1600-60	3.75	0.150 +0.005/-0	0.090 +0.005/-0	0.157 +0.003/-0	3.353 +0/-0.003	3.749 +0/-0.004	3.750 ±0.001
PS1600-64	4	0.150 +0.005/-0	0.090 +0.005/-0	0.157 +0.003/-0	3.603 +0/-0.003	3.999 +0/-0.004	4.000 ±0.001
PS1600-68	4.25	0.150 +0.005/-0	0.090 +0.005/-0	0.157 +0.003/-0	3.853 +0/-0.003	4.249 +0/-0.004	4.250 ±0.001
PS1600-72	4.5	0.150 +0.005/-0	0.090 +0.005/-0	0.157 +0.003/-0	4.103 +0/-0.003	4.499 +0/-0.004	4.500 ±0.001
PS1600-76	4.75	0.150 +0.005/-0	0.090 +0.005/-0	0.157 +0.003/-0	4.353 +0/-0.003	4.749 +0/-0.004	4.750 ±0.001
PS1600-80	5	0.150 +0.005/-0	0.090 +0.005/-0	0.157 +0.003/-0	4.603 +0/-0.003	4.999 +0/-0.004	5.000 ±0.001
PS1600-84	5.25	0.150 +0.005/-0	0.090 +0.005/-0	0.157 +0.003/-0	4.853 +0/-0.003	5.249 +0/-0.004	5.250 ±0.001
PS1600-88	5.5	0.150 +0.005/-0	0.090 +0.005/-0	0.157 +0.003/-0	5.103 +0/-0.003	5.499 +0/-0.004	5.500 ±0.001
PS1600-92	5.75	0.150 +0.005/-0	0.090 +0.005/-0	0.157 +0.003/-0	5.353 +0/-0.003	5.749 +0/-0.004	5.750 ±0.001
PS1600-96	6	0.287 +0.005/-0	0.120 +0.005/-0	0.293 +0.003/-0	5.305 +0/-0.003	5.999 +0/-0.005	6.000 ±0.001
PS1600-112	7	0.287 +0.005/-0	0.120 +0.005/-0	0.293 +0.003/-0	6.305 +0/-0.003	6.999 +0/-0.005	7.000 ±0.001

# 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.

### HERCULES PART NUMBERS



SEAL INFORMATION	
MATERIAL	15% GLASS FILLED PTFE SEAL 70A NITRILE ENERGIZER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI

PART NUMBER	B NOM. O.D.	C HT.	C/S SEAL CROSS SECTION	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
PS1800-16	1	0.116-0.121	0.067-0.073	0.129 ±0.002	0.690 ±0.004	0.999 +0/-0.005	1.000 ±0.002
PS1800-18	1.125	0.116-0.121	0.067-0.073	0.129 ±0.002	0.815 ±0.004	1.124 +0/-0.005	1.125 ±0.002
PS1800-20	1.25	0.116-0.121	0.067-0.073	0.129 ±0.002	0.940 ±0.004	1.249 +0/-0.005	1.250 ±0.002
PS1800-24	1.5	0.116-0.121	0.067-0.073	0.129 ±0.002	1.190 ±0.004	1.499 +0/-0.005	1.500 ±0.002
PS1800-28	1.75	0.116-0.121	0.067-0.073	0.129 ±0.002	1.440 ±0.004	1.749 +0/-0.005	1.750 ±0.002
PS1800-32	2	0.116-0.121	0.067-0.073	0.129 ±0.002	1.690 ±0.004	1.999 +0/-0.005	2.000 ±0.002
PS1800-36	2.25	0.116-0.121	0.067-0.073	0.129 ±0.002	1.940 ±0.004	2.249 +0/-0.005	2.250 ±0.002
PS1800-40	2.5	0.116-0.121	0.067-0.073	0.129 ±0.002	2.190 ±0.004	2.499 +0/-0.005	2.500 ±0.002
PS1800-44	2.75	0.116-0.121	0.067-0.073	0.129 ±0.002	2.440 ±0.004	2.749 +0/-0.005	2.750 ±0.002
PS1800-44A	2.75	0.269-0.274	0.087-0.093	0.284 ±0.002	2.190 ±0.004	2.749 +0/-0.005	2.750 ±0.002
PS1800-48	3	0.269-0.274	0.087-0.093	0.284 ±0.002	2.440 ±0.004	2.999 +0/-0.006	3.000 ±0.002
PS1800-52	3.25	0.269-0.274	0.087-0.093	0.284 ±0.002	2.690 ±0.004	3.249 +0/-0.006	3.250 ±0.002
PS1800-56	3.5	0.269-0.274	0.087-0.093	0.284 ±0.002	2.940 ±0.004	3.499 +0/-0.006	3.500 ±0.002
PS1800-60	3.75	0.269-0.274	0.087-0.093	0.284 ±0.002	3.190 ±0.004	3.749 +0/-0.006	3.750 ±0.002
PS1800-64	4	0.269-0.274	0.087-0.093	0.284 ±0.002	3.440 ±0.004	3.999 +0/-0.006	4.000 ±0.002
PS1800-68	4.25	0.269-0.274	0.087-0.093	0.284 ±0.002	3.690 ±0.004	4.249 +0/-0.006	4.250 ±0.002
PS1800-72	4.5	0.269-0.274	0.087-0.093	0.284 ±0.002	3.940 ±0.004	4.499 +0/-0.006	4.500 ±0.002
PS1800-76	4.75	0.269-0.274	0.087-0.093	0.284 ±0.002	4.190 ±0.004	4.749 +0/-0.006	4.750 ±0.002
PS1800-80	5	0.269-0.274	0.087-0.093	0.284 ±0.002	4.440 ±0.004	4.999 +0/-0.006	5.000 ±0.002
PS1800-84	5.25	0.362-0.367	0.137-0.147	0.379 ±0.002	4.488 ±0.004	5.249 +0/-0.007	5.250 ±0.002
PS1800-88	5.5	0.362-0.367	0.137-0.147	0.379 ±0.002	4.738 ±0.004	5.499 +0/-0.007	5.500 ±0.002
PS1800-90	5.625	0.362-0.367	0.137-0.147	0.379 ±0.002	4.863 ±0.004	5.624 +0/-0.007	5.625 ±0.002
PS1800-92	5.75	0.362-0.367	0.137-0.147	0.379 ±0.002	4.988 ±0.004	5.749 +0/-0.007	5.750 ±0.002
PS1800-96	6	0.362-0.367	0.137-0.147	0.379 ±0.002	5.238 ±0.004	5.999 +0/-0.007	6.000 ±0.002
PS1800-100	6.25	0.362-0.367	0.137-0.147	0.379 ±0.002	5.488 ±0.004	6.249 +0/-0.007	6.250 ±0.002
PS1800-104	6.5	0.362-0.367	0.137-0.147	0.379 ±0.002	5.738 ±0.004	6.499 +0/-0.007	6.500 ±0.002
PS1800-112	7	0.362-0.367	0.137-0.147	0.379 ±0.002	6.238 ±0.004	6.999 +0/-0.007	7.000 ±0.002
PS1800-116	7.25	0.362-0.367	0.137-0.147	0.379 ±0.002	6.488 ±0.004	7.249 +0/-0.007	7.250 ±0.002
PS1800-120	7.5	0.362-0.367	0.137-0.147	0.379 ±0.002	6.738 ±0.004	7.499 +0/-0.007	7.500 ±0.002
PS1800-128	8	0.362-0.367	0.137-0.147	0.379 ±0.002	7.238 ±0.004	7.999 +0/-0.007	8.000 ±0.002
PS1800-132	8.25	0.362-0.367	0.137-0.147	0.379 ±0.002	7.488 ±0.004	8.249 +0/-0.007	8.250 ±0.002
PS1800-136	8.5	0.362-0.367	0.137-0.147	0.379 ±0.002	7.738 ±0.004	8.499 +0/-0.007	8.500 ±0.002
PS1800-144	9	0.362-0.367	0.195-0.210	0.379 ±0.002	8.122 ±0.004	8.999 +0/-0.008	9.000 ±0.002
PS1800-152	9.5	0.362-0.367	0.195-0.210	0.379 ±0.002	8.622 ±0.004	9.499 +0/-0.008	9.500 ±0.002
PS1800-160	10	0.362-0.367	0.195-0.210	0.379 ±0.002	9.122 ±0.004	9.999 +0/-0.008	10.000 ±0.002

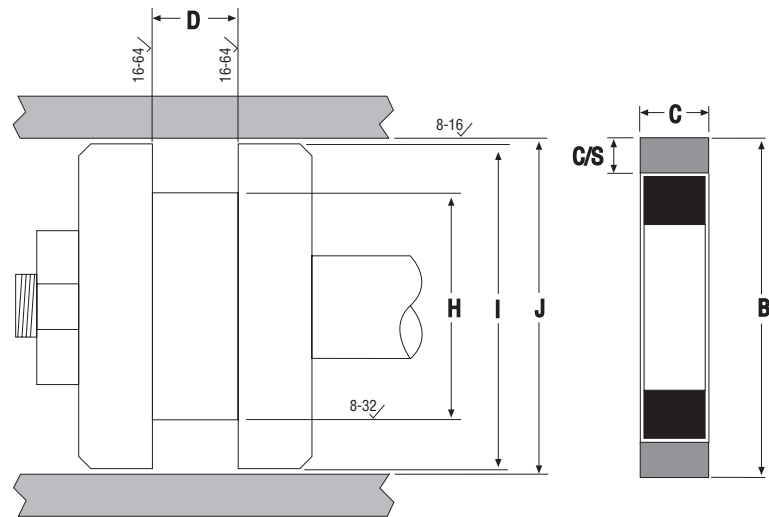


## STYLE PS1800 GLASS FILLED PTFE PISTON SEALS

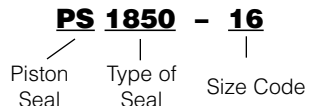
PART NUMBER	B NOM. O.D.	C HT.	C/S SEAL CROSS SECTION	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
PS1800-168	10.5	0.362-0.367	0.195-0.210	0.379 ±0.002	9.622 ±0.004	10.499 +0/-0.008	10.500 ±0.002
PS1800-176	11	0.362-0.367	0.195-0.210	0.379 ±0.002	10.122 ±0.004	10.999 +0/-0.008	11.000 ±0.002
PS1800-192	12	0.362-0.367	0.195-0.210	0.379 ±0.002	11.122 ±0.004	11.999 +0/-0.008	12.000 ±0.002
PS1800-208	13	0.362-0.367	0.195-0.210	0.379 ±0.002	12.122 ±0.004	12.999 +0/-0.008	13.000 ±0.002
PS1800-224	14	0.362-0.367	0.195-0.210	0.379 ±0.002	13.122 ±0.004	13.999 +0/-0.008	14.000 ±0.002

# STYLE PS1850 BRONZE FILLED PTFE 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.



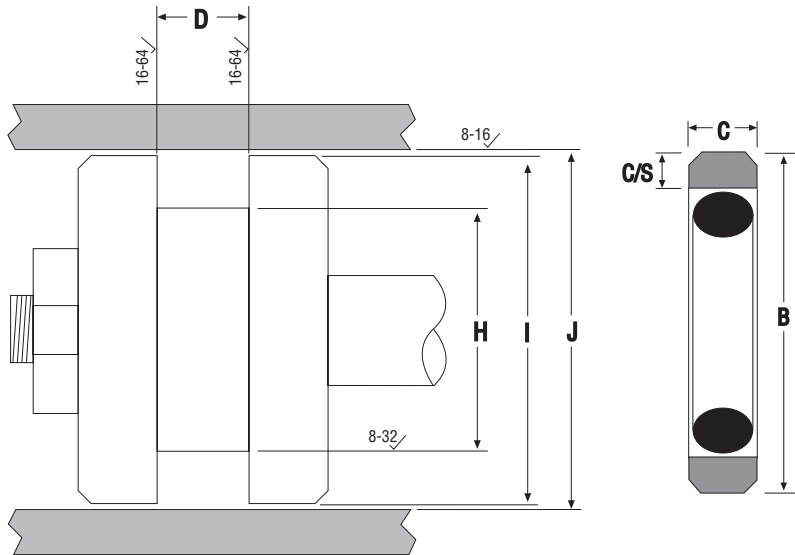
### HERCULES PART NUMBERS



SEAL INFORMATION	
MATERIAL	40% BRONZE FILLED PTFE SEAL 70A NITRILE ENERGIZER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI

PART NUMBER	B NOM. O.D.	C HT.	C/S SEAL CROSS SECTION	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
PS1850-16	1	0.116-0.121	0.067-0.073	0.129 ±0.002	0.690 ±0.004	0.999 +0/-0.005	1.000 ±0.002
PS1850-20	1.25	0.116-0.121	0.067-0.073	0.129 ±0.002	0.940 ±0.004	1.249 +0/-0.005	1.250 ±0.002
PS1850-24	1.5	0.116-0.121	0.067-0.073	0.129 ±0.002	1.190 ±0.004	1.499 +0/-0.005	1.500 ±0.002
PS1850-28	1.75	0.116-0.121	0.067-0.073	0.129 ±0.002	1.440 ±0.004	1.749 +0/-0.005	1.750 ±0.002
PS1850-32	2	0.116-0.121	0.067-0.073	0.129 ±0.002	1.690 ±0.004	1.999 +0/-0.005	2.000 ±0.002
PS1850-36	2.25	0.116-0.121	0.067-0.073	0.129 ±0.002	1.940 ±0.004	2.249 +0/-0.005	2.250 ±0.002
PS1850-40	2.5	0.116-0.121	0.067-0.073	0.129 ±0.002	2.190 ±0.004	2.499 +0/-0.005	2.500 ±0.002
PS1850-44	2.75	0.116-0.121	0.067-0.073	0.129 ±0.002	2.440 ±0.004	2.749 +0/-0.005	2.750 ±0.002
PS1850-48	3	0.269-0.274	0.087-0.093	0.284 ±0.002	2.440 ±0.004	2.999 +0/-0.006	3.000 ±0.002
PS1850-52	3.25	0.269-0.274	0.087-0.093	0.284 ±0.002	2.690 ±0.004	3.249 +0/-0.006	3.250 ±0.002
PS1850-56	3.5	0.269-0.274	0.087-0.093	0.284 ±0.002	2.940 ±0.004	3.499 +0/-0.006	3.500 ±0.002
PS1850-60	3.75	0.269-0.274	0.087-0.093	0.284 ±0.002	3.190 ±0.004	3.749 +0/-0.006	3.750 ±0.002
PS1850-64	4	0.269-0.274	0.087-0.093	0.284 ±0.002	3.440 ±0.004	3.999 +0/-0.006	4.000 ±0.002
PS1850-68	4.25	0.269-0.274	0.087-0.093	0.284 ±0.002	3.690 ±0.004	4.249 +0/-0.006	4.250 ±0.002
PS1850-72	4.5	0.269-0.274	0.087-0.093	0.284 ±0.002	3.940 ±0.004	4.499 +0/-0.006	4.500 ±0.002
PS1850-76	4.75	0.269-0.274	0.087-0.093	0.284 ±0.002	4.190 ±0.004	4.749 +0/-0.006	4.750 ±0.002
PS1850-80	5	0.269-0.274	0.087-0.093	0.284 ±0.002	4.440 ±0.004	4.999 +0/-0.006	5.000 ±0.002
PS1850-84	5.25	0.362-0.367	0.137-0.147	0.379 ±0.002	4.488 ±0.004	5.249 +0/-0.007	5.250 ±0.002
PS1850-88	5.5	0.362-0.367	0.137-0.147	0.379 ±0.002	4.738 ±0.004	5.499 +0/-0.007	5.500 ±0.002
PS1850-92	5.75	0.362-0.367	0.137-0.147	0.379 ±0.002	4.988 ±0.004	5.749 +0/-0.007	5.750 ±0.002
PS1850-96	6	0.362-0.367	0.137-0.147	0.379 ±0.002	5.238 ±0.004	5.999 +0/-0.007	6.000 ±0.002
PS1850-104	6.5	0.362-0.367	0.137-0.147	0.379 ±0.002	5.738 ±0.004	6.499 +0/-0.007	6.500 ±0.002
PS1850-108A	6.75	0.362-0.367	0.195-0.210	0.379 ±0.002	5.872 ±0.004	6.749 +0/-0.007	6.750 ±0.002
PS1850-112	7	0.362-0.367	0.137-0.147	0.379 ±0.002	6.238 ±0.004	6.999 +0/-0.007	7.000 ±0.002
PS1850-116	7.25	0.362-0.367	0.137-0.147	0.379 ±0.002	6.488 ±0.004	7.249 +0/-0.003	7.250 ±0.002
PS1850-120	7.5	0.362-0.367	0.137-0.147	0.379 ±0.002	6.738 ±0.004	7.499 +0/-0.007	7.500 ±0.002
PS1850-124	7.75	0.362-0.367	0.137-0.147	0.379 ±0.002	6.988 ±0.004	7.499 +0/-0.007	7.750 ±0.002
PS1850-128	8	0.362-0.367	0.137-0.147	0.379 ±0.002	7.238 ±0.004	7.999 +0/-0.007	8.000 ±0.002
PS1850-136	8.5	0.362-0.367	0.137-0.147	0.379 ±0.002	7.738 ±0.004	8.499 +0/-0.007	8.500 ±0.002
PS1850-144	9	0.362-0.367	0.195-0.210	0.379 ±0.002	8.122 ±0.004	8.999 +0/-0.008	9.000 ±0.002
PS1850-152	9.5	0.362-0.367	0.195-0.210	0.379 ±0.002	8.622 ±0.004	9.499 +0/-0.008	9.500 ±0.002
PS1850-160	10	0.362-0.367	0.195-0.210	0.379 ±0.002	9.122 ±0.004	9.999 +0/-0.008	10.000 ±0.002
PS1850-176	11	0.362-0.367	0.195-0.210	0.379 ±0.002	10.122 ±0.004	10.999 +0/-0.008	11.000 ±0.002
PS1850-192	12	0.362-0.367	0.195-0.210	0.379 ±0.002	11.122 ±0.004	11.999 +0/-0.008	12.000 ±0.002
PS1850-208	13	0.362-0.367	0.195-0.210	0.379 ±0.002	12.122 ±0.004	12.999 +0/-0.008	13.000 ±0.002
PS1850-224	14	0.362-0.367	0.195-0.210	0.379 ±0.002	13.122 ±0.004	13.999 +0/-0.008	14.000 ±0.002

# STYLE PS2470 BRONZE FILED PTFE PISTON SEALS



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

## HERCULES PART NUMBERS

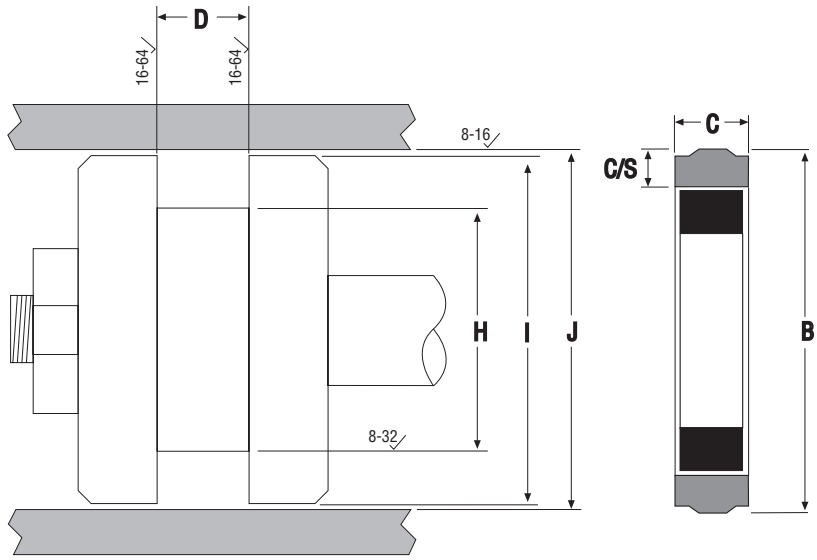
**PS 2472 - 32**

Piston Seal      Type of Seal      Size

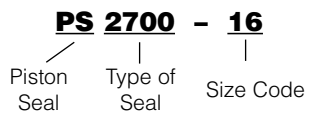
PART NUMBER	B NOM. O.D.	C SEAL HT.	C/S SEAL CROSS SECTION	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
PS2472-32	2	0.150	0.100	0.168 ±0.002	1.576 ±0.002	1.998 +0/-0.002	2.000 +0.002/-0
PS2472-40	2 1/2	0.150	0.100	0.168 ±0.002	2.076 ±0.002	2.498 +0/-0.002	2.500 +0.003/-0
PS2472-44	2 3/4	0.150	0.100	0.168 ±0.002	2.326 ±0.002	2.748 +0/-0.002	2.750 +0.003/-0
PS2472-48	3	0.150	0.100	0.168 ±0.002	2.576 ±0.002	2.998 +0/-0.002	3.000 +0.003/-0
PS2473-48.04	3.040	0.235	0.120	0.249 ±0.002	2.464 ±0.003	3.038 +0/-0.002	3.040 +0.004/-0
PS2473-52	3 1/4	0.225	0.140	0.249 ±0.002	2.634 ±0.003	3.248 +0/-0.002	3.250 +0.004/-0
PS2473-56	3 1/2	0.225	0.140	0.249 ±0.002	2.884 ±0.003	3.498 +0/-0.002	3.500 +0.004/-0
PS2473-60	3 3/4	0.225	0.145	0.249 ±0.002	3.134 ±0.003	3.748 +0/-0.002	3.750 +0.004/-0
PS2473-64	4	0.225	0.140	0.249 ±0.002	3.384 ±0.003	3.998 +0/-0.002	4.000 +0.004/-0
PS2473-68	4 1/4	0.225	0.145	0.249 ±0.002	3.634 ±0.003	4.248 +0/-0.002	4.250 +0.004/-0
PS2473-72	4 1/2	0.225	0.140	0.249 ±0.002	3.884 ±0.003	4.498 +0/-0.002	4.500 +0.004/-0
PS2473-80	5	0.225	0.140	0.249 ±0.002	4.384 ±0.003	4.998 +0/-0.002	5.000 +0.004/-0
PS2474-88	5 1/2	0.290	0.195	0.322 ±0.002	4.670 ±0.004	5.498 +0/-0.002	5.500 +0.004/-0
PS2474-96	6	0.290	0.195	0.322 ±0.002	5.170 ±0.004	5.998 +0/-0.002	6.000 +0.004/-0
PS2474-104	6 1/2	0.290	0.195	0.322 ±0.002	5.670 ±0.004	6.498 +0/-0.002	6.500 +0.004/-0
PS2474-112	7	0.290	0.195	0.322 ±0.002	6.170 ±0.004	6.998 +0/-0.002	7.000 +0.004/-0
PS2474-120	7 1/2	0.290	0.195	0.322 ±0.002	6.670 ±0.004	7.498 +0/-0.002	7.500 +0.004/-0
PS2474-128	8	0.290	0.195	0.322 ±0.002	7.170 ±0.004	7.998 +0/-0.003	8.000 +0.005/-0
PS2474-144	9	0.290	0.195	0.322 ±0.002	8.170 ±0.004	8.998 +0/-0.003	9.000 +0.005/-0
PS2474-152	9 1/2	0.290	0.195	0.322 ±0.002	8.670 ±0.004	9.498 +0/-0.003	9.500 +0.005/-0
PS2474-160	10	0.290	0.195	0.322 ±0.002	9.170 ±0.004	9.998 +0/-0.003	10.000 +0.005/-0

# STYLE PS2700 PISTON SEALS

This seal, molded from high grade polyesters with 5% glass fiber and 5% PTFE, is totally interchangeable with the Style PS1800 seals. 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.



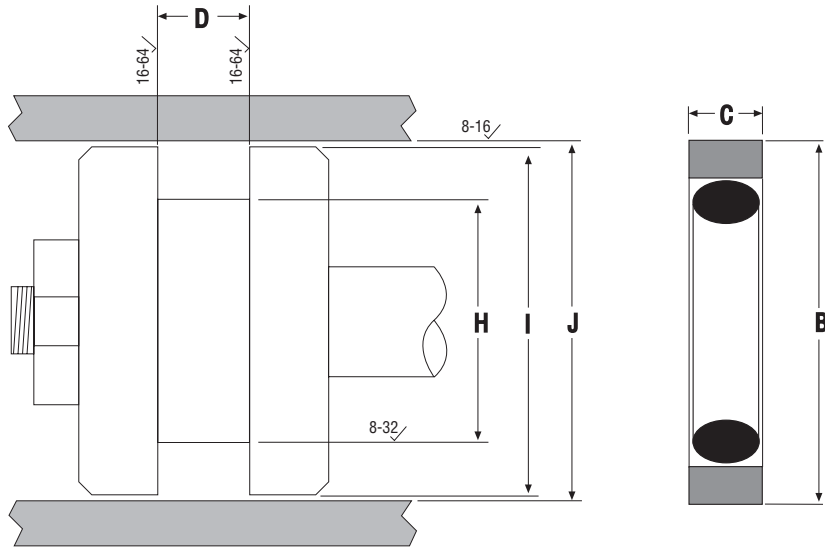
### HERCULES PART NUMBERS



SEAL INFORMATION	
MATERIAL	GLASS/PTFE FILLED POLYESTER SEAL 70A NITRILE ENERGIZER
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI

PART NUMBER	B NOM. O.D.	C HT.	C/S SEAL CROSS SECTION	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
PS2700-16	1	0.116-0.121	0.067-0.073	0.129 ±0.002	0.690 ±0.004	0.999 +0/-0.009	1.000 ±0.002
PS2700-20	1.25	0.116-0.121	0.067-0.073	0.129 ±0.002	0.940 ±0.004	1.249 +0/-0.009	1.250 ±0.002
PS2700-24	1.5	0.116-0.121	0.067-0.073	0.129 ±0.002	1.190 ±0.004	1.499 +0/-0.009	1.500 ±0.002
PS2700-28	1.75	0.116-0.121	0.067-0.073	0.129 ±0.002	1.440 ±0.004	1.749 +0/-0.009	1.750 ±0.002
PS2700-32	2	0.116-0.121	0.067-0.073	0.129 ±0.002	1.690 ±0.004	1.999 +0/-0.009	2.000 ±0.002
PS2700-36	2.25	0.116-0.121	0.067-0.073	0.129 ±0.002	1.940 ±0.004	2.249 +0/-0.009	2.250 ±0.002
PS2700-40	2.5	0.116-0.121	0.067-0.073	0.129 ±0.002	2.190 ±0.004	2.499 +0/-0.009	2.500 ±0.002
PS2700-44	2.75	0.116-0.121	0.067-0.073	0.129 ±0.002	2.440 ±0.004	2.749 +0/-0.009	2.750 ±0.002
PS2700-48	3	0.269-0.274	0.087-0.093	0.284 ±0.002	2.440 ±0.004	2.999 +0/-0.014	3.000 ±0.002
PS2700-52	3.25	0.269-0.274	0.087-0.093	0.284 ±0.002	2.690 ±0.004	3.249 +0/-0.014	3.250 ±0.002
PS2700-56	3.5	0.269-0.274	0.087-0.093	0.284 ±0.002	2.940 ±0.004	3.499 +0/-0.014	3.500 ±0.002
PS2700-60	3.75	0.269-0.274	0.087-0.093	0.284 ±0.002	3.190 ±0.004	3.749 +0/-0.014	3.750 ±0.002
PS2700-64	4	0.269-0.274	0.087-0.093	0.284 ±0.002	3.440 ±0.004	3.999 +0/-0.014	4.000 ±0.002
PS2700-68	4.25	0.269-0.274	0.087-0.093	0.284 ±0.002	3.690 ±0.004	4.249 +0/-0.014	4.250 ±0.002
PS2700-72	4.5	0.269-0.274	0.087-0.093	0.284 ±0.002	3.940 ±0.004	4.499 +0/-0.014	4.500 ±0.002
PS2700-76	4.75	0.269-0.274	0.087-0.093	0.284 ±0.002	4.190 ±0.004	4.749 +0/-0.014	4.750 ±0.002
PS2700-80	5	0.269-0.274	0.087-0.093	0.284 ±0.002	4.440 ±0.004	4.999 +0/-0.014	5.000 ±0.002
PS2700-84	5.25	0.362-0.367	0.137-0.147	0.379 ±0.002	4.488 ±0.004	5.249 +0/-0.014	5.250 ±0.002
PS2700-88	5.5	0.362-0.367	0.137-0.147	0.379 ±0.002	4.738 ±0.004	5.499 +0/-0.014	5.500 ±0.002
PS2700-96	6	0.362-0.367	0.137-0.147	0.379 ±0.002	5.238 ±0.004	5.999 +0/-0.014	6.000 ±0.002
PS2700-100	6.25	0.362-0.367	0.137-0.147	0.379 ±0.002	5.488 ±0.004	6.249 +0/-0.014	6.250 ±0.002
PS2700-104	6.5	0.362-0.367	0.137-0.147	0.379 ±0.002	5.738 ±0.004	6.499 +0/-0.014	6.500 ±0.002
PS2700-112	7	0.362-0.367	0.137-0.147	0.379 ±0.002	6.238 ±0.004	6.999 +0/-0.014	7.000 ±0.002
PS2700-116	7.25	0.362-0.367	0.137-0.147	0.379 ±0.002	6.488 ±0.004	7.249 +0/-0.014	7.250 ±0.002
PS2700-120	7.5	0.362-0.367	0.137-0.147	0.379 ±0.002	6.738 ±0.004	7.499 +0/-0.014	7.500 ±0.002
PS2700-128	8	0.362-0.367	0.137-0.147	0.379 ±0.002	7.238 ±0.004	7.999 +0/-0.014	8.000 ±0.002
PS2700-136	8.5	0.362-0.367	0.137-0.147	0.379 ±0.002	7.738 ±0.004	8.499 +0/-0.014	8.500 ±0.002
PS2700-144	9	0.362-0.367	0.137-0.147	0.379 ±0.002	8.122 ±0.004	8.999 +0/-0.014	9.000 ±0.002
PS2700-152	9.5	0.362-0.367	0.195-0.210	0.379 ±0.002	8.622 ±0.004	9.499 +0/-0.014	9.500 ±0.002
PS2700-160	10	0.362-0.367	0.195-0.210	0.379 ±0.002	9.122 ±0.004	9.999 +0/-0.014	10.000 ±0.002

# STYLE PS914 NYLON STEP CUT PISTON SEALS



## HERCULES PART NUMBERS

**PS 914 - 2000 - 282**

Piston Seal | Type of Seal | Bore Size | Groove Width

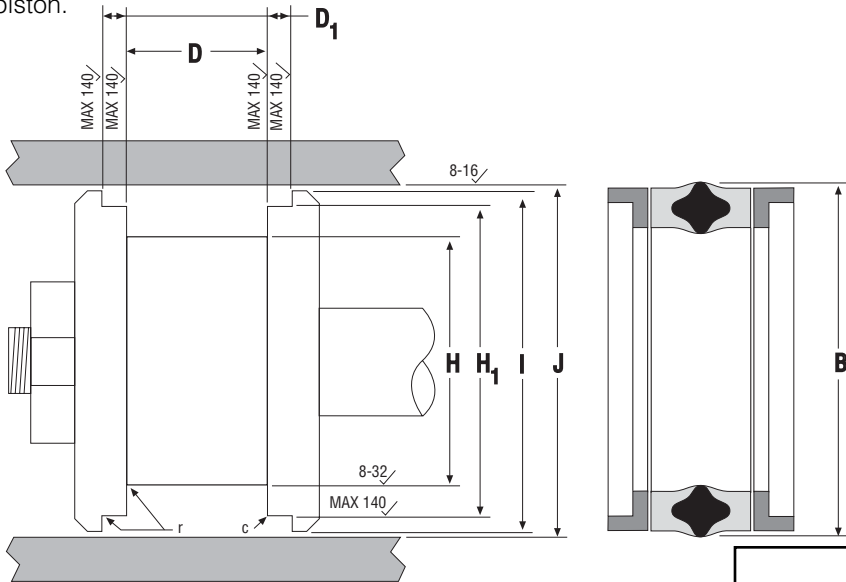
## SEAL INFORMATION

MATERIAL	GLASS FILLED NYLON SEAL 90A NITRILE ENERGIZER
TEMPERATURE RANGE	-40° TO +275° F
PRESSURE RANGE	0 TO 5,000 PSI

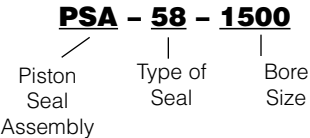
PART NUMBER	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
PS914-2000-282	2	0.274	0.282 +0.005/-0	1.462 +0/-0.005	1.999 +0/-0.065	2.000 +0.005/-0
PS914-2500-282	2.5	0.274	0.282 +0.005/-0	1.962 +0/-0.005	2.499 +0/-0.065	2.500 +0.005/-0
PS914-2500-312	2.5	0.306	0.312 +0.005/-0	1.908 +0/-0.005	2.499 +0/-0.065	2.500 +0.005/-0
PS914-3000-282	3	0.274	0.282 +0.005/-0	2.442 +0/-0.005	2.999 +0/-0.080	3.000 +0.005/-0
PS914-3000-312	3	0.306	0.312 +0.005/-0	2.408 +0/-0.005	2.999 +0/-0.080	3.000 +0.005/-0
PS914-3500-282	3.5	0.274	0.282 +0.005/-0	2.942 +0/-0.005	3.499 +0/-0.080	3.500 +0.005/-0
PS914-3500-312	3.5	0.306	0.312 +0.005/-0	2.908 +0/-0.005	3.499 +0/-0.080	3.500 +0.005/-0
PS914-4000-282	4	0.274	0.282 +0.005/-0	3.442 +0/-0.005	3.999 +0/-0.080	4.000 +0.005/-0
PS914-4000-312	4	0.306	0.312 +0.005/-0	3.408 +0/-0.005	3.999 +0/-0.080	4.000 +0.005/-0
PS914-4500-282	4.5	0.274	0.282 +0.005/-0	3.942 +0/-0.005	4.499 +0/-0.080	4.500 +0.005/-0
PS914-4500-312	4.5	0.306	0.312 +0.005/-0	3.908 +0/-0.005	4.499 +0/-0.080	4.500 +0.005/-0
PS914-5000-282	5	0.274	0.282 +0.005/-0	4.442 +0/-0.005	4.999 +0/-0.080	5.000 +0.005/-0
PS914-5000-375	5	0.370	0.377 +0.005/-0	4.240 +0/-0.005	4.999 +0/-0.080	5.000 +0.005/-0
PS914-5500-375	5.5	0.370	0.377 +0.005/-0	4.740 +0/-0.005	5.499 +0/-0.100	5.500 +0.005/-0
PS914-6000-375	6	0.370	0.377 +0.005/-0	5.240 +0/-0.005	5.999 +0/-0.100	6.000 +0.005/-0
PS914-6500-375	6.5	0.370	0.377 +0.005/-0	5.740 +0/-0.005	6.499 +0/-0.100	6.500 +0.005/-0
PS914-7000-375	7	0.370	0.377 +0.005/-0	6.240 +0/-0.005	6.999 +0/-0.100	7.000 +0.005/-0
PS914-7500-375	7.5	0.370	0.377 +0.005/-0	6.740 +0/-0.005	7.499 +0/-0.100	7.500 +0.005/-0
PS914-8000-375	8	0.370	0.377 +0.005/-0	7.240 +0/-0.005	7.999 +0/-0.100	8.000 +0.005/-0
PS914-8500-375	8.5	0.370	0.377 +0.005/-0	7.740 +0/-0.005	8.499 +0/-0.100	8.500 +0.005/-0
PS914-9000-375	9	0.370	0.377 +0.005/-0	8.124 +0/-0.005	8.999 +0/-0.110	9.000 +0.005/-0
PS914-9500-375	9.5	0.370	0.377 +0.005/-0	8.624 +0/-0.005	9.499 +0/-0.110	9.500 +0.005/-0
PS914-10000-375	10	0.370	0.377 +0.005/-0	9.124 +0/-0.005	9.999 +0/-0.110	10.000 +0.005/-0

# STYLE PSA-58 PISTON SEALS

Style PSA-58 piston seals combine a heavy duty, fabric reinforced seal with two polyacetal "L" bearings. This allows the seal to withstand the pressures up to 10,000 PSI. The "L" bearings react to pressure and prevent extrusion while supporting the piston.



### HERCULES PART NUMBERS



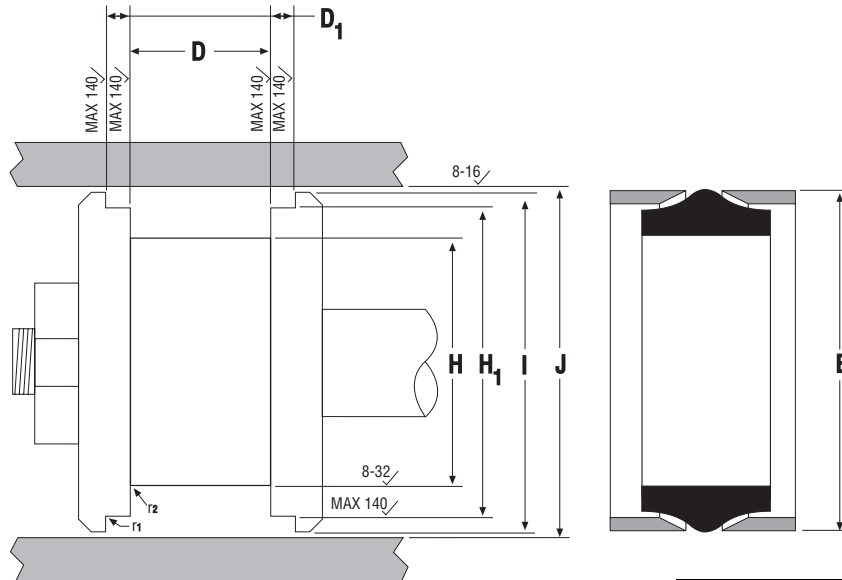
CHAMFER INFORMATION		
BORE DIAMETER	MIN CHAMFER "c"	MAX RADIUS "r"
1.5 - 2.5	0.032X45°	0.008
2.75 - 4.0	0.062X45°	0.008
4.5 - 10.0	0.062X45°	0.016

SEAL INFORMATION	
MATERIAL	FABRIC REINFORCED NITRILE SEAL POLYACETAL BEARING RING
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 10,000 PSI
MAXIMUM SPEED	90 FPM

PART NUMBER	B NOM. O.D.	D SEAL GROOVE WIDTH	D1 BEARING GROOVE WIDTH	H SEAL GROOVE DIA.	H1 BEARING GROOVE DIA.	I PISTON DIA.	J BORE DIA.
PSA-58-1500	1.5	0.750 +0.035/+0.025	0.250 +0/-0.005	1.000 ±0.003	1.371 +0/-0.002	1.468 ±0.003	1.500 +0.006/-0
PSA-58-1750	1.75	0.937 +0.035/+0.025	0.250 +0/-0.005	1.125 ±0.003	1.555 +0/-0.002	1.687 ±0.003	1.750 +0.006/-0
PSA-58-2000	2	0.937 +0.035/+0.025	0.250 +0/-0.005	1.375 ±0.003	1.805 +0/-0.002	1.937 ±0.004	2.000 +0.007/-0
PSA-58-2000A	2	0.750 +0.035/+0.025	0.254 +0/-0.005	1.375 ±0.003	1.822 +0/-0.002	1.962 ±0.004	2.000 +0.007/-0
PSA-58-2250	2.25	0.937 +0.035/+0.025	0.250 +0/-0.005	1.625 ±0.003	2.055 +0/-0.003	2.187 ±0.004	2.250 +0.007/-0
PSA-58-2500	2.5	0.937 +0.035/+0.025	0.250 +0/-0.005	1.875 ±0.003	2.305 +0/-0.003	2.437 ±0.004	2.500 +0.007/-0
PSA-58-2500A	2.5	0.750 +0.035/+0.025	0.254 +0/-0.005	1.875 ±0.003	2.321 +0/-0.003	2.437 ±0.004	2.500 +0.007/-0
PSA-58-2750	2.75	1.187 +0.035/+0.025	0.250 +0/-0.005	2.000 ±0.004	2.485 +0/-0.003	2.687 ±0.004	2.750 +0.007/-0
PSA-58-3000	3	1.187 +0.035/+0.025	0.250 +0/-0.005	2.250 ±0.004	2.735 +0/-0.003	2.937 ±0.004	3.000 +0.007/-0
PSA-58-3250	3.25	1.187 +0.035/+0.025	0.250 +0/-0.005	2.500 ±0.004	2.985 +0/-0.003	3.187 ±0.004	3.250 +0.009/-0
PSA-58-3500	3.5	1.187 +0.035/+0.025	0.250 +0/-0.005	2.750 ±0.004	3.235 +0/-0.003	3.437 ±0.004	3.500 +0.009/-0
PSA-58-3750	3.75	1.187 +0.035/+0.025	0.250 +0/-0.005	3.000 ±0.004	3.485 +0/-0.003	3.687 ±0.004	3.750 +0.009/-0
PSA-58-4000	4	1.187 +0.035/+0.025	0.250 +0/-0.005	3.250 ±0.004	3.735 +0/-0.003	3.937 ±0.004	4.000 +0.009/-0
PSA-58-4500	4.5	1.500 +0.035/+0.025	0.375 +0/-0.005	3.500 ±0.004	4.234 +0/-0.003	4.437 ±0.005	4.500 +0.009/-0
PSA-58-4750	4.75	1.500 +0.035/+0.025	0.375 +0/-0.005	3.750 ±0.004	4.485 +0/-0.003	4.687 ±0.005	4.750 +0.010/-0
PSA-58-4750A	4.75	1.250 +0.035/+0.025	0.254 +0/-0.005	3.750 ±0.004	4.483 +0/-0.003	4.700 ±0.005	4.750 +0.010/-0
PSA-58-5000	5	1.500 +0.035/+0.025	0.375 +0/-0.005	4.000 ±0.004	4.735 +0/-0.004	4.937 ±0.005	5.000 +0.010/-0
PSA-58-5500	5.5	1.500 +0.035/+0.025	0.375 +0/-0.005	4.500 ±0.004	5.236 +0/-0.004	5.437 ±0.005	5.500 +0.010/-0
PSA-58-5750	5.75	1.500 +0.035/+0.025	0.375 +0/-0.005	4.750 ±0.005	5.484 +0/-0.004	5.687 ±0.005	5.750 +0.010/-0
PSA-58-6000	6	1.500 +0.035/+0.025	0.375 +0/-0.005	5.000 ±0.005	5.736 +0/-0.004	5.937 ±0.005	6.000 +0.010/-0
PSA-58-6000A	6	1.250 +0.035/+0.025	0.254 +0/-0.005	5.000 ±0.005	5.728 +0/-0.004	5.954 ±0.005	6.000 +0.010/-0
PSA-58-6500	6.5	1.500 +0.035/+0.025	0.375 +0/-0.005	5.500 ±0.005	6.236 +0/-0.004	6.437 ±0.005	6.500 +0.010/-0
PSA-58-7000	7	1.500 +0.035/+0.025	0.375 +0/-0.005	6.000 ±0.005	6.736 +0/-0.004	6.937 ±0.005	7.000 +0.010/-0
PSA-58-8000	8	1.250 +0.035/+0.025	0.375 +0/-0.005	7.000 ±0.005	7.740 +0/-0.005	7.937 ±0.006	8.000 +0.011/-0
PSA-58-10000	10	1.250 +0.035/+0.025	0.375 +0/-0.005	9.000 ±0.006	9.740 +0/-0.005	9.937 ±0.006	10.000 +0.013/-0

## 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 seal and two polyacetal bearings which support the piston and decreases seal extrusion.



### HERCULES PART NUMBERS

**PSA - 65 - 2000**

Piston Seal | Type of Seal | Bore Size

### GROOVE INFORMATION

BORE DIAMETER	MAX RADIUS	
	"r <sub>1</sub> "	"r <sub>2</sub> "
2.0 - 3.0	0.008	0.016
3.5 - 4.5	0.008	0.016
5.0 - 5.5	0.016	0.032
6.0 - 7.0	0.016	0.032

### SEAL INFORMATION

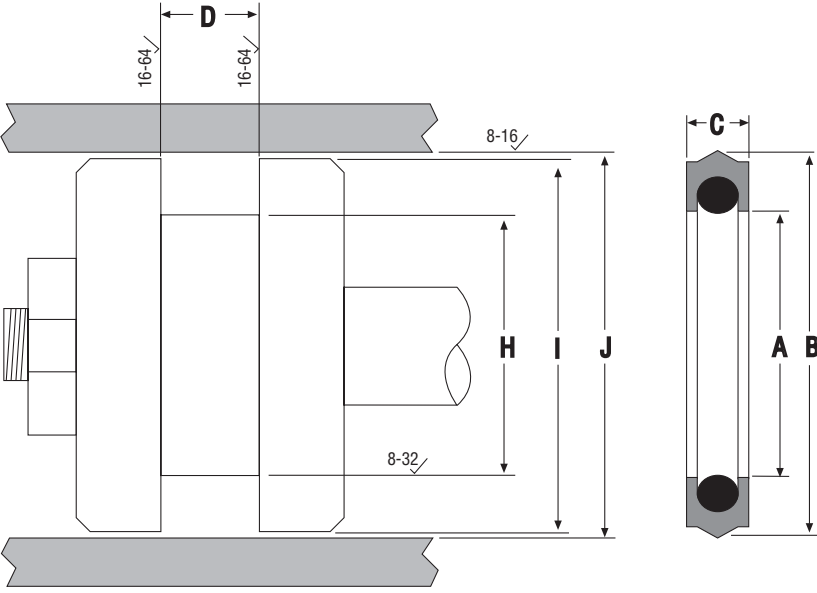
MATERIAL	NITRILE SEAL POLYACETAL ANTI-EXTRUSION RING
TEMPERATURE RANGE	-22° TO +212° F
PRESSURE RANGE	0 TO 3000 PSI
MAXIMUM SPEED	90 FPM

PART NUMBER	B NOM. O.D.	D SEAL GROOVE WIDTH	D1 BEARING GROOVE WIDTH	H SEAL GROOVE DIA.	H1 BEARING GROOVE DIA.	I PISTON DIA.	J BORE DIA.
PSA-65-2000	2	0.437 +0.015/+0.005	0.150 +0/-0.005	1.625 +0/-0.002	1.824 +0/-0.002	1.937 +0/-0.006	2.000 +0.005/-0
PSA-65-2500	2.5	0.437 +0.015/+0.005	0.150 +0/-0.005	2.125 +0/-0.003	2.325 +0/-0.003	2.437 +0/-0.007	2.500 +0.005/-0
PSA-65-3000	3	0.437 +0.015/+0.005	0.150 +0/-0.005	2.625 +0/-0.003	2.825 +0/-0.003	2.937 +0/-0.007	3.000 +0.005/-0
PSA-65-3500	3.5	0.562 +0.015/+0.005	0.210 +0/-0.005	3.000 +0/-0.003	3.270 +0/-0.003	3.437 +0/-0.009	3.500 +0.006/-0
PSA-65-4000	4	0.562 +0.015/+0.005	0.210 +0/-0.005	3.500 +0/-0.003	3.770 +0/-0.003	3.937 +0/-0.009	4.000 +0.006/-0
PSA-65-4500	4.5	0.562 +0.015/+0.005	0.210 +0/-0.005	4.000 +0/-0.003	4.270 +0/-0.003	4.437 +0/-0.009	4.500 +0.006/-0
PSA-65-5000	5	0.687 +0.015/+0.005	0.344 +0/-0.005	4.375 +0/-0.003	4.689 +0/-0.003	4.937 +0/-0.010	5.000 +0.006/-0
PSA-65-5500	5.5	0.687 +0.015/+0.005	0.344 +0/-0.005	4.875 +0/-0.004	5.188 +0/-0.004	5.437 +0/-0.010	5.500 +0.006/-0
PSA-65-6000	6	1.000 +0.015/+0.005	0.500 +0/-0.005	5.250 +0/-0.004	5.712 +0/-0.004	5.937 +0/-0.010	6.000 +0.006/-0
PSA-65-7000	7	1.000 +0.015/+0.005	0.500 +0/-0.005	6.250 +0/-0.004	6.712 +0/-0.004	6.937 +0/-0.010	7.000 +0.006/-0

# STYLE PSC PISTON SEALS

The Hercules 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). Hercules 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 Urethane giving it high extrusion and abrasion resistance. The crowned sealing surface produces a positive seal from vacuum to high pressure.

Hercules also offers a wide base (WB) style PSC piston seal. Similar to standard PSC design, wide base PSC seals, eliminate the need to use back-up rings to accommodate wider grooves. The groove width for a wide base PSC seal is equivalent to the groove for an o-ring and two back-up rings.



### HERCULES PART NUMBERS

**PSC - 218 - WB**  
 |  
 Type of Seal      O-Ring Size      Wide Base

SEAL INFORMATION	
MATERIAL	95A URETHANE SEAL 70 A NITRILE ENERGIZER
TEMPERATURE RANGE	-65° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
PSC-212	7/8	1-1/8	1/8	0.185 +.005/-0	0.879 +0/-0.002	1.123 +0/-0.002	1.125 +.002/-0
PSC-216	1-1/8	1-3/8	1/8	0.185 +.010/-0	1.129 +0/-0.002	1.373 +0/-0.002	1.375 +.002/-0
PSC-218	1-1/4	1-1/2	1/8	0.185 +.005/-0	1.254 +0/-0.002	1.498 +0/-0.002	1.500 +.002/-0
PSC-218-WB	1-1/4	1-1/2	1/4	0.296 +.005/-0	1.254 +0/-0.002	1.498 +0/-0.002	1.500 +.002/-0
PSC-222	1-1/2	1-3/4	1/8	0.185 +.005/-0	1.504 +0/-0.002	1.748 +0/-0.002	1.750 +.002/-0
PSC-222-WB	1-1/2	1-3/4	1/4	0.296 +.005/-0	1.504 +0/-0.002	1.748 +0/-0.002	1.750 +.002/-0
PSC-325	1-1/2	1-7/8	3/16	0.280 +.005/-0	1.500 +0/-0.002	1.873 +0/-0.002	1.875 +.002/-0
PSC-326	1-5/8	2	3/16	0.280 +.005/-0	1.625 +0/-0.002	1.998 +0/-0.002	2.000 +.002/-0
PSC-326-WB	1-5/8	2	3/8	0.423 +.005/-0	1.625 +0/-0.002	1.998 +0/-0.002	2.000 +.002/-0
PSC-328	1-7/8	2-1/4	3/16	0.280 +.005/-0	1.875 +0/-0.002	2.248 +0/-0.002	2.250 +.002/-0
PSC-329	2	2-3/8	3/16	0.280 +.005/-0	2.000 +0/-0.002	2.373 +0/-0.002	2.375 +.002/-0
PSC-330	2-1/8	2-1/2	3/16	0.280 +.005/-0	2.125 +0/-0.002	2.498 +0/-0.002	2.500 +.002/-0
PSC-330-WB	2-1/8	2-1/2	3/8	0.423 +.005/-0	2.125 +0/-0.002	2.498 +0/-0.002	2.500 +.002/-0
PSC-332	2-3/8	2-3/4	3/16	0.280 +.005/-0	2.374 +0/-0.004	2.747 +0/-0.004	2.749 +.004/-0
PSC-334	2-5/8	3	3/16	0.280 +.005/-0	2.624 +0/-0.004	2.997 +0/-0.004	2.999 +.004/-0
PSC-334-WB	2-5/8	3	3/8	0.423 +.005/-0	2.624 +0/-0.004	2.997 +0/-0.004	2.999 +.004/-0
PSC-336	2-7/8	3-1/4	3/16	0.280 +.005/-0	2.874 +0/-0.004	3.247 +0/-0.004	3.249 +.004/-0
PSC-337	3	3-3/8	3/16	0.280 +.005/-0	3.000 +0/-0.004	3.373 +0/-0.004	3.375 +.004/-0
PSC-338	3-1/8	3-1/2	3/16	0.280 +.005/-0	3.125 +0/-0.004	3.498 +0/-0.004	3.500 +.004/-0
PSC-338-WB	3-1/8	3-1/2	3/8	0.423 +.005/-0	3.125 +0/-0.004	3.498 +0/-0.004	3.500 +.004/-0
PSC-339	3-1/4	3-5/8	3/16	0.280 +.005/-0	3.250 +0/-0.004	3.623 +0/-0.004	3.625 +.004/-0
PSC-340	3-3/8	3-3/4	3/16	0.280 +.005/-0	3.375 +0/-0.004	3.748 +0/-0.004	3.750 +.004/-0
PSC-342	3-5/8	4	3/16	0.280 +.005/-0	3.625 +0/-0.004	3.998 +0/-0.004	4.000 +.004/-0
PSC-342-WB	3-5/8	4	3/8	0.423 +.005/-0	3.625 +0/-0.004	3.998 +0/-0.004	4.000 +.004/-0
PSC-344	3-7/8	4-1/4	3/16	0.280 +.005/-0	3.875 +0/-0.004	4.248 +0/-0.004	4.250 +.004/-0
PSC-346	4-1/8	4-1/2	3/16	0.280 +.005/-0	4.125 +0/-0.004	4.498 +0/-0.004	4.500 +.004/-0
PSC-347	4-1/4	4-5/8	3/16	0.280 +.005/-0	4.250 +0/-0.004	4.623 +0/-0.004	4.625 +.004/-0



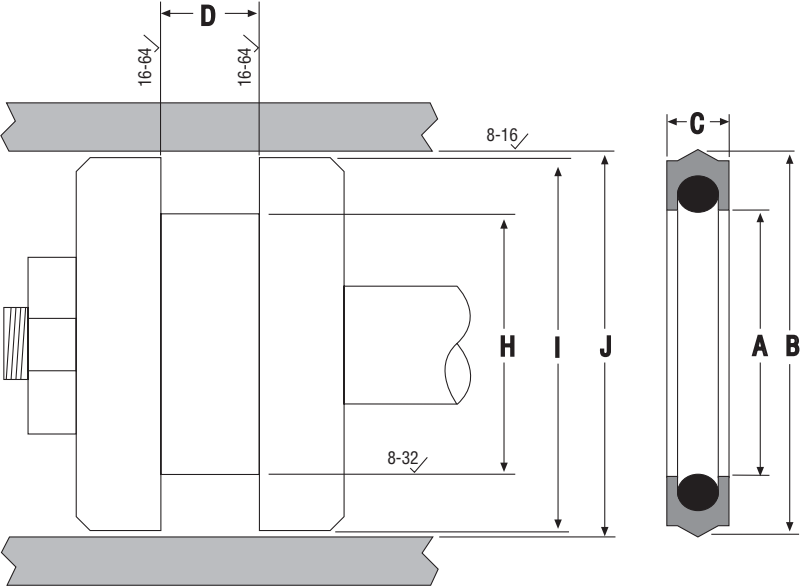
## STYLE PSC PISTON SEALS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
PSC-350	4-5/8	5	3/16	0.280 +.005/-0	4.626 +0/-0.004	4.999 +0/-0.004	5.001 +.004/-0
PSC-429	5	5-1/2	1/4	0.365 +.006/-0	5.021 +0/-0.004	4.499 +0/-0.004	5.501 +.004/-0
PSC-433	5-1/2	6	1/4	0.365 +.006/-0	5.521 +0/-0.004	5.999 +0/-0.004	6.001 +.004/-0
PSC-433-WB	5-1/2	6	1/2	0.574 +.006/-0	5.521 +0/-0.004	5.999 +0/-0.004	6.001 +.004/-0
PSC-437	6	6-1/2	1/4	0.365 +.006/-0	6.020 +0/-0.006	6.498 +0/-0.006	6.500 +.006/-0
PSC-439	6-1/2	7	1/4	0.365 +.006/-0	6.520 +0/-0.006	6.998 +0/-0.006	7.000 +.006/-0
PSC-440	6-3/4	7-1/4	1/4	0.365 +.006/-0	6.770 +0/-0.006	7.248 +0/-0.006	7.250 +.006/-0
PSC-441	7	7-1/2	1/4	0.365 +.006/-0	7.020 +0/-0.006	7.498 +0/-0.006	7.500 +.006/-0
PSC-442	7-1/4	7-3/4	1/4	0.365 +.006/-0	7.270 +0/-0.006	7.748 +0/-0.006	7.750 +.006/-0
PSC-443	7-1/2	8	1/4	0.365 +.006/-0	7.520 +0/-0.006	7.998 +0/-0.006	8.000 +.006/-0
PSC-444	7-3/4	8-1/4	1/4	0.365 +.006/-0	7.770 +0/-0.006	8.248 +0/-0.006	8.250 +.006/-0
PSC-445	8	8-1/2	1/4	0.365 +.006/-0	8.020 +0/-0.006	8.498 +0/-0.006	8.500 +.006/-0
PSC-446	8-1/2	9	1/4	0.365 +.006/-0	8.520 +0/-0.006	8.998 +0/-0.006	9.000 +.006/-0
PSC-447	9	9-1/2	1/4	0.365 +.006/-0	9.020 +0/-0.006	9.498 +0/-0.006	9.500 +.006/-0
PSC-448	9-1/2	10	1/4	0.365 +.006/-0	9.520 +0/-0.006	9.998 +0/-0.006	10.000 +.006/-0
PSC-449	10	10-1/2	1/4	0.365 +.006/-0	10.020 +0/-0.006	10.498 +0/-0.006	10.500 +.006/-0
PSC-450	10-1/2	11	1/4	0.365 +.006/-0	10.520 +0/-0.006	10.998 +0/-0.006	11.000 +.006/-0
PSC-451	11	11-1/2	1/4	0.365 +.006/-0	11.020 +0/-0.006	11.498 +0/-0.006	11.500 +.006/-0
PSC-452	11-1/2	12	1/4	0.365 +.006/-0	11.520 +0/-0.006	11.998 +0/-0.006	12.000 +.006/-0
PSC-453	12	12-1/2	1/4	0.365 +.006/-0	12.020 +0/-0.006	12.498 +0/-0.006	12.500 +.006/-0
PSC-454	12-1/2	13	1/4	0.365 +.006/-0	12.520 +0/-0.006	12.998 +0/-0.006	13.000 +.006/-0
PSC-456	13-1/2	14	1/4	0.365 +.006/-0	13.520 +0/-0.006	13.998 +0/-0.006	14.000 +.006/-0

# 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 oil. Consult Hercules 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	-65° TO +275° F
PRESSURE RANGE	0 TO 5,000 PSI

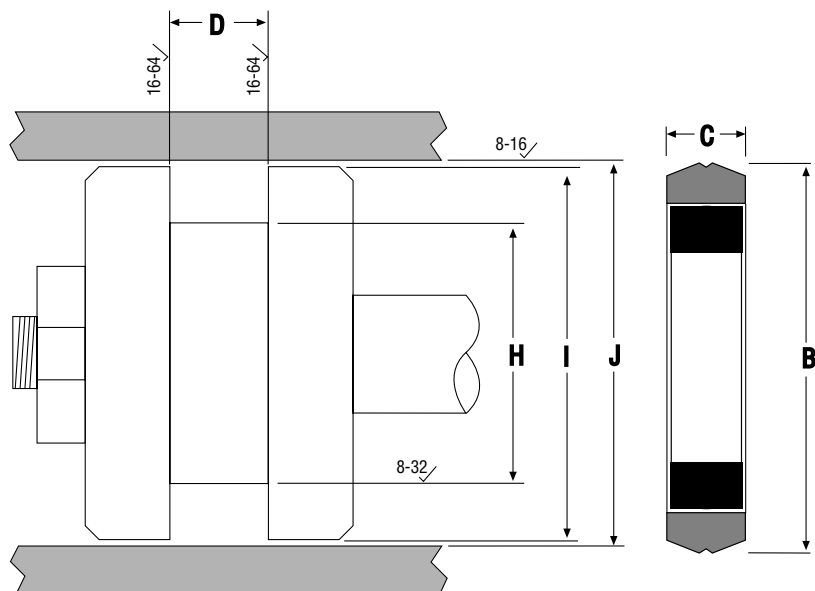
### HERCULES PART NUMBERS



PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
PSC-218F	1-1/4	1-1/2	1/8	0.185 +.005/-0	1.254 +0/-0.002	1.498 +0/-0.002	1.500 +.002/-0
PSC-222F	1-1/2	1-3/4	1/8	0.185 +.005/-0	1.504 +0/-0.002	1.748 +0/-0.002	1.750 +.002/-0
PSC-326F	1-5/8	2	1/4	0.280 +.005/-0	1.625 +0/-0.002	1.998 +0/-0.002	2.000 +.002/-0
PSC-328F	1-7/8	2-1/4	1/4	0.280 +.005/-0	1.875 +0/-0.002	2.248 +0/-0.002	2.250 +.002/-0
PSC-330F	2-1/8	2-1/2	1/4	0.280 +.005/-0	2.125 +0/-0.002	2.498 +0/-0.002	2.500 +.002/-0
PSC-334F	2-5/8	3	1/4	0.280 +.005/-0	2.624 +0/-0.004	2.997 +0/-0.004	2.999 +.004/-0
PSC-338F	3-1/8	3-1/2	1/4	0.280 +.005/-0	3.125 +0/-0.004	3.498 +0/-0.004	3.500 +.004/-0
PSC-340F	3-3/8	3-3/4	1/4	0.280 +.005/-0	3.375 +0/-0.004	3.748 +0/-0.004	3.750 +.004/-0
PSC-342F	3-5/8	4	1/4	0.280 +.005/-0	3.625 +0/-0.004	3.998 +0/-0.004	4.000 +.004/-0
PSC-350F	4-5/8	5	1/4	0.280 +.005/-0	4.626 +0/-0.004	4.999 +0/-0.004	5.000 +.004/-0
PSC-433F	5-1/2	6	3/8	0.365 +.006/-0	5.521 +0/-0.004	5.999 +0/-0.004	6.000 +.004/-0

## STYLE PSM 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 applications involving wider grooves. Extrusion resistant by design, this seal is also resistant to rolling and twisting. Installation is an easy two step procedure with no need to re-size the seal ring before insertion into the bore.



### HERCULES PART NUMBERS

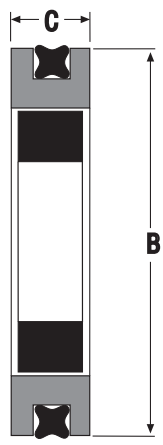
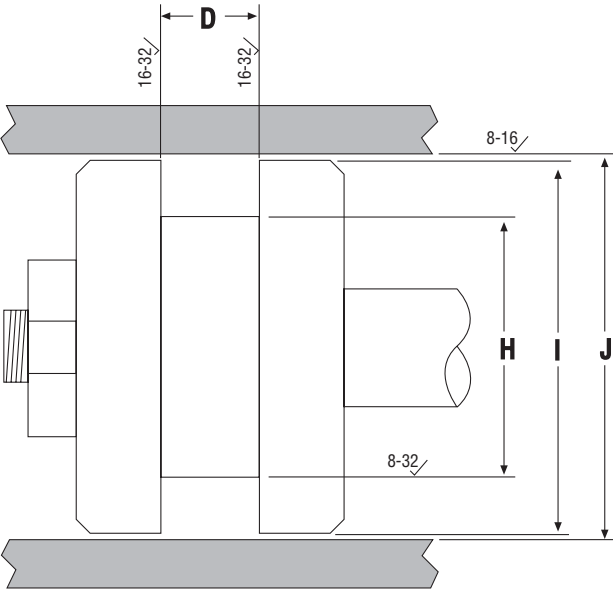
**PSM - 222**  
 PSM — Piston Seal  
 222 — O-ring Size

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

PART NUMBER	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
PSM-222	1.750	0.165	0.185 ±0.002	1.500 ±0.002	1.749 +0/-0.006	1.750 ±0.001
PSM-326	2.000	0.265	0.280 ±0.002	1.625 ±0.002	1.999 +0/-0.006	2.000 ±0.001
PSM-328	2.250	0.265	0.280 ±0.002	1.875 ±0.002	2.249 +0/-0.006	2.250 ±0.001
PSM-329	2.375	0.265	0.280 ±0.002	2.000 ±0.002	2.374 +0/-0.006	2.375 ±0.001
PSM-330	2.500	0.265	0.280 ±0.002	2.125 ±0.002	2.499 +0/-0.006	2.500 ±0.001
PSM-332	2.750	0.265	0.280 ±0.002	2.375 ±0.002	2.749 +0/-0.006	2.750 ±0.001
PSM-334	3.000	0.265	0.280 ±0.002	2.625 ±0.002	2.999 +0/-0.006	3.000 ±0.001
PSM-336	3.250	0.265	0.280 ±0.002	2.875 ±0.002	3.249 +0/-0.006	3.250 ±0.001
PSM-338	3.500	0.265	0.280 ±0.002	3.125 ±0.002	3.499 +0/-0.006	3.500 ±0.001
PSM-340	3.750	0.265	0.280 ±0.002	3.375 ±0.002	3.749 +0/-0.006	3.750 ±0.001
PSM-342	4.000	0.265	0.280 ±0.002	3.625 ±0.002	3.999 +0/-0.006	4.000 ±0.001
PSM-344	4.250	0.265	0.280 ±0.002	3.875 ±0.002	4.249 +0/-0.006	4.250 ±0.001
PSM-346	4.500	0.265	0.280 ±0.002	4.125 ±0.002	4.499 +0/-0.006	4.500 ±0.001
PSM-347	4.625	0.265	0.280 ±0.002	4.250 ±0.002	4.624 +0/-0.006	4.625 ±0.001
PSM-350	5.000	0.265	0.280 ±0.002	4.625 ±0.002	4.999 +0/-0.008	5.000 ±0.001
PSM-429	5.500	0.350	0.365 ±0.002	5.000 ±0.002	5.499 +0/-0.008	5.500 ±0.001
PSM-433	6.000	0.350	0.365 ±0.002	5.500 ±0.002	5.999 +0/-0.008	6.000 ±0.001
PSM-437	6.500	0.350	0.365 ±0.002	6.000 ±0.002	6.499 +0/-0.008	6.500 ±0.001
PSM-439	7.000	0.350	0.365 ±0.002	6.500 ±0.002	6.999 +0/-0.008	7.000 ±0.001
PSM-441	7.500	0.350	0.365 ±0.002	7.000 ±0.002	7.499 +0/-0.008	7.500 ±0.001
PSM-443	8.000	0.350	0.365 ±0.002	7.500 ±0.002	7.999 +0/-0.008	8.000 ±0.001
PSM-445	8.500	0.350	0.365 ±0.002	8.000 ±0.002	8.499 +0/-0.008	8.500 ±0.001
PSM-446	9.000	0.350	0.365 ±0.002	8.500 ±0.002	8.999 +0/-0.008	9.000 ±0.001

# STYLE PSQ BRONZE FILLED PISTON SEALS

The PSQ piston seal provides bi-directional, low friction sealing with increased stability and superior leakage control. The square cut energizer and Quad Ring® provide low pressure sealing and eliminate leakage. This seal also effectively seals between different fluids on each side of the piston seal, making gas/liquid combinations possible.



### HERCULES PART NUMBERS

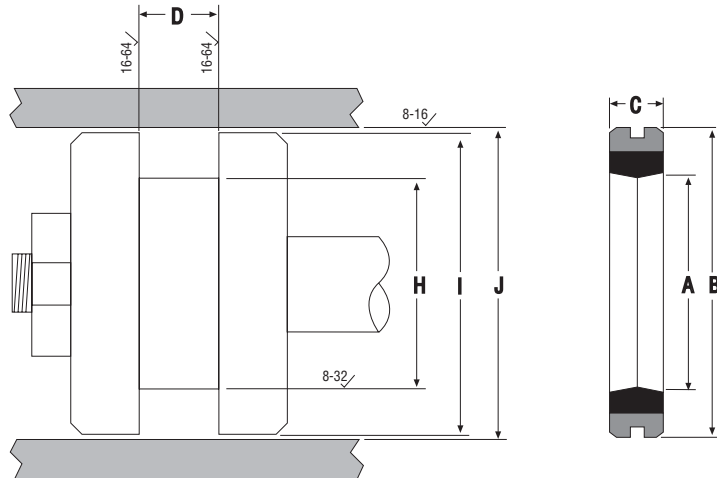
**PSQ - 32**  
 PSQ: Piston Seal Style  
 32: Size Code

SEAL INFORMATION	
MATERIAL	40% BRONZE FILLED PTFE SEAL NITRILE ENERGIZER AND QUAD RING®
TEMPERATURE RANGE	-40° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI

PART NUMBER	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
PSQ-24	1.5	0.271	.288/.293	.884 +0/-0.006	1.499 +0/-0.008	1.500 +0.004/-0
PSQ-32	2	0.271	.288/.293	1.384 +0/-0.006	1.999 +0/-0.008	2.000 +0.004/-0
PSQ-40	2.5	0.271	.288/.293	1.884 +0/-0.006	2.499 +0/-0.008	2.500 +0.004/-0
PSQ-48	3	0.271	.288/.293	2.384 +0/-0.006	2.999 +0/-0.008	3.000 +0.004/-0
PSQ-52	3.25	0.271	.288/.293	2.634 +0/-0.006	3.249 +0/-0.008	3.250 +0.004/-0
PSQ-56	3.5	0.271	.288/.293	2.884 +0/-0.006	3.499 +0/-0.008	3.500 +0.004/-0
PSQ-64	4	0.271	.288/.293	3.384 +0/-0.006	3.999 +0/-0.008	4.000 +0.004/-0
PSQ-72	4.5	0.271	.288/.293	3.884 +0/-0.006	4.499 +0/-0.008	4.500 +0.004/-0
PSQ-80	5	0.271	.288/.293	4.384 +0/-0.006	4.999 +0/-0.008	5.000 +0.004/-0
PSQ-88	5.5	0.352	.375/.380	4.660 +0/-0.007	5.499 +0/-0.009	5.500 +0.005/-0
PSQ-96	6	0.352	.375/.380	5.160 +0/-0.007	5.999 +0/-0.009	6.000 +0.005/-0
PSQ-104	6.5	0.352	.375/.380	5.660 +0/-0.007	6.499 +0/-0.009	6.500 +0.005/-0
PSQ-112	7	0.352	.375/.380	6.170 +0/-0.009	6.999 +0/-0.009	7.000 +0.005/-0
PSQ-128	8	0.352	.375/.380	7.170 +0/-0.009	7.999 +0/-0.009	8.000 +0.006/-0

## STYLE PSU PISTON SEALS

The Piston Uniring is a laminated one-piece double-acting seal made of cast polyurethane. The tough outer part is highly resistant to abrasion and is impregnated with molybdenum disulfide to reduce friction. The softer inner part acts as a static seal and also energizes the O.D. to make full contact with the bore. The PSU 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.



### HERCULES PART NUMBERS

**PSU - 1.50 X 1.00 X .375**

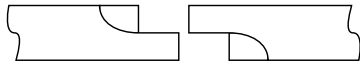
Type of Seal      Outside Diameter      Inside Diameter      Seal Width

### SEAL INFORMATION

MATERIAL	60D & 57A URETHANE COMPOSITE
TEMPERATURE RANGE	-65° TO +220° F
PRESSURE RANGE	0 TO 5,000 PSI

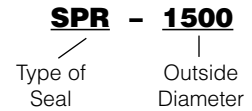
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
PSU-1.50X1.00X.375	1	1-1/2	3/8	0.394 +0.015/-0	1.000 +0.006/-0	1.499 +0/-0.004	1.500 +0.006/-0
PSU-1.50X1.12X.250	1-1/8	1-1/2	1/4	0.263 +0.015/-0	1.125 +0.004/-0	1.499 +0/-0.004	1.500 +0.004/-0
PSU-1.50X1.25X.187	1-1/4	1-1/2	3/16	0.196 +0.015/-0	1.250 +0.003/-0	1.499 +0/-0.004	1.500 +0.003/-0
PSU-1.75X1.25X.375	1-1/4	1-3/4	3/8	0.394 +0.015/-0	1.250 +0.006/-0	1.749 +0/-0.004	1.750 +0.006/-0
PSU-1.75X1.37X.250	1-3/8	1-3/4	1/4	0.263 +0.015/-0	1.375 +0.004/-0	1.749 +0/-0.004	1.750 +0.004/-0
PSU-1.75X1.37X.500	1-3/8	1-3/4	1/2	0.526 +0.015/-0	1.375 +0.004/-0	1.749 +0/-0.004	1.750 +0.004/-0
PSU-2.00X1.50X.375	1-1/2	2	3/8	0.394 +0.015/-0	1.500 +0.006/-0	1.999 +0/-0.004	2.000 +0.006/-0
PSU-2.00X1.62X.312	1-5/8	2	5/16	0.328 +0.015/-0	1.625 +0.004/-0	1.999 +0/-0.004	2.000 +0.004/-0
PSU-2.00X1.62X.375	1-5/8	2	3/8	0.394 +0.015/-0	1.625 +0.004/-0	1.999 +0/-0.004	2.000 +0.004/-0
PSU-2.25X1.87X.312	1-7/8	2-1/4	5/16	0.328 +0.015/-0	1.875 +0.004/-0	2.249 +0/-0.004	2.250 +0.004/-0
PSU-2.50X2.00X.375	2	2-1/2	3/8	0.394 +0.015/-0	2.000 +0.004/-0	2.499 +0/-0.004	2.500 +0.004/-0
PSU-2.50X2.12X.312	2-1/8	2-1/2	5/16	0.328 +0.015/-0	2.125 +0.004/-0	2.499 +0/-0.004	2.500 +0.004/-0
PSU-2.50X2.12X.375	2-1/8	2-1/2	3/8	0.394 +0.015/-0	2.125 +0.004/-0	2.499 +0/-0.004	2.500 +0.004/-0
PSU-3.00X2.50X.375	2-1/2	3	3/8	0.394 +0.015/-0	2.500 +0.006/-0	2.999 +0/-0.004	3.000 +0.006/-0
PSU-3.00X2.50X.500	2-1/2	3	1/2	0.550 +0.015/-0	2.500 +0.004/-0	2.999 +0/-0.004	3.000 +0.006/-0
PSU-3.00X2.62X.312	2-5/8	3	5/16	0.328 +0.015/-0	2.625 +0.004/-0	2.999 +0/-0.004	3.000 +0.004/-0
PSU-3.00X2.62X.375	2-5/8	3	3/8	0.394 +0.015/-0	2.625 +0.004/-0	2.999 +0/-0.004	3.000 +0.004/-0
PSU-3.25X2.75X.550	2-3/4	3-1/4	.55	0.577 +0.015/-0	2.750 +0.004/-0	3.249 +0/-0.004	3.250 +0.004/-0
PSU-3.25X2.87X.312	2-7/8	3-1/4	5/16	0.328 +0.015/-0	2.875 +0.004/-0	3.249 +0/-0.004	3.250 +0.004/-0
PSU-3.50X3.00X.375	3	3-1/2	3/8	0.394 +0.015/-0	3.000 +0.006/-0	3.499 +0/-0.004	3.500 +0.006/-0
PSU-3.50X3.12X.312	3-1/8	3-1/2	5/16	0.328 +0.015/-0	3.125 +0.004/-0	3.499 +0/-0.004	3.500 +0.004/-0
PSU-3.50X3.12X.375	3-1/8	3-1/2	3/8	0.394 +0.015/-0	3.125 +0.004/-0	3.499 +0/-0.004	3.500 +0.004/-0
PSU-3.75X3.37X.312	3-3/8	3-3/4	5/16	0.328 +0.015/-0	3.375 +0.004/-0	3.749 +0/-0.004	3.750 +0.004/-0
PSU-4.00X3.50X.375	3-1/2	4	3/8	0.394 +0.015/-0	3.500 +0.006/-0	3.999 +0/-0.004	4.000 +0.006/-0
PSU-4.00X3.62X.375	3-5/8	4	3/8	0.394 +0.015/-0	3.625 +0.004/-0	3.999 +0/-0.004	4.000 +0.004/-0
PSU-4.50X4.00X.375	4	4-1/2	3/8	0.394 +0.015/-0	4.000 +0.006/-0	4.499 +0/-0.004	4.500 +0.006/-0
PSU-4.50X4.00X.562	4	4-1/2	9/16	0.591 +0.015/-0	4.000 +0.006/-0	4.499 +0/-0.004	4.500 +0.006/-0
PSU-5.00X4.37X.500	4-3/8	5	1/2	0.526 +0.015/-0	4.375 +0.006/-0	4.999 +0/-0.004	5.000 +0.006/-0
PSU-5.00X4.50X.375	4-1/2	5	3/8	0.394 +0.015/-0	4.500 +0.006/-0	4.999 +0/-0.004	5.000 +0.006/-0
PSU-5.00X4.50X.500	4-1/2	5	1/2	0.526 +0.015/-0	4.500 +0.006/-0	4.999 +0/-0.004	5.000 +0.006/-0
PSU-5.00X4.50X.562	4-1/2	5	9/16	0.591 +0.015/-0	4.500 +0.006/-0	4.999 +0/-0.004	5.000 +0.006/-0
PSU-5.25X4.75X.562	4-3/4	5-1/4	9/16	0.591 +0.015/-0	4.750 +0.006/-0	5.249 +0/-0.004	5.250 +0.006/-0
PSU-5.50X5.00X.375	5	5-1/2	3/8	0.394 +0.015/-0	5.000 +0.006/-0	5.499 +0/-0.004	5.500 +0.006/-0
PSU-6.00X5.50X.375	5-1/2	6	3/8	0.394 +0.015/-0	5.500 +0.006/-0	5.999 +0/-0.004	6.000 +0.006/-0
PSU-6.00X5.50X.562	5-1/2	6	9/16	0.591 +0.015/-0	5.500 +0.006/-0	5.999 +0/-0.004	6.000 +0.006/-0
PSU-6.50X6.00X.562	6	6-1/2	9/16	0.591 +0.015/-0	6.000 +0.006/-0	6.499 +0/-0.004	6.500 +0.006/-0

# STYLE SPR CAST IRON PISTON RINGS



All Hercules Cast Iron Piston Rings have step cut ends.

## HERCULES PART NUMBERS



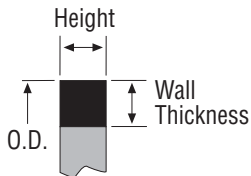
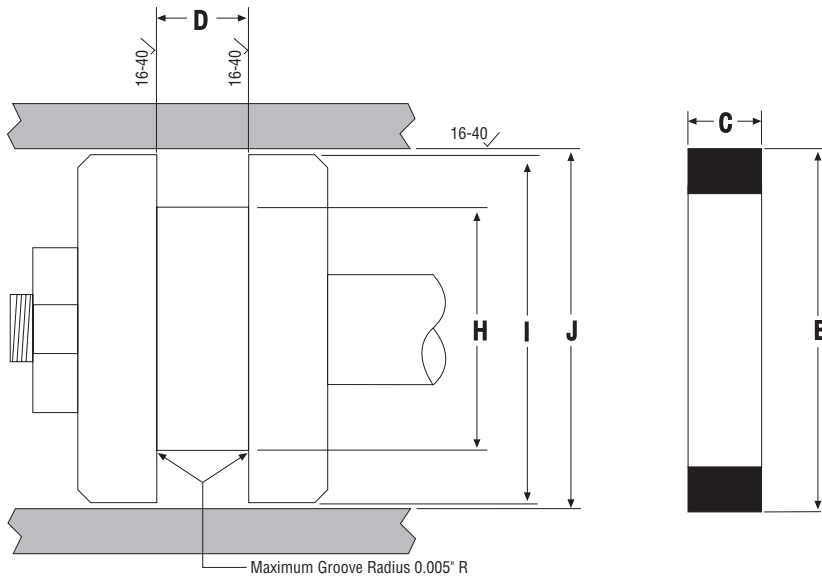
### CAST IRON PISTON RING GROOVE DIMENSIONS

When using cast 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 a cast 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.



### SEAL INFORMATION

MATERIAL	CAST IRON
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PART NUMBER	B NOM. O.D.	C HT.	WALL THICKNESS	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
SPR-1000	1	.1230/.1240	.045/.055	0.126 +0.003/-0	0.870 +0.003/-0	0.970 /0.999	1.000 +0.003/-0
SPR-1001	1	.0925/.0935	.045/.055	0.095 +0.003/-0	0.870 +0.003/-0	0.970 /0.999	1.000 +0.003/-0
SPR-1500	1.5	.1230/.1240	.052/.067	0.126 +0.003/-0	1.286 +0.003/-0	1.465 /1.499	1.500 +0.003/-0
SPR-1501	1.5	.0925/.0935	.052/.067	0.095 +0.003/-0	1.286 +0.003/-0	1.465 /1.499	1.500 +0.003/-0
SPR-1530	1.53	.1230/.1240	.050/.080	0.126 +0.003/-0	1.290 +0.003/-0	1.497 /1.529	1.530 +0.003/-0
SPR-1750	1.75	.1230/.1240	.060/.075	0.126 +0.003/-0	1.510 +0.003/-0	1.710 /1.749	1.750 +0.003/-0
SPR-1751	1.75	.0925/.0935	.060/.075	0.095 +0.003/-0	1.510 +0.003/-0	1.710 /1.749	1.750 +0.003/-0
SPR-2000	2	.1230/.1240	.060/.075	0.126 +0.003/-0	1.750 +0.003/-0	1.960 /1.999	2.000 +0.003/-0
SPR-2001	2	.1855/.1865	.060/.075	0.188 +0.003/-0	1.750 +0.003/-0	1.960 /1.999	2.000 +0.003/-0
SPR-2002	2	.2480/.2490	.060/.075	0.251 +0.003/-0	1.750 +0.003/-0	1.960 /1.999	2.000 +0.003/-0
SPR-2003	2	.0925/.0935	.082/.097	0.095 +0.003/-0	1.776 +0.003/-0	1.945 /1.999	2.000 +0.003/-0
SPR-2030	2.03	.1230/.1240	.065/.095	0.126 +0.003/-0	1.750 +0.003/-0	1.987 /2.029	2.030 +0.003/-0
SPR-2125	2.125	.1855/.1865	.065/.080	0.188 +0.003/-0	1.865 +0.003/-0	2.082 /2.124	2.125 +0.003/-0
SPR-2126	2.125	.1230/.1240	.065/.080	0.126 +0.003/-0	1.865 +0.003/-0	2.082 /2.124	2.125 +0.003/-0
SPR-2250	2.25	.1855/.1865	.070/.085	0.188 +0.003/-0	1.980 +0.003/-0	2.203 /2.249	2.250 +0.003/-0
SPR-2251	2.25	.1230/.1240	.070/.085	0.126 +0.003/-0	1.980 +0.003/-0	2.203 /2.249	2.250 +0.003/-0

## STYLE SPR CAST IRON PISTON RINGS

PART NUMBER	B NOM. O.D.	C WIDTH	WALL THICKNESS	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
SPR-2254	2.25	.2480/.2490	.070/.085	0.251 +0.003/-0	1.980 +0.003/-0	2.203 /2.249	2.250 +0.003/-0
SPR-2376	2.375	.1855/.1865	.076/.091	0.188 +0.003/-0	2.093 +0.003/-0	2.324 /2.374	2.375 +0.003/-0
SPR-2500	2.5	.1230/.1240	.082/.097	0.126 +0.003/-0	2.206 +0.003/-0	2.445 /2.499	2.500 +0.003/-0
SPR-2501	2.5	.1855/.1865	.082/.097	0.188 +0.003/-0	2.206 +0.003/-0	2.445 /2.499	2.500 +0.003/-0
SPR-2502	2.5	.2480/.2490	.103/.118	0.251 +0.003/-0	2.164 +0.003/-0	2.431 /2.499	2.500 +0.003/-0
SPR-2503	2.5	.2480/.2490	.082/.097	0.251 +0.003/-0	2.206 +0.003/-0	2.445 /2.499	2.500 +0.003/-0
SPR-2530	2.53	.1230/.1240	.087/.117	0.126 +0.003/-0	2.196 +0.003/-0	2.472 /2.529	2.530 +0.003/-0
SPR-2625	2.625	.1855/.1865	.087/.102	0.188 +0.003/-0	2.321 +0.003/-0	2.567 /2.624	2.625 +0.003/-0
SPR-2750	2.75	.1855/.1865	.091/.106	0.188 +0.003/-0	2.438 +0.003/-0	2.689 /2.749	2.750 +0.003/-0
SPR-2752	2.75	.1550/.1560	.100/.125	0.158 +0.003/-0	2.490 +0.003/-0	2.677 /2.749	2.750 +0.003/-0
SPR-2754	2.75	.1860/.1870	.103/.118	0.188 +0.003/-0	2.414 +0.003/-0	2.681 /2.749	2.750 +0.003/-0
SPR-2755	2.755	.1180/.1190	.109/.124	0.121 +0.003/-0	2.443 +0.003/-0	2.682 /2.754	2.755 +0.003/-0
SPR-2875	2.875	.1855/.1865	.093/.108	0.188 +0.003/-0	2.559 +0.003/-0	2.813 /2.874	2.875 +0.003/-0
SPR-3000	3	.1855/.1865	.095/.110	0.188 +0.003/-0	2.680 +0.003/-0	2.937 /2.999	3.000 +0.003/-0
SPR-3001	3	.2480/.2490	.095/.110	0.251 +0.003/-0	2.680 +0.003/-0	2.937 /2.999	3.000 +0.003/-0
SPR-3003	3	.3100/.3110	.095/.110	0.313 +0.003/-0	2.680 +0.003/-0	2.937 /2.999	3.000 +0.003/-0
SPR-3120	3.125	.1855/.1865	.100/.115	0.188 +0.003/-0	2.795 +0.003/-0	3.058 /3.124	3.125 +0.003/-0
SPR-3250	3.25	.1855/.1865	.103/.118	0.188 +0.003/-0	2.914 +0.003/-0	3.181 /3.249	3.250 +0.003/-0
SPR-3251	3.25	.1230/.1240	.103/.118	0.126 +0.003/-0	2.914 +0.003/-0	3.181 /3.249	3.250 +0.003/-0
SPR-3252	3.25	.2480/.2490	.103/.118	0.251 +0.003/-0	2.914 +0.003/-0	3.181 /3.249	3.250 +0.003/-0
SPR-3253	3.25	.1545/.1555	.121/.134	0.157 +0.003/-0	2.952 +0.003/-0	3.169 /3.249	3.250 +0.003/-0
SPR-3260	3.26	.2480/.2490	.145/.160	0.251 +0.003/-0	2.924 +0.003/-0	3.163 /3.259	3.260 +0.003/-0
SPR-3280	3.28	.1855/.1865	.100/.130	0.188 +0.003/-0	2.920 +0.003/-0	3.213 /3.279	3.280 +0.003/-0
SPR-3375	3.375	.1855/.1865	.106/.121	0.188 +0.003/-0	3.033 +0.003/-0	3.304 /3.374	3.375 +0.003/-0
SPR-3497	3.497	.1855/.1865	.109/.124	0.188 +0.003/-0	3.145 +0.003/-0	3.424 /3.496	3.497 +0.003/-0
SPR-3500	3.5	.1230/.1240	.109/.124	0.126 +0.003/-0	3.148 +0.003/-0	3.427 /3.499	3.500 +0.003/-0
SPR-3502	3.5	.2480/.2490	.109/.124	0.251 +0.003/-0	3.148 +0.003/-0	3.427 /3.499	3.500 +0.003/-0
SPR-3503	3.5	.3720/.3730	.109/.124	0.376 +0.003/-0	3.148 +0.003/-0	3.427 /3.499	3.500 +0.003/-0
SPR-3505	3.5	.1855/.1865	.109/.124	0.188 +0.003/-0	3.148 +0.003/-0	3.427 /3.499	3.500 +0.003/-0
SPR-3626	3.625	.2480/.2490	.170/.185	0.251 +0.003/-0	3.157 +0.003/-0	3.511 /3.624	3.625 +0.003/-0
SPR-3750	3.75	.1855/.1865	.115/.130	0.188 +0.003/-0	3.380 +0.003/-0	3.673 /3.749	3.750 +0.003/-0
SPR-3751	3.75	.2480/.2490	.115/.130	0.251 +0.003/-0	3.380 +0.003/-0	3.673 /3.749	3.750 +0.003/-0
SPR-3875	3.875	.2480/.2490	.123/.138	0.251 +0.003/-0	3.489 +0.003/-0	3.793 /3.874	3.875 +0.003/-0
SPR-3990	3.99	.2480/.2490	.127/.142	0.251 +0.003/-0	3.602 +0.003/-0	3.905 /3.989	3.990 +0.003/-0
SPR-4000	4	.2480/.2490	.127/.142	0.251 +0.003/-0	3.612 +0.003/-0	3.915 /3.999	4.000 +0.003/-0
SPR-4002	4	.1855/.1865	.127/.142	0.188 +0.003/-0	3.612 +0.003/-0	3.915 /3.999	4.000 +0.003/-0
SPR-4003	4	.3100/.3110	.127/.142	0.313 +0.003/-0	3.612 +0.003/-0	3.915 /3.999	4.000 +0.003/-0
SPR-4020	4.02	.3100/.3110	.127/.142	0.313 +0.003/-0	3.632 +0.003/-0	3.935 /4.019	4.020 +0.003/-0
SPR-4030	4.03	.2480/.2490	.132/.162	0.251 +0.003/-0	3.602 +0.003/-0	3.942 /4.029	4.030 +0.003/-0
SPR-4250	4.25	.2480/.2490	.135/.150	0.251 +0.003/-0	3.844 +0.003/-0	4.160 /4.249	4.250 +0.003/-0
SPR-4260	4.26	.2480/.2490	.135/.150	0.251 +0.003/-0	3.854 +0.003/-0	4.170 /4.259	4.260 +0.003/-0
SPR-4490	4.49	.2480/.2490	.160/.175	0.251 +0.003/-0	4.030 +0.003/-0	4.383 /4.489	4.490 +0.003/-0
SPR-4496	4.496	.2480/.2490	.135/.150	0.251 +0.003/-0	4.070 +0.003/-0	4.406 /4.495	4.496 +0.003/-0
SPR-4500	4.5	.3100/.3110	.145/.160	0.313 +0.003/-0	4.074 +0.003/-0	4.403 /4.499	4.500 +0.003/-0
SPR-4501	4.5	.1855/.1865	.145/.160	0.188 +0.003/-0	4.074 +0.003/-0	4.403 /4.499	4.500 +0.003/-0
SPR-4502	4.5	.2480/.2490	.145/.160	0.251 +0.003/-0	4.074 +0.003/-0	4.403 /4.499	4.500 +0.003/-0
SPR-4503	4.5	.3720/.3730	.145/.160	0.376 +0.003/-0	4.074 +0.003/-0	4.403 /4.499	4.500 +0.003/-0
SPR-4540	4.54	.1855/.1865	.152/.167	0.188 +0.003/-0	4.098 +0.003/-0	4.439 /4.539	4.540 +0.003/-0
SPR-4751	4.75	.2480/.2490	.152/.167	0.251 +0.003/-0	4.308 +0.003/-0	4.649 /4.749	4.750 +0.003/-0
SPR-5000	5	.2480/.2490	.140/.150	0.251 +0.003/-0	4.574 +0.003/-0	4.907 /4.999	5.000 +0.003/-0
SPR-5001	5	.1855/.1865	.160/.175	0.188 +0.003/-0	4.540 +0.003/-0	4.893 /4.999	5.000 +0.003/-0
SPR-5002	5	.2480/.2490	.160/.175	0.251 +0.003/-0	4.540 +0.003/-0	4.893 /4.999	5.000 +0.003/-0
SPR-5003	5	.3720/.3730	.160/.175	0.376 +0.003/-0	4.540 +0.003/-0	4.893 /4.999	5.000 +0.003/-0
SPR-5004	5	.3100/.3110	.160/.175	0.313 +0.003/-0	4.540 +0.003/-0	4.893 /4.999	5.000 +0.003/-0
SPR-5005	5	.1230/.1240	.160/.175	0.126 +0.003/-0	4.540 +0.003/-0	4.893 /4.999	5.000 +0.003/-0
SPR-5030	5.03	.2480/.2490	.165/.195	0.251 +0.003/-0	4.530 +0.003/-0	4.920 /5.029	5.030 +0.003/-0
SPR-5120	5.125	.2480/.2490	.166/.181	0.251 +0.003/-0	4.657 +0.003/-0	5.014 /5.124	5.125 +0.003/-0
SPR-5251	5.250	.2480/.2490	.166/.181	0.251 +0.003/-0	4.782 +0.003/-0	5.139 /5.249	5.250 +0.003/-0

## STYLE SPR CAST IRON PISTON RINGS

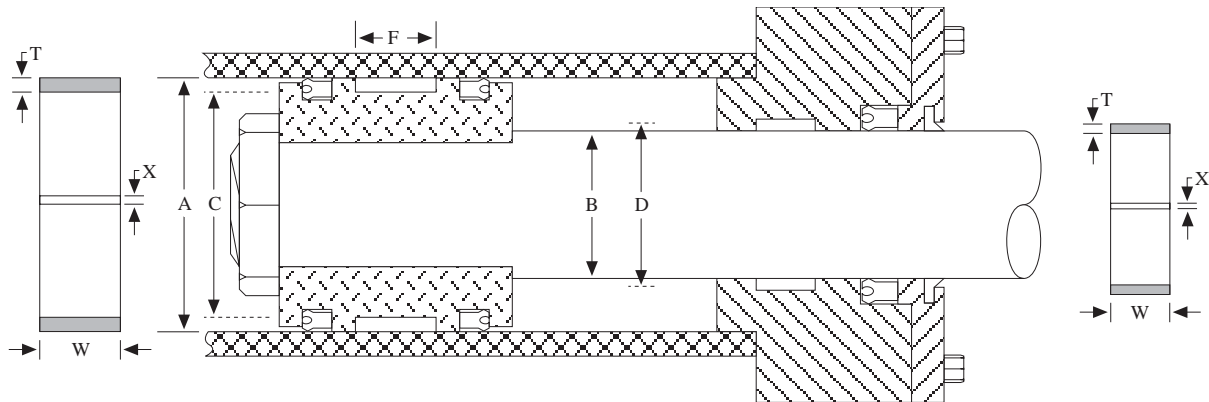
PART NUMBER	B NOM. O.D.	C WIDTH	WALL THICKNESS	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
SPR-5260	5.26	.2480/.2490	.166/.181	0.251 +0.003/-0	4.792 +0.003/-0	5.149 /5.259	5.260 +0.003/-0
SPR-5490	5.49	.2480/.2490	.175/.190	0.251 +0.003/-0	5.010 +0.003/-0	5.373 /5.489	5.490 +0.003/-0
SPR-5496	5.496	.2480/.2490	.140/.160	0.251 +0.003/-0	5.070 +0.003/-0	5.403 /5.495	5.496 +0.003/-0
SPR-5500	5.5	.3100/.3110	.175/.190	0.313 +0.003/-0	5.020 +0.003/-0	5.383 /5.499	5.500 +0.003/-0
SPR-5501	5.5	.1855/.1865	.175/.190	0.188 +0.003/-0	5.020 +0.003/-0	5.383 /5.499	5.500 +0.003/-0
SPR-5502	5.5	.2480/.2490	.175/.190	0.251 +0.003/-0	5.020 +0.003/-0	5.383 /5.499	5.500 +0.003/-0
SPR-5503	5.5	.3720/.3730	.175/.190	0.376 +0.003/-0	5.020 +0.003/-0	5.383 /5.499	5.500 +0.003/-0
SPR-5540	5.54	.1855/.1865	.180/.210	0.188 +0.003/-0	5.020 +0.003/-0	5.420 /5.539	5.540 +0.003/-0
SPR-5750	5.75	.1855/.1865	.184/.199	0.188 +0.003/-0	5.252 +0.003/-0	5.627 /5.749	5.750 +0.003/-0
SPR-5751	5.75	.2480/.2490	.184/.199	0.251 +0.003/-0	5.252 +0.003/-0	5.627 /5.749	5.750 +0.003/-0
SPR-5752	5.75	.3100/.3110	.184/.199	0.313 +0.003/-0	5.252 +0.003/-0	5.627 /5.749	5.750 +0.003/-0
SPR-6000	6	.2475/.2490	.140/.160	0.251 +0.003/-0	5.574 +0.003/-0	5.907 /5.999	6.000 +0.003/-0
SPR-6001	6	.1225/.1240	.191/.206	0.126 +0.003/-0	5.488 +0.003/-0	5.872 /5.999	6.000 +0.003/-0
SPR-6002	6	.2475/.2490	.191/.206	0.251 +0.003/-0	5.488 +0.003/-0	5.873 /5.999	6.000 +0.003/-0
SPR-6004	6	.3095/.3110	.191/.206	0.313 +0.003/-0	5.488 +0.003/-0	5.873 /5.999	6.000 +0.003/-0
SPR-6005	6	.3715/.3730	.191/.206	0.376 +0.003/-0	5.488 +0.003/-0	5.873 /5.999	6.000 +0.003/-0
SPR-6006	6	.1851/.1865	.191/.206	0.188 +0.003/-0	5.488 +0.003/-0	5.873 /5.999	6.000 +0.003/-0
SPR-6030	6.03	.2475/.2490	.196/.226	0.251 +0.003/-0	5.478 +0.003/-0	5.899 /6.029	6.030 +0.003/-0
SPR-6040	6.04	.1850/.1865	.191/.206	0.188 +0.003/-0	5.528 +0.003/-0	5.913 /6.039	6.040 +0.003/-0
SPR-6120	6.125	.2475/.2490	.191/.206	0.251 +0.003/-0	5.613 +0.003/-0	5.998 /6.124	6.125 +0.003/-0
SPR-6250	6.25	.1850/.1865	.202/.217	0.188 +0.003/-0	5.734 +0.003/-0	6.115 /6.249	6.250 +0.003/-0
SPR-6251	6.25	.3095/.3110	.202/.217	0.313 +0.003/-0	5.734 +0.003/-0	6.115 /6.249	6.250 +0.003/-0
SPR-6252	6.25	.2475/.2490	.202/.217	0.251 +0.003/-0	5.734 +0.003/-0	6.115 /6.249	6.250 +0.003/-0
SPR-6260	6.26	.2475/.2490	.202/.217	0.251 +0.003/-0	5.744 +0.003/-0	6.125 /6.259	6.260 +0.003/-0
SPR-6490	6.49	.2475/.2490	.175/.190	0.251 +0.003/-0	6.010 +0.003/-0	6.373 /6.489	6.490 +0.003/-0
SPR-6496	6.496	.2475/.2490	.140/.160	0.251 +0.003/-0	6.070 +0.003/-0	6.403 /6.495	6.496 +0.003/-0
SPR-6500	6.5	.3095/.3110	.211/.226	0.313 +0.003/-0	5.948 +0.003/-0	6.359 /6.499	6.500 +0.003/-0
SPR-6502	6.5	.2475/.2490	.211/.226	0.251 +0.003/-0	5.948 +0.003/-0	6.359 /6.499	6.500 +0.003/-0
SPR-6503	6.5	.1860/.1870	.211/.226	0.188 +0.003/-0	5.948 +0.003/-0	6.359 /6.499	6.500 +0.003/-0
SPR-6505	6.5	.4965/.4980	.211/.226	0.501 +0.003/-0	5.948 +0.003/-0	6.359 /6.499	6.500 +0.003/-0
SPR-6540	6.54	.2475/.2490	.230/.240	0.251 +0.003/-0	5.960 +0.003/-0	6.387 /6.539	6.540 +0.003/-0
SPR-6750	6.75	.2480/.2490	.175/.190	0.251 +0.003/-0	6.270 +0.003/-0	6.633 /6.749	6.750 +0.003/-0
SPR-6751	6.75	.3095/.3110	.219/.234	0.313 +0.003/-0	6.182 +0.003/-0	6.604 /6.749	6.750 +0.003/-0
SPR-6752	6.75	.2475/.2490	.219/.234	0.313 +0.003/-0	6.182 +0.003/-0	6.604 /6.749	6.750 +0.003/-0
SPR-7000	7	.2475/.2490	.140/.160	0.251 +0.003/-0	6.574 +0.003/-0	6.907 /6.999	7.000 +0.003/-0
SPR-7002	7	.2475/.2490	.228/.243	0.251 +0.003/-0	6.414 +0.003/-0	6.848 /6.999	7.000 +0.003/-0
SPR-7003	7	.3715/.3730	.228/.243	0.376 +0.003/-0	6.414 +0.003/-0	6.848 /6.999	7.000 +0.003/-0
SPR-7005	7	.3095/.3110	.228/.243	0.313 +0.003/-0	6.414 +0.003/-0	6.848 /6.999	7.000 +0.003/-0
SPR-7006	7	.4965/.4980	.228/.243	0.501 +0.003/-0	6.414 +0.003/-0	6.848 /6.999	7.000 +0.003/-0
SPR-7030	7.03	.3095/.3110	.233/.263	0.313 +0.003/-0	6.404 +0.003/-0	6.875 /7.029	7.030 +0.003/-0
SPR-7250	7.25	.2475/.2490	.160/.175	0.251 +0.003/-0	6.800 +0.003/-0	7.143 /7.249	7.250 +0.003/-0
SPR-7255	7.25	.3095/.3110	.237/.252	0.313 +0.003/-0	6.646 +0.003/-0	7.092 /7.249	7.250 +0.003/-0
SPR-7260	7.26	.2475/.2490	.237/.252	0.251 +0.003/-0	6.656 +0.003/-0	7.102 /7.259	7.260 +0.003/-0
SPR-7375	7.375	.3715/.3730	.191/.206	0.376 +0.003/-0	6.863 +0.003/-0	7.247 /7.374	7.375 +0.003/-0
SPR-7490	7.49	.2475/.2490	.175/.190	0.251 +0.003/-0	7.010 +0.003/-0	7.373 /7.489	7.490 +0.003/-0
SPR-7496	7.496	.2475/.2490	.140/.160	0.251 +0.003/-0	7.070 +0.003/-0	7.403 /7.495	7.496 +0.003/-0
SPR-7500	7.5	.3095/.3110	.211/.226	0.313 +0.003/-0	6.948 +0.003/-0	7.359 /7.499	7.500 +0.003/-0
SPR-7501	7.5	.2479/.2490	.244/.259	0.251 +0.003/-0	6.882 +0.003/-0	7.337 /7.499	7.500 +0.003/-0
SPR-7505	7.5	.3095/.3110	.244/.259	0.313 +0.003/-0	6.882 +0.003/-0	7.337 /7.499	7.500 +0.003/-0
SPR-7625	7.625	.2475/.2490	.244/.259	0.251 +0.003/-0	6.999 +0.003/-0	7.462 /7.624	7.625 +0.003/-0
SPR-7750	7.75	.3095/.3110	.252/.267	0.313 +0.003/-0	7.116 +0.003/-0	7.582 /7.749	7.750 +0.003/-0
SPR-8000	8	.3095/.3110	.211/.226	0.313 +0.003/-0	7.448 +0.003/-0	7.859 /7.999	8.000 +0.003/-0
SPR-8001	8	.4340/.4350	.255/.270	0.437 +0.003/-0	7.350 +0.003/-0	7.830 /7.999	8.000 +0.003/-0
SPR-8005	8	.3095/.3110	.260/.275	0.313 +0.003/-0	7.350 +0.003/-0	7.826 /7.999	8.000 +0.003/-0
SPR-8006	8	.3715/.3730	.260/.275	0.376 +0.003/-0	7.350 +0.003/-0	7.827 /7.999	8.000 +0.003/-0
SPR-8030	8.03	.3095/.3110	.265/.295	0.313 +0.003/-0	7.340 +0.003/-0	7.853 /8.029	8.030 +0.003/-0
SPR-8125	8.125	.4340/.4350	.265/.270	0.437 +0.003/-0	7.485 +0.003/-0	7.948 /8.124	8.125 +0.003/-0
SPR-8250	8.25	.3715/.3730	.268/.283	0.376 +0.003/-0	7.584 +0.003/-0	8.071 /8.249	8.250 +0.003/-0



## STYLE SPR CAST IRON PISTON RINGS

PART NUMBER	B NOM. O.D.	C HT.	WALL THICKNESS	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
SPR-8370	8.375	.2475/.2490	.268/.283	0.251 +0.003/-0	7.709 +0.003/-0	8.196 /8.374	8.375 +0.003/-0
SPR-8420	8.42	.2475/.2490	.268/.283	0.251 +0.003/-0	7.754 +0.003/-0	8.241 /8.419	8.420 +0.003/-0
SPR-8490	8.49	.2475/.2490	.175/.190	0.251 +0.003/-0	8.010 +0.003/-0	8.373 /8.489	8.490 +0.003/-0
SPR-8496	8.496	.2475/.2490	.140/.160	0.251 +0.003/-0	8.070 +0.003/-0	8.403 /8.495	8.496 +0.003/-0
SPR-8500	8.5	.3095/.3110	.210/.225	0.313 +0.003/-0	7.870 +0.003/-0	8.360 /8.499	8.500 +0.003/-0
SPR-8502	8.5	.3715/.3730	.275/.290	0.376 +0.003/-0	7.820 +0.003/-0	8.317 /8.499	8.500 +0.003/-0
SPR-8503	8.5	.3095/.3110	.294/.309	0.313 +0.003/-0	7.782 +0.003/-0	8.304 /8.499	8.500 +0.003/-0
SPR-8751	8.75	.3715/.3730	.284/.299	0.376 +0.003/-0	8.052 +0.003/-0	8.567 /8.749	8.750 +0.003/-0
SPR-9000	9	.3715/.3730	.294/.309	0.376 +0.003/-0	8.282 +0.003/-0	8.804 /8.999	9.000 +0.003/-0
SPR-9001	9	.3095/.3110	.294/.309	0.313 +0.003/-0	8.282 +0.003/-0	8.804 /8.999	9.000 +0.003/-0
SPR-9004	9	.4335/.4350	.244/.259	0.437 +0.003/-0	8.382 +0.003/-0	8.837 /8.999	9.000 +0.003/-0
SPR-9005	9	.4965/.4980	.175/.195	0.501 +0.003/-0	8.510 +0.003/-0	8.883 /8.999	9.000 +0.003/-0
SPR-9170	9.17	.3095/.3110	.300/.315	0.313 +0.003/-0	8.446 +0.003/-0	8.970 /9.169	9.170 +0.003/-0
SPR-9250	9.25	.2475/.2490	.160/.175	0.251 +0.003/-0	8.790 +0.003/-0	9.143 /9.249	9.250 +0.003/-0
SPR-9251	9.25	.3095/.3110	.300/.315	0.313 +0.003/-0	8.526 +0.003/-0	9.050 /9.249	9.250 +0.003/-0
SPR-9500	9.5	.3095/.3110	.305/.320	0.313 +0.003/-0	8.760 +0.003/-0	9.297 /9.499	9.500 +0.003/-0
SPR-9501	9.5	.2475/.2490	.305/.320	0.251 +0.003/-0	8.760 +0.003/-0	9.297 /9.499	9.500 +0.003/-0
SPR-9502	9.5	.3715/.3730	.294/.309	0.376 +0.003/-0	8.782 +0.003/-0	9.304 /9.499	9.500 +0.003/-0
SPR-9720	9.72	.2475/.249	.284/.299	0.251 +0.003/-0	9.022 +0.003/-0	9.531 /9.719	9.720 +0.003/-0
SPR-9746	9.746	.2475/.2490	.140/.160	0.251 +0.003/-0	9.320 +0.003/-0	9.653 /9.745	9.746 +0.003/-0
SPR-10000	10	.3090/.3110	.317/.332	0.313 +0.003/-0	9.236 +0.003/-0	9.789 /9.999	10.000 +0.003/-0
SPR-10001	10	.3710/.3730	.317/.332	0.376 +0.003/-0	9.236 +0.003/-0	9.788 /9.999	10.000 +0.003/-0
SPR-10501	10.5	.3710/.3730	.317/.332	0.376 +0.003/-0	9.736 +0.003/-0	10.289 /10.499	10.500 +0.003/-0
SPR-10502	10.5	.6210/.6230	.238/.253	0.626 +0.003/-0	9.894 +0.003/-0	10.341 /10.499	10.500 +0.003/-0
SPR-11000	11	.4720/.4740	.302/.317	0.476 +0.003/-0	10.266 +0.003/-0	10.798 /10.999	11.000 +0.003/-0
SPR-12001	12	.4340/.4360	.364/.379	0.437 +0.003/-0	11.212 +0.003/-0	11.747 /11.999	12.000 +0.003/-0
SPR-12030	12.03	.3710/.3730	.386/.401	0.376 +0.003/-0	11.138 +0.003/-0	11.761 /12.029	12.030 +0.003/-0
SPR-16003	16.035	.4950/.4970	.455/.485	0.501 +0.003/-0	14.985 +0.003/-0	15.731 /16.034	16.035 +0.003/-0

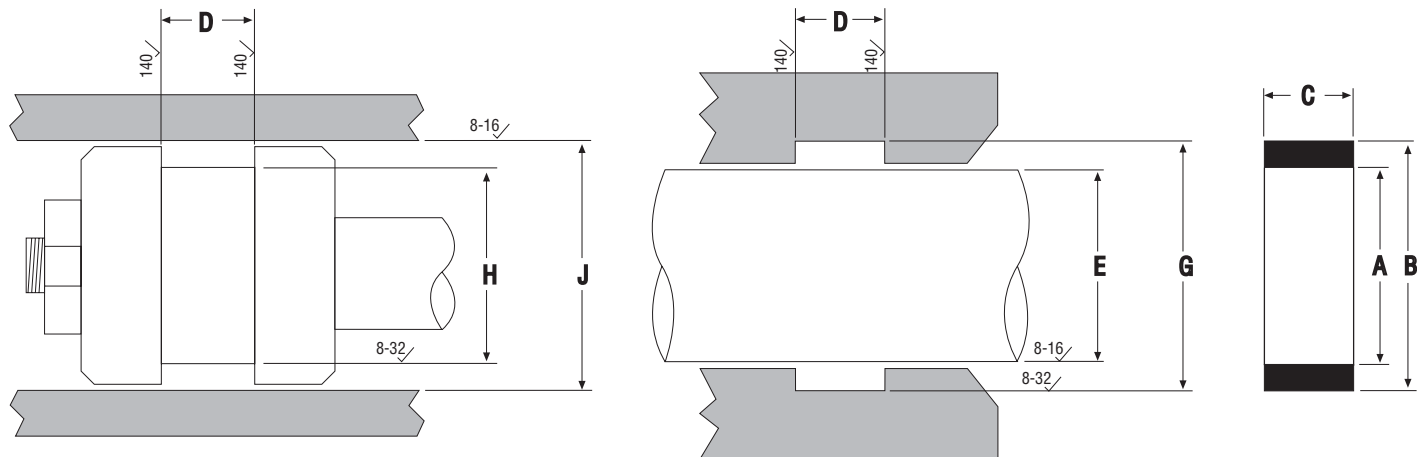
# NYLON WEAR RING TECHNICAL INFORMATION



- A - Cylinder Bore
- B - Rod Diameter
- C - Minimum Bore "A" minus .253/.256
- D - Maximum Rod Diameter "B" plus .253/.256
- F - Groove Width
- T - Thickness of Wear Ring
- W - Width of Wear Ring
- X - Minimum Ring Gap

<b>Groove Dimensions For Standard Wear Ring Widths</b>												
<u>1/2" Width</u>			<u>5/8 Width</u>			<u>3/4" Width</u>			<u>1" Width</u>			
E	I	X	E	I	X	E	I	X	E	I	X	
.505"	.122"	1/16"	.630"	.122"	1/16"	.755"	.122"	1/16"	1.005"	.122"	1/16"	
.510"	.125"		.635"	.125"		.760"	.125"		1.010"	.125"		
<b>Cut Downs Factors For Standard Wear Rings</b>												
<p>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.</p>												
<u>Wear Ring O.D.</u>						<u>Maximum amount to be Cut Down</u>						
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"						
<b>Flexible Guide Bearing Cut To Fit Formula</b>												
Use the following formula when cutting flexible guide bearing to fit a specific application.												
<b>For Piston Bearings</b>						<b>For Rod Bearings</b>						
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



## HERCULES PART NUMBERS

**606 - 162 - 098**

Type of  
Wear Ring

O.D.

Width

## SEAL INFORMATION

TEMPERATURE RANGE	-40° to +250° F
TENSILE STRENGTH	27,000 PSI
COMPRESSIVE STRENGTH	35,000 PSI

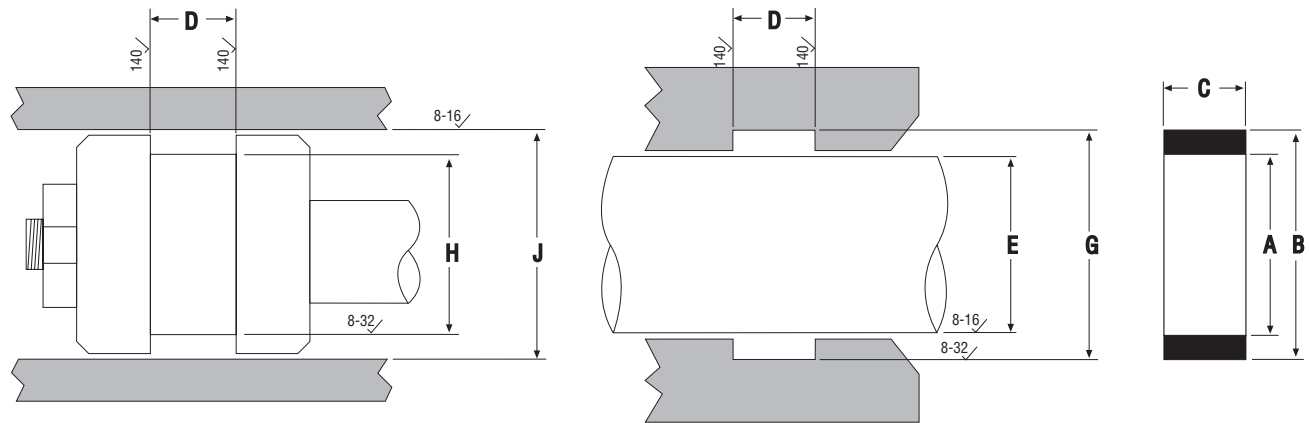
SC = Scarf Cut Split

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.	H GROOVE DIA.	J NOM. BORE DIA.
606-087-050	0.75	0.875	0.5	0.505 +0.005/-0	0.75	0.878 +0.003/-0	0.747 +0/-0.003	0.875
606-112-050	1	1.125	0.5	0.505 +0.005/-0	1	1.128 +0.003/-0	0.997 +0/-0.003	1.125
606-137-050	1.25	1.375	0.5	0.505 +0.005/-0	1.25	1.378 +0.003/-0	1.247 +0/-0.003	1.375
606-162-082	1.5	1.625	0.82	0.825 +0.005/-0	1.5	1.628 +0.003/-0	1.497 +0/-0.003	1.625
606-162-098	1.5	1.625	1	1.005 +0.005/-0	1.5	1.628 +0.003/-0	1.497 +0/-0.003	1.625
606-162-125	1.5	1.625	1.25	1.255 +0.005/-0	1.5	1.628 +0.003/-0	1.497 +0/-0.003	1.625
606-187-098-SC	1.75	1.875	1	1.005 +0.005/-0	1.75	1.878 +0.003/-0	1.747 +0/-0.003	1.875
606-200-025	1.875	2	0.25	0.255 +0.005/-0	1.875	2.003 +0.003/-0	1.872 +0/-0.003	2
606-200-072	1.875	2	0.72	0.725 +0.005/-0	1.875	2.003 +0.003/-0	1.872 +0/-0.003	2
606-200-098-SC	1.875	2	1	1.005 +0.005/-0	1.875	2.003 +0.003/-0	1.872 +0/-0.003	2
606-212-125	2	2.125	1.25	1.255 +0.005/-0	2	2.128 +0.003/-0	1.997 +0/-0.003	2.125
606-225-036	2.125	2.25	0.36	0.365 +0.005/-0	2.125	2.253 +0.003/-0	2.122 +0/-0.003	2.25
606-225-072	2.125	2.25	0.72	0.725 +0.005/-0	2.125	2.253 +0.003/-0	2.122 +0/-0.003	2.25
606-237-098-SC	2.25	2.375	1	1.005 +0.005/-0	2.25	2.378 +0.003/-0	2.247 +0/-0.003	2.375
606-237-100	2.25	2.375	1	1.005 +0.005/-0	2.25	2.378 +0.003/-0	2.247 +0/-0.003	2.375
606-237-118	2.25	2.375	1.188	1.193 +0.005/-0	2.25	2.378 +0.003/-0	2.247 +0/-0.003	2.375
606-262-098	2.5	2.625	1	1.005 +0.005/-0	2.5	2.628 +0.003/-0	2.497 +0/-0.003	2.625
606-262-125	2.5	2.625	1.25	1.255 +0.005/-0	2.5	2.628 +0.003/-0	2.497 +0/-0.003	2.625
606-262-168	2.5	2.625	1.688	1.693 +0.005/-0	2.5	2.628 +0.003/-0	2.497 +0/-0.003	2.625
606-275-100	2.625	2.75	1	1.005 +0.005/-0	2.625	2.753 +0.003/-0	2.622 +0/-0.003	2.75
606-287-100-SC	2.75	2.875	1	1.005 +0.005/-0	2.75	2.878 +0.003/-0	2.747 +0/-0.003	2.875
606-287-126-SC	2.75	2.875	1.26	1.265 +0.005/-0	2.75	2.878 +0.003/-0	2.747 +0/-0.003	2.875
606-287-157-SC	2.75	2.875	1.5625	1.5675 +0.005/-0	2.75	2.878 +0.003/-0	2.747 +0/-0.003	2.875
606-287-181	2.75	2.875	1.8125	1.8175 +0.005/-0	2.75	2.878 +0.003/-0	2.747 +0/-0.003	2.875
606-312-124	3	3.125	1.25	1.255 +0.005/-0	3	3.128 +0.003/-0	2.997 +0/-0.003	3.125

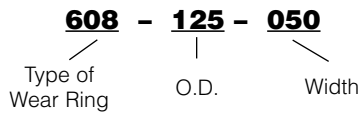
## STYLE 606 NYLON WEAR RINGS 1/16" THICK

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.	H GROOVE DIA.	J NOM. BORE DIA.
606-312-156	3	3.125	1.563	1.568 +0.005/-0	3	3.128 +0.003/-0	2.997 +0/-0.003	3.125
606-312-165-SC	3	3.125	1.65	1.655 +0.005/-0	3	3.128 +0.003/-0	2.997 +0/-0.003	3.125
606-325-050	3.125	3.25	0.5	0.505 +0.005/-0	3.125	3.253 +0.003/-0	3.122 +0/-0.003	3.25
606-337-168	3.25	3.375	1.688	1.693 +0.005/-0	3.25	3.378 +0.003/-0	3.247 +0/-0.003	3.375
606-337-174	3.25	3.375	1.74	1.745 +0.005/-0	3.25	3.378 +0.003/-0	3.247 +0/-0.003	3.375
606-337-187	3.25	3.375	1.875	1.88 +0.005/-0	3.25	3.378 +0.003/-0	3.247 +0/-0.003	3.375
606-362-105	3.5	3.625	1.0625	1.0675 +0.005/-0	3.5	3.628 +0.003/-0	3.497 +0/-0.003	3.625
606-362-188	3.5	3.625	1.875	1.88 +0.005/-0	3.5	3.628 +0.003/-0	3.497 +0/-0.003	3.625
606-387-157	3.75	3.875	1.5625	1.5675 +0.005/-0	3.75	3.878 +0.003/-0	3.747 +0/-0.003	3.875

# STYLE 608 NYLON WEAR RINGS .078" THICK



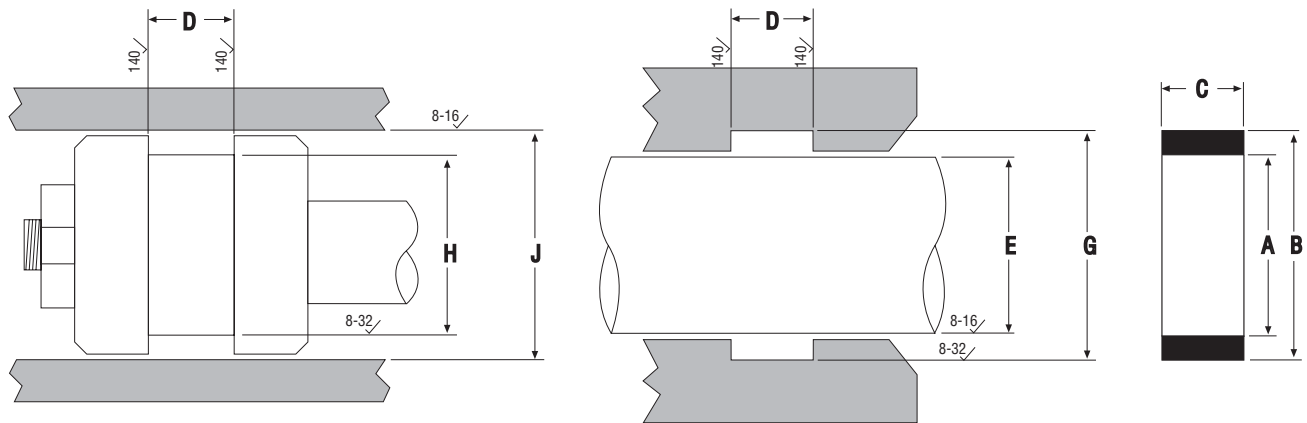
### HERCULES PART NUMBERS



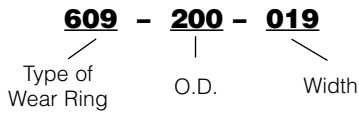
SEAL INFORMATION	
TEMPERATURE RANGE	-40° to +250° F
TENSILE STRENGTH	27,000 PSI
COMPRESSIVE STRENGTH	35,000 PSI

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.	H GROOVE DIA.	J NOM. BORE DIA.
608-125-050	1.093	1.25	0.500	0.505 +0.005/-0	1.093	1.253 +0.003/-0	1.090 +0/-0.003	1.25
608-152-075	1.360	1.52	0.75	0.755 +0.005/-0	1.360	1.523 +0.003/-0	1.357 +0/-0.003	1.52
608-154-075	1.380	1.54	0.75	0.755 +0.005/-0	1.80	1.543 +0.003/-0	1.377 +0/-0.003	1.54
608-166-062	1.503	1.66	0.625	0.630 +0.005/-0	1.503	1.663 +0.003/-0	1.500 +0/-0.003	1.66

# STYLE 609 NYLON WEAR RINGS 3/32" THICK



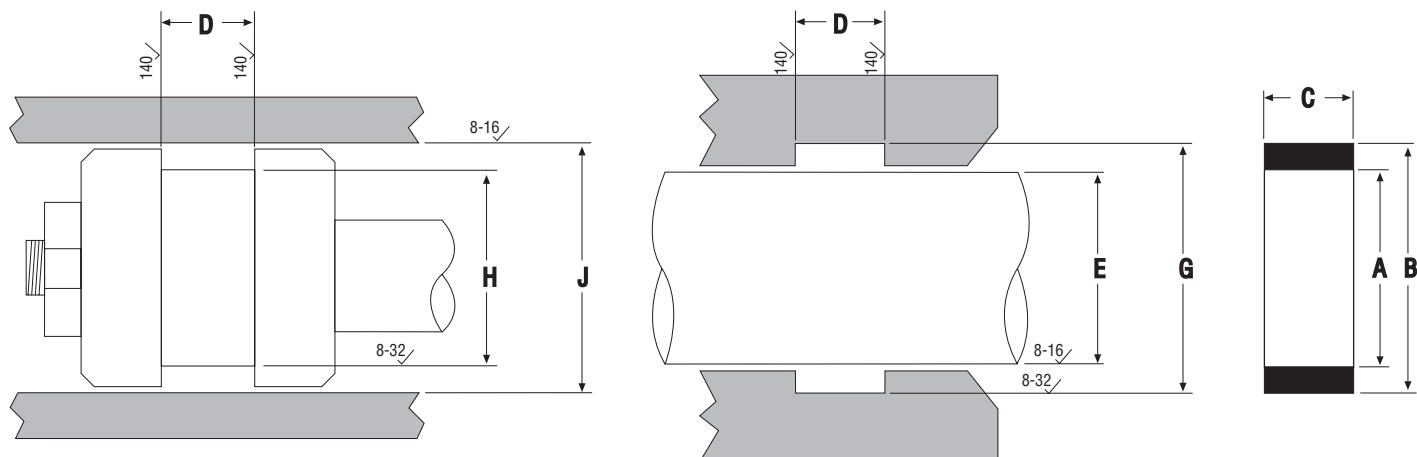
### HERCULES PART NUMBERS



SEAL INFORMATION	
TEMPERATURE RANGE	-40° to +250° F
TENSILE STRENGTH	27,000 PSI
COMPRESSIVE STRENGTH	35,000 PSI

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.	H GROOVE DIA.	J NOM. BORE DIA.
609-150-018	1.3125	1.5	0.1875	0.1925 +0.005/-0	1.3125	1.503 +0.003/-0	1.3095 +0/-0.003	1.5
609-150-037	1.3125	1.5	0.375	0.38 +0.005/-0	1.3125	1.503 +0.003/-0	1.3095 +0/-0.003	1.5
609-200-019	1.8125	2	0.188	0.193 +0.005/-0	1.8125	2.003 +0.003/-0	1.8095 +0/-0.003	2
609-200-037	1.8125	2	0.375	0.38 +0.005/-0	1.8125	2.003 +0.003/-0	1.8095 +0/-0.003	2
609-250-037	2.3125	2.5	0.375	0.38 +0.005/-0	2.3125	2.503 +0.003/-0	2.3095 +0/-0.003	2.5
609-255-150	2.3625	2.55	1.5	1.505 +0.005/-0	2.3625	2.553 +0.003/-0	2.3595 +0/-0.003	2.55
609-285-100	2.6625	2.85	1	1.005 +0.005/-0	2.6625	2.853 +0.003/-0	2.6595 +0/-0.003	2.85
609-300-022	2.8125	3	0.22	0.225 +0.005/-0	2.8125	3.003 +0.003/-0	2.8095 +0/-0.003	3
609-325-037	3.0625	3.25	0.375	0.38 +0.005/-0	3.0625	3.253 +0.003/-0	3.0595 +0/-0.003	3.25
609-331-062	3.1245	3.312	0.625	0.63 +0.005/-0	3.1245	3.315 +0.003/-0	3.1215 +0/-0.003	3.312
609-350-050	3.3125	3.5	0.5	0.505 +0.005/-0	3.3125	3.503 +0.003/-0	3.3095 +0/-0.003	3.5
609-362-022	3.4375	3.625	0.22	0.225 +0.005/-0	3.4375	3.628 +0.003/-0	3.4345 +0/-0.003	3.625
609-393-022	3.75	3.938	0.22	0.225 +0.005/-0	3.75	3.941 +0.003/-0	3.747 +0/-0.003	3.938
609-400-037	3.8125	4	0.375	0.38 +0.005/-0	3.8125	4.003 +0.003/-0	3.8095 +0/-0.003	4
609-500-050	4.8125	5	0.5	0.505 +0.005/-0	4.8125	5.003 +0.003/-0	4.8095 +0/-0.003	5
609-600-050	5.8125	6	0.5	0.505 +0.005/-0	5.8125	6.003 +0.003/-0	5.8095 +0/-0.003	6

# STYLE 610 NYLON WEAR RINGS .100" THICK



## HERCULES PART NUMBERS

**610 - 325 - 112**

Type of Wear Ring      O.D.      Width

## SEAL INFORMATION

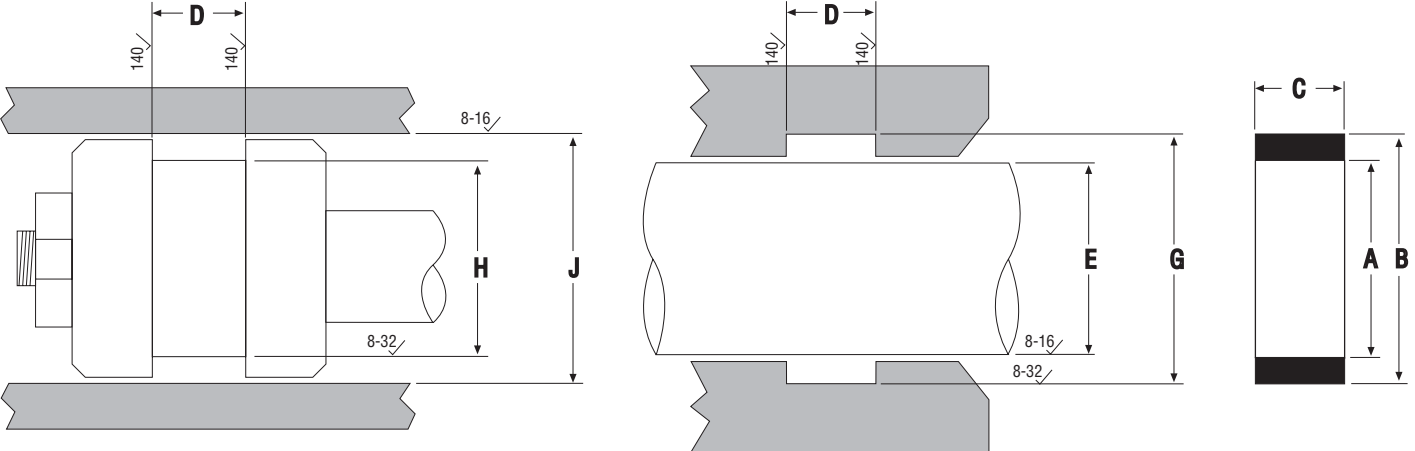
TEMPERATURE RANGE	-40° to +250° F
TENSILE STRENGTH	27,000 PSI
COMPRESSIVE STRENGTH	35,000 PSI

SC = Scarf Cut Split

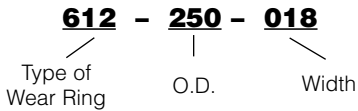
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.	H GROOVE DIA.	J NOM. BORE DIA.
610-270-228	2.5	2.7	2.28	2.285 +0.005/-0	2.5	2.703 +0.003/-0	2.497 +0/-0.003	2.7
610-295-196	2.75	2.95	1.96	1.965 +0.005/-0	2.75	2.953 +0.003/-0	2.747 +0/-0.003	2.95
610-325-112	3.05	3.25	1.125	1.13 +0.005/-0	3.05	2.253 +0.003/-0	3.047 +0/-0.003	3.25
610-345-162	3.25	3.45	1.625	1.63 +0.005/-0	3.25	3.453 +0.003/-0	3.247 +0/-0.003	3.45
610-345-196	3.25	3.45	1.96	1.965 +0.005/-0	3.25	3.453 +0.003/-0	3.247 +0/-0.003	3.45
610-345-274	3.25	3.45	2.74	2.745 +0.005/-0	3.25	3.453 +0.003/-0	3.247 +0/-0.003	3.45
610-370-176	3.5	3.7	1.76	1.765 +0.005/-0	3.5	3.703 +0.003/-0	3.497 +0/-0.003	3.7
610-370-236	3.5	3.7	2.365	2.37 +0.005/-0	3.5	3.703 +0.003/-0	3.497 +0/-0.003	3.7
610-395-243	3.75	3.95	2.438	2.443 +0.005/-0	3.75	3.953 +0.003/-0	3.747 +0/-0.003	3.95
610-420-156-SC	4.1	4.2	1.5625	1.5675 +0.005/-0	4.1	4.203 +0.003/-0	4.007 +0/-0.003	4.2
610-420-255	4	4.2	2.5525	2.5575 +0.005/-0	4	4.203 +0.003/-0	3.997 +0/-0.003	4.2
610-445-237	4.25	4.45	2.375	2.38 +0.005/-0	4.25	4.453 +0.003/-0	4.247 +0/-0.003	4.45
610-495-196	4.75	4.95	1.96	1.965 +0.005/-0	4.75	4.953 +0.003/-0	4.747 +0/-0.003	4.95
610-520-250	5	5.2	2.5	2.505 +0.005/-0	5	5.203 +0.003/-0	4.997 +0/-0.003	5.2
610-550-249-SC	5.3	5.5	2.49	2.495 +0.005/-0	5.3	5.203 +0.003/-0	5.297 +0/-0.003	5.5
610-595-361	5.75	5.95	3.615	3.62 +0.005/-0	5.75	5.953 +0.003/-0	5.747 +0/-0.003	5.95
610-720-314	7	7.2	3.14	3.145 +0.005/-0	7	7.203 +0.003/-0	6.997 +0/-0.003	7.2

# STYLE 612 NYLON WEAR RINGS 1/8" THICK

Manufactured from glass reinforced nylon, our wear rings offer physical properties equivalent to those of bronze. They are highly recommended for bearing applications because of their wear rate, non-scoring properties, and their ability to ingest metal chips.



### HERCULES PART NUMBERS



SC = Scarf Cut Split  
ST=Step Cut Split

SEAL INFORMATION	
TEMPERATURE RANGE	-40° to +250° F
TENSILE STRENGTH	27,000 PSI
COMPRESSIVE STRENGTH	35,000 PSI

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.	H GROOVE DIA.	J NOM. BORE DIA.
612-100-037	0.75	1	0.375	0.38 +0.005/-0	0.75	1.003 +0.003/-0	0.747 +0/-0.003	1
612-112-037	0.875	1.125	0.375	0.38 +0.005/-0	0.875	1.128 +0.003/-0	0.872 +0/-0.003	1.125
612-125-037	1	1.25	0.375	0.38 +0.005/-0	1	1.253 +0.003/-0	0.997 +0/-0.003	1.25
612-125-050	1	1.25	0.5	0.505 +0.005/-0	1	1.253 +0.003/-0	0.997 +0/-0.003	1.25
612-137-050	1.125	1.375	0.5	0.505 +0.005/-0	1.125	1.378 +0.003/-0	1.122 +0/-0.003	1.375
612-150-025	1.25	1.5	0.25	0.255 +0.005/-0	1.25	1.503 +0.003/-0	1.247 +0/-0.003	1.5
612-150-037	1.25	1.5	0.375	0.38 +0.005/-0	1.25	1.503 +0.003/-0	1.247 +0/-0.003	1.5
612-150-050	1.25	1.5	0.5	0.505 +0.005/-0	1.25	1.503 +0.003/-0	1.247 +0/-0.003	1.5
612-150-062	1.25	1.5	0.625	0.63 +0.005/-0	1.25	1.503 +0.003/-0	1.247 +0/-0.003	1.5
612-150-100	1.25	1.5	1	1.005 +0.005/-0	1.25	1.503 +0.003/-0	1.247 +0/-0.003	1.5
612-162-050	1.375	1.625	0.5	0.505 +0.005/-0	1.375	1.628 +0.003/-0	1.372 +0/-0.003	1.625
612-175-037	1.5	1.75	0.375	0.38 +0.005/-0	1.5	1.753 +0.003/-0	1.497 +0/-0.003	1.75
612-175-050	1.5	1.75	0.5	0.505 +0.005/-0	1.5	1.753 +0.003/-0	1.497 +0/-0.003	1.75
612-175-075	1.5	1.75	0.75	0.755 +0.005/-0	1.5	1.753 +0.003/-0	1.497 +0/-0.003	1.75
612-175-100	1.5	1.75	1	1.005 +0.005/-0	1.5	1.753 +0.003/-0	1.497 +0/-0.003	1.75
612-187-050	1.625	1.875	0.5	0.505 +0.005/-0	1.625	1.878 +0.003/-0	1.622 +0/-0.003	1.875
612-187-075	1.625	1.875	0.75	0.755 +0.005/-0	1.625	1.878 +0.003/-0	1.622 +0/-0.003	1.875
612-200-016	1.75	2	0.16	0.165 +0.005/-0	1.75	2.003 +0.003/-0	1.747 +0/-0.003	2
612-200-025	1.75	2	0.25	0.255 +0.005/-0	1.75	2.003 +0.003/-0	1.747 +0/-0.003	2
612-200-037	1.75	2	0.375	0.38 +0.005/-0	1.75	2.003 +0.003/-0	1.747 +0/-0.003	2
612-200-050	1.75	2	0.5	0.505 +0.005/-0	1.75	2.003 +0.003/-0	1.747 +0/-0.003	2
612-200-050-ST	1.75	2	0.5	0.505 +0.005/-0	1.75	2.003 +0.003/-0	1.747 +0/-0.003	2
612-200-062	1.75	2	0.625	0.63 +0.005/-0	1.75	2.003 +0.003/-0	1.747 +0/-0.003	2
612-200-075	1.75	2	0.75	0.755 +0.005/-0	1.75	2.003 +0.003/-0	1.747 +0/-0.003	2
612-200-100	1.75	2	1	1.005 +0.005/-0	1.75	2.003 +0.003/-0	1.747 +0/-0.003	2
612-200-150	1.75	2	1.5	1.505 +0.005/-0	1.75	2.003 +0.003/-0	1.747 +0/-0.003	2
612-212-037	1.875	2.125	0.375	0.38 +0.005/-0	1.875	2.128 +0.003/-0	1.872 +0/-0.003	2.125
612-212-050	1.875	2.125	0.5	0.505 +0.005/-0	1.875	2.128 +0.003/-0	1.872 +0/-0.003	2.125



## STYLE 612 NYLON WEAR RINGS 1/8" THICK

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.	H GROOVE DIA.	J NOM. BORE DIA.
612-212-075	1.875	2.125	0.75	0.755 +0.005/-0	1.875	2.128 +0.003/-0	1.872 +0/-0.003	2.125
612-218-026	1.938	2.188	0.26	0.265 +0.005/-0	1.938	2.191 +0.003/-0	1.935 +0/-0.003	2.188
612-225-031	2	2.25	0.312	0.317 +0.005/-0	2	2.253 +0.003/-0	1.997 +0/-0.003	2.25
612-225-037	2	2.25	0.375	0.38 +0.005/-0	2	2.253 +0.003/-0	1.997 +0/-0.003	2.25
612-225-050	2	2.25	0.5	0.505 +0.005/-0	2	2.253 +0.003/-0	1.997 +0/-0.003	2.25
612-225-050-SC	2	2.25	0.5	0.505 +0.005/-0	2	2.253 +0.003/-0	1.997 +0/-0.003	2.25
612-225-062	2	2.25	0.625	0.63 +0.005/-0	2	2.253 +0.003/-0	1.997 +0/-0.003	2.25
612-225-075	2	2.25	0.75	0.755 +0.005/-0	2	2.253 +0.003/-0	1.997 +0/-0.003	2.25
612-225-075-SC	2	2.25	0.75	0.755 +0.005/-0	2	2.253 +0.003/-0	1.997 +0/-0.003	2.25
612-225-087	2	2.25	0.875	0.88 +0.005/-0	2	2.253 +0.003/-0	1.997 +0/-0.003	2.25
612-225-100	2	2.25	1	1.005 +0.005/-0	2	2.253 +0.003/-0	1.997 +0/-0.003	2.25
612-237-050	2.125	2.375	0.5	0.505 +0.005/-0	2.125	2.378 +0.003/-0	2.122 +0/-0.003	2.375
612-237-075	2.125	2.375	0.75	0.755 +0.005/-0	2.125	2.378 +0.003/-0	2.122 +0/-0.003	2.375
612-250-018	2.25	2.5	0.1875	0.1925 +0.005/-0	2.25	2.503 +0.003/-0	2.247 +0/-0.003	2.5
612-250-025	2.25	2.5	0.25	0.255 +0.005/-0	2.25	2.503 +0.003/-0	2.247 +0/-0.003	2.5
612-250-031	2.25	2.5	0.312	0.317 +0.005/-0	2.25	2.503 +0.003/-0	2.247 +0/-0.003	2.5
612-250-037	2.25	2.5	0.375	0.38 +0.005/-0	2.25	2.503 +0.003/-0	2.247 +0/-0.003	2.5
612-250-050	2.25	2.5	0.5	0.505 +0.005/-0	2.25	2.503 +0.003/-0	2.247 +0/-0.003	2.5
612-250-050-ST	2.25	2.5	0.5	0.505 +0.005/-0	2.25	2.503 +0.003/-0	2.247 +0/-0.003	2.5
612-250-062	2.25	2.5	0.625	0.63 +0.005/-0	2.25	2.503 +0.003/-0	2.247 +0/-0.003	2.5
612-250-075	2.25	2.5	0.75	0.755 +0.005/-0	2.25	2.503 +0.003/-0	2.247 +0/-0.003	2.5
612-250-087	2.25	2.5	0.875	0.88 +0.005/-0	2.25	2.503 +0.003/-0	2.247 +0/-0.003	2.5
612-250-100	2.25	2.5	1	1.005 +0.005/-0	2.25	2.503 +0.003/-0	2.247 +0/-0.003	2.5
612-250-100-ST	2.25	2.5	1	1.005 +0.005/-0	2.25	2.503 +0.003/-0	2.247 +0/-0.003	2.5
612-262-062	2.375	2.625	0.625	0.63 +0.005/-0	2.375	2.628 +0.003/-0	2.372 +0/-0.003	2.625
612-262-075	2.375	2.625	0.75	0.755 +0.005/-0	2.375	2.628 +0.003/-0	2.372 +0/-0.003	2.625
612-275-031	2.5	2.75	0.312	0.317 +0.005/-0	2.5	2.753 +0.003/-0	2.497 +0/-0.003	2.75
612-275-031P	2.5	2.75	0.3125	0.3175 +0.005/-0	2.5	2.753 +0.003/-0	2.497 +0/-0.003	2.75
612-275-037	2.5	2.75	0.375	0.38 +0.005/-0	2.5	2.753 +0.003/-0	2.497 +0/-0.003	2.75
612-275-050	2.5	2.75	0.5	0.505 +0.005/-0	2.5	2.753 +0.003/-0	2.497 +0/-0.003	2.75
612-275-062	2.5	2.75	0.625	0.63 +0.005/-0	2.5	2.753 +0.003/-0	2.497 +0/-0.003	2.75
612-275-075	2.5	2.75	0.75	0.755 +0.005/-0	2.5	2.753 +0.003/-0	2.497 +0/-0.003	2.75
612-275-093	2.5	2.75	0.09375	0.0988 +0.005/-0	2.5	2.753 +0.003/-0	2.497 +0/-0.003	2.75
612-275-100	2.5	2.75	1	1.005 +0.005/-0	2.5	2.753 +0.003/-0	2.497 +0/-0.003	2.75
612-275-100-SC	2.5	2.75	1	1.005 +0.005/-0	2.5	2.753 +0.003/-0	2.497 +0/-0.003	2.75
612-275-100-ST	2.5	2.75	1	1.005 +0.005/-0	2.5	2.753 +0.003/-0	2.497 +0/-0.003	2.75
612-275-150	2.5	2.75	1.5	1.505 +0.005/-0	2.5	2.753 +0.003/-0	2.497 +0/-0.003	2.75
612-287-050	2.625	2.875	0.5	0.505 +0.005/-0	2.625	2.878 +0.003/-0	2.622 +0/-0.003	2.875
612-287-100	2.625	2.875	1	1.005 +0.005/-0	2.625	2.878 +0.003/-0	2.622 +0/-0.003	2.875
612-300-025	2.75	3	0.25	0.255 +0.005/-0	2.75	3.003 +0.003/-0	2.747 +0/-0.003	3
612-300-031	2.75	3	0.312	0.317 +0.005/-0	2.75	3.003 +0.003/-0	2.747 +0/-0.003	3
612-300-037	2.75	3	0.375	0.38 +0.005/-0	2.75	3.003 +0.003/-0	2.747 +0/-0.003	3
612-300-050	2.75	3	0.5	0.505 +0.005/-0	2.75	3.003 +0.003/-0	2.747 +0/-0.003	3
612-300-050P	2.75	3	0.5	0.505 +0.005/-0	2.75	3.003 +0.003/-0	2.747 +0/-0.003	3
612-300-062	2.75	3	0.625	0.63 +0.005/-0	2.75	3.003 +0.003/-0	2.747 +0/-0.003	3
612-300-075	2.75	3	0.75	0.755 +0.005/-0	2.75	3.003 +0.003/-0	2.747 +0/-0.003	3
612-300-100	2.75	3	1	1.005 +0.005/-0	2.75	3.003 +0.003/-0	2.747 +0/-0.003	3
612-300-100-ST	2.75	3	1	1.005 +0.005/-0	2.75	3.003 +0.003/-0	2.747 +0/-0.003	3
612-300-124-SC	2.75	3	1.24	1.245 +0.005/-0	2.75	3.003 +0.003/-0	2.747 +0/-0.003	3
612-306-025	2.8125	3.063	0.25	0.255 +0.005/-0	2.8125	3.066 +0.003/-0	2.8095 +0/-0.003	3.063
612-312-050	2.875	3.125	0.5	0.505 +0.005/-0	2.875	3.128 +0.003/-0	2.872 +0/-0.003	3.125
612-325-025	3	3.25	0.25	0.255 +0.005/-0	3	3.253 +0.003/-0	2.997 +0/-0.003	3.25
612-325-037	3	3.25	0.375	0.38 +0.005/-0	3	3.253 +0.003/-0	2.997 +0/-0.003	3.25
612-325-050	3	3.25	0.5	0.505 +0.005/-0	3	3.253 +0.003/-0	2.997 +0/-0.003	3.25
612-325-062	3	3.25	0.625	0.63 +0.005/-0	3	3.253 +0.003/-0	2.997 +0/-0.003	3.25
612-325-075	3	3.25	0.75	0.755 +0.005/-0	3	3.253 +0.003/-0	2.997 +0/-0.003	3.25
612-325-100	3	3.25	1	1.005 +0.005/-0	3	3.253 +0.003/-0	2.997 +0/-0.003	3.25
612-325-100-SC	3	3.25	1	1.005 +0.005/-0	3	3.253 +0.003/-0	2.997 +0/-0.003	3.25

# STYLE 612 NYLON WEAR RINGS 1/8" THICK

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.	H GROOVE DIA.	J NOM. BORE DIA.
612-325-111	3	3.25	1.115	1.12 +0.005/-0	3	3.253 +0.003/-0	2.997 +0/-0.003	3.25
612-325-125	3	3.25	1.25	1.255 +0.005/-0	3	3.253 +0.003/-0	2.997 +0/-0.003	3.25
612-325-150	3	3.25	1.5	1.505 +0.005/-0	3	3.253 +0.003/-0	2.997 +0/-0.003	3.25
612-325-155	3	3.25	1.55	1.555 +0.005/-0	3	3.253 +0.003/-0	2.997 +0/-0.003	3.25
612-325-162-SC	3	3.25	1.625	1.63 +0.005/-0	3	3.253 +0.003/-0	2.997 +0/-0.003	3.25
612-325-200	3	3.25	2	2.005 +0.005/-0	3	3.253 +0.003/-0	2.997 +0/-0.003	3.25
612-325-200P-SC	3	3.25	2	2.005 +0.005/-0	3	3.253 +0.003/-0	2.997 +0/-0.003	3.25
612-325-212-SC	3	3.25	2.125	2.13 +0.005/-0	3	3.253 +0.003/-0	2.997 +0/-0.003	3.25
612-337-075	3.125	3.375	0.75	0.755 +0.005/-0	3.125	3.378 +0.003/-0	3.122 +0/-0.003	3.375
612-350-037	3.25	3.5	0.375	0.38 +0.005/-0	3.25	3.503 +0.003/-0	3.247 +0/-0.003	3.5
612-350-043	3.25	3.5	0.438	0.443 +0.005/-0	3.25	3.503 +0.003/-0	3.247 +0/-0.003	3.5
612-350-050	3.25	3.5	0.5	0.505 +0.005/-0	3.25	3.503 +0.003/-0	3.247 +0/-0.003	3.5
612-350-062	3.25	3.5	0.625	0.63 +0.005/-0	3.25	3.503 +0.003/-0	3.247 +0/-0.003	3.5
612-350-062-ST	3.25	3.5	0.625	0.63 +0.005/-0	3.25	3.503 +0.003/-0	3.247 +0/-0.003	3.5
612-350-075	3.25	3.5	0.75	0.755 +0.005/-0	3.25	3.503 +0.003/-0	3.247 +0/-0.003	3.5
612-350-087	3.25	3.5	0.875	0.88 +0.005/-0	3.25	3.503 +0.003/-0	3.247 +0/-0.003	3.5
612-350-100	3.25	3.5	1	1.005 +0.005/-0	3.25	3.503 +0.003/-0	3.247 +0/-0.003	3.5
612-350-100-ST	3.25	3.5	1	1.005 +0.005/-0	3.25	3.503 +0.003/-0	3.247 +0/-0.003	3.5
612-350-112	3.25	3.5	1.125	1.13 +0.005/-0	3.25	3.503 +0.003/-0	3.247 +0/-0.003	3.5
612-350-150	3.25	3.5	1.5	1.505 +0.005/-0	3.25	3.503 +0.003/-0	3.247 +0/-0.003	3.5
612-362-062	3.375	3.625	0.625	0.63 +0.005/-0	3.375	3.628 +0.003/-0	3.372 +0/-0.003	3.625
612-362-075	3.375	3.625	0.75	0.755 +0.005/-0	3.375	3.628 +0.003/-0	3.372 +0/-0.003	3.625
612-362-100	3.375	3.625	1	1.005 +0.005/-0	3.375	3.628 +0.003/-0	3.372 +0/-0.003	3.625
612-375-037	3.5	3.75	0.375	0.38 +0.005/-0	3.5	3.753 +0.003/-0	3.497 +0/-0.003	3.75
612-375-050	3.5	3.75	0.5	0.505 +0.005/-0	3.5	3.753 +0.003/-0	3.497 +0/-0.003	3.75
612-375-050P-SC	3.5	3.75	0.5	0.505 +0.005/-0	3.5	3.753 +0.003/-0	3.497 +0/-0.003	3.75
612-375-062	3.5	3.75	0.625	0.63 +0.005/-0	3.5	3.753 +0.003/-0	3.497 +0/-0.003	3.75
612-375-075	3.5	3.75	0.75	0.755 +0.005/-0	3.5	3.753 +0.003/-0	3.497 +0/-0.003	3.75
612-375-100	3.5	3.75	1	1.005 +0.005/-0	3.5	3.753 +0.003/-0	3.497 +0/-0.003	3.75
612-375-100P-SC	3.5	3.75	1	1.005 +0.005/-0	3.5	3.753 +0.003/-0	3.497 +0/-0.003	3.75
612-375-124	3.5	3.75	1.24	1.245 +0.005/-0	3.5	3.753 +0.003/-0	3.497 +0/-0.003	3.75
612-375-125	3.5	3.75	1.25	1.255 +0.005/-0	3.5	3.753 +0.003/-0	3.497 +0/-0.003	3.75
612-375-125P-SC	3.5	3.75	1.25	1.255 +0.005/-0	3.5	3.753 +0.003/-0	3.497 +0/-0.003	3.75
612-375-149	3.5	3.75	1.49	1.495 +0.005/-0	3.5	3.753 +0.003/-0	3.497 +0/-0.003	3.75
612-375-199	3.5	3.75	1.99	1.995 +0.005/-0	3.5	3.753 +0.003/-0	3.497 +0/-0.003	3.75
612-387-025	3.625	3.875	0.25	0.255 +0.005/-0	3.625	3.878 +0.003/-0	3.622 +0/-0.003	3.875
612-400-031	3.75	4	0.3125	0.3175 +0.005/-0	3.75	4.003 +0.003/-0	3.747 +0/-0.003	4
612-400-037	3.75	4	0.375	0.38 +0.005/-0	3.75	4.003 +0.003/-0	3.747 +0/-0.003	4
612-400-050	3.75	4	0.5	0.505 +0.005/-0	3.75	4.003 +0.003/-0	3.747 +0/-0.003	4
612-400-062	3.75	4	0.625	0.63 +0.005/-0	3.75	4.003 +0.003/-0	3.747 +0/-0.003	4
612-400-062-ST	3.75	4	0.625	0.63 +0.005/-0	3.75	4.003 +0.003/-0	3.747 +0/-0.003	4
612-400-075	3.75	4	0.75	0.755 +0.005/-0	3.75	4.003 +0.003/-0	3.747 +0/-0.003	4
612-400-087	3.75	4	0.875	0.88 +0.005/-0	3.75	4.003 +0.003/-0	3.747 +0/-0.003	4
612-400-100	3.75	4	1	1.005 +0.005/-0	3.75	4.003 +0.003/-0	3.747 +0/-0.003	4
612-400-125	3.75	4	1.25	1.255 +0.005/-0	3.75	4.003 +0.003/-0	3.747 +0/-0.003	4
612-400-150	3.75	4	1.5	1.505 +0.005/-0	3.75	4.003 +0.003/-0	3.747 +0/-0.003	4
612-412-042	3.875	4.125	0.42	0.425 +0.005/-0	3.875	4.128 +0.003/-0	3.872 +0/-0.003	4.125
612-425-025	4	4.25	0.25	0.255 +0.005/-0	4	4.253 +0.003/-0	3.997 +0/-0.003	4.25
612-425-037	4	4.25	0.375	0.38 +0.005/-0	4	4.253 +0.003/-0	3.997 +0/-0.003	4.25
612-425-050	4	4.25	0.5	0.505 +0.005/-0	4	4.253 +0.003/-0	3.997 +0/-0.003	4.25
612-425-062	4	4.25	0.625	0.63 +0.005/-0	4	4.253 +0.003/-0	3.997 +0/-0.003	4.25
612-425-075	4	4.25	0.75	0.755 +0.005/-0	4	4.253 +0.003/-0	3.997 +0/-0.003	4.25
612-425-100	4	4.25	1	1.005 +0.005/-0	4	4.253 +0.003/-0	3.997 +0/-0.003	4.25
612-425-125	4	4.25	1.25	1.255 +0.005/-0	4	4.253 +0.003/-0	3.997 +0/-0.003	4.25
612-425-125-SC	4	4.25	1.25	1.255 +0.005/-0	4	4.253 +0.003/-0	3.997 +0/-0.003	4.25
612-425-149-SC	4	4.25	1.49	1.495 +0.005/-0	4	4.253 +0.003/-0	3.997 +0/-0.003	4.25
612-425-150P	4	4.25	1.5	1.505 +0.005/-0	4	4.253 +0.003/-0	3.997 +0/-0.003	4.25
612-425-188	4	4.25	1.88	1.885 +0.005/-0	4	4.253 +0.003/-0	3.997 +0/-0.003	4.25

## STYLE 612 NYLON WEAR RINGS 1/8" THICK

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.	H GROOVE DIA.	J NOM. BORE DIA.
612-426-249	4.01	4.26	2.49	2.495 +0.005/-0	4.01	4.263 +0.003/-0	4.007 +0/-0.003	4.26
612-440-062	4.15	4.4	0.625	0.63 +0.005/-0	4.15	4.403 +0.003/-0	4.147 +0/-0.003	4.4
612-450-037	4.25	4.5	0.375	0.38 +0.005/-0	4.25	4.503 +0.003/-0	4.247 +0/-0.003	4.5
612-450-050	4.25	4.5	0.5	0.505 +0.005/-0	4.25	4.503 +0.003/-0	4.247 +0/-0.003	4.5
612-450-062	4.25	4.5	0.625	0.63 +0.005/-0	4.25	4.503 +0.003/-0	4.247 +0/-0.003	4.5
612-450-075	4.25	4.5	0.75	0.755 +0.005/-0	4.25	4.503 +0.003/-0	4.247 +0/-0.003	4.5
612-450-075-SC	4.25	4.5	0.75	0.755 +0.005/-0	4.25	4.503 +0.003/-0	4.247 +0/-0.003	4.5
612-450-087	4.25	4.5	0.875	0.88 +0.005/-0	4.25	4.503 +0.003/-0	4.247 +0/-0.003	4.5
612-450-093	4.25	4.5	0.9375	0.9425 +0.005/-0	4.25	4.503 +0.003/-0	4.247 +0/-0.003	4.5
612-450-100	4.25	4.5	1	1.005 +0.005/-0	4.25	4.503 +0.003/-0	4.247 +0/-0.003	4.5
612-450-150	4.25	4.5	1.5	1.505 +0.005/-0	4.25	4.503 +0.003/-0	4.247 +0/-0.003	4.5
612-450-186	4.25	4.5	1.865	1.87 +0.005/-0	4.25	4.503 +0.003/-0	4.247 +0/-0.003	4.5
612-450-236	4.25	4.5	2.365	2.37 +0.005/-0	4.25	4.503 +0.003/-0	4.247 +0/-0.003	4.5
612-475-050	4.5	4.75	0.5	0.505 +0.005/-0	4.5	4.753 +0.003/-0	4.497 +0/-0.003	4.75
612-475-075	4.5	4.75	0.75	0.755 +0.005/-0	4.5	4.753 +0.003/-0	4.497 +0/-0.003	4.75
612-475-100	4.5	4.75	1	1.005 +0.005/-0	4.5	4.753 +0.003/-0	4.497 +0/-0.003	4.75
612-475-125	4.5	4.75	1.25	1.255 +0.005/-0	4.5	4.753 +0.003/-0	4.497 +0/-0.003	4.75
612-475-125-SC	4.5	4.75	1.25	1.255 +0.005/-0	4.5	4.753 +0.003/-0	4.497 +0/-0.003	4.75
612-475-156	4.5	4.75	1.563	1.568 +0.005/-0	4.5	4.753 +0.003/-0	4.497 +0/-0.003	4.75
612-475-199	4.5	4.75	1.99	1.995 +0.005/-0	4.5	4.753 +0.003/-0	4.497 +0/-0.003	4.75
612-475-350	4.5	4.75	3.5	3.505 +0.005/-0	4.5	4.753 +0.003/-0	4.497 +0/-0.003	4.75
612-487-075	4.625	4.875	0.75	0.755 +0.005/-0	4.625	4.878 +0.003/-0	4.622 +0/-0.003	4.875
612-500-037	4.75	5	0.375	0.38 +0.005/-0	4.75	5.003 +0.003/-0	4.747 +0/-0.003	5
612-500-050	4.75	5	0.5	0.505 +0.005/-0	4.75	5.003 +0.003/-0	4.747 +0/-0.003	5
612-500-062	4.75	5	0.625	0.63 +0.005/-0	4.75	5.003 +0.003/-0	4.747 +0/-0.003	5
612-500-075	4.75	5	0.75	0.755 +0.005/-0	4.75	5.003 +0.003/-0	4.747 +0/-0.003	5
612-500-100	4.75	5	1	1.005 +0.005/-0	4.75	5.003 +0.003/-0	4.747 +0/-0.003	5
612-500-112	4.75	5	1.125	1.13 +0.005/-0	4.75	5.003 +0.003/-0	4.747 +0/-0.003	5
612-500-124	4.75	5	1.24	1.245 +0.005/-0	4.75	5.003 +0.003/-0	4.747 +0/-0.003	5
612-500-155-SC	4.75	5	1.5525	1.5575 +0.005/-0	4.75	5.003 +0.003/-0	4.747 +0/-0.003	5
612-500-175	4.75	5	1.75	1.755 +0.005/-0	4.75	5.003 +0.003/-0	4.747 +0/-0.003	5
612-512-156	4.875	5.125	1.5625	1.5675 +0.005/-0	4.875	4.128 +0.003/-0	4.872 +0/-0.003	5.125
612-512-156-SC	4.875	5.125	1.5625	1.5675 +0.005/-0	4.875	5.128 +0.003/-0	4.872 +0/-0.003	5.125
612-525-050	5	5.25	0.5	0.505 +0.005/-0	5	5.253 +0.003/-0	4.997 +0/-0.003	5.25
612-525-062	5	5.25	0.625	0.63 +0.005/-0	5	5.253 +0.003/-0	4.997 +0/-0.003	5.25
612-525-075	5	5.25	0.75	0.755 +0.005/-0	5	5.253 +0.003/-0	4.997 +0/-0.003	5.25
612-525-100	5	5.25	1	1.005 +0.005/-0	5	5.253 +0.003/-0	4.997 +0/-0.003	5.25
612-525-102	5	5.25	1.02	1.025 +0.005/-0	5	5.253 +0.003/-0	4.997 +0/-0.003	5.25
612-525-125	5	5.25	1.25	1.255 +0.005/-0	5	5.253 +0.003/-0	4.997 +0/-0.003	5.25
612-525-149	5	5.25	1.49	1.495 +0.005/-0	5	5.253 +0.003/-0	4.997 +0/-0.003	5.25
612-525-200P-SC	5	5.25	2	2.005 +0.005/-0	5	5.253 +0.003/-0	4.997 +0/-0.003	5.25
612-525-361	5	5.25	3.615	3.62 +0.005/-0	5	5.253 +0.003/-0	4.997 +0/-0.003	5.25
612-550-037	5.25	5.5	0.375	0.38 +0.005/-0	5.25	5.503 +0.003/-0	5.247 +0/-0.003	5.5
612-550-050	5.25	5.5	0.5	0.505 +0.005/-0	5.25	5.503 +0.003/-0	5.247 +0/-0.003	5.5
612-550-062	5.25	5.5	0.625	0.63 +0.005/-0	5.25	5.503 +0.003/-0	5.247 +0/-0.003	5.5
612-550-075	5.25	5.5	0.75	0.755 +0.005/-0	5.25	5.503 +0.003/-0	5.247 +0/-0.003	5.5
612-550-100	5.25	5.5	1	1.005 +0.005/-0	5.25	5.503 +0.003/-0	5.247 +0/-0.003	5.5
612-550-125	5.25	5.5	1.25	1.255 +0.005/-0	5.25	5.503 +0.003/-0	5.247 +0/-0.003	5.5
612-550-137	5.25	5.5	1.375	1.38 +0.005/-0	5.25	5.503 +0.003/-0	5.247 +0/-0.003	5.5
612-550-161	5.25	5.5	1.619	1.624 +0.005/-0	5.25	5.503 +0.003/-0	5.247 +0/-0.003	5.5
612-550-175	5.25	5.5	1.75	1.755 +0.005/-0	5.25	5.503 +0.003/-0	5.247 +0/-0.003	5.5
612-550-199	5.25	5.5	1.99	1.995 +0.005/-0	5.25	5.503 +0.003/-0	5.247 +0/-0.003	5.5
612-550-224	5.25	5.5	2.24	2.245 +0.005/-0	5.25	5.503 +0.003/-0	5.247 +0/-0.003	5.5
612-575-050	5.5	5.75	0.5	0.505 +0.005/-0	5.5	5.753 +0.003/-0	5.497 +0/-0.003	5.75
612-575-062	5.5	5.75	0.625	0.63 +0.005/-0	5.5	5.753 +0.003/-0	5.497 +0/-0.003	5.75
612-575-075	5.5	5.75	0.75	0.755 +0.005/-0	5.5	5.753 +0.003/-0	5.497 +0/-0.003	5.75
612-575-100	5.5	5.75	1	1.005 +0.005/-0	5.5	5.753 +0.003/-0	5.497 +0/-0.003	5.75
612-575-175	5.5	5.75	1.75	1.755 +0.005/-0	5.5	5.753 +0.003/-0	5.497 +0/-0.003	5.75

## STYLE 612 NYLON WEAR RINGS 1/8" THICK

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.	H GROOVE DIA.	J NOM. BORE DIA.
612-575-199	5.5	5.75	1.99	1.995 +0.005/-0	5.5	5.753 +0.003/-0	5.497 +0/-0.003	5.75
612-575-236	5.5	5.75	2.365	2.37 +0.005/-0	5.5	5.753 +0.003/-0	5.497 +0/-0.003	5.75
612-600-037	5.75	6	0.375	0.38 +0.005/-0	5.75	6.003 +0.003/-0	5.747 +0/-0.003	6
612-600-050	5.75	6	0.5	0.505 +0.005/-0	5.75	6.003 +0.003/-0	5.747 +0/-0.003	6
612-600-050P-SC	5.75	6	0.5	0.505 +0.005/-0	5.75	6.003 +0.003/-0	5.747 +0/-0.003	6
612-600-062	5.75	6	0.625	0.63 +0.005/-0	5.75	6.003 +0.003/-0	5.747 +0/-0.003	6
612-600-062-SC	5.75	6	0.625	0.63 +0.005/-0	5.75	6.003 +0.003/-0	5.747 +0/-0.003	6
612-600-075	5.75	6	0.75	0.755 +0.005/-0	5.75	6.003 +0.003/-0	5.747 +0/-0.003	6
612-600-087	5.75	6	0.875	0.88 +0.005/-0	5.75	6.003 +0.003/-0	5.747 +0/-0.003	6
612-600-100	5.75	6	1	1.005 +0.005/-0	5.75	6.003 +0.003/-0	5.747 +0/-0.003	6
612-600-107	5.75	6	1.07	1.075 +0.005/-0	5.75	6.003 +0.003/-0	5.747 +0/-0.003	6
612-600-125	5.75	6	1.25	1.255 +0.005/-0	5.75	6.003 +0.003/-0	5.747 +0/-0.003	6
612-600-131	5.75	6	1.312	1.317 +0.005/-0	5.75	6.003 +0.003/-0	5.747 +0/-0.003	6
612-600-150	5.75	6	1.5	1.505 +0.005/-0	5.75	6.003 +0.003/-0	5.747 +0/-0.003	6
612-600-150-ST	5.75	6	1.5	1.505 +0.005/-0	5.75	6.003 +0.003/-0	5.747 +0/-0.003	6
612-600-175	5.75	6	1.75	1.755 +0.005/-0	5.75	6.003 +0.003/-0	5.747 +0/-0.003	6
612-600-200	5.75	6	2	2.01 +0.005/-0	5.75	6.003 +0.003/-0	5.747 +0/-0.003	6
612-600-286	5.75	6	2.865	2.875 +0.005/-0	5.75	6.003 +0.003/-0	5.747 +0/-0.003	6
612-625-050	6	6.25	0.5	0.505 +0.005/-0	6	6.253 +0.003/-0	5.997 +0/-0.003	6.25
612-625-062	6	6.25	0.625	0.63 +0.005/-0	6	6.253 +0.003/-0	5.997 +0/-0.003	6.25
612-625-100	6	6.25	1	1.005 +0.005/-0	6	6.253 +0.003/-0	5.997 +0/-0.003	6.25
612-625-149-SC	6	6.25	1.49	1.495 +0.005/-0	6	6.253 +0.003/-0	5.997 +0/-0.003	6.25
612-625-150	6	6.25	1.5	1.505 +0.005/-0	6	6.253 +0.003/-0	5.997 +0/-0.003	6.25
612-625-175	6	6.25	1.75	1.755 +0.005/-0	6	6.253 +0.003/-0	5.997 +0/-0.003	6.25
612-625-200-SC	6	6.25	2	2.005 +0.005/-0	6	6.253 +0.003/-0	5.997 +0/-0.003	6.25
612-625-274-SC	6	6.25	2.74	2.75 +0.005/-0	6	6.253 +0.003/-0	5.997 +0/-0.003	6.25
612-650-050	6.25	6.5	0.5	0.505 +0.005/-0	6.25	6.503 +0.003/-0	6.247 +0/-0.003	6.5
612-650-062	6.25	6.5	0.625	0.63 +0.005/-0	6.25	6.503 +0.003/-0	6.247 +0/-0.003	6.5
612-650-075	6.25	6.5	0.75	0.755 +0.005/-0	6.25	6.503 +0.003/-0	6.247 +0/-0.003	6.5
612-650-100	6.25	6.5	1	1.005 +0.005/-0	6.25	6.503 +0.003/-0	6.247 +0/-0.003	6.5
612-650-125	6.25	6.5	1.25	1.255 +0.005/-0	6.25	6.503 +0.003/-0	6.247 +0/-0.003	6.5
612-650-137	6.25	6.5	1.375	1.38 +0.005/-0	6.25	6.503 +0.003/-0	6.247 +0/-0.003	6.5
612-650-150	6.25	6.5	1.5	1.505 +0.005/-0	6.25	6.503 +0.003/-0	6.247 +0/-0.003	6.5
612-650-174	6.25	6.5	1.74	1.75 +0.005/-0	6.25	6.503 +0.003/-0	6.247 +0/-0.003	6.5
612-650-200	6.25	6.5	2	2.01 +0.005/-0	6.25	6.503 +0.003/-0	6.247 +0/-0.003	6.5
612-650-274	6.25	6.5	2.74	2.75 +0.005/-0	6.25	6.503 +0.003/-0	6.247 +0/-0.003	6.5
612-650-286	6.25	6.5	2.865	2.875 +0.005/-0	6.25	6.503 +0.003/-0	6.247 +0/-0.003	6.5
612-675-075	6.5	6.75	0.75	0.755 +0.005/-0	6.5	6.753 +0.003/-0	6.497 +0/-0.003	6.75
612-675-100	6.5	6.75	1	1.005 +0.005/-0	6.5	6.753 +0.003/-0	6.497 +0/-0.003	6.75
612-675-150P	6.5	6.75	1.5	1.505 +0.005/-0	6.5	6.753 +0.003/-0	6.497 +0/-0.003	6.75
612-676-125P-SC	6.51	6.76	1.25	1.255 +0.005/-0	6.51	6.763 +0.003/-0	6.507 +0/-0.003	6.76
612-700-050	6.75	7	0.5	0.505 +0.005/-0	6.75	7.003 +0.003/-0	6.747 +0/-0.003	7
612-700-062	6.75	7	0.625	0.63 +0.005/-0	6.75	7.003 +0.003/-0	6.747 +0/-0.003	7
612-700-062-SC	6.75	7	0.625	0.63 +0.005/-0	6.75	7.003 +0.003/-0	6.747 +0/-0.003	7
612-700-075	6.75	7	0.75	0.755 +0.005/-0	6.75	7.003 +0.003/-0	6.747 +0/-0.003	7
612-700-100	6.75	7	1	1.005 +0.005/-0	6.75	7.003 +0.003/-0	6.747 +0/-0.003	7
612-700-150	6.75	7	1.5	1.505 +0.005/-0	6.75	7.003 +0.003/-0	6.747 +0/-0.003	7
612-700-174	6.75	7	1.74	1.745 +0.005/-0	6.75	7.003 +0.003/-0	6.747 +0/-0.003	7
612-700-199	6.75	7	1.99	1.995 +0.005/-0	6.75	7.003 +0.003/-0	6.747 +0/-0.003	7
612-700-300	6.75	7	3	3.005 +0.005/-0	6.75	7.003 +0.003/-0	6.747 +0/-0.003	7
612-700-312	6.75	7	3.125	3.13 +0.005/-0	6.75	7.003 +0.003/-0	6.747 +0/-0.003	7
612-725-050	7	7.25	0.5	0.505 +0.005/-0	7	7.253 +0.003/-0	6.997 +0/-0.003	7.25
612-725-062	7	7.25	0.625	0.63 +0.005/-0	7	7.253 +0.003/-0	6.997 +0/-0.003	7.25
612-725-100	7	7.25	1	1.005 +0.005/-0	7	7.253 +0.003/-0	6.997 +0/-0.003	7.25
612-725-138	7	7.25	1.375	1.38 +0.005/-0	7	7.253 +0.003/-0	6.997 +0/-0.003	7.25
612-725-200	7	7.25	2	2.005 +0.005/-0	7	7.253 +0.003/-0	6.997 +0/-0.003	7.25
612-725-200-SC	7	7.25	2	2.005 +0.005/-0	7	7.253 +0.003/-0	6.997 +0/-0.003	7.25
612-725-200P-SC	7	7.25	2	2.005 +0.005/-0	7	7.253 +0.003/-0	6.997 +0/-0.003	7.25

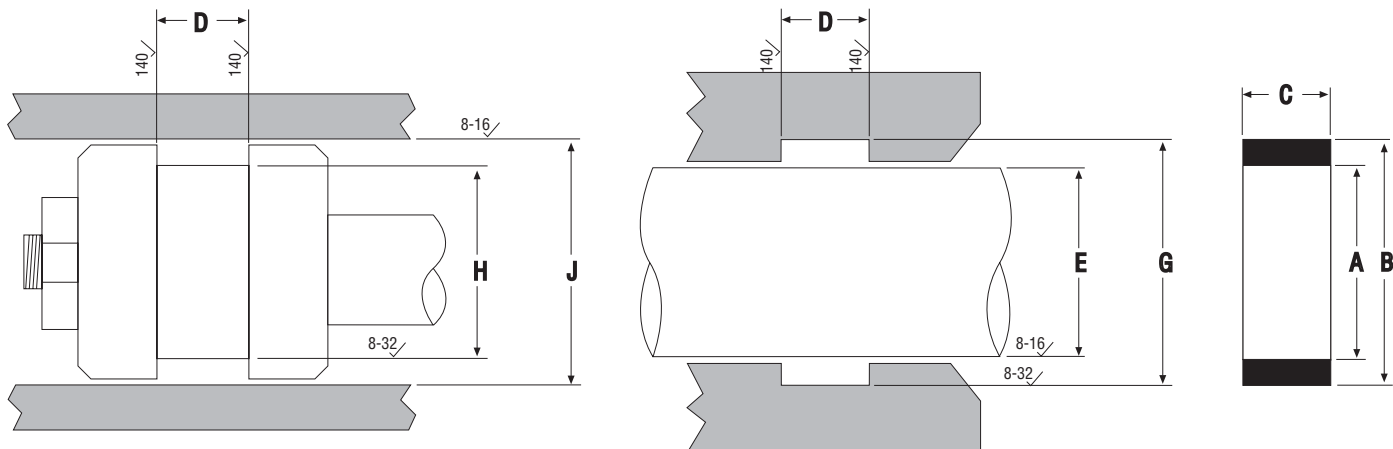
## STYLE 612 NYLON WEAR RINGS 1/8" THICK

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.	H GROOVE DIA.	J NOM. BORE DIA.
612-725-710	7	7.25	7.1	7.105 +0.005/-0	7	7.253 +0.003/-0	6.997 +0/-0.003	7.25
612-750-050	7.25	7.5	0.5	0.505 +0.005/-0	7.25	7.503 +0.003/-0	7.247 +0/-0.003	7.5
612-750-062	7.25	7.5	0.625	0.63 +0.005/-0	7.25	7.503 +0.003/-0	7.247 +0/-0.003	7.5
612-750-075	7.25	7.5	0.75	0.755 +0.005/-0	7.25	7.503 +0.003/-0	7.247 +0/-0.003	7.5
612-750-100	7.25	7.5	1	1.005 +0.005/-0	7.25	7.503 +0.003/-0	7.247 +0/-0.003	7.5
612-750-236	7.25	7.5	2.365	2.37 +0.005/-0	7.25	7.503 +0.003/-0	7.247 +0/-0.003	7.5
612-750-250	7.25	7.5	2.5	2.505 +0.005/-0	7.25	7.503 +0.003/-0	7.247 +0/-0.003	7.5
612-750-295	7.25	7.5	2.95	2.955 +0.005/-0	7.25	7.503 +0.003/-0	7.247 +0/-0.003	7.5
612-775-050	7.5	7.75	0.5	0.505 +0.005/-0	7.5	7.753 +0.003/-0	7.497 +0/-0.003	7.75
612-775-199	7.5	7.75	1.99	1.995 +0.005/-0	7.5	7.753 +0.003/-0	7.497 +0/-0.003	7.75
612-775-350	7.5	7.75	3.5	3.505 +0.005/-0	7.5	7.753 +0.003/-0	7.497 +0/-0.003	7.75
612-787-100	7.625	7.875	1	1.005 +0.005/-0	7.625	7.878 +0.003/-0	7.622 +0/-0.003	7.875
612-800-050	7.75	8	0.5	0.505 +0.005/-0	7.75	8.003 +0.003/-0	7.747 +0/-0.003	8
612-800-062	7.75	8	0.625	0.63 +0.005/-0	7.75	8.003 +0.003/-0	7.747 +0/-0.003	8
612-800-075	7.75	8	0.75	0.755 +0.005/-0	7.75	8.003 +0.003/-0	7.747 +0/-0.003	8
612-800-087	7.75	8	0.875	0.88 +0.005/-0	7.75	8.003 +0.003/-0	7.747 +0/-0.003	8
612-800-100	7.75	8	1	1.005 +0.005/-0	7.75	8.003 +0.003/-0	7.747 +0/-0.003	8
612-800-146-ST	7.75	8	1.46	1.465 +0.005/-0	7.75	8.003 +0.003/-0	7.747 +0/-0.003	8
612-800-150	7.75	8	1.5	1.505 +0.005/-0	7.75	8.003 +0.003/-0	7.747 +0/-0.003	8
612-800-200	7.75	8	2	2.005 +0.005/-0	7.75	8.003 +0.003/-0	7.747 +0/-0.003	8
612-800-500	7.75	8	5	5.005 +0.005/-0	7.75	8.003 +0.003/-0	7.747 +0/-0.003	8
612-825-100	8	8.25	1	1.005 +0.005/-0	8	8.253 +0.003/-0	7.997 +0/-0.003	8.25
612-825-125	8	8.25	1.25	1.255 +0.005/-0	8	8.253 +0.003/-0	7.997 +0/-0.003	8.25
612-825-150	8	8.25	1.5	1.505 +0.005/-0	8	8.253 +0.003/-0	7.997 +0/-0.003	8.25
612-825-175	8	8.25	1.75	1.755 +0.005/-0	8	8.253 +0.003/-0	7.997 +0/-0.003	8.25
612-825-212	8	8.25	2.125	2.13 +0.005/-0	8	8.253 +0.003/-0	7.997 +0/-0.003	8.25
612-825-225	8	8.25	2.25	2.255 +0.005/-0	8	8.253 +0.003/-0	7.997 +0/-0.003	8.25
612-825-249	8	8.25	2.49	2.495 +0.005/-0	8	8.253 +0.003/-0	7.997 +0/-0.003	8.25
612-825-274	8	8.25	2.74	2.745 +0.005/-0	8	8.253 +0.003/-0	7.997 +0/-0.003	8.25
612-825-411	8	8.25	4.115	4.12 +0.005/-0	8	8.253 +0.003/-0	7.997 +0/-0.003	8.25
612-850-050	8.25	8.5	0.5	0.505 +0.005/-0	8.25	8.503 +0.003/-0	8.247 +0/-0.003	8.5
612-850-062	8.25	8.5	0.625	0.63 +0.005/-0	8.25	8.503 +0.003/-0	8.247 +0/-0.003	8.5
612-850-075	8.25	8.5	0.75	0.755 +0.005/-0	8.25	8.503 +0.003/-0	8.247 +0/-0.003	8.5
612-850-236	8.25	8.5	2.365	2.37 +0.005/-0	8.25	8.503 +0.003/-0	8.247 +0/-0.003	8.5
612-850-237	8.25	8.5	2.375	2.38 +0.005/-0	8.25	8.503 +0.003/-0	8.247 +0/-0.003	8.5
612-850-300	8.25	8.5	3	3.005 +0.005/-0	8.25	8.503 +0.003/-0	8.247 +0/-0.003	8.5
612-862-050	8.375	8.625	0.5	0.505 +0.005/-0	8.375	8.628 +0.003/-0	8.372 +0/-0.003	8.625
612-875-100	8.5	8.75	1	1.005 +0.005/-0	8.5	8.753 +0.003/-0	8.497 +0/-0.003	8.75
612-900-050	8.75	9	0.5	0.505 +0.005/-0	8.75	9.003 +0.003/-0	8.747 +0/-0.003	9
612-900-062	8.75	9	0.625	0.63 +0.005/-0	8.75	9.003 +0.003/-0	8.747 +0/-0.003	9
612-900-075	8.75	9	0.75	0.755 +0.005/-0	8.75	9.003 +0.003/-0	8.747 +0/-0.003	9
612-900-100	8.75	9	1	1.005 +0.005/-0	8.75	9.003 +0.003/-0	8.747 +0/-0.003	9
612-900-150	8.75	9	1.5	1.505 +0.005/-0	8.75	9.003 +0.003/-0	8.747 +0/-0.003	9
612-925-225	9	9.25	2.25	2.255 +0.005/-0	9	9.253 +0.003/-0	8.997 +0/-0.003	9.25
612-950-050	9.25	9.5	0.5	0.505 +0.005/-0	9.25	9.503 +0.003/-0	9.247 +0/-0.003	9.5
612-950-062	9.25	9.5	0.625	0.63 +0.005/-0	9.25	9.503 +0.003/-0	9.247 +0/-0.003	9.5
612-950-075	9.25	9.5	0.75	0.755 +0.005/-0	9.25	9.503 +0.003/-0	9.247 +0/-0.003	9.5
612-975-050	9.5	9.75	0.5	0.505 +0.005/-0	9.5	9.753 +0.003/-0	9.497 +0/-0.003	9.75
612-975-075	9.5	9.75	0.75	0.755 +0.005/-0	9.5	9.753 +0.003/-0	9.497 +0/-0.003	9.75
612-987-050	9.625	9.875	0.5	0.505 +0.005/-0	9.625	9.878 +0.003/-0	9.622 +0/-0.003	9.875
612-1000-025	9.75	10	0.25	0.255 +0.005/-0	9.75	10.003 +0.003/-0	9.747 +0/-0.003	10
612-1000-050	9.75	10	0.5	0.505 +0.005/-0	9.75	10.003 +0.003/-0	9.747 +0/-0.003	10
612-1000-062	9.75	10	0.625	0.63 +0.005/-0	9.75	10.003 +0.003/-0	9.747 +0/-0.003	10
612-1000-075	9.75	10	0.75	0.755 +0.005/-0	9.75	10.003 +0.003/-0	9.747 +0/-0.003	10
612-1000-100	9.75	10	1	1.005 +0.005/-0	9.75	10.003 +0.003/-0	9.747 +0/-0.003	10
612-1000-125	9.75	10	1.25	1.255 +0.005/-0	9.75	10.003 +0.003/-0	9.747 +0/-0.003	10
612-1000-150	9.75	10	1.5	1.505 +0.005/-0	9.75	10.003 +0.003/-0	9.747 +0/-0.003	10
612-1000-325	9.75	10	3.25	3.255 +0.005/-0	9.75	10.003 +0.003/-0	9.747 +0/-0.003	10

# STYLE 612 NYLON WEAR RINGS 1/8" THICK

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.	H GROOVE DIA.	J NOM. BORE DIA.
612-1025-075	10	10.25	0.75	0.755 +0.005/-0	10	10.253 +0.003/-0	9.997 +0/-0.003	10.25
612-1025-100	10	10.25	1	1.005 +0.005/-0	10	10.253 +0.003/-0	9.997 +0/-0.003	10.25
612-1025-125-SC	10	10.25	1.25	1.255 +0.005/-0	10	10.253 +0.003/-0	9.997 +0/-0.003	10.25
612-1050-050	10.25	10.5	0.5	0.505 +0.005/-0	10.25	10.503 +0.003/-0	10.247 +0/-0.003	10.5
612-1050-100	10.25	10.5	1	1.005 +0.005/-0	10.25	10.503 +0.003/-0	10.247 +0/-0.003	10.5
612-1050-125	10.25	10.5	1.25	1.255 +0.005/-0	10.25	10.503 +0.003/-0	10.247 +0/-0.003	10.5
612-1050-274	10.25	10.5	2.74	2.745 +0.005/-0	10.25	10.503 +0.003/-0	10.247 +0/-0.003	10.5
612-1050-375	10.25	10.5	3.75	3.755 +0.005/-0	10.25	10.503 +0.003/-0	10.247 +0/-0.003	10.5
612-1050-400	10.25	10.5	4	4.005 +0.005/-0	10.25	10.503 +0.003/-0	10.247 +0/-0.003	10.5
612-1100-050	10.75	11	0.5	0.505 +0.005/-0	10.75	11.003 +0.003/-0	10.747 +0/-0.003	11
612-1100-100	10.75	11	1	1.005 +0.005/-0	10.75	11.003 +0.003/-0	10.747 +0/-0.003	11
612-1100-125	10.75	11	1.25	1.255 +0.005/-0	10.75	11.003 +0.003/-0	10.747 +0/-0.003	11
612-1100-162	10.75	11	1.625	1.63 +0.005/-0	10.75	11.003 +0.003/-0	10.747 +0/-0.003	11
612-1100-187	10.75	11	1.875	1.88 +0.005/-0	10.75	11.003 +0.003/-0	10.747 +0/-0.003	11
612-1125-125	11	11.25	1.25	1.255 +0.005/-0	11	11.253 +0.003/-0	10.997 +0/-0.003	11.25
612-1150-075	11.25	11.5	0.75	0.755 +0.005/-0	11.25	11.503 +0.003/-0	11.247 +0/-0.003	11.5
612-1150-387	11.25	11.5	3.875	3.88 +0.005/-0	11.25	11.503 +0.003/-0	11.247 +0/-0.003	11.5
612-1200-050	11.75	12	0.5	0.505 +0.005/-0	11.75	12.003 +0.003/-0	11.747 +0/-0.003	12
612-1200-100	11.75	12	1	1.005 +0.005/-0	11.75	12.003 +0.003/-0	11.747 +0/-0.003	12
612-1200-125	11.75	12	1.25	1.255 +0.005/-0	11.75	12.003 +0.003/-0	11.747 +0/-0.003	12
612-1200-150	11.75	12	1.5	1.505 +0.005/-0	11.75	12.003 +0.003/-0	11.747 +0/-0.003	12
612-1200-200	11.75	12	2	2.005 +0.005/-0	11.75	12.003 +0.003/-0	11.747 +0/-0.003	12
612-1225-100	12	12.25	1	1.005 +0.005/-0	12	12.253 +0.003/-0	11.997 +0/-0.003	12.25
612-1225-125	12	12.25	1.25	1.255 +0.005/-0	12	12.253 +0.003/-0	11.997 +0/-0.003	12.25
612-1250-075	12.25	12.5	0.75	0.755 +0.005/-0	12.25	12.503 +0.003/-0	12.247 +0/-0.003	12.5
612-1300-150	12.75	13	1.5	1.505 +0.005/-0	12.75	12.503 +0.003/-0	12.247 +0/-0.003	13
612-1350-075	13.25	13.5	0.75	0.755 +0.005/-0	13.25	13.503 +0.003/-0	13.247 +0/-0.003	13.5
612-1400-050	13.75	14	0.5	0.505 +0.005/-0	13.75	14.003 +0.003/-0	13.747 +0/-0.003	14
612-1400-100	13.75	14	1	1.005 +0.005/-0	13.75	14.003 +0.003/-0	13.747 +0/-0.003	14
612-1400-125	13.75	14	1.25	1.255 +0.005/-0	13.75	14.003 +0.003/-0	13.747 +0/-0.003	14
612-1400-150	13.75	14	1.5	1.505 +0.005/-0	13.75	14.003 +0.003/-0	13.747 +0/-0.003	14
612-1425-399	14	14.25	3.99	3.995 +0.005/-0	14	14.253 +0.003/-0	13.997 +0/-0.003	14.25
612-1600-050	15.75	16	0.5	0.505 +0.005/-0	15.75	16.003 +0.003/-0	15.747 +0/-0.003	16
612-1600-100	15.75	16	1	1.005 +0.005/-0	15.75	16.003 +0.003/-0	15.747 +0/-0.003	16
612-1600-150	15.75	16	1.5	1.505 +0.005/-0	15.75	16.003 +0.003/-0	15.747 +0/-0.003	16
612-1650-100	16.25	16.5	1	1.005 +0.005/-0	16.25	16.503 +0.003/-0	16.247 +0/-0.003	16.5
612-1800-050	17.75	18	0.5	0.505 +0.005/-0	17.75	18.003 +0.003/-0	17.747 +0/-0.003	18
612-2000-050	19.75	20	0.5	0.505 +0.005/-0	19.75	20.003 +0.003/-0	19.747 +0/-0.003	20

# STYLE 616 NYLON WEAR RINGS 3/16" THICK



## HERCULES PART NUMBERS

**616 - 300 3 - 050**

Type of Wear Ring    O.D.    C/S Code    Width

## SEAL INFORMATION

TEMPERATURE RANGE	-40° to +250° F
TENSILE STRENGTH	27,000 PSI
COMPRESSIVE STRENGTH	35,000 PSI

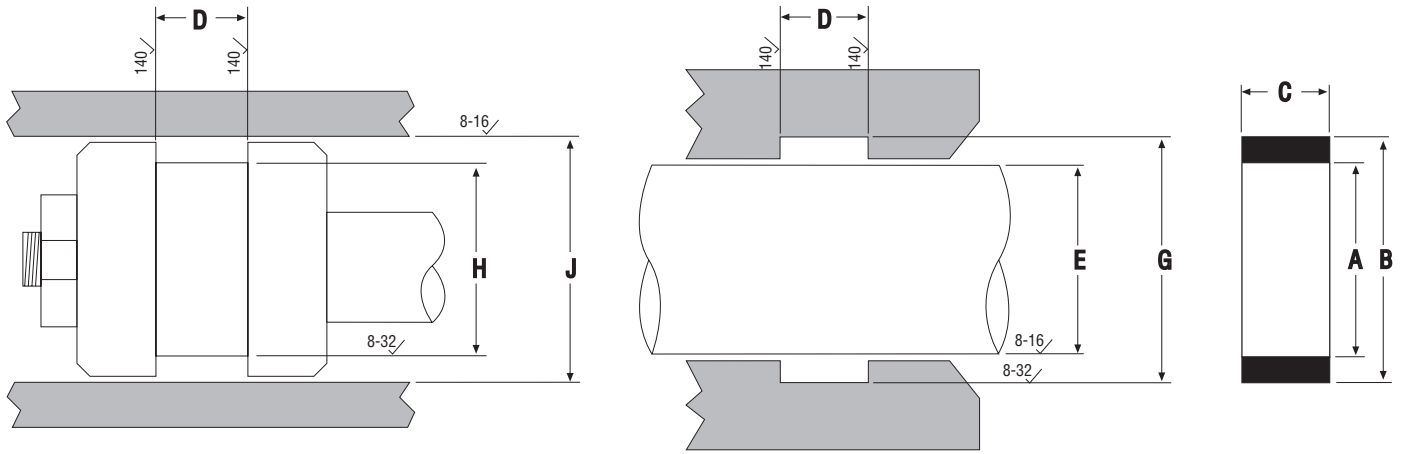
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.	H GROOVE DIA.	J NOM. BORE DIA.
616-2203-062	1.825	2.2	0.625	0.63 +0.005/-0	1.825	2.203 +0.003/-0	1.822 +0/-0.003	2.2
616-2623-062	2.25	2.625	0.625	0.63 +0.005/-0	2.25	2.628 +0.003/-0	2.247 +0/-0.003	2.625
616-2873-062	2.5	2.875	0.625	0.63 +0.005/-0	2.5	2.503 +0.003/-0	2.497 +0/-0.003	2.875
616-3003-050	2.625	3	0.5	0.505 +0.005/-0	2.625	3.003 +0.003/-0	2.622 +0/-0.003	3
616-3003-075	2.625	3	0.75	0.755 +0.005/-0	2.625	3.003 +0.003/-0	2.622 +0/-0.003	3
616-3003-087	2.625	3	0.875	0.88 +0.005/-0	2.625	3.003 +0.003/-0	2.622 +0/-0.003	3
616-3063-062	2.687	3.062	0.625	0.63 +0.005/-0	2.687	3.065 +0.003/-0	2.684 +0/-0.003	3.062
616-3123-100	2.75	3.125	1	1.005 +0.005/-0	2.75	3.128 +0.003/-0	2.747 +0/-0.003	3.125
616-3123-125	2.75	3.125	1.25	1.255 +0.005/-0	2.75	3.128 +0.003/-0	2.747 +0/-0.003	3.125
616-3253-062	2.875	3.25	0.625	0.63 +0.005/-0	2.875	3.253 +0.003/-0	2.872 +0/-0.003	3.25
616-3373-125	3	3.375	1.25	1.255 +0.005/-0	3	3.378 +0.003/-0	2.997 +0/-0.003	3.375
616-3503-050	3.125	3.5	0.5	0.505 +0.005/-0	3.125	3.503 +0.003/-0	3.122 +0/-0.003	3.5
616-3503-075	3.125	3.5	0.75	0.755 +0.005/-0	3.125	3.503 +0.003/-0	3.122 +0/-0.003	3.5
616-3503-100	3.125	3.5	1	1.005 +0.005/-0	3.125	3.503 +0.003/-0	3.122 +0/-0.003	3.5
616-3753-100	3.375	3.75	1	1.005 +0.005/-0	3.375	3.753 +0.003/-0	3.372 +0/-0.003	3.75
616-3873-125	3.5	3.875	1.25	1.255 +0.005/-0	3.5	3.878 +0.003/-0	3.497 +0/-0.003	3.875
616-3873-175	3.5	3.875	1.75	1.755 +0.005/-0	3.5	3.878 +0.003/-0	3.497 +0/-0.003	3.875
616-3873-262	3.5	3.875	2.625	2.63 +0.005/-0	3.5	3.878 +0.003/-0	3.497 +0/-0.003	3.875
616-4003-050	3.625	4	0.5	0.505 +0.005/-0	3.625	4.003 +0.003/-0	3.622 +0/-0.003	4
616-4003-087	3.625	4	0.875	0.88 +0.005/-0	3.625	4.003 +0.003/-0	3.622 +0/-0.003	4
616-4003-100	3.625	4	1	1.005 +0.005/-0	3.625	4.003 +0.003/-0	3.622 +0/-0.003	4
616-4123-100	3.75	4.125	1	1.005 +0.005/-0	3.75	4.128 +0.003/-0	3.747 +0/-0.003	4.125
616-4253-075	3.875	4.25	0.75	0.755 +0.005/-0	3.875	4.253 +0.003/-0	3.872 +0/-0.003	4.25
616-4373-150	4	4.375	1.5	1.505 +0.005/-0	4	4.378 +0.003/-0	3.997 +0/-0.003	4.375
616-4373-175	4	4.375	1.75	1.755 +0.005/-0	4	4.378 +0.003/-0	3.997 +0/-0.003	4.375
616-4503-050	4.125	4.5	0.5	0.505 +0.005/-0	4.125	4.503 +0.003/-0	4.122 +0/-0.003	4.5
616-4503-100	4.125	4.5	1	1.005 +0.005/-0	4.125	4.503 +0.003/-0	4.122 +0/-0.003	4.5
616-4875-225	4.5	4.875	2.25	2.255 +0.005/-0	4.5	4.878 +0.003/-0	4.497 +0/-0.003	4.875
616-5003-087	4.625	5	0.875	0.88 +0.005/-0	4.625	5.003 +0.003/-0	4.622 +0/-0.003	5
616-5003-100	4.625	5	1	1.005 +0.005/-0	4.625	5.003 +0.003/-0	4.622 +0/-0.003	5
616-5003-150	4.625	5	1.5	1.505 +0.005/-0	4.625	5.003 +0.003/-0	4.622 +0/-0.003	5
616-5123-075	4.75	5.125	0.75	0.755 +0.005/-0	4.75	5.128 +0.003/-0	4.747 +0/-0.003	5.125
616-5503-087	5.125	5.5	0.875	0.88 +0.005/-0	5.125	5.503 +0.003/-0	5.122 +0/-0.003	5.5
616-5503-100	5.125	5.5	1	1.005 +0.005/-0	5.125	5.503 +0.003/-0	5.122 +0/-0.003	5.5

# STYLE 616 NYLON WEAR RINGS 3/16" THICK

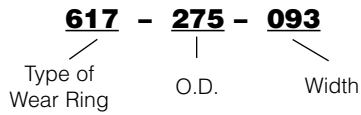
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.	H GROOVE DIA.	J NOM. BORE DIA.
616-5503-150	5.125	5.5	1.5	1.505 +0.005/-0	5.125	5.503 +0.003/-0	5.122 +0/-0.003	5.5
616-5503-174	5.125	5.5	1.74	1.745 +0.005/-0	5.125	5.503 +0.003/-0	5.122 +0/-0.003	5.5
616-5753-100	5.375	5.75	1	1.005 +0.005/-0	5.375	5.753 +0.003/-0	5.372 +0/-0.003	5.75
616-6003-062	5.625	6	0.625	0.63 +0.005/-0	5.625	6.003 +0.003/-0	5.622 +0/-0.003	6
616-6003-087	5.625	6	0.875	0.88 +0.005/-0	5.625	6.003 +0.003/-0	5.622 +0/-0.003	6
616-6003-100	5.625	6	1	1.005 +0.005/-0	5.625	6.003 +0.003/-0	5.622 +0/-0.003	6
616-6003-125	5.625	6	1.25	1.255 +0.005/-0	5.625	6.003 +0.003/-0	5.622 +0/-0.003	6
616-6003-274	5.625	6	2.74	2.745 +0.005/-0	5.625	6.003 +0.003/-0	5.622 +0/-0.003	6
616-6123-075	5.75	6.125	0.75	0.755 +0.005/-0	5.75	6.128 +0.003/-0	5.747 +0/-0.003	6.125
616-6123-095	5.75	6.125	0.953	0.958 +0.005/-0	5.75	6.128 +0.003/-0	5.747 +0/-0.003	6.125
616-6503-075	6.125	6.5	0.75	0.755 +0.005/-0	6.125	6.503 +0.003/-0	6.122 +0/-0.003	6.5
616-6503-150	6.125	6.5	1.5	1.505 +0.005/-0	6.125	6.503 +0.003/-0	6.122 +0/-0.003	6.5
616-6753-100	6.375	6.75	1	1.005 +0.005/-0	6.375	6.753 +0.003/-0	6.372 +0/-0.003	6.75
616-7003-125	6.625	7	1.25	1.255 +0.005/-0	6.625	7.003 +0.003/-0	6.622 +0/-0.003	7
616-7123-087	6.75	7.125	0.875	0.88 +0.005/-0	6.75	7.128 +0.003/-0	6.747 +0/-0.003	7.125
616-7123-100	6.75	7.125	1	1.005 +0.005/-0	6.75	7.128 +0.003/-0	6.747 +0/-0.003	7.125
616-7253-100	6.875	7.25	1	1.005 +0.005/-0	6.875	7.253 +0.003/-0	6.872 +0/-0.003	7.25
616-7253-306	6.875	7.25	3.062	3.067 +0.005/-0	6.875	7.253 +0.003/-0	6.872 +0/-0.003	7.25
616-7373-161	7	7.375	1.615	1.62 +0.005/-0	7	7.378 +0.003/-0	6.997 +0/-0.003	7.375
616-7753-449	7.375	7.75	4.49	4.495 +0.005/-0	7.375	7.753 +0.003/-0	7.372 +0/-0.003	7.75
616-8253-199	7.875	8.25	1.99	2.04 +0.005/-0	7.875	8.253 +0.003/-0	7.872 +0/-0.003	8.25
616-8253-274	7.875	8.25	2.74	2.745 +0.005/-0	7.875	8.253 +0.003/-0	7.872 +0/-0.003	8.25
616-9503-193	9.125	9.5	1.9375	1.9425 +0.005/-0	9.125	9.503 +0.003/-0	9.122 +0/-0.003	9.5
616-9875-050	9.5	9.875	0.5	0.505 +0.005/-0	9.5	9.878 +0.003/-0	9.497 +0/-0.003	9.875
616-10003-125	9.625	10	1.25	1.255 +0.005/-0	9.625	10.003 +0.003/-0	9.622 +0/-0.003	10
616-10003-150	9.625	10	1.5	1.505 +0.005/-0	9.625	10.003 +0.003/-0	9.622 +0/-0.003	10
616-12003-250	11.625	12	2.5	2.505 +0.005/-0	11.625	12.003 +0.003/-0	11.622 +0/-0.003	12
616-12253-400	11.875	12.25	4	4.005 +0.005/-0	11.875	12.253 +0.003/-0	11.872 +0/-0.003	12.25
616-12873-289	12.5	12.875	2.89	2.895 +0.005/-0	12.5	12.878 +0.003/-0	12.497 +0/-0.003	12.875
616-12873-1218	12.5	12.875	12.1875	12.193 +0.005/-0	12.5	12.878 +0.003/-0	12.497 +0/-0.003	12.875
616-14003-100	13.625	14	1	1.005 +0.005/-0	13.625	14.003 +0.003/-0	13.622 +0/-0.003	14
616-15123-771	14.75	15.125	7.71	7.715 +0.005/-0	14.75	15.128 +0.003/-0	14.747 +0/-0.003	15.125



# STYLE 617 PHENOLIC WEAR RINGS 3/16" THICK



### HERCULES PART NUMBERS

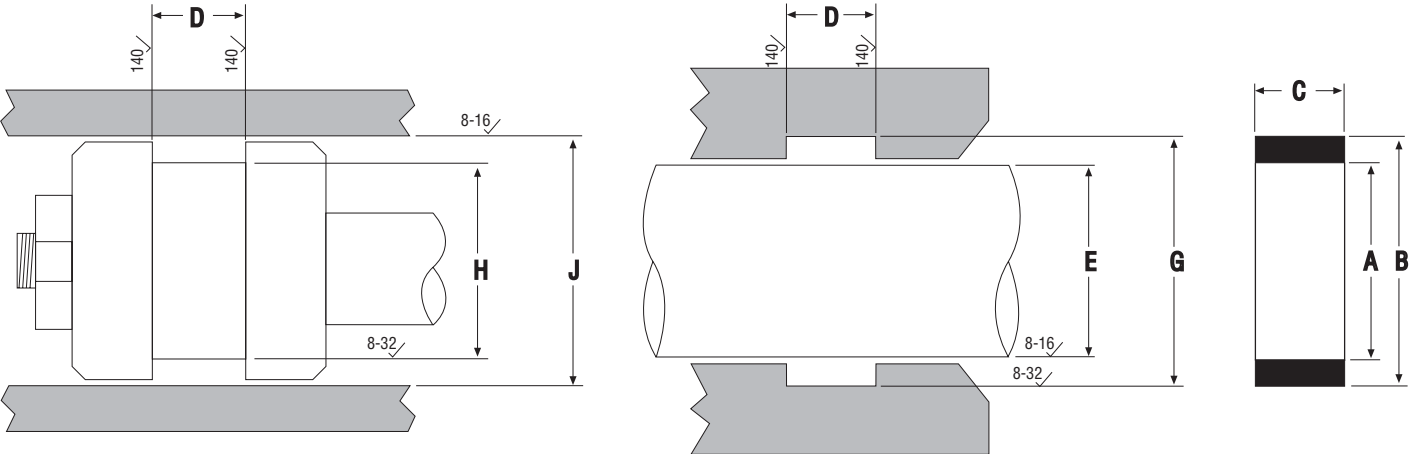


SEAL INFORMATION	
TEMPERATURE RANGE	-58° to +250° F
TENSILE STRENGTH	10,000 PSI
COMPRESSIVE STRENGTH	34,000 PSI

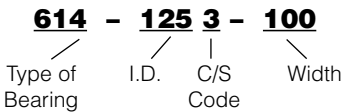
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.	H GROOVE DIA.	J NOM. BORE DIA.
617-275-093	2.5	2.75	0.9375	0.9425 +0.005/-0	2.5	2.753 +0/-0.003	2.497 +0.003/-0	2.75
617-300-119	2.75	3	1.19	1.195 +0.005/-0	2.75	3.003 +0/-0.003	2.747 +0.003/-0	3
617-400-138	3.75	4	1.38	1.385 +0.005/-0	3.75	4.003 +0/-0.003	3.747 +0.003/-0	4
617-650-125	6.25	6.5	1.25	1.255 +0.005/-0	6.25	6.503 +0/-0.003	6.247 +0.003/-0	6.5
617-650-200	6.25	6.5	2	2.005 +0.005/-0	6.25	6.503 +0/-0.003	6.247 +0.003/-0	6.5
617-725-137	7	7.25	1.375	1.38 +0.005/-0	7	7.253 +0/-0.003	6.997 +0.003/-0	7.25
617-825-175	8	8.25	1.75	1.755 +0.005/-0	8	8.253 +0/-0.003	7.997 +0.003/-0	8.25
617-825-225	8	8.25	2.25	2.26 +0.005/-0	8	8.253 +0/-0.003	7.997 +0.003/-0	8.25
617-925-175	9	9.25	1.75	1.755 +0.005/-0	9	9.253 +0/-0.003	8.997 +0.003/-0	9.25

# STYLE 614 NYLON ROD BEARINGS

Style 614 rod bearings are manufactured from glass reinforced nylon. These products are used extensively in hydraulic cylinders due to their low wear rate and non-scoring properties. Style 614 wear rings are excellent for those heavy duty applications requiring a sturdy bearing. Most of these bearings are solid.



**HERCULES PART NUMBERS**



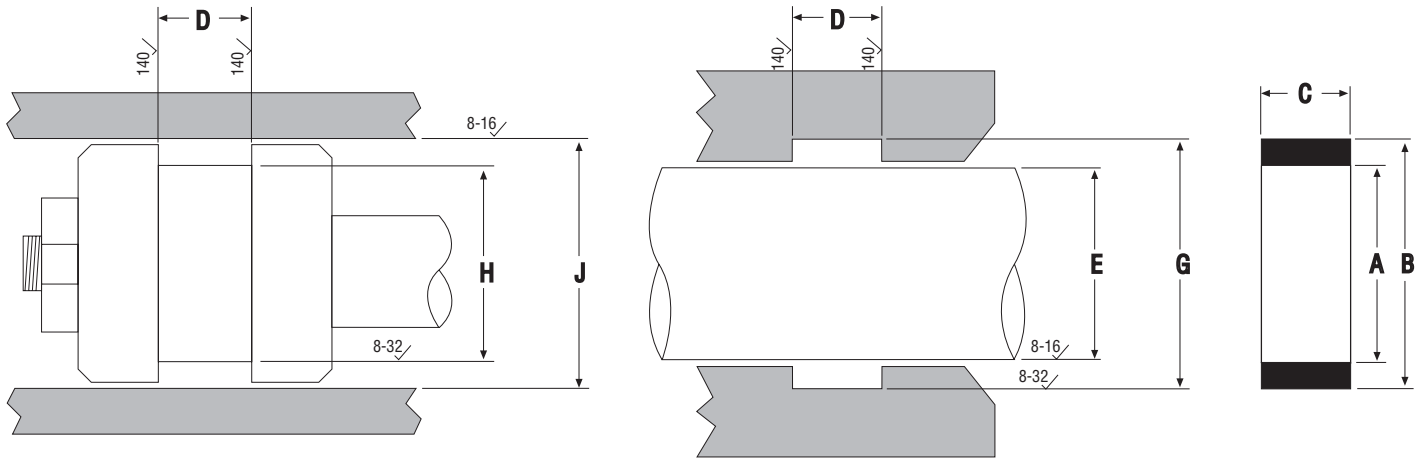
SEAL INFORMATION	
TEMPERATURE RANGE	-40° to +250° F
TENSILE STRENGTH	27,000 PSI
COMPRESSIVE STRENGTH	35,000 PSI

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.	H GROOVE DIA.	J NOM. BORE DIA.
614-1253-100	1.25	1.5	1	1.005 +0.005/-0	1.25	1.503 +0.003/-0	1.247 +0/-0.003	1.5
614-1254-084	1.25	1.75	0.84	0.845 +0.005/-0	1.25	1.753 +0.003/-0	1.247 +0/-0.003	1.75
614-1254-100	1.25	1.75	1	1.005 +0.005/-0	1.25	1.753 +0.003/-0	1.247 +0/-0.003	1.75
614-1502-100	1.5	1.625	0.975	0.980 +0.005/-0	1.5	1.628 +0.003/-0	1.497 +0/-0.003	1.625
614-1503-100	1.5	1.75	1	1.005 +0.005/-0	1.5	1.753 +0.003/-0	1.497 +0/-0.003	1.75
614-1504-058	1.5	2	0.58	0.585 +0.005/-0	1.5	2.003 +0.003/-0	1.497 +0/-0.003	2
614-1504-075	1.5	2	0.75	0.755 +0.005/-0	1.5	2.003 +0.003/-0	1.497 +0/-0.003	2
614-1505-150	1.5	2.5	1.5	1.505 +0.005/-0	1.5	2.503 +0.003/-0	1.497 +0/-0.003	2.5
614-1752-100	1.75	1.875	0.975	0.980 +0.005/-0	1.75	1.878 +0.003/-0	1.747 +0/-0.003	1.875
614-1753-100	1.75	2	1	1.005 +0.005/-0	1.75	2.003 +0.003/-0	1.747 +0/-0.003	2
614-1754-040	1.75	2.25	0.438	0.443 +0.005/-0	1.75	2.253 +0.003/-0	1.747 +0/-0.003	2.25
614-1754-058	1.75	2.25	0.58	0.585 +0.005/-0	1.75	2.253 +0.003/-0	1.747 +0/-0.003	2.25
614-1754-075	1.75	2.25	0.75	0.755 +0.005/-0	1.75	2.253 +0.003/-0	1.747 +0/-0.003	2.25
614-2002-100	2	2.125	0.975	0.980 +0.005/-0	2	2.128 +0.003/-0	1.997 +0/-0.003	2.125
614-2003-099	2	2.25	1	1.005 +0.005/-0	2	2.253 +0.003/-0	1.997 +0/-0.003	2.25
614-2004-050	2	2.5	0.5	0.505 +0.005/-0	2	2.503 +0.003/-0	1.997 +0/-0.003	2.5
614-2004-058	2	2.5	0.58	0.585 +0.005/-0	2	2.503 +0.003/-0	1.997 +0/-0.003	2.5
614-2004-075	2	2.5	0.75	0.755 +0.005/-0	2	2.503 +0.003/-0	1.997 +0/-0.003	2.5
614-2004-100	2	2.5	1	1.005 +0.005/-0	2	2.503 +0.003/-0	1.997 +0/-0.003	2.5
614-2252-150	2.25	2.375	1.475	1.480 +0.005/-0	2.25	2.378 +0.003/-0	2.247 +0/-0.003	2.375
614-2253-125	2.25	2.5	1.25	1.255 +0.005/-0	2.25	2.503 +0.003/-0	2.247 +0/-0.003	2.5
614-2253-155	2.25	2.5	1.547	1.552 +0.005/-0	2.25	2.503 +0.003/-0	2.247 +0/-0.003	2.5
614-2253-225	2.25	2.5	2.25	2.255 +0.005/-0	2.25	2.503 +0.003/-0	2.247 +0/-0.003	2.5
614-2254-058	2.25	2.75	0.58	0.585 +0.005/-0	2.25	2.753 +0.003/-0	2.247 +0/-0.003	2.75
614-2254-075	2.25	2.75	0.75	0.755 +0.005/-0	2.25	2.753 +0.003/-0	2.247 +0/-0.003	2.75
614-2502-150	2.5	2.625	1.475	1.480 +0.005/-0	2.5	2.628 +0.003/-0	2.497 +0/-0.003	2.625

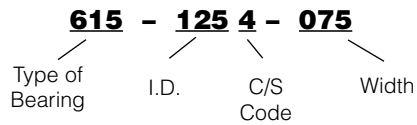
## STYLE 614 NYLON ROD BEARINGS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.	H GROOVE DIA.	J NOM. BORE DIA.
614-2503-125	2.5	2.75	1.25	1.255 +0.005/-0	2.5	2.753 +0.003/-0	2.497 +0/-0.003	2.75
614-2503-155	2.5	2.75	1.547	1.552 +0.005/-0	2.5	2.753 +0.003/-0	2.497 +0/-0.003	2.75
614-2504-025	2.5	3	0.25	0.255 +0.005/-0	2.5	3.003 +0.003/-0	2.497 +0/-0.003	3
614-2504-040	2.5	3	0.406	0.411 +0.005/-0	2.5	3.003 +0.003/-0	2.497 +0/-0.003	3
614-2504-058	2.5	3	0.58	0.585 +0.005/-0	2.5	3.003 +0.003/-0	2.497 +0/-0.003	3
614-2504-075	2.5	3	0.75	0.755 +0.005/-0	2.5	3.003 +0.003/-0	2.497 +0/-0.003	3
614-2504-100	2.5	3	1	1.005 +0.005/-0	2.5	3.003 +0.003/-0	2.497 +0/-0.003	3
614-2752-150	2.75	2.875	1.475	1.480 +0.005/-0	2.75	2.878 +0.003/-0	2.747 +0/-0.003	2.875
614-2753-155	2.75	3	1.547	1.552 +0.005/-0	2.75	3.003 +0.003/-0	2.747 +0/-0.003	3
614-2755-100	2.75	3.375	1	1.005 +0.005/-0	2.75	3.378 +0.003/-0	2.747 +0/-0.003	3.375
614-3002-150	3	3.125	1.475	1.480 +0.005/-0	3	3.128 +0.003/-0	2.997 +0/-0.003	3.125
614-3003-100	3	3.25	1	1.005 +0.005/-0	3	3.253 +0.003/-0	2.997 +0/-0.003	3.25
614-3004-046	3	3.5	0.469	0.474 +0.005/-0	3	3.503 +0.003/-0	2.997 +0/-0.003	3.5
614-3004-050	3	3.5	0.5	0.505 +0.005/-0	3	3.503 +0.003/-0	2.997 +0/-0.003	3.5
614-3004-058	3	3.5	0.58	0.585 +0.005/-0	3	3.503 +0.003/-0	2.997 +0/-0.003	3.5
614-3004-075	3	3.5	0.75	0.755 +0.005/-0	3	3.503 +0.003/-0	2.997 +0/-0.003	3.5
614-3004-100	3	3.5	1	1.005 +0.005/-0	3	3.503 +0.003/-0	2.997 +0/-0.003	3.5
614-3004-150	3	3.5	1.5	1.505 +0.005/-0	3	3.503 +0.003/-0	2.997 +0/-0.003	3.5
614-3123-075	3.125	3.5	0.75	0.755 +0.005/-0	3.125	3.503 +0.003/-0	3.122 +0/-0.003	3.5
614-3123-084	3.125	3.5	0.845	0.850 +0.005/-0	3.125	3.503 +0.003/-0	3.122 +0/-0.003	3.5
614-3253-155	3.25	3.5	1.547	1.552 +0.005/-0	3.25	3.503 +0.003/-0	3.247 +0/-0.003	3.5
614-3383-075	3.375	3.625	0.75	0.755 +0.005/-0	3.375	3.628 +0.003/-0	3.372 +0/-0.003	3.625
614-3504-025	3.5	4	0.25	0.255 +0.005/-0	3.5	4.003 +0.003/-0	3.497 +0/-0.003	4
614-3504-046	3.5	4	0.469	0.474 +0.005/-0	3.5	4.003 +0.003/-0	3.497 +0/-0.003	4
614-3754-075	3.75	4.25	0.75	0.755 +0.005/-0	3.75	4.253 +0.003/-0	3.747 +0/-0.003	4.25
614-3755-100	3.75	4.375	1	1.005 +0.005/-0	3.75	4.378 +0.003/-0	3.747 +0/-0.003	4.375
614-4004-025	4	4.5	0.25	0.255 +0.005/-0	4	4.503 +0.003/-0	3.997 +0/-0.003	4.5
614-4004-037	4	4.5	0.375	0.380 +0.005/-0	4	4.503 +0.003/-0	3.997 +0/-0.003	4.5
614-4004-075	4	4.5	0.75	0.755 +0.005/-0	4	4.503 +0.003/-0	3.997 +0/-0.003	4.5
614-4004-084	4	4.5	0.845	0.850 +0.005/-0	4	4.503 +0.003/-0	3.997 +0/-0.003	4.5
614-4004-093	4	4.5	0.9375	0.943 +0.005/-0	4	4.503 +0.003/-0	3.997 +0/-0.003	4.5
614-4004-100	4	4.5	1	1.005 +0.005/-0	4	4.503 +0.003/-0	3.997 +0/-0.003	4.5
614-4004-150	4	4.5	1.5	1.505 +0.005/-0	4	4.503 +0.003/-0	3.997 +0/-0.003	4.5
614-4504-025	4.5	5	0.25	0.255 +0.005/-0	4.5	5.003 +0.003/-0	4.497 +0/-0.003	5
614-4755-100	4.75	5.375	1	1.005 +0.005/-0	4.75	5.378 +0.003/-0	4.747 +0/-0.003	5.375
614-5004-075	5	5.5	0.75	0.755 +0.005/-0	5	5.503 +0.003/-0	4.997 +0/-0.003	5.5
614-5004-084	5	5.5	0.845	0.850 +0.005/-0	5	5.503 +0.003/-0	4.997 +0/-0.003	5.5
614-5004-093	5	5.5	0.9375	0.943 +0.005/-0	5	5.503 +0.003/-0	4.997 +0/-0.003	5.5
614-5004-100	5	5.5	1	1.005 +0.005/-0	5	5.503 +0.003/-0	4.997 +0/-0.003	5.5
614-5755-100	5.75	6.375	1	1.005 +0.005/-0	5.75	6.378 +0.003/-0	5.747 +0/-0.003	6.375
614-6004-037	6	6.5	0.375	0.380 +0.005/-0	6	6.503 +0.003/-0	5.997 +0/-0.003	6.5
614-6004-075	6	6.5	0.75	0.755 +0.005/-0	6	6.503 +0.003/-0	5.997 +0/-0.003	6.5
614-6004-084	6	6.5	0.845	0.855 +0.005/-0	6	6.503 +0.003/-0	5.997 +0/-0.003	6.5
614-6004-093	6	6.5	0.9375	0.943 +0.005/-0	6	6.503 +0.003/-0	5.997 +0/-0.003	6.5
614-6004-100	6	6.5	1	1.005 +0.005/-0	6	6.503 +0.003/-0	5.997 +0/-0.003	6.5
614-7004-075	7	7.5	0.75	0.755 +0.005/-0	7	7.503 +0.003/-0	6.997 +0/-0.003	7.5
614-8004-075	8	8.5	0.75	0.755 +0.005/-0	8	8.503 +0.003/-0	7.997 +0/-0.003	8.5
614-8256-075	8.25	9	0.75	0.755 +0.005/-0	8.25	9.003 +0.003/-0	8.247 +0/-0.003	9
614-9006-075	9	9.75	0.75	0.755 +0.005/-0	9	9.753 +0.003/-0	8.997 +0/-0.003	9.75
614-9375-100	9.375	10	1	1.005 +0.005/-0	9.375	10.003 +0.003/-0	9.372 +0/-0.003	10

# STYLE 615 PHENOLIC ROD BEARINGS



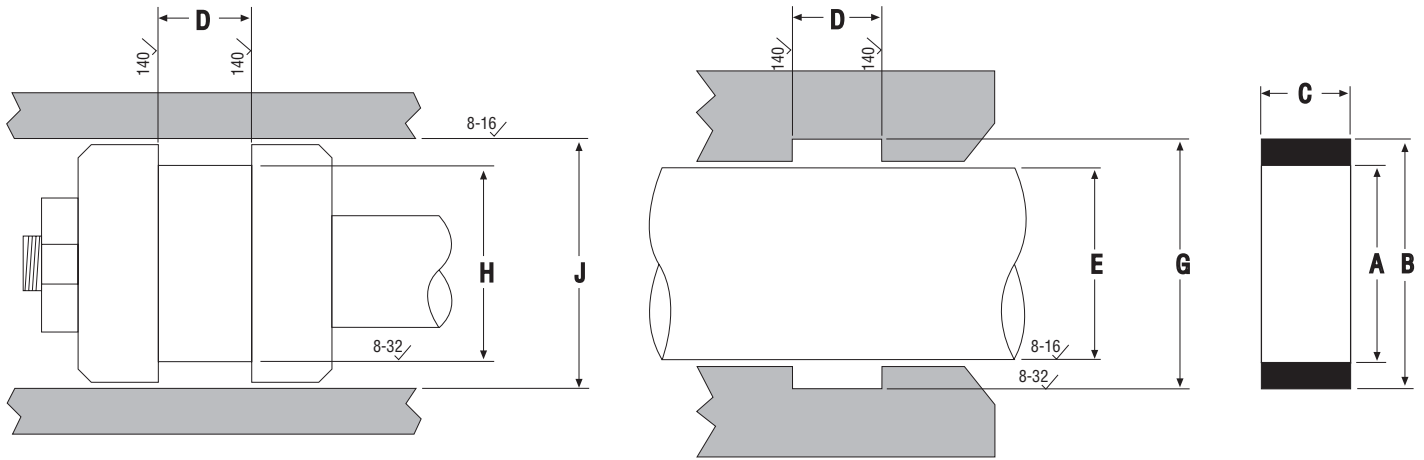
### HERCULES PART NUMBERS



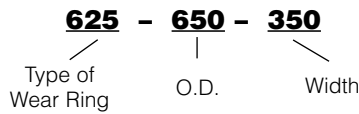
SEAL INFORMATION	
TEMPERATURE RANGE	-58° to +250° F
TENSILE STRENGTH	10,000 PSI
COMPRESSIVE STRENGTH	34,000 PSI

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.	H GROOVE DIA.	J NOM. BORE DIA.
615-1254-075	1.25	1.75	0.75	0.755 +0.005/-0	1.25	1.753 +0.003/-0	1.247 +0/-0.003	1.75
615-1504-075	1.5	2	0.75	0.755 +0.005/-0	1.5	2.003 +0.003/-0	1.497 +0/-0.003	2
615-2504-150	2.5	3	1.5	1.505 +0.005/-0	2.5	3.003 +0.003/-0	2.497 +0/-0.003	3
615-2753-138	2.75	3	1.385	1.390 +0.005/-0	2.75	3.003 +0.003/-0	2.747 +0/-0.003	3
615-3753-175	3.75	4	1.74	1.745 +0.005/-0	3.75	4.003 +0.003/-0	3.747 +0/-0.003	4

# STYLE 625 NYLON WEAR RINGS 1/4" THICK



### HERCULES PART NUMBERS

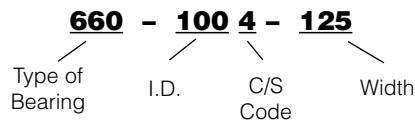


SEAL INFORMATION	
TEMPERATURE RANGE	-40° to +250° F
TENSILE STRENGTH	27,000 PSI
COMPRESSIVE STRENGTH	35,000 PSI

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.	H GROOVE DIA.	J NOM. BORE DIA.
625-650-349	6	6.5	3.49	3.500 +0.005/-0	6	6.501 +0.003/-0	5.999 +0/-0.003	6.5
625-650-350	6	6.5	3.5	3.505 +0.005/-0	6	6.503 +0.003/-0	5.997 +0/-0.003	6.5
625-825-350	7.75	8.25	3.5	3.505 +0.005/-0	7.75	8.253 +0.003/-0	7.747 +0/-0.003	8.25

# STYLE 660 BRONZE ROD BEARINGS

### HERCULES PART NUMBERS

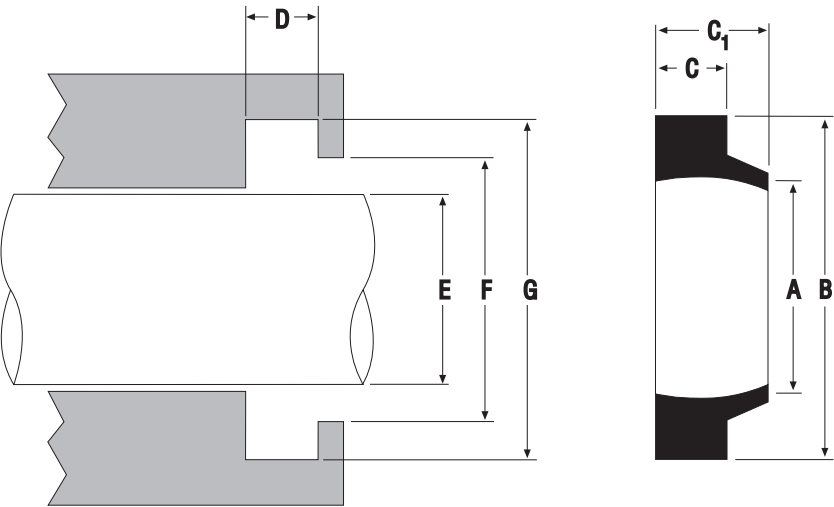


SEAL INFORMATION	
TEMPERATURE RANGE	-40° to +250° F
TENSILE STRENGTH	35,000 PSI
YIELD STRENGTH	18,000 PSI

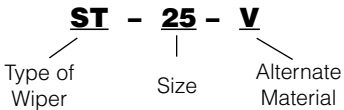
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.	H GROOVE DIA.	J NOM. BORE DIA.
660-1004-125	1	1.25	1.25	1.255 +0.005/-0	1	1.253 +0.003/-0	0.997 +0/-0.003	1.25
660-1008-125	1	1.5	1.25	1.255 +0.005/-0	1	1.503 +0.003/-0	0.997 +0/-0.003	1.5

# STYLE ST WIPER RINGS

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



### HERCULES PART NUMBERS



SEAL INFORMATION	
MATERIAL	URETHANE / FLUOROCARBON
TEMPERATURE RANGE	URETHANE -65° TO +220° F
	FLUOROCARBON -20° to +400° F

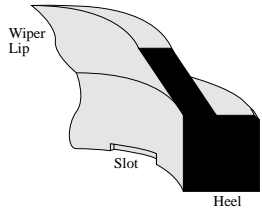
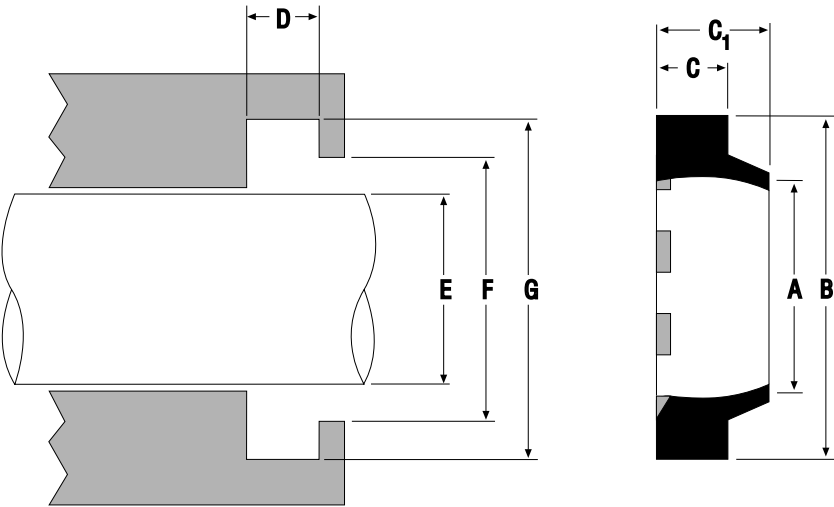
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. BASE THICKNESS	C <sub>1</sub> OVERALL HT.(MAX)	D GROOVE WIDTH	E NOM. ROD DIA.	F THROAT DIA.	G HOUSING DIA.
ST-25	1/4	1/2	1/8	0.210	0.124 +0.004/0	1/4	0.410 +0.010/0	0.497 +0.006/0
ST-37	3/8	5/8	1/8	0.210	0.124 +0.004/0	3/8	0.535 +0.010/0	0.622 +0.006/0
ST-43	7/16	11/16	1/8	0.210	0.124 +0.004/0	7/16	0.600 +0.010/0	0.685 +0.006/0
ST-50	1/2	3/4	1/8	0.210	0.124 +0.004/0	1/2	0.660 +0.010/0	0.747 +0.006/0
ST-56	9/16	13/16	1/8	0.210	0.124 +0.004/0	9/16	0.725 +0.010/0	0.810 +0.006/0
ST-62	5/8	7/8	1/8	0.210	0.124 +0.004/0	5/8	0.785 +0.010/0	0.872 +0.006/0
ST-75	3/4	1-1/8	3/16	0.305	0.187 +0.004/0	3/4	0.995 +0.010/0	1.122 +0.006/0
ST-81	13/16	1-3/16	3/16	0.305	0.187 +0.004/0	13/16	1.060 +0.010/0	1.185 +0.006/0
ST-87	7/8	1-1/4	3/16	0.305	0.187 +0.004/0	7/8	1.120 +0.010/0	1.247 +0.006/0
ST-93	15/16	1-5/16	3/16	0.305	0.187 +0.004/0	15/16	1.185 +0.010/0	1.310 +0.006/0
ST-100	1	1-3/8	3/16	0.305	0.187 +0.004/0	1	1.245 +0.010/0	1.372 +0.006/0
ST-100V	1	1-3/8	3/16	0.306	0.187 +0.004/0	1	1.245 +0.010/0	1.372 +0.006/0
ST-112	1-1/8	1-1/2	3/16	0.305	0.187 +0.004/0	1-1/8	1.370 +0.010/0	1.497 +0.006/0
ST-112V	1-1/8	1-1/2	3/16	0.307	0.187 +0.004/0	1-1/8	1.370 +0.010/0	1.497 +0.006/0
ST-118	1-3/16	1-9/16	3/16	0.305	0.187 +0.004/0	1-3/16	1.435 +0.010/0	1.560 +0.006/0
ST-125	1-1/4	1-5/8	3/16	0.305	0.187 +0.004/0	1-1/4	1.495 +0.010/0	1.622 +0.006/0
ST-125V	1-1/4	1-5/8	3/16	0.308	0.187 +0.004/0	1-1/4	1.495 +0.010/0	1.622 +0.006/0
ST-131	1-5/16	1-11/16	3/16	0.305	0.187 +0.004/0	1-5/16	1.560 +0.010/0	1.685 +0.006/0
ST-137	1-3/8	1-3/4	3/16	0.305	0.187 +0.004/0	1-3/8	1.620 +0.010/0	1.747 +0.006/0
ST-137V	1-3/8	1-3/4	3/16	0.309	0.187 +0.004/0	1-3/8	1.620 +0.010/0	1.747 +0.006/0
ST-143	1-7/16	1-13/16	3/16	0.305	0.187 +0.004/0	1-7/16	1.685 +0.010/0	1.810 +0.006/0
ST-150	1-1/2	1-7/8	3/16	0.305	0.187 +0.004/0	1-1/2	1.745 +0.010/0	1.872 +0.006/0
ST-156	1-9/16	1-15/16	3/16	0.305	0.187 +0.004/0	1-9/16	1.810 +0.010/0	1.935 +0.006/0
ST-162	1-5/8	2	3/16	0.305	0.187 +0.004/0	1-5/8	1.870 +0.010/0	1.997 +0.006/0
ST-175	1-3/4	2-1/8	3/16	0.305	0.187 +0.004/0	1-3/4	1.995 +0.010/0	2.122 +0.006/0
ST-175V	1-3/4	2-1/8	3/16	0.310	0.187 +0.004/0	1-3/4	1.995 +0.010/0	2.122 +0.006/0
ST-187	1-7/8	2-1/4	3/16	0.305	0.187 +0.004/0	1-7/8	2.120 +0.010/0	2.247 +0.006/0
ST-193	1-15/16	2-5/16	3/16	0.305	0.187 +0.004/0	1-15/16	2.185 +0.010/0	2.310 +0.006/0
ST-200	2	2-1/2	1/4	0.395	0.249 +0.004/0	2	2.327 +0.010/0	2.497 +0.006/0
ST-200V	2	2-1/2	1/4	0.311	0.249 +0.004/0	2	2.327 +0.010/0	2.497 +0.006/0
ST-212	2-1/8	2-5/8	1/4	0.395	0.249 +0.004/0	2-1/8	2.452 +0.010/0	2.622 +0.006/0
ST-212A	2-1/8	2-1/2	3/16	0.305	0.187 +0.004/0	2-1/8	2.452 +0.010/0	2.497 +0.006/0
ST-225	2-1/4	2-3/4	1/4	0.395	0.249 +0.004/0	2-1/4	2.577 +0.010/0	2.747 +0.006/0
ST-237	2-3/8	2-7/8	1/4	0.395	0.249 +0.004/0	2-3/8	2.702 +0.010/0	2.872 +0.006/0
ST-250	2-1/2	3	1/4	0.395	0.249 +0.004/0	2-1/2	2.827 +0.010/0	2.997 +0.006/0

## STYLE ST WIPER RINGS

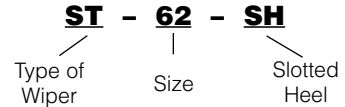
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. BASE THICKNESS	C <sub>1</sub> OVERALL HT.(MAX)	D GROOVE WIDTH	E NOM. ROD DIA.	F THROAT DIA.	G HOUSING DIA.
ST-250V	2-1/2	3	1/4	0.312	0.249 +0.004/0	2-1/2	2.827 +0.010/0	2.997 +0.006/0
ST-262	2-5/8	3-1/8	1/4	0.395	0.249 +0.004/0	2-5/8	2.952 +0.010/0	3.122 +0.006/0
ST-275	2-3/4	3-1/4	1/4	0.395	0.249 +0.004/0	2-3/4	3.077 +0.010/0	3.247 +0.006/0
ST-287	2-7/8	3-3/8	1/4	0.395	0.249 +0.004/0	2-7/8	3.202 +0.010/0	3.372 +0.006/0
ST-300	3	3-1/2	1/4	0.395	0.249 +0.004/0	3	3.327 +0.010/0	3.497 +0.006/0
ST-300V	3	3-1/2	1/4	0.313	0.249 +0.004/0	3	3.327 +0.010/0	3.497 +0.006/0
ST-312	3-1/8	3-5/8	1/4	0.395	0.249 +0.004/0	3-1/8	3.452 +0.010/0	3.622 +0.006/0
ST-325	3-1/4	3-3/4	1/4	0.395	0.249 +0.004/0	3-1/4	3.577 +0.010/0	3.747 +0.006/0
ST-337	3-3/8	3-7/8	1/4	0.395	0.249 +0.004/0	3-3/8	3.702 +0.010/0	3.872 +0.006/0
ST-350	3-1/2	4	1/4	0.395	0.249 +0.004/0	3-1/2	3.827 +0.010/0	3.997 +0.006/0
ST-350V	3-1/2	4	1/4	0.314	0.249 +0.004/0	3-1/2	3.827 +0.010/0	3.997 +0.006/0
ST-362	3-5/8	4-1/8	1/4	0.395	0.249 +0.004/0	3-5/8	3.952 +0.010/0	4.122 +0.006/0
ST-375	3-3/4	4-1/4	1/4	0.395	0.249 +0.004/0	3-3/4	4.077 +0.010/0	4.247 +0.006/0
ST-387	3-7/8	4-3/8	1/4	0.395	0.249 +0.004/0	3-7/8	4.202 +0.010/0	4.372 +0.006/0
ST-400	4	4-1/2	1/4	0.395	0.249 +0.004/0	4	4.327 +0.010/0	4.497 +0.006/0
ST-412	4-1/8	4-5/8	1/4	0.395	0.249 +0.004/0	4-1/8	4.452 +0.010/0	4.622 +0.006/0
ST-425	4-1/4	4-3/4	1/4	0.395	0.249 +0.004/0	4-1/4	4.577 +0.010/0	4.747 +0.006/0
ST-437	4-3/8	4-7/8	1/4	0.395	0.249 +0.004/0	4-3/8	4.702 +0.010/0	4.872 +0.006/0
ST-450	4-1/2	5-1/4	3/8	0.585	0.374 +0.004/0	4-1/2	4.993 +0.010/0	5.247 +0.006/0
ST-451	4-1/2	5	1/4	0.395	0.249 +0.004/0	4-1/2	4.827 +0.010/0	4.997 +0.006/0
ST-475	4-3/4	5-1/2	3/8	0.585	0.374 +0.004/0	4-3/4	5.243 +0.010/0	5.497 +0.006/0
ST-487	4-7/8	5-5/8	3/8	0.315	0.374 +0.004/0	4-7/8	5.368 +0.010/0	4.872 +0.006/0
ST-500	5	5-3/4	3/8	0.585	0.374 +0.004/0	5	5.493 +0.010/0	5.747 +0.006/0
ST-500V	5	5-3/4	3/8	0.316	0.374 +0.004/0	5	5.493 +0.010/0	5.747 +0.006/0
ST-501	5	5-1/2	1/4	0.395	0.249 +0.004/0	5	5.327 +0.010/0	5.497 +0.006/0
ST-525	5-1/4	6	3/8	0.585	0.374 +0.004/0	5-1/4	5.743 +0.010/0	5.997 +0.006/0
ST-550	5-1/2	6-1/4	3/8	0.585	0.374 +0.004/0	5-1/2	5.993 +0.010/0	6.247 +0.006/0
ST-575	5-3/4	6-1/2	3/8	0.585	0.374 +0.004/0	5-3/4	6.243 +0.010/0	6.497 +0.006/0
ST-600	6	6-3/4	3/8	0.585	0.374 +0.004/0	6	6.493 +0.010/0	6.747 +0.006/0
ST-625	6-1/4	7	3/8	0.585	0.374 +0.004/0	6-1/4	6.743 +0.010/0	6.997 +0.006/0
ST-650	6-1/2	7-1/4	3/8	0.585	0.374 +0.004/0	6-1/2	6.993 +0.010/0	7.247 +0.006/0
ST-660	6-1/2	7-1/2	1/2	0.317	0.499 +0.004/0	6-1/2	6.993 +0.010/0	7.497 +0.006/0
ST-675	6-3/4	7-1/2	3/8	0.585	0.374 +0.004/0	6-3/4	7.243 +0.010/0	7.497 +0.006/0
ST-700	7	7-3/4	3/8	0.585	0.374 +0.004/0	7	7.493 +0.010/0	7.747 +0.006/0
ST-701	7	8	1/2	0.775	0.499 +0.004/0	7	7.659 +0.010/0	7.997 +0.006/0
ST-702	7	8	0.40	0.675	0.399 +0.004/0	7	7.659 +0.010/0	7.997 +0.006/0
ST-750	7-1/2	8-1/4	3/8	0.585	0.374 +0.004/0	7-1/2	7.993 +0.010/0	8.247 +0.006/0
ST-775	7-3/4	8-1/2	3/8	0.318	0.374 +0.004/0	7-3/4	8.243 +0.010/0	8.497 +0.006/0
ST-800	8	8-3/4	3/8	0.585	0.374 +0.004/0	8	8.493 +0.010/0	8.747 +0.006/0
ST-801	8	8-1/2	1/4	0.395	0.249 +0.004/0	8	8.327 +0.010/0	8.497 +0.006/0
ST-825	8-1/4	9	3/8	0.585	0.374 +0.004/0	8-1/4	8.743 +0.010/0	8.997 +0.006/0
ST-850	8-1/2	9-1/4	3/8	0.585	0.374 +0.004/0	8-1/2	8.993 +0.010/0	9.247 +0.006/0
ST-851	8-1/2	9	1/4	0.395	0.249 +0.004/0	8-1/2	8.827 +0.010/0	8.997 +0.006/0
ST-875	8-3/4	9-1/2	1/4	0.585	0.249 +0.004/0	8-3/4	9.243 +0.010/0	9.497 +0.006/0
ST-900	9	9-3/4	3/8	0.585	0.374 +0.004/0	9	9.493 +0.010/0	9.747 +0.006/0
ST-950	9-1/2	10-1/4	3/8	0.585	0.374 +0.004/0	9-1/2	9.993 +0.010/0	10.247 +0.006/0
ST-975	9-3/4	10-1/2	3/8	0.585	0.374 +0.004/0	9-3/4	10.243 +0.010/0	10.497 +0.006/0
ST-1000	10	11	1/2	0.775	0.499 +0.004/0	10	10.659 +0.010/0	10.997 +0.006/0
ST-1000A-SH	10	10-1/2	1/4	0.775	0.249 +0.004/0	10	10.659 +0.010/0	10.497 +0.006/0
ST-1100	11	12	1/2	0.775	0.499 +0.004/0	11	11.659 +0.010/0	11.997 +0.006/0
ST-1200	12	13	1/2	0.775	0.499 +0.004/0	12	12.659 +0.010/0	12.997 +0.006/0
ST-1201	12	13-1/4	1/2	0.775	0.499 +0.004/0	12	12.909 +0.010/0	13.247 +0.006/0

# STYLE ST WIPER RINGS W/ SLOTTED HEEL

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



**HERCULES PART NUMBERS**



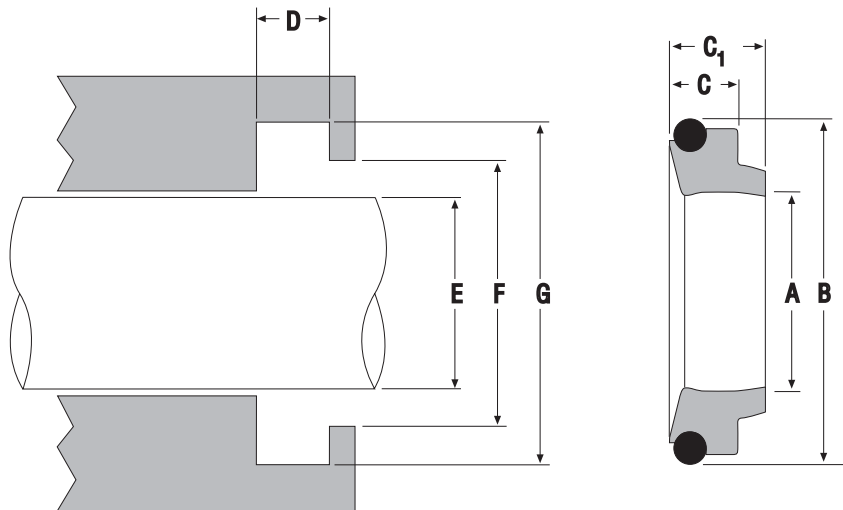
SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-65° TO +220° F

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. BASE THICKNESS	C <sub>1</sub> OVERALL HT.(MAX)	D GROOVE WIDTH	E NOM. ROD DIA.	F THROAT DIA.	G HOUSING DIA.
ST-62-SH	5/8	7/8	1/8	0.192	0.124 +0.004/-0	5/8	0.785 +0.010/-0	0.872 +0.006/-0
ST-75-SH	3/4	1-1/8	3/16	0.295	0.187 +0.004/-0	3/4	0.995 +0.010/-0	1.122 +0.006/-0
ST-87-SH	7/8	1-1/4	3/16	0.295	0.187 +0.004/-0	7/8	1.120 +0.010/-0	1.247 +0.006/-0
ST-100-SH	1	1-3/8	3/16	0.295	0.187 +0.004/-0	1	1.245 +0.010/-0	1.372 +0.006/-0
ST-112-SH	1-1/8	1-1/2	3/16	0.295	0.187 +0.004/-0	1-1/8	1.370 +0.010/-0	1.497 +0.006/-0
ST-125-SH	1-1/4	1-5/8	3/16	0.295	0.187 +0.004/-0	1-1/4	1.495 +0.010/-0	1.622 +0.006/-0
ST-137-SH	1-3/8	1-3/4	3/16	0.295	0.187 +0.004/-0	1-3/8	1.620 +0.010/-0	1.747 +0.006/-0
ST-150-SH	1-1/2	1-7/8	3/16	0.295	0.187 +0.004/-0	1-1/2	1.745 +0.010/-0	1.872 +0.006/-0
ST-175-SH	1-3/4	2-1/8	3/16	0.295	0.187 +0.004/-0	1-3/4	1.995 +0.010/-0	2.122 +0.006/-0
ST-200-SH	2	2-1/2	1/4	0.380	0.249 +0.004/-0	2	2.327 +0.010/-0	2.497 +0.006/-0
ST-225-SH	2-1/4	2-3/4	1/4	0.380	0.249 +0.004/-0	2-1/4	2.577 +0.010/-0	2.747 +0.006/-0
ST-250-SH	2-1/2	3	1/4	0.380	0.249 +0.004/-0	2-1/2	2.827 +0.010/-0	2.997 +0.006/-0
ST-262-SH	2-5/8	3-1/8	1/4	0.380	0.249 +0.004/-0	2-5/8	2.952 +0.010/-0	3.122 +0.006/-0
ST-275-SH	2-3/4	3-1/4	1/4	0.380	0.249 +0.004/-0	2-3/4	3.077 +0.010/-0	3.247 +0.006/-0
ST-300-SH	3	3-1/2	1/4	0.380	0.249 +0.004/-0	3	3.327 +0.010/-0	3.497 +0.006/-0
ST-350-SH	3-1/2	4	1/4	0.380	0.249 +0.004/-0	3-1/2	3.827 +0.010/-0	3.997 +0.006/-0
ST-400-SH	4	4-1/2	1/4	0.380	0.249 +0.004/-0	4	4.327 +0.010/-0	4.497 +0.006/-0
ST-425-SH	4-1/4	4-3/4	1/4	0.380	0.249 +0.004/-0	4-1/4	4.577 +0.010/-0	4.747 +0.006/-0
ST-475-SH	4-3/4	5-1/2	3/8	0.560	0.374 +0.004/-0	4-3/4	5.243 +0.010/-0	5.497 +0.006/-0
ST-525-SH	5-1/4	6	3/8	0.560	0.374 +0.004/-0	5-1/4	5.743 +0.010/-0	5.997 +0.006/-0



## 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.



### HERCULES PART NUMBERS

**STXE - 150**  
 Type of Wiper      Size

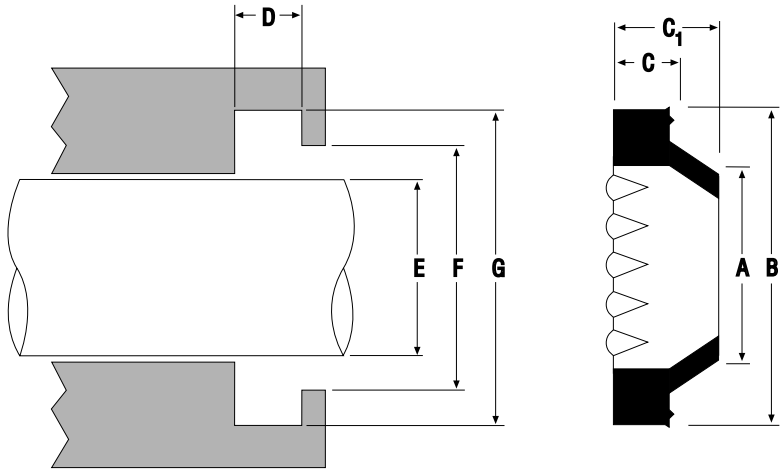
### SEAL INFORMATION

MATERIAL	95A URETHANE WIPER 70A NITRILE ENERGIZER
TEMPERATURE RANGE	-65° TO +220° F

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. BASE THICKNESS	C <sub>1</sub> OVERALL HT. (MAX)	D GROOVE WIDTH	E NOM. ROD DIA.	F THROAT DIA.	G HOUSING DIA.
STXE-150	1-1/2	1-7/8	3/16	0.305	0.187 +0.004/0	1-1/2	1.745 +0.010/0	1.872 +0.006/0
STXE-200	2	2-1/2	1/4	0.395	0.249 +0.004/0	2	2.327 +0.010/0	2.497 +0.006/0
STXE-250	2-1/2	3	1/4	0.395	0.249 +0.004/0	2-1/2	2.827 +0.010/0	2.997 +0.006/0
STXE-300	3	3-1/2	1/4	0.395	0.249 +0.004/0	3	3.327 +0.010/0	3.497 +0.006/0
STXE-350	3-1/2	4	1/4	0.395	0.249 +0.004/0	3-1/2	3.827 +0.010/0	3.997 +0.006/0
STXE-375	3-3/4	4-1/4	1/4	0.395	0.249 +0.004/0	3-3/4	4.077 +0.010/0	4.247 +0.006/0
STXE-400	4	4-1/2	1/4	0.395	0.249 +0.004/0	4	4.327 +0.010/0	4.497 +0.006/0
STXE-450	4-1/2	5-1/4	3/8	0.585	0.374 +0.004/0	4-1/2	4.993 +0.010/0	5.247 +0.006/0

# STYLE ST-XL 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 contaminants from entering through the groove. The inside diameter is ribbed to prevent pressure traps between the wiper and rod seal.



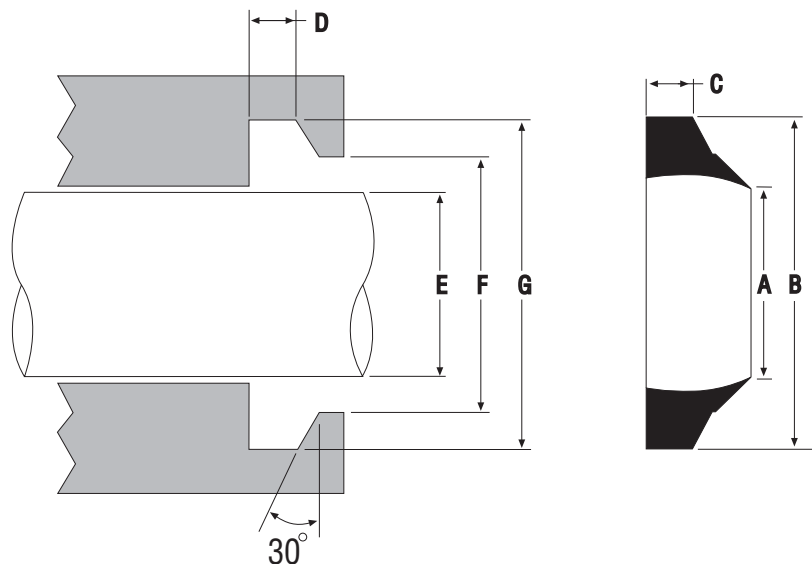
### HERCULES PART NUMBERS

**STXE - 150**  
 Type of Wiper      Size

SEAL INFORMATION	
MATERIAL	92A URETHANE
TEMPERATURE RANGE	-40° TO +230° F

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. BASE THICKNESS	C <sub>1</sub> OVERALL HT. (MAX)	D GROOVE WIDTH	E NOM. ROD DIA.	F THROAT DIA.	G HOUSING DIA.
ST-100-XL	1	1-3/8	3/16	0.281	0.187 +0.004/-0	1	1.250 ±0.005	1.375 ±0.003
ST-112-XL	1-1/8	1-1/2	3/16	0.281	0.187 +0.004/-0	1-1/8	1.375 ±0.005	1.500 ±0.003
ST-125-XL	1-1/4	1-5/8	3/16	0.281	0.187 +0.004/-0	1-1/4	1.500 ±0.005	1.625 ±0.003
ST-137-XL	1-3/8	1-3/4	3/16	0.281	0.187 +0.004/-0	1-3/8	1.625 ±0.005	1.750 ±0.003
ST-150-XL	1-1/2	1-7/8	3/16	0.281	0.187 +0.004/-0	1-1/2	1.750 ±0.005	1.875 ±0.003
ST-175-XL	1-3/4	2-1/8	3/16	0.281	0.187 +0.004/-0	1-3/4	2.000 ±0.005	2.125 ±0.003
ST-200-XL	2	2-1/2	1/4	0.375	0.250 +0.004/-0	2	2.332 ±0.005	2.500 ±0.003
ST-225-XL	2-1/4	2-3/4	1/4	0.375	0.250 +0.004/-0	2-1/4	2.582 ±0.005	2.750 ±0.003
ST-250-XL	2-1/2	3	1/4	0.375	0.250 +0.004/-0	2-1/2	2.832 ±0.005	3.000 ±0.003
ST-300-XL	3	3-1/2	1/4	0.375	0.250 +0.004/-0	3	3.332 ±0.005	3.500 ±0.003
ST-325-XL	3-1/4	3-3/4	1/4	0.375	0.250 +0.004/-0	3-1/4	3.582 ±0.005	3.750 ±0.003
ST-350-XL	3-1/2	4	1/4	0.375	0.250 +0.004/-0	3-1/2	3.832 ±0.005	4.000 ±0.003
ST-400-XL	4	4-1/2	1/4	0.375	0.250 +0.004/-0	4	4.332 ±0.005	4.500 ±0.003
ST-450-XL	4-1/2	5-1/4	3/8	0.562	0.375 +0.004/-0	4-1/2	4.998 ±0.005	5.250 ±0.003
ST-500-XL	5	5-3/4	3/8	0.562	0.375 +0.004/-0	5	5.498 ±0.005	5.750 ±0.003
ST-525-XL	5-1/4	6	3/8	0.562	0.375 +0.004/-0	5-1/4	5.748 ±0.005	6.000 ±0.003
ST-550-XL	5-1/2	6-1/4	3/8	0.562	0.375 +0.004/-0	5-1/2	5.998 ±0.005	6.250 ±0.003
ST-600-XL	6	6-3/4	3/8	0.562	0.375 +0.004/-0	6	6.498 ±0.005	6.750 ±0.003

# STYLE BT WIPER RINGS



## HERCULES PART NUMBERS

**BT 01050**  
 Type of Wiper | Size Code

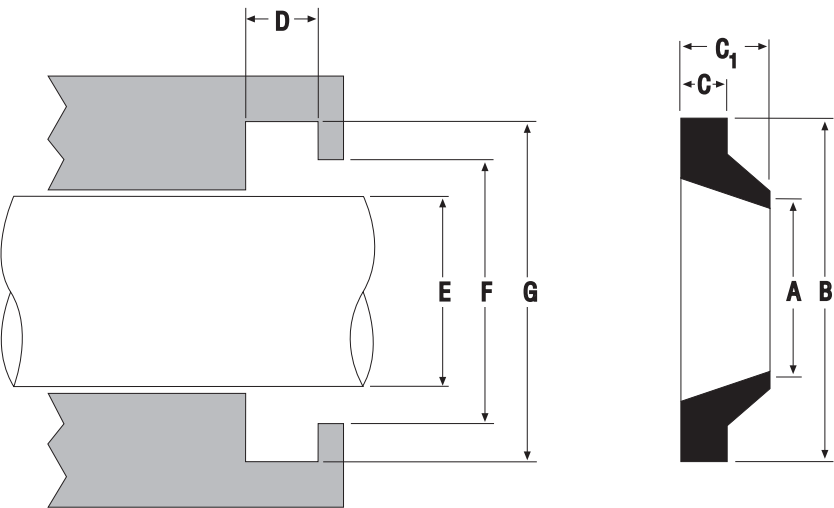
## SEAL INFORMATION

MATERIAL	POLYESTER
TEMPERATURE RANGE	-65° TO +220° F

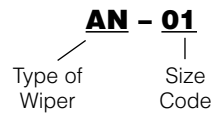
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. BASE THICKNESS	D GROOVE WIDTH	E NOM. ROD DIA.	F THROAT DIA.	G HOUSING DIA.
BT01050	5/8	7/8	5/32	0.155 +0.005/-0	5/8	+0.005/-0	0.885 +0.005/-0
BT01260	3/4	1-1/8	3/16	0.195 +0.005/-0	3/4	+0.005/-0	1.135 +0.005/-0
BT01460	7/8	1-1/4	3/16	0.195 +0.005/-0	7/8	+0.005/-0	1.260 +0.005/-0
BT10060	1	1-3/8	3/16	0.195 +0.005/-0	1	+0.005/-0	1.385 +0.005/-0
BT10260	1-1/8	1-1/2	3/16	0.195 +0.005/-0	1-1/8	+0.005/-0	1.510 +0.005/-0
BT10460	1-1/4	1-5/8	3/16	0.195 +0.005/-0	1-1/4	+0.005/-0	1.635 +0.005/-0
BT10660	1-3/8	1-3/4	3/16	0.195 +0.005/-0	1-3/8	+0.005/-0	1.760 +0.005/-0
BT10860	1-1/2	1-7/8	3/16	0.195 +0.005/-0	1-1/2	+0.005/-0	1.885 +0.005/-0
BT11260	1-3/4	2-1/8	3/16	0.195 +0.005/-0	1-3/4	+0.005/-0	2.135 +0.005/-0
BT11580	1-15/16	2-7/16	1/4	0.255 +0.005/-0	1-15/16	+0.005/-0	2.447 +0.005/-0
BT20060	2	2-3/8	3/16	0.195 +0.005/-0	2	+0.005/-0	2.385 +0.005/-0
BT20460	2-1/4	2-5/8	3/16	0.195 +0.005/-0	2-1/4	+0.005/-0	2.635 +0.005/-0
BT20791	2-7/16	3	0.281	0.286 +0.005/-0	2-7/16	+0.005/-0	3.010 +0.005/-0
BT20860	2-1/2	2-7/8	3/16	0.195 +0.005/-0	2-1/2	+0.005/-0	2.885 +0.005/-0
BT20880	2-1/2	3	1/4	0.255 +0.005/-0	2-1/2	+0.005/-0	3.010 +0.005/-0
BT21080	2-5/8	3-1/8	1/4	0.255 +0.005/-0	2-5/8	+0.005/-0	3.135 +0.005/-0
BT21260	2-3/4	3-1/8	3/16	0.195 +0.005/-0	2-3/4	+0.005/-0	3.135 +0.005/-0
BT21280	2-3/4	3-1/4	1/4	0.255 +0.005/-0	2-3/4	+0.005/-0	3.260 +0.005/-0
BT30060	3	3-3/8	3/16	0.195 +0.005/-0	3	+0.005/-0	3.385 +0.005/-0
BT30080	3	3-1/2	1/4	0.255 +0.005/-0	3	+0.005/-0	3.510 +0.005/-0
BT30090	2.95	3-1/2	0.275	0.286 +0.005/-0	2.95	+0.005/-0	3.510 +0.005/-0
BT30391	3.165	3.734	0.284	0.289 +0.005/-0	3.165	+0.005/-0	3.744 +0.005/-0
BT30480	3-1/4	3-3/4	1/4	0.255 +0.005/-0	3-1/4	+0.005/-0	3.760 +0.005/-0
BT30860	3-1/2	3-7/8	3/16	0.195 +0.005/-0	3-1/2	+0.005/-0	3.885 +0.005/-0
BT30880	3-1/2	4	1/4	0.255 +0.005/-0	3-1/2	+0.005/-0	4.010 +0.005/-0
BT30890	3.45	4	0.275	0.280 +0.005/-0	3.45	+0.005/-0	4.010 +0.005/-0
BT31080	3-5/8	4-1/8	1/4	0.255 +0.005/-0	3-5/8	+0.005/-0	4.135 +0.005/-0
BT31280	3-3/4	4-1/4	1/4	0.255 +0.005/-0	3-3/4	+0.005/-0	4.260 +0.005/-0
BT40080	4	4-1/2	1/4	0.255 +0.005/-0	4	+0.005/-0	4.510 +0.005/-0
BT40480	4-1/4	4-3/4	1/4	0.255 +0.005/-0	4-1/4	+0.005/-0	4.760 +0.005/-0
BT40880	4-1/2	5	1/4	0.255 +0.005/-0	4-1/2	+0.005/-0	5.010 +0.005/-0
BT41280	4-3/4	5-1/4	1/4	0.255 +0.005/-0	4-3/4	+0.005/-0	5.260 +0.005/-0
BT41591	4-15/16	5-31/64	0.284	0.289 +0.005/-0	4-15/16	+0.005/-0	4.948 +0.005/-0
BT50080	5	5-1/2	1/4	0.255 +0.005/-0	5	+0.005/-0	5.510 +0.005/-0
BT50880	5-1/2	6	1/4	0.255 +0.005/-0	5-1/2	+0.005/-0	6.010 +0.005/-0
BT60080	6	6-1/2	1/4	0.255 +0.005/-0	6	+0.005/-0	6.510 +0.005/-0

# STYLE AN WIPER RINGS

**NOTE:** The "SH" suffix designates slotted heel design. The "V" suffix designates fluorocarbon material. B suffix designates carboxilated nitrile material.



**HERCULES PART NUMBERS**



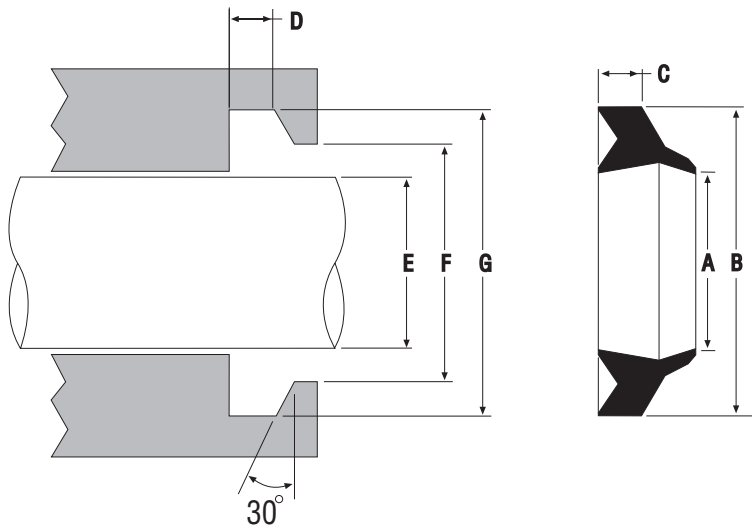
SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-65° TO +220° F

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. BASE THICKNESS	C <sub>1</sub> OVERALL HT.(MAX)	D GROOVE WIDTH	E NOM. ROD DIA.	F THROAT DIA.	G HOUSING DIA.
AN-01	1/2	0.766	0.104	0.187	0.107 ±0.003	1/2	0.647 +0.005/-0	0.760 +0.005/-0
AN-02	9/16	0.829	0.104	0.187	0.107 ±0.003	9/16	0.710 +0.005/-0	0.823 +0.005/-0
AN-03	5/8	0.891	0.104	0.187	0.107 ±0.003	5/8	0.772 +0.005/-0	0.885 +0.005/-0
AN-04	11/16	0.954	0.104	0.187	0.107 ±0.003	11/16	0.839 +0.005/-0	0.948 +0.005/-0
AN-05	3/4	1.016	0.104	0.187	0.107 ±0.003	3/4	0.897 +0.005/-0	1.010 +0.005/-0
AN-05-SH	3/4	1.016	0.104	0.187	0.107 ±0.003	3/4	0.897 +0.005/-0	1.010 +0.005/-0
AN-06	13/16	1.090	0.104	0.187	0.107 ±0.003	13/16	0.960 +0.005/-0	1.086 +0.005/-0
AN-07	7/8	1.153	0.104	0.187	0.107 ±0.003	7/8	1.023 +0.005/-0	1.148 +0.005/-0
AN-08	15/16	1.215	0.104	0.187	0.107 ±0.003	15/16	1.085 +0.005/-0	1.210 +0.005/-0
AN-09	1	1.278	0.104	0.187	0.107 ±0.003	1	1.148 +0.005/-0	1.273 +0.005/-0
AN-09B	1	1.278	0.104	0.187	0.107 ±0.003	1	1.148 +0.005/-0	1.273 +0.005/-0
AN-09V	1	1.278	0.104	0.187	0.107 ±0.003	1	1.148 +0.005/-0	1.273 +0.005/-0
AN-10	1-1/16	1.340	0.104	0.187	0.107 ±0.003	1-1/16	1.210 +0.005/-0	1.335 +0.005/-0
AN-11	1-1/8	1.403	0.104	0.187	0.107 ±0.003	1-1/8	1.273 +0.005/-0	1.398 +0.005/-0
AN-12	1-3/16	1.465	0.104	0.187	0.107 ±0.003	1-3/16	1.335 +0.005/-0	1.460 +0.005/-0
AN-13	1-1/4	1.528	0.104	0.187	0.107 ±0.003	1-1/4	1.398 +0.005/-0	1.523 +0.005/-0
AN-13B	1-1/4	1.528	0.104	0.187	0.107 ±0.003	1-1/4	1.398 +0.005/-0	1.523 +0.005/-0
AN-14	1-5/16	1.622	0.104	0.187	0.107 ±0.003	1-5/16	1.480 +0.005/-0	1.614 +0.005/-0
AN-15	1-3/8	1.685	0.104	0.187	0.107 ±0.003	1-3/8	1.542 +0.005/-0	1.677 +0.005/-0
AN-15V	1-3/8	1.677	0.104	0.187	0.107 ±0.003	1-3/8	1.542 +0.005/-0	1.677 +0.005/-0
AN-16	1-7/16	1.747	0.104	0.187	0.107 ±0.003	1-7/16	1.605 +0.005/-0	1.739 +0.005/-0
AN-17	1-1/2	1.810	0.104	0.187	0.107 ±0.003	1-1/2	1.668 +0.005/-0	1.802 +0.005/-0
AN-18	1-5/8	1.935	0.104	0.187	0.107 ±0.003	1-5/8	1.793 +0.005/-0	1.927 +0.005/-0
AN-19	1-3/4	2.060	0.104	0.187	0.107 ±0.003	1-3/4	1.918 +0.005/-0	2.052 +0.005/-0
AN-20	1-7/8	2.185	0.104	0.187	0.107 ±0.003	1-7/8	2.043 +0.005/-0	2.177 +0.005/-0
AN-21	2	2.310	0.104	0.187	0.107 ±0.003	2	2.178 +0.005/-0	2.302 +0.005/-0
AN-21V	2	2.310	0.104	0.187	0.107 ±0.003	2	2.178 +0.005/-0	2.302 +0.005/-0
AN-22	2-1/8	2.435	0.104	0.187	0.107 ±0.003	2-1/8	2.303 +0.005/-0	2.427 +0.005/-0
AN-23	2-1/4	2.560	0.104	0.187	0.107 ±0.003	2-1/4	2.428 +0.005/-0	2.552 +0.005/-0
AN-23B	2-1/4	2.560	0.104	0.187	0.107 ±0.003	2-1/4	2.428 +0.005/-0	2.552 +0.005/-0
AN-23BN	2-1/4	2.560	0.104	0.187	0.107 ±0.003	2-1/4	2.428 +0.005/-0	2.552 +0.005/-0
AN-24	2-3/8	2.685	0.104	0.187	0.107 ±0.003	2-3/8	2.553 +0.005/-0	2.677 +0.005/-0
AN-25	2-1/2	2.810	0.104	0.187	0.107 ±0.003	2-1/2	2.678 +0.005/-0	2.802 +0.005/-0
AN-26	2-5/8	2.999	0.119	0.211	0.122 ±0.003	2-5/8	2.834 +0.005/-0	2.989 +0.005/-0
AN-27	2-3/4	3.124	0.119	0.211	0.122 ±0.003	2-3/4	2.959 +0.005/-0	3.114 +0.005/-0
AN-28	2-7/8	3.249	0.119	0.211	0.122 ±0.003	2-7/8	3.084 +0.005/-0	3.239 +0.005/-0

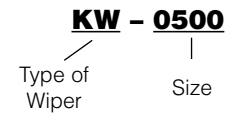
## STYLE AN WIPER RINGS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. BASE THICKNESS	C <sub>1</sub> OVERALL HT.(MAX)	D GROOVE WIDTH	E NOM. ROD DIA.	F THROAT DIA.	G HOUSING DIA.
AN-29	3	3.374	0.119	0.211	0.122 ±0.003	3	3.209 +0.005/-0	3.364 +0.005/-0
AN-30	3-1/8	3.499	0.119	0.211	0.122 ±0.003	3-1/8	3.334 +0.005/-0	3.489 +0.005/-0
AN-31	3-1/4	3.624	0.119	0.211	0.122 ±0.003	3-1/4	3.459 +0.005/-0	3.614 +0.005/-0
AN-32	3-3/8	3.749	0.119	0.211	0.122 ±0.003	3-3/8	3.584 +0.005/-0	3.739 +0.005/-0
AN-33	3-1/2	3.874	0.119	0.211	0.122 ±0.003	3-1/2	3.709 +0.005/-0	3.864 +0.005/-0
AN-34	3-5/8	3.999	0.119	0.211	0.122 ±0.003	3-5/8	3.834 +0.005/-0	3.989 +0.005/-0
AN-35	3-3/4	4.124	0.119	0.211	0.122 ±0.003	3-3/4	3.959 +0.005/-0	4.114 +0.005/-0
AN-36	3-7/8	4.249	0.119	0.211	0.122 ±0.003	3-7/8	4.084 +0.005/-0	4.239 +0.005/-0
AN-37	4	4.439	0.135	0.238	0.138 ±0.003	4	4.240 +0.005/-0	4.427 +0.005/-0
AN-38	4-1/8	4.564	0.135	0.238	0.138 ±0.003	4-1/8	4.365 +0.005/-0	4.552 +0.005/-0
AN-39	4-1/4	4.689	0.135	0.238	0.138 ±0.003	4-1/4	4.490 +0.005/-0	4.677 +0.005/-0
AN-40	4-3/8	4.814	0.135	0.238	0.138 ±0.003	4-3/8	4.615 +0.005/-0	4.802 +0.005/-0
AN-41	4-1/2	4.939	0.135	0.238	0.138 ±0.003	4-1/2	4.740 +0.005/-0	4.927 +0.005/-0
AN-42	4-5/8	5.064	0.135	0.238	0.138 ±0.003	4-5/8	4.865 +0.005/-0	5.052 +0.005/-0
AN-43	4-3/4	5.189	0.135	0.238	0.138 ±0.003	4-3/4	4.990 +0.005/-0	5.177 +0.005/-0
AN-44	4-7/8	5.314	0.135	0.238	0.138 ±0.003	4-7/8	5.115 +0.005/-0	5.302 +0.005/-0
AN-45	5	5.439	0.135	0.238	0.138 ±0.003	5	5.240 +0.005/-0	5.427 +0.005/-0
AN-45-SH	5	5.439	0.135	0.238	0.138 ±0.003	5	5.240 +0.005/-0	5.427 +0.005/-0
AN-46	5-1/8	5.564	0.135	0.238	0.138 ±0.003	5-1/8	5.365 +0.005/-0	5.552 +0.005/-0
AN-47	5-1/4	5.689	0.135	0.238	0.138 ±0.003	5-1/4	5.490 +0.005/-0	5.677 +0.005/-0
AN-48	5-3/8	5.814	0.135	0.238	0.138 ±0.003	5-3/8	5.615 +0.005/-0	5.802 +0.005/-0
AN-49	5-1/2	5.939	0.135	0.238	0.138 ±0.003	5-1/2	5.740 +0.005/-0	5.927 +0.005/-0
AN-50	5-5/8	6.128	0.151	0.264	0.154 ±0.003	5-5/8	5.896 +0.005/-0	6.114 +0.005/-0
AN-51	5-3/4	6.254	0.151	0.264	0.154 ±0.003	5-3/4	6.022 +0.005/-0	6.239 +0.005/-0
AN-52	5-7/8	6.379	0.151	0.264	0.154 ±0.003	5-7/8	6.146 +0.005/-0	6.364 +0.005/-0
AN-53	6	6.504	0.151	0.264	0.154 ±0.003	6	6.272 +0.005/-0	6.489 +0.005/-0
AN-54	6-1/4	6.754	0.151	0.264	0.154 ±0.003	6-1/4	6.522 +0.005/-0	6.739 +0.005/-0
AN-55	6-1/2	7.004	0.151	0.264	0.154 ±0.003	6-1/2	6.772 +0.005/-0	6.989 +0.005/-0
AN-56	6-3/4	7.254	0.151	0.264	0.154 ±0.003	6-3/4	7.022 +0.005/-0	7.239 +0.005/-0
AN-57	7	7.504	0.151	0.264	0.154 ±0.003	7	7.272 +0.005/-0	7.489 +0.005/-0
AN-58	7-1/4	7.754	0.151	0.264	0.154 ±0.003	7-1/4	7.522 +0.005/-0	7.739 +0.005/-0
AN-59	7-1/2	8.004	0.151	0.264	0.154 ±0.003	7-1/2	7.772 +0.005/-0	7.989 +0.005/-0
AN-60	7-3/4	8.254	0.151	0.264	0.154 ±0.003	7-3/4	8.022 +0.005/-0	8.239 +0.005/-0
AN-61	8	8.504	0.151	0.264	0.154 ±0.003	8	8.272 +0.005/-0	8.489 +0.005/-0
AN-62	8-1/2	9.004	0.151	0.264	0.154 ±0.003	8-1/2	8.772 +0.005/-0	8.989 +0.005/-0
AN-63	9	9.504	0.151	0.264	0.154 ±0.003	9	9.272 +0.005/-0	9.489 +0.005/-0
AN-64	9-1/2	10.004	0.151	0.264	0.154 ±0.003	9-1/2	9.772 +0.005/-0	9.989 +0.005/-0
AN-65	10	10.504	0.151	0.264	0.154 ±0.003	10	10.272 +0.005/-0	10.489 +0.005/-0
AN-66	10-1/2	11.004	0.151	0.264	0.154 ±0.003	10-1/2	10.772 +0.005/-0	10.989 +0.005/-0
AN-67	11	11.504	0.151	0.264	0.154 ±0.003	11	11.272 +0.005/-0	11.489 +0.005/-0
AN-68	11-1/2	12.004	0.151	0.264	0.154 ±0.003	11-1/2	11.772 +0.005/-0	11.989 +0.005/-0
AN-69	12	12.504	0.151	0.264	0.154 ±0.003	12	12.272 +0.005/-0	12.489 +0.005/-0
AN-70	12-1/2	13.004	0.151	0.264	0.154 ±0.003	12-1/2	12.772 +0.005/-0	12.989 +0.005/-0
AN-71	13	13.504	0.151	0.264	0.154 ±0.003	13	13.272 +0.005/-0	13.489 +0.005/-0

# STYLE KW WIPER RINGS



## HERCULES PART NUMBERS

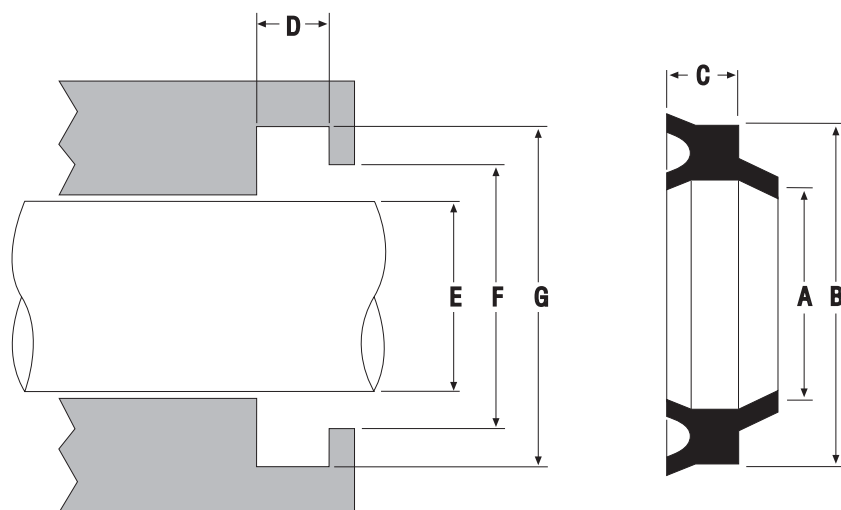


SEAL INFORMATION	
MATERIAL	95A URETHANE
TEMPERATURE RANGE	-65° TO +220° F

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. BASE THICKNESS	D GROOVE WIDTH	E NOM. ROD DIA.	F THROAT DIA.	G HOUSING DIA.
KW-0500	1/2	3/4	0.150	0.155 +0.005/-0	1/2	0.625 +0/-0.005	0.760 +0.005/-0
KW-0625	5/8	7/8	0.150	0.155 +0.005/-0	5/8	0.750 +0/-0.005	0.885 +0.005/-0
KW-0750	3/4	1-1/8	0.190	0.195 +0.005/-0	3/4	0.832 +0/-0.005	1.135 +0.005/-0
KW-0875	7/8	1-1/4	0.190	0.195 +0.005/-0	7/8	0.957 +0/-0.005	1.260 +0.005/-0
KW-1000	1	1-3/8	0.190	0.195 +0.005/-0	1	1.082 +0/-0.005	1.385 +0.005/-0
KW-1125	1-1/8	1-1/2	0.190	0.195 +0.005/-0	1-1/8	1.207 +0/-0.005	1.510 +0.005/-0
KW-1250	1-1/4	1-5/8	0.190	0.195 +0.005/-0	1-1/4	1.332 +0/-0.005	1.635 +0.005/-0
KW-1375	1-3/8	1-3/4	0.190	0.195 +0.005/-0	1-3/8	1.457 +0/-0.005	1.760 +0.005/-0
KW-1500	1-1/2	1-7/8	0.190	0.195 +0.005/-0	1-1/2	1.582 +0/-0.005	1.885 +0.005/-0
KW-1625	1-5/8	2	0.190	0.195 +0.005/-0	1-5/8	1.707 +0/-0.005	2.010 +0.005/-0
KW-1750	1-3/4	2-1/8	0.190	0.195 +0.005/-0	1-3/4	1.832 +0/-0.005	2.135 +0.005/-0
KW-2000	2	2-3/8	0.190	0.195 +0.005/-0	2	2.082 +0/-0.005	2.385 +0.005/-0
KW-2125	2-1/8	2-1/2	0.190	0.195 +0.005/-0	2-1/8	2.207 +0/-0.005	2.510 +0.005/-0
KW-2210	2-7/32	2-23/32	0.250	0.255 +0.005/-0	2-7/32	2.402 +0/-0.005	2.729 +0.005/-0
KW-2250	2-1/4	2-3/4	0.250	0.255 +0.005/-0	2-1/4	2.407 +0/-0.005	2.760 +0.005/-0
KW-2450N	2.45	3	0.281	0.258 +0.002/-0.003	2.45	2.607 +0/-0.005	3.010 +0.005/-0
KW-2500	2-1/2	3	0.250	0.255 +0.005/-0	2-1/2	2.657 +0/-0.005	3.010 +0.005/-0
KW-2500-1	2-1/2	2-7/8	0.190	0.195 +0.005/-0	2-1/2	2.532 +0/-0.005	2.885 +0.005/-0
KW-2625	2-5/8	3-1/8	0.250	0.255 +0.005/-0	2-5/8	2.782 +0/-0.005	3.135 +0.005/-0
KW-2750	2-3/4	3-1/4	0.250	0.255 +0.005/-0	2-3/4	2.907 +0/-0.005	3.260 +0.005/-0
KW-3000	3	3-1/2	0.250	0.255 +0.005/-0	3	3.157 +0/-0.005	3.510 +0.005/-0
KW-3125N	3-1/8	3-5/8	0.250	0.285 +0.005/-0	2-1/8	3.282 +0/-0.005	3.635 +0.005/-0
KW-3250	3-1/4	3-3/4	0.250	0.255 +0.005/-0	3-1/4	3.407 +0/-0.005	3.760 +0.005/-0
KW-3375	3-3/8	3-7/8	0.250	0.255 +0.005/-0	3-3/8	3.532 +0/-0.005	3.885 +0.005/-0
KW-3500	3-1/2	4	0.250	0.255 +0.005/-0	3-1/2	3.657 +0/-0.005	4.010 +0.005/-0
KW-3500-2	3-1/2	3-7/8	0.190	0.195 +0.005/-0	3-1/2	3.532 +0/-0.005	3.885 +0.005/-0
KW-3750	3-3/4	4-1/4	0.250	0.255 +0.005/-0	3-3/4	3.907 +0/-0.005	4.260 +0.005/-0
KW-4000	4	4-1/2	0.250	0.255 +0.005/-0	4	4.157 +0/-0.005	4.510 +0.005/-0
KW-4060	4-1/16	4-9/16	0.250	0.255 +0.005/-0	4-1/16	4.219 +0/-0.005	4.572 +0.005/-0
KW-4500	4-1/2	5	0.250	0.255 +0.005/-0	4-1/2	4.657 +0/-0.005	5.010 +0.005/-0
KW-4875	4-7/8	5-3/8	0.250	0.255 +0.005/-0	4-7/8	5.032 +0/-0.005	5.385 +0.005/-0
KW-5000	5	5-1/2	0.250	0.255 +0.005/-0	5	5.157 +0/-0.005	5.510 +0.005/-0
KW-5250N	5-1/4	5-3/4	0.250	0.255 +0.005/-0	5-1/4	5.407 +0/-0.005	5.760 +0.005/-0
KW-5375	5-3/8	5-7/8	0.250	0.255 +0.005/-0	5-3/8	5.532 +0/-0.005	5.885 +0.005/-0
KW-6000	6	6-1/2	0.250	0.255 +0.005/-0	6	6.157 +0/-0.005	6.510 +0.005/-0
KW-6250	6-1/4	6-3/4	0.250	0.255 +0.005/-0	6-1/4	6.407 +0/-0.005	6.760 +0.005/-0
KW-7000	7	7-1/2	0.250	0.255 +0.005/-0	7	7.157 +0/-0.005	7.510 +0.005/-0
KW-8000N	8	8-1/2	0.250	0.255 +0.005/-0	8	8.157 +0/-0.005	8.510 +0.005/-0

# STYLE HW WIPER RINGS

**NOTE:** The "V" suffix designates fluorocarbon material. The "N" suffix designates nitrile material.



## HERCULES PART NUMBERS

**HW - 0500**  
 Type of Wiper      Size

## SEAL INFORMATION

MATERIAL	95A URETHANE
TEMPERATURE RANGE	-65° TO +220° F

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. BASE THICKNESS	D GROOVE WIDTH	E NOM. ROD DIA.	F THROAT DIA.	G HOUSING DIA.
HW-0500	1/2	13/16	0.194	0.203 +0.005/-0	1/2	0.620 +0.002/-0	0.802 +0.002/-0
HW-0500N	1/2	13/16	0.194	0.203 +0.005/-0	1/2	0.620 +0.002/-0	0.802 +0.002/-0
HW-0500V	1/2	13/16	0.194	0.203 +0.005/-0	1/2	0.620 +0.002/-0	0.802 +0.002/-0
HW-0625	5/8	15/16	0.194	0.203 +0.005/-0	5/8	0.745 +0.002/-0	0.927 +0.002/-0
HW-0625-1	5/8	1	0.194	0.203 +0.005/-0	5/8	0.807 +0.002/-0	0.990 +0.002/-0
HW-0625-1N	5/8	1	0.194	0.203 +0.005/-0	5/8	0.807 +0.002/-0	0.990 +0.002/-0
HW-0625-2N	5/8	15/16	0.318	0.324 +0.005/-0	5/8	0.745 +0.002/-0	0.927 +0.002/-0
HW-0625N	5/8	15/16	0.194	0.203 +0.005/-0	5/8	0.745 +0.002/-0	0.927 +0.002/-0
HW-0625V	5/8	15/16	0.194	0.203 +0.005/-0	5/8	0.745 +0.002/-0	0.927 +0.002/-0
HW-0750	3/4	1-1/16	0.194	0.203 +0.005/-0	3/4	0.870 +0.002/-0	1.052 +0.002/-0
HW-0750N	3/4	1-1/16	0.194	0.203 +0.005/-0	3/4	0.870 +0.002/-0	1.052 +0.002/-0
HW-0875	7/8	1-1/4	0.212	0.218 +0.005/-0	7/8	1.010 +0.002/-0	1.240 +0.002/-0
HW-1000	1	1-3/8	0.212	0.218 +0.005/-0	1	1.135 +0.003/-0	1.365 +0.003/-0
HW-1000N	1	1-3/8	0.212	0.218 +0.005/-0	1	1.135 +0.003/-0	1.365 +0.003/-0
HW-1000V	1	1-3/8	0.212	0.218 +0.005/-0	1	1.135 +0.003/-0	1.365 +0.003/-0
HW-1125	1-1/8	1-1/2	0.212	0.218 +0.005/-0	1-1/8	1.260 +0.003/-0	1.490 +0.003/-0
HW-1250	1-1/4	1-5/8	0.212	0.218 +0.005/-0	1-1/4	1.385 +0.003/-0	1.615 +0.003/-0
HW-1250N	1-1/4	1-5/8	0.212	0.218 +0.005/-0	1-1/4	1.385 +0.003/-0	1.615 +0.003/-0
HW-1375	1-3/8	1-3/4	0.212	0.218 +0.005/-0	1-3/8	1.510 +0.003/-0	1.740 +0.003/-0
HW-1375N	1-3/8	1-3/4	0.212	0.218 +0.005/-0	1-3/8	1.510 +0.003/-0	1.740 +0.003/-0
HW-1375V	1-3/8	1-3/4	0.212	0.218 +0.005/-0	1-3/8	1.510 +0.003/-0	1.740 +0.003/-0
HW-1500	1-1/2	1-7/8	0.212	0.218 +0.005/-0	1-1/2	1.635 +0.003/-0	1.865 +0.003/-0
HW-1500N	1-1/2	1-7/8	0.212	0.218 +0.005/-0	1-1/2	1.635 +0.003/-0	1.865 +0.003/-0
HW-1625	1-5/8	2	0.212	0.218 +0.005/-0	1-5/8	1.760 +0.003/-0	1.990 +0.003/-0
HW-1750	1-3/4	2-1/8	0.212	0.218 +0.005/-0	1-3/4	1.885 +0.003/-0	2.115 +0.003/-0
HW-1750N	1-3/4	2-1/8	0.212	0.218 +0.005/-0	1-3/4	1.885 +0.003/-0	2.115 +0.003/-0
HW-1750V	1-3/4	2-1/8	0.212	0.218 +0.005/-0	1-3/4	1.885 +0.003/-0	2.115 +0.003/-0
HW-1875	1-7/8	2-1/4	0.212	0.218 +0.005/-0	1-7/8	2.010 +0.003/-0	2.240 +0.003/-0
HW-2000	2	2-3/8	0.212	0.218 +0.005/-0	2	2.135 +0.003/-0	2.365 +0.003/-0
HW-2000N	2	2-3/8	0.212	0.218 +0.005/-0	2	2.135 +0.003/-0	2.365 +0.003/-0
HW-2000V	2	2-3/8	0.212	0.218 +0.005/-0	2	2.135 +0.003/-0	2.365 +0.003/-0
HW-2125	2-1/8	2-1/2	0.212	0.218 +0.005/-0	2-1/8	2.260 +0.003/-0	2.490 +0.003/-0
HW-2250	2-1/4	2-3/4	0.275	0.281 +0.005/-0	2-1/4	2.385 +0.003/-0	2.745 +0.003/-0
HW-2375N	2-3/8	2.875	0.275	0.281 +0.005/-0	2-3/8	2.510 +0.003/-0	2.870 +0.003/-0

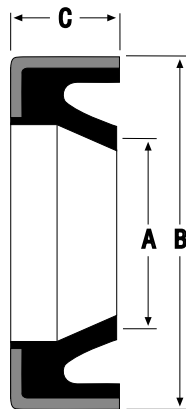
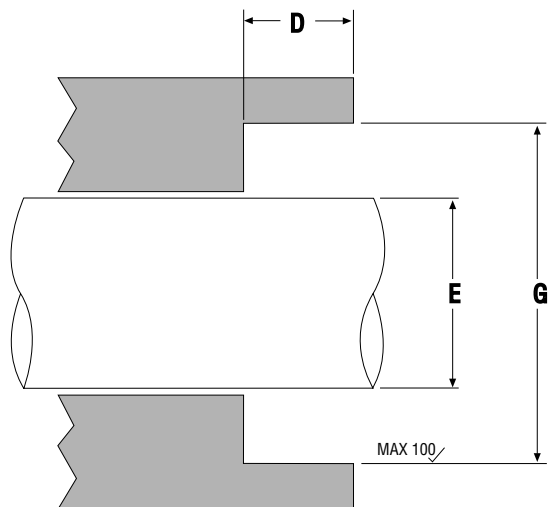
# STYLE HW WIPER RINGS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. BASE THICKNESS	D GROOVE WIDTH	E NOM. ROD DIA.	F THROAT DIA.	G HOUSING DIA.
HW-2500	2-1/2	3	0.275	0.281 +0.005/-0	2-1/2	2.635 +0.003/-0	2.995 +0.003/-0
HW-2500N	2-1/2	3	0.275	0.281 +0.005/-0	2-1/2	2.635 +0.003/-0	2.995 +0.003/-0
HW-2500V	2-1/2	3	0.275	0.281 +0.005/-0	2-1/2	2.635 +0.003/-0	2.995 +0.003/-0
HW-2625	2-5/8	3-1/8	0.275	0.281 +0.005/-0	2-5/8	2.760 +0.003/-0	3.120 +0.003/-0
HW-2750	2-3/4	3-1/4	0.275	0.281 +0.005/-0	2-3/4	2.885 +0.003/-0	3.245 +0.003/-0
HW-3000	3	3-1/2	0.275	0.281 +0.005/-0	3	3.135 +0.003/-0	3.495 +0.003/-0
HW-3000N	3	3-1/2	0.275	0.281 +0.005/-0	3	3.135 +0.003/-0	3.495 +0.003/-0
HW-3000V	3	3-1/2	0.275	0.281 +0.005/-0	3	3.135 +0.003/-0	3.495 +0.003/-0
HW-3250	3-1/4	3-3/4	0.275	0.281 +0.005/-0	3-1/4	3.385 +0.003/-0	3.745 +0.003/-0
HW-3500	3-1/2	4	0.275	0.281 +0.005/-0	3-1/2	3.635 +0.003/-0	3.995 +0.003/-0
HW-3500N	3-1/2	4	0.275	0.281 +0.005/-0	3-1/2	3.635 +0.003/-0	3.995 +0.003/-0
HW-3500V	3-1/2	4	0.275	0.281 +0.005/-0	3-1/2	3.635 +0.003/-0	3.995 +0.003/-0
HW-3750	3-3/4	4-1/4	0.275	0.281 +0.005/-0	3-3/4	3.885 +0.003/-0	4.245 +0.003/-0
HW-4000	4	4-1/2	0.275	0.281 +0.005/-0	4	4.135 +0.003/-0	4.495 +0.003/-0
HW-4000N	4	4-1/2	0.275	0.281 +0.005/-0	4	4.135 +0.003/-0	4.495 +0.003/-0
HW-4000V	4	4-1/2	0.275	0.281 +0.005/-0	4	4.135 +0.003/-0	4.495 +0.003/-0
HW-4250	4-1/4	4-3/4	0.275	0.281 +0.005/-0	4-1/4	4.385 +0.003/-0	4.745 +0.003/-0
HW-4430	4-7/16	4-15/16	0.275	0.281 +0.005/-0	4-7/16	4.573 +0.003/-0	4.933 +0.003/-0
HW-4500	4-1/2	5	0.275	0.281 +0.005/-0	4-1/2	4.635 +0.003/-0	4.995 +0.003/-0
HW-4500N	4-1/2	5	0.275	0.281 +0.005/-0	4-1/2	4.635 +0.003/-0	4.995 +0.003/-0
HW-4500V	4-1/2	5	0.275	0.281 +0.005/-0	4-1/2	4.635 +0.003/-0	4.995 +0.003/-0
HW-4750	4-3/4	5-1/4	0.275	0.281 +0.005/-0	4-3/4	4.885 +0.003/-0	5.245 +0.003/-0
HW-5000	5	5-1/2	0.275	0.281 +0.005/-0	5	5.135 +0.003/-0	5.495 +0.003/-0
HW-5000N	5	5-1/2	0.275	0.281 +0.005/-0	5	5.135 +0.003/-0	5.495 +0.003/-0
HW-5000V	5	5-1/2	0.275	0.281 +0.005/-0	5	5.135 +0.003/-0	5.495 +0.003/-0
HW-5500	5-1/2	6	0.275	0.281 +0.005/-0	5-1/2	5.635 +0.003/-0	5.995 +0.003/-0
HW-5500N	5-1/2	6	0.275	0.281 +0.005/-0	5-1/2	5.635 +0.003/-0	5.995 +0.003/-0
HW-5500V	5-1/2	6	0.275	0.281 +0.005/-0	5-1/2	5.635 +0.003/-0	5.995 +0.003/-0
HW-6000V	6	6-1/2	0.275	0.281 +0.005/-0	6	6.135 +0.003/-0	6.495 +0.003/-0
HW-7000	7	7-1/2	0.275	0.281 +0.005/-0	7	7.135 +0.003/-0	7.495 +0.003/-0
HW-8000	8	8-1/2	0.275	0.281 +0.005/-0	8	8.135 +0.003/-0	8.495 +0.003/-0



## STYLE MCU 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.



### HERCULES PART NUMBERS

**MCU - 0750**  
 Type of Wiper      Size

### SEAL INFORMATION

MATERIAL	92A URETHANE
TEMPERATURE RANGE	-65° TO +220° F

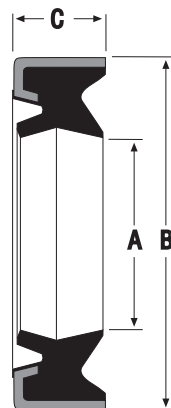
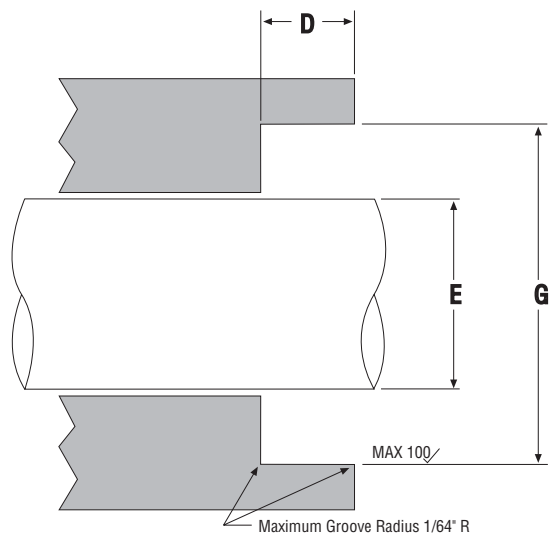
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.
MCU-0625	5/8	1-1/8	0.312	0.312 +0.015/-0	5/8	1.125 ±0.001
MCU-0750	3/4	1-1/4	0.312	0.312 +0.015/-0	3/4	1.250 ±0.001
MCU-0875	7/8	1-3/8	0.312	0.312 +0.015/-0	7/8	1.375 ±0.001
MCU-1000	1	1-1/2	0.312	0.312 +0.015/-0	1	1.500 ±0.001
MCU-1120	1-1/8	1-5/8	0.312	0.312 +0.015/-0	1-1/8	1.625 ±0.001
MCU-1187	1-3/16	1-5/8	0.250	0.250 +0.015/-0	1-3/16	1.625 ±0.001
MCU-1250	1-1/4	1-3/4	0.312	0.312 +0.015/-0	1-1/4	1.750 ±0.001
MCU-1254	1-1/4	1-3/4	0.250	0.250 +0.015/-0	1-1/4	1.750 ±0.001
MCU-1255	1-1/4	2-1/16	0.375	0.375 +0.015/-0	1-1/4	2.062 ±0.001
MCU-1375	1-3/8	1-7/8	0.312	0.312 +0.015/-0	1-3/8	1.875 ±0.001
MCU-1500	1-1/2	2	0.312	0.312 +0.015/-0	1-1/2	2.000 ±0.001
MCU-1502	1-1/2	2	0.250	0.250 +0.015/-0	1-1/2	2.000 ±0.001
MCU-1505	1-1/2	2-1/8	0.312	0.312 +0.015/-0	1-1/2	2.125 ±0.001
MCU-1506	1-1/2	2-1/4	0.375	0.375 +0.015/-0	1-1/2	2.250 ±0.001
MCU-1625	1-5/8	2-1/8	0.312	0.312 +0.015/-0	1-5/8	2.125 ±0.001
MCU-1750	1-3/4	2-1/4	0.312	0.312 +0.015/-0	1-3/4	2.250 ±0.001
MCU-1751	1-3/4	2-1/4	0.250	0.250 +0.015/-0	1-3/4	2.250 ±0.001
MCU-1755	1-3/4	2-7/16	0.375	0.375 +0.015/-0	1-3/4	2.437 ±0.001
MCU-1756	1-3/4	2-1/2	0.375	0.375 +0.015/-0	1-3/4	2.500 ±0.001
MCU-1875	1-7/8	2-3/8	0.312	0.312 +0.015/-0	1-7/8	2.375 ±0.001
MCU-1876	1-7/8	2-9/16	0.375	0.375 +0.015/-0	1-7/8	2.562 ±0.001
MCU-2000	2	2-1/2	0.312	0.312 +0.015/-0	2	2.500 ±0.001
MCU-2001	2	2-3/8	0.250	0.250 +0.015/-0	2	2.375 ±0.001
MCU-2002	2	2-1/2	0.250	0.250 +0.015/-0	2	2.500 ±0.001
MCU-2003	2	2-3/4	0.375	0.375 +0.015/-0	2	2.750 ±0.001
MCU-2004	2	2-5/8	0.250	0.250 +0.015/-0	2	2.625 ±0.001
MCU-2006	2	2-9/16	0.375	0.375 +0.015/-0	2	2.687 ±0.001
MCU-2125	2-1/8	2-7/8	0.375	0.375 +0.015/-0	2-1/8	2.875 ±0.001
MCU-2188	2-3/16	2-9/16	0.375	0.375 +0.015/-0	2-3/16	2.687 ±0.001
MCU-2250	2-1/4	2-3/4	0.312	0.312 +0.015/-0	2-1/4	2.750 ±0.001
MCU-2251	2-1/4	2-3/4	0.250	0.250 +0.015/-0	2-1/4	2.750 ±0.001
MCU-2252	2-1/4	3	0.250	0.250 +0.015/-0	2-1/4	3.000 ±0.001
MCU-2253	2-1/4	3	0.375	0.375 +0.015/-0	2-1/4	3.000 ±0.001
MCU-2375	2-3/8	2-7/8	0.312	0.312 +0.015/-0	2-3/8	2.875 ±0.001
MCU-2376	2-3/8	3-1/8	0.375	0.375 +0.015/-0	2-3/8	3.125 ±0.001

## STYLE MCU METAL CLAD WIPER RINGS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.
MCU-2500	2-1/2	3	0.312	0.312 +0.015/-0	2-1/2	3.000 ±0.001
MCU-2501	2-1/2	3-1/4	0.250	0.250 +0.015/-0	2-1/2	3.250 ±0.001
MCU-2502	2-1/2	3-1/4	0.375	0.375 +0.015/-0	2-1/2	3.250 ±0.001
MCU-2503	2-1/2	3	0.187	0.187 +0.015/-0	2-1/2	3.000 ±0.001
MCU-2504	2-1/2	3-3/16	0.375	0.375 +0.015/-0	2-1/2	3.187 ±0.001
MCU-2625	2-5/8	3-1/8	0.250	0.250 +0.015/-0	2-5/8	3.125 ±0.001
MCU-2750	2-3/4	3-1/4	0.312	0.312 +0.015/-0	2-3/4	3.250 ±0.001
MCU-2755	2-3/4	3-3/4	0.500	0.500 +0.015/-0	2-3/4	3.750 ±0.001
MCU-2756	2-3/4	3-1/2	0.375	0.375 +0.015/-0	2-3/4	3.500 ±0.001
MCU-2758	2-3/4	3-1/2	0.500	0.500 +0.015/-0	2-3/4	3.500 ±0.001
MCU-3000	3	3-1/2	0.312	0.312 +0.015/-0	3	3.500 ±0.001
MCU-3002	3	3-3/4	0.250	0.250 +0.015/-0	3	3.750 ±0.001
MCU-3006	3	3-3/4	0.375	0.375 +0.015/-0	3	3.750 ±0.001
MCU-3008	3	4	0.500	0.500 +0.015/-0	3	4.000 ±0.001
MCU-3125	3-1/8	3-3/4	0.312	0.312 +0.015/-0	3-1/8	3.750 ±0.001
MCU-3250	3-1/4	4-1/4	0.500	0.500 +0.015/-0	3-1/4	4.250 ±0.001
MCU-3254	3-1/4	3-3/4	0.312	0.312 +0.015/-0	3-1/4	3.750 ±0.001
MCU-3256	3-1/4	3-7/8	0.312	0.312 +0.015/-0	3-1/4	3.875 ±0.001
MCU-3375	3-3/8	4	0.312	0.312 +0.015/-0	3-3/8	4.000 ±0.001
MCU-3500	3-1/2	4	0.312	0.312 +0.015/-0	3-1/2	4.000 ±0.001
MCU-3504	3-1/2	4-1/4	0.250	0.250 +0.015/-0	3-1/2	4.250 ±0.001
MCU-3506	3-1/2	4-1/8	0.312	0.312 +0.015/-0	3-1/2	4.125 ±0.001
MCU-3508	3-1/2	4-1/2	0.500	0.500 +0.015/-0	3-1/2	4.500 ±0.001
MCU-3750	3-3/4	4-1/4	0.312	0.312 +0.015/-0	3-3/4	4.250 ±0.001
MCU-3751	3-3/4	4-3/4	0.500	0.500 +0.015/-0	3-3/4	4.750 ±0.001
MCU-3754	3-3/4	4-3/8	0.312	0.312 +0.015/-0	3-3/4	4.375 ±0.001
MCU-3755	3-3/4	4-1/2	0.312	0.312 +0.015/-0	3-3/4	4.500 ±0.001
MCU-4000	4	5	0.500	0.500 +0.015/-0	4	5.000 ±0.001
MCU-4002	4	4-3/4	0.312	0.312 +0.015/-0	4	4.750 ±0.001
MCU-4005	4	4-5/8	0.312	0.312 +0.015/-0	4	4.625 ±0.001
MCU-4250	4-1/4	5-1/4	0.500	0.500 +0.015/-0	4-1/4	5.250 ±0.001
MCU-4251-G	4-1/4	4-3/4	0.187	0.187 +0.015/-0	4-1/4	4.750 ±0.001
MCU-4252-G	4-1/4	4-3/4	0.312	0.312 +0.015/-0	4-1/4	4.750 ±0.001
MCU-4375	4-3/8	5	0.312	0.312 +0.015/-0	4-3/8	5.000 ±0.001
MCU-4505	4-1/2	5-1/8	0.312	0.312 +0.015/-0	4-1/2	5.125 ±0.001
MCU-4508	4-1/2	5-1/2	0.500	0.500 +0.015/-0	4-1/2	5.500 ±0.001
MCU-4750	4-3/4	5-3/4	0.500	0.500 +0.015/-0	4-3/4	5.750 ±0.001
MCU-5000	5	5-3/4	0.312	0.312 +0.015/-0	5	5.750 ±0.001
MCU-5001	5	5-5/8	0.312	0.312 +0.015/-0	5	5.625 ±0.001
MCU-5002	5	6	0.500	0.500 +0.015/-0	5	6.000 ±0.001
MCU-5250	5-1/4	6	0.312	0.312 +0.015/-0	5-1/4	6.000 ±0.001
MCU-5251	5-1/4	5-3/4	0.312	0.312 +0.015/-0	5-1/4	5.750 ±0.001
MCU-5500	5-1/2	6-1/8	0.375	0.375 +0.015/-0	5-1/2	6.125 ±0.001
MCU-5502	5-1/2	6-1/4	0.312	0.312 +0.015/-0	5-1/2	6.250 ±0.001
MCU-5750	5-3/4	6-3/8	0.375	0.375 +0.015/-0	5-3/4	6.375 ±0.001
MCU-5751	5-3/4	6-3/4	0.500	0.500 +0.015/-0	5-3/4	6.750 ±0.001
MCU-6000	6	6-3/4	0.375	0.375 +0.015/-0	6	6.750 ±0.001
MCU-6002	6	7	0.500	0.500 +0.015/-0	6	7.000 ±0.001
MCU-6250	6-1/4	6-3/4	0.312	0.312 +0.015/-0	6-1/4	6.750 ±0.001
MCU-6500	6-1/2	7-1/2	0.625	0.625 +0.015/-0	6-1/2	7.500 ±0.001
MCU-6503	6-1/2	7-1/4	0.312	0.312 +0.015/-0	6-1/2	7.250 ±0.001
MCU-6735	6-3/4	7-3/4	0.500	0.500 +0.015/-0	6-3/4	7.750 ±0.001
MCU-6750	6-3/4	7-3/8	0.375	0.375 +0.015/-0	6-3/4	7.375 ±0.001
MCU-6751	6-3/4	7-1/4	0.312	0.312 +0.015/-0	6-3/4	7.250 ±0.001
MCU-7000	7	7-3/4	0.312	0.312 +0.015/-0	7	7.750 ±0.001
MCU-7002	7	8	0.500	0.500 +0.015/-0	7	8.000 ±0.001
MCU-8120	8-1/8	8-5/8	0.312	0.312 +0.015/-0	8-1/8	8.625 ±0.001
MCU-9750	9-3/4	10-1/4	0.312	0.312 +0.015/-0	9-3/4	10.25 ±0.001

# HEAVY DUTY STYLE MCHD METAL CLAD WIPER RINGS

MCHD wipers employ a double lip construction for severe duty service. These wipers are molded from the same high performance urethane used in our heavy duty u-seals and are bonded to a heavy duty metal case.



## HERCULES PART NUMBERS

**MCHD - 1506**  
 Type of Wiper      Size

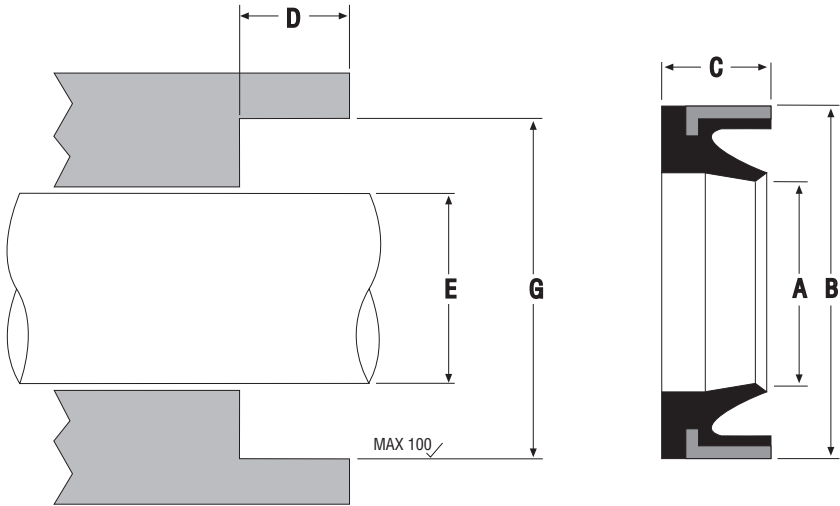
## SEAL INFORMATION

MATERIAL	92A URETHANE
TEMPERATURE RANGE	-65° TO +220° F

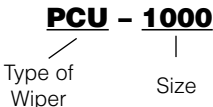
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.
MCHD-1506	1-1/2	2-1/4	3/8	0.430 +0.015/-0	1-1/2	2.250 ±0.001
MCHD-1755	1-3/4	2-7/16	3/8	0.430 +0.015/-0	1-3/4	2.437 ±0.001
MCHD-2006	2	2-11/16	3/8	0.430 +0.015/-0	2	2.687 ±0.001
MCHD-2253	2-1/4	3	3/8	0.430 +0.015/-0	2-1/4	3.000 ±0.001
MCHD-2502	2-1/2	3-1/4	3/8	0.430 +0.015/-0	2-1/2	3.250 ±0.001
MCHD-2755	2-3/4	3-3/4	1/2	0.550 +0.015/-0	2-3/4	3.750 ±0.001
MCHD-3008	3	4	1/2	0.550 +0.015/-0	3	4.000 ±0.001
MCHD-3250	3-1/4	4-1/4	1/2	0.550 +0.015/-0	3-1/4	4.250 ±0.001
MCHD-3508	3-1/2	4-1/2	1/2	0.550 +0.015/-0	3-1/2	4.500 ±0.001
MCHD-3751	3-3/4	4-3/4	1/2	0.550 +0.015/-0	3-3/4	4.750 ±0.001
MCHD-4000	4	5	1/2	0.550 +0.015/-0	4	5.000 ±0.001
MCHD-5002	5	6	1/2	0.550 +0.015/-0	5	6.000 ±0.001
MCHD-6753	6-3/4	7-3/4	1/2	0.550 +0.015/-0	6-3/4	7.375 ±0.001
MCHD-7002	7	8	1/2	0.550 +0.015/-0	7	8.000 ±0.001

# STYLE PCU NON-METALLIC CANNED WIPER RINGS

This unique wiper utilizes a tough 90A duro urethane lip in a molded through non-metallic casing. The thermoplastic case provides a rust proof, rigid base that supports the wiper and maintains it in the housing. These wipers can be used interchangeably with metal clad wipers of the same dimensions.



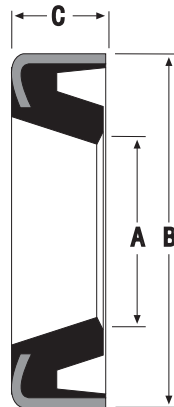
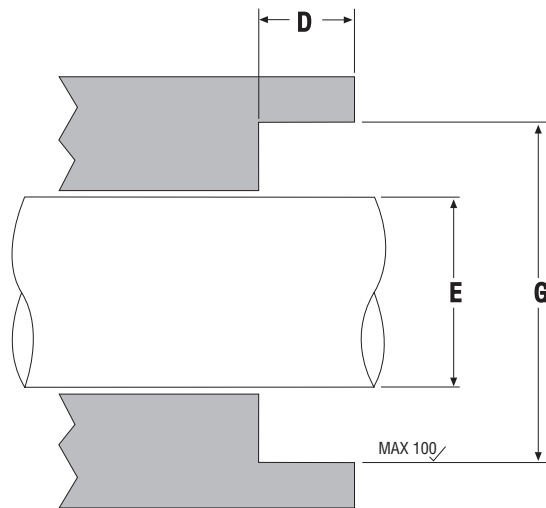
### HERCULES PART NUMBERS



SEAL INFORMATION	
MATERIAL	90A URETHANE
TEMPERATURE RANGE	-65° TO +220° F

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.
PCU-1000	1	1-1/2	5/16	0.312 +0.015/-0	1	1.500 ±0.001
PCU-1250	1-1/4	1-3/4	5/16	0.312 +0.015/-0	1-1/4	1.750 ±0.001
PCU-1375	1-3/8	1-7/8	5/16	0.312 +0.015/-0	1-3/8	1.875 ±0.001
PCU-1500	1-1/2	2	5/16	0.312 +0.015/-0	1-1/2	2.000 ±0.001
PCU-1750	1-3/4	2-1/4	5/16	0.312 +0.015/-0	1-3/4	2.250 ±0.001
PCU-2000	2	2-1/2	5/16	0.312 +0.015/-0	2	2.500 ±0.001
PCU-2250	2-1/4	2-3/4	5/16	0.312 +0.015/-0	2-1/4	2.750 ±0.001
PCU-2500	2-1/2	3	5/16	0.312 +0.015/-0	2-1/2	3.000 ±0.001
PCU-2750	2-3/4	3-1/4	5/16	0.312 +0.015/-0	2-3/4	3.250 ±0.001
PCU-3000	3	3-1/2	5/16	0.312 +0.015/-0	3	3.500 ±0.001
PCU-3250	3-1/4	3-3/4	5/16	0.312 +0.015/-0	3-1/4	3.750 ±0.001
PCU-3500	3-1/2	4	5/16	0.312 +0.015/-0	3-1/2	4.000 ±0.001

# STYLE MCN METAL CLAD WIPERS



## HERCULES PART NUMBERS

**MCN - 0500**  
 Type of Wiper      Size

## SEAL INFORMATION

MATERIAL	Nitrile
TEMPERATURE RANGE	-40° TO +240° F

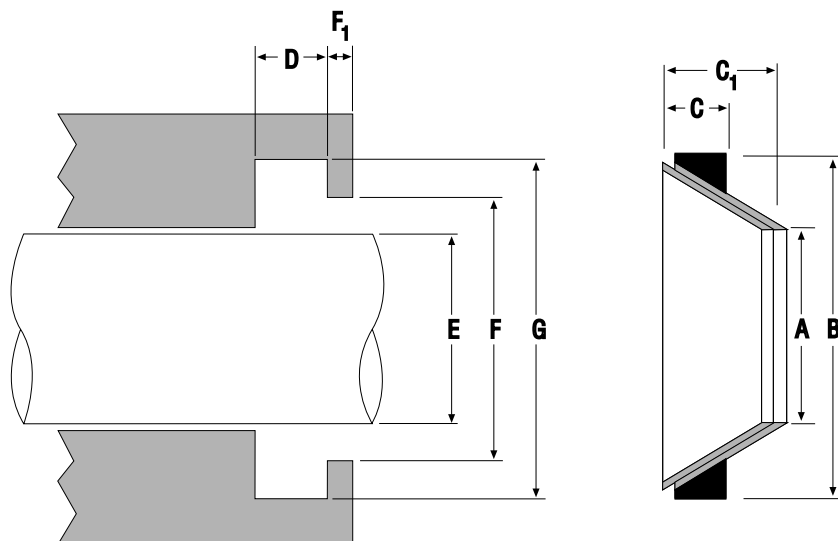
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.
MCN-0312	5-1/6	9/16	1/8	0.125 +0.015/-0	0.313 ±0.003	0.563 ±0.001
MCN-0500	1/2	11/16	3/32	0.098 +0.015/-0	0.500 ±0.003	0.688 ±0.001
MCN-0501	1/2	3/4	1/8	0.125 +0.015/-0	0.500 ±0.003	0.750 ±0.001
MCN-0562	9/16	3/4	3/32	0.094 +0.015/-0	0.563 ±0.003	0.750 ±0.001
MCN-0625	5/8	15/16	3/16	0.188 +0.015/-0	0.625 ±0.003	0.938 ±0.001
MCN-0626	5/8	7/8	1/8	0.125 +0.015/-0	0.625 ±0.003	0.875 ±0.001
MCN-0750	3/4	1-1/4	1/4	0.250 +0.015/-0	0.750 ±0.003	1.250 ±0.001
MCN-0751	3/4	1	1/8	0.125 +0.015/-0	0.750 ±0.003	1.000 ±0.001
MCN-0873	7/8	1-1/8	1/8	0.125 +0.015/-0	0.875 ±0.003	1.125 ±0.001
MCN-0875	7/8	1-1/4	3/16	0.188 +0.015/-0	0.875 ±0.003	1.250 ±0.001
MCN-1001	1	1-1/4	1/8	0.125 +0.015/-0	1.000 ±0.003	1.250 ±0.001
MCN-1003	1	1-3/8	3/16	0.188 +0.015/-0	1.000 ±0.003	1.375 ±0.001
MCN-1004	1	1-7/16	1/4	0.250 +0.015/-0	1.000 ±0.003	1.438 ±0.001
MCN-1005	1	1-1/2	3/16	0.188 +0.015/-0	1.000 ±0.003	1.500 ±0.001
MCN-1006	1	1-5/16	1/8	0.125 +0.015/-0	1.000 ±0.003	1.313 ±0.001
MCN-1060	1-1/16	1-1/2	3/16	0.188 +0.015/-0	1.063 ±0.003	1.500 ±0.001
MCN-1125	1-1/8	1-1/2	3/16	0.188 +0.015/-0	1.125 ±0.003	1.500 ±0.001
MCN-1126	1-1/8	1-3/8	1/8	0.125 +0.015/-0	1.125 ±0.003	1.375 ±0.001
MCN-1127	1-1/8	1-9/16	1/4	0.250 +0.015/-0	1.125 ±0.003	1.563 ±0.001
MCN-1129	1-1/8	1-5/8	1/4	0.250 +0.015/-0	1.125 ±0.003	1.625 ±0.001
MCN-1251	1-1/4	1-1/2	1/8	0.125 +0.015/-0	1.250 ±0.003	1.500 ±0.001
MCN-1253	1-1/4	1-11/16	3/16	0.188 +0.015/-0	1.250 ±0.003	1.688 ±0.001
MCN-1254	1-1/4	1-3/4	1/4	0.250 +0.015/-0	1.250 ±0.003	1.750 ±0.001
MCN-1255	1-1/4	1-7/8	1/4	0.250 +0.015/-0	1.250 ±0.003	1.875 ±0.001
MCN-1375	1-3/8	1-3/4	3/16	0.188 +0.015/-0	1.375 ±0.003	1.750 ±0.001
MCN-1376	1-3/8	1-7/8	1/4	0.250 +0.015/-0	1.375 ±0.003	1.875 ±0.001
MCN-1377	1-3/8	1-5/8	1/8	0.125 +0.015/-0	1.375 ±0.003	1.625 ±0.001
MCN-1502	1-1/2	1-7/8	1/4	0.250 +0.015/-0	1.500 ±0.003	1.875 ±0.001
MCN-1503	1-1/2	1-7/8	3/16	0.188 +0.015/-0	1.500 ±0.003	1.875 ±0.001
MCN-1504	1-1/2	2	1/4	0.250 +0.015/-0	1.500 ±0.003	2.000 ±0.001
MCN-1625	1-5/8	2-1/8	1/4	0.250 +0.015/-0	1.625 ±0.003	2.125 ±0.001
MCN-1626	1-5/8	2-5/8	1/4	0.250 +0.015/-0	1.625 ±0.003	2.625 ±0.001
MCN-1753	1-3/4	2-1/8	3/16	0.188 +0.015/-0	1.750 ±0.003	2.125 ±0.001
MCN-1754	1-3/4	2-1/4	1/4	0.250 +0.015/-0	1.750 ±0.003	2.250 ±0.001
MCN-1755	1-3/4	2-3/8	1/4	0.250 +0.015/-0	1.750 ±0.003	2.375 ±0.001
MCN-1756	1-3/4	2-5/8	1/4	0.250 +0.015/-0	1.750 ±0.003	2.625 ±0.001
MCN-1877	1-7/8	2-1/4	3/16	0.188 +0.015/-0	1.875 ±0.003	2.250 ±0.001

## STYLE MCN METAL CLAD WIPERS

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.
MCN-1879	1-7/8	2-1/2	1/4	0.250 +0.015/-0	1.875 ±0.003	2.500 ±0.001
MCN-2001	2	2-3/8	3/16	0.188 +0.015/-0	2.000 ±0.003	2.375 ±0.001
MCN-2002	2	2-5/8	1/4	0.250 +0.015/-0	2.000 ±0.003	2.625 ±0.001
MCN-2003	2	2-1/2	1/4	0.250 +0.015/-0	2.000 ±0.003	2.500 ±0.001
MCN-2006	2	2-3/4	1/4	0.250 +0.015/-0	2.000 ±0.003	2.750 ±0.001
MCN-2007	2	2-7/8	15/32	0.469 +0.015/-0	2.000 ±0.003	2.875 ±0.001
MCN-2125	2-1/8	2-1/2	3/16	0.188 +0.015/-0	2.125 ±0.003	2.500 ±0.001
MCN-2251	2-1/4	2-5/8	1/4	0.250 +0.015/-0	2.250 ±0.003	2.625 ±0.001
MCN-2253	2-1/4	2-3/4	1/4	0.250 +0.015/-0	2.250 ±0.003	2.750 ±0.001
MCN-2255	2-1/4	2-7/8	1/4	0.250 +0.015/-0	2.250 ±0.003	2.875 ±0.001
MCN-2371	2-3/8	3	1/4	0.250 +0.015/-0	2.375 ±0.003	3.000 ±0.0015
MCN-2501	2-1/2	3	1/4	0.250 +0.015/-0	2.500 ±0.003	3.000 ±0.0015
MCN-2504	2-1/2	3-1/8	1/4	0.250 +0.015/-0	2.500 ±0.003	3.125 ±0.0015
MCN-2660	2-21/32	3-1/4	3/8	0.375 +0.015/-0	2.660 ±0.003	3.250 ±0.0015
MCN-2750	2-3/4	3-1/4	1/4	0.250 +0.015/-0	2.750 ±0.003	3.250 ±0.0015
MCN-2751	2-3/4	3-1/8	3/16	0.188 +0.015/-0	2.750 ±0.003	3.125 ±0.0015
MCN-2756	2-3/4	3-3/4	3/8	0.375 +0.015/-0	2.750 ±0.003	3.750 ±0.0015
MCN-3001	3	3-1/2	1/4	0.250 +0.015/-0	3.000 ±0.003	3.500 ±0.0015
MCN-3003	3	3-3/4	1/4	0.250 +0.015/-0	3.000 ±0.003	3.750 ±0.0015
MCN-3504	3-1/2	4	1/4	0.250 +0.015/-0	3.500 ±0.003	4.000 ±0.0015

## STYLE SG 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. While particularly suited for hostile environments, seal guard wipers shave off sand, grit, 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 Hercules "ST" or "D" Style grooves by increasing the "B" gland dimension to the "B" diameter shown.



### HERCULES PART NUMBERS

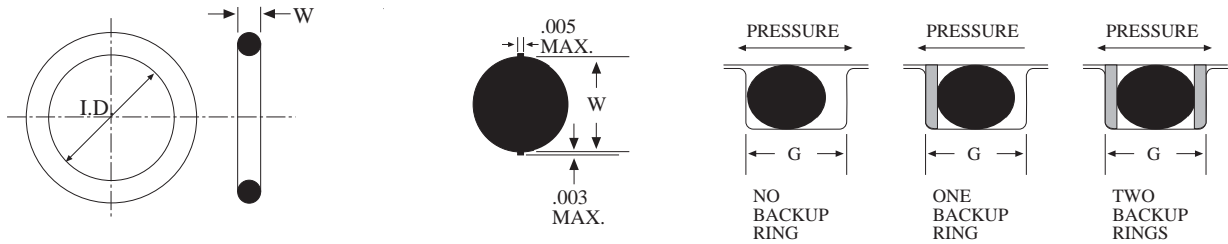
**SG - 0.375**  
 Type of Wiper      Size

### SEAL INFORMATION

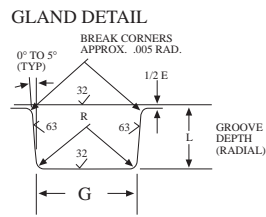
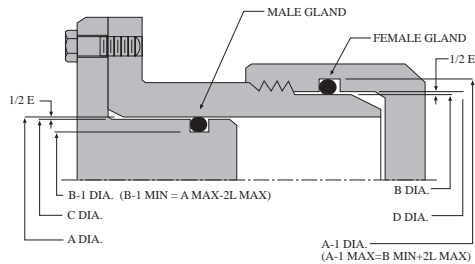
MATERIAL	660 BRONZE 70A NITRILE
TEMPERATURE RANGE	-40° TO +240° F

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. BASE THICKNESS	C <sub>1</sub> OVERALL HT. (MAX)	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	F <sub>1</sub> THROAT THICKNESS	G HOUSING DIA.
SG-0.375	3/8	5/8	1/8	0.200	0.125 +0.003/-0.001	0.375 +.001/-0.002	0.589 +0/-0.010	0.018 +0.015/-0	0.625 ±0.003
SG-0.500	1/2	3/4	1/8	0.200	0.125 +0.003/-0.001	0.500 +.001/-0.002	0.714 +0/-0.010	0.018 +0.015/-0	0.750 ±0.003
SG-0.750	3/4	1-1/8	3/16	0.325	0.188 +0.003/-0.001	0.750 +.001/-0.002	1.082 +0/-0.010	0.022 +0.015/-0	1.125 ±0.003
SG-0.875	7/8	1-1/4	3/16	0.325	0.188 +0.003/-0.001	0.875 +.001/-0.002	1.207 +0/-0.010	0.022 +0.015/-0	1.250 ±0.003
SG-1.000	1	1-3/8	3/16	0.325	0.188 +0.003/-0.001	1.000 +.001/-0.002	1.332 +0/-0.010	0.022 +0.015/-0	1.375 ±0.003
SG-1.125	1-1/8	1-1/2	3/16	0.325	0.188 +0.003/-0.001	1.125 +.001/-0.002	1.457 +0/-0.010	0.022 +0.015/-0	1.500 ±0.003
SG-1.250	1-1/4	1-5/8	3/16	0.325	0.188 +0.003/-0.001	1.250 +.001/-0.002	1.582 +0/-0.010	0.022 +0.015/-0	1.625 ±0.003
SG-1.375	1-3/8	1-3/4	3/16	0.325	0.188 +0.003/-0.001	1.375 +.001/-0.002	1.707 +0/-0.010	0.022 +0.015/-0	1.750 ±0.003
SG-1.500	1-1/2	1-7/8	3/16	0.325	0.188 +0.003/-0.001	1.500 +.001/-0.002	1.832 +0/-0.010	0.022 +0.015/-0	1.875 ±0.003
SG-1.750	1-3/4	2-1/8	3/16	0.325	0.188 +0.003/-0.001	1.750 +.001/-0.002	2.082 +0/-0.010	0.022 +0.015/-0	2.125 ±0.003
SG-2.000	2	2-1/2	1/4	0.400	0.250 +0.003/-0.001	2.000 +.001/-0.002	2.440 +0/-0.010	0.030 +0.015/-0	2.500 ±0.003
SG-2.250	2-1/4	2-3/4	1/4	0.400	0.250 +0.003/-0.001	2.250 +.001/-0.002	2.690 +0/-0.010	0.030 +0.015/-0	2.750 ±0.003
SG-2.500	2-1/2	3	1/4	0.400	0.250 +0.003/-0.001	2.500 +.001/-0.002	2.940 +0/-0.010	0.030 +0.015/-0	3.000 ±0.003
SG-3.000	3	3-1/2	1/4	0.400	0.250 +0.003/-0.001	3.000 +.001/-0.002	3.440 +0/-0.010	0.030 +0.015/-0	3.500 ±0.003
SG-3.500	3-1/2	4	1/4	0.400	0.250 +0.003/-0.001	3.500 +.001/-0.002	3.940 +0/-0.010	0.030 +0.015/-0	4.000 ±0.003

# O-RING GLAND DIMENSIONS



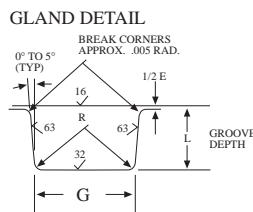
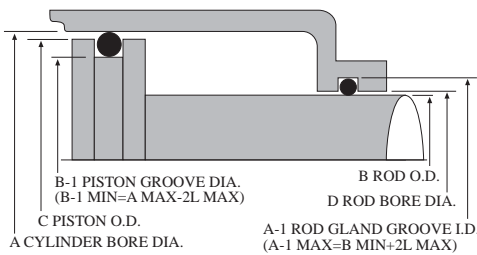
## O-Ring Gland Design For Static Seals



- 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 DIAMET- RICAL CLEAR- ANCE MAX.	G GROOVE WIDTH ± .005			R GROOVE RADIUS	ECCEN- TRICITY MAX.
			RADIAL		AXIAL			NO BACKUP RINGS	ONE BACKUP RING	TWO BACKUP RINGS		
	RADIAL	AXIAL	INCHES	%	INCHES	%						
.070	.050-.052	.045-.050	.015-.023	22-32	.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-.226	.201-.211	.040-.055	15-20	.058-.080	21-29	.007	.377	.410	.540	.020-.035	.005

## O-Ring Gland Design For Reciprocating Seals



- A** – Bore Dia. of Cylinder
- B** – OD of Rod
- C** – OD of Piston
- D** – Bore Dia. for Rod

W O-RING CROSS SECTION	L GROOVE DEPTH	SQUEEZE		E DIAMET- RICAL CLEAR- ANCE MAX.	G GROOVE WIDTH ± .005			R GROOVE RADIUS	ECCEN- TRICITY MAX.
		INCHES	%		NO BACKUP RINGS	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

AS-568A SERIES	NOM. SIZE			ACTUAL DIMENSIONS		AS-568A SERIES	NOM. SIZE			ACTUAL DIMENSIONS	
	I.D.	O.D.	Width	I.D. Tol.	W. Tol.		I.D.	O.D.	Width	I.D. Tol.	W. Tol.
-001	1/32	3/32	1/32	.029±.004	.040±.003	-111	7/16	5/8	3/32	.424±.005	.103±.003
-001 1/2	1/16	1/8	1/32	.070±.004	.040±.003	-112	1/2	11/16	3/32	.487±.005	.103±.003
-002	3/64	9/64	3/64	.042±.004	.050±.003	-113	9/16	3/4	3/32	.549±.005	.103±.003
-003	1/16	3/16	1/16	.056±.004	.060±.003	-114	5/8	13/16	3/32	.612±.009	.103±.003
-004	5/64	13/64	1/16	.070±.005	.070±.003	-115	11/16	7/8	3/32	.674±.009	.103±.003
-005	3/32	7/32	1/16	.101±.005	.070±.003	-116	3/4	15/16	3/32	.737±.009	.103±.003
-006	1/8	1/4	1/16	.114±.005	.070±.003	-117	13/16	1	3/32	.799±.010	.103±.003
-007	5/32	9/32	1/16	.145±.005	.070±.003	-118	7/8	1 1/16	3/32	.862±.010	.103±.003
-008	3/16	5/16	1/16	.176±.005	.070±.003	-119	15/16	1 1/8	3/32	.924±.010	.103±.003
-009	7/32	11/32	1/16	.208±.005	.070±.003	-120	1	1 3/16	3/32	.987±.010	.103±.003
-010	1/4	3/8	1/16	.239±.005	.070±.003	-121	1 1/16	1 1/4	3/32	1.049±.010	.103±.003
-011	5/16	7/16	1/16	.301±.005	.070±.003	-122	1 1/8	1 5/16	3/32	1.112±.010	.103±.003
-012	3/8	1/2	1/16	.364±.005	.070±.003	-123	1 3/16	1 3/8	3/32	1.174±.012	.103±.003
-013	7/16	9/16	1/16	.426±.005	.070±.003	-124	1 1/4	1 7/16	3/32	1.237±.012	.103±.003
-014	1/2	5/8	1/16	.489±.005	.070±.003	-125	1 5/16	1 1/2	3/32	1.299±.012	.103±.003
-015	9/16	11/16	1/16	.551±.007	.070±.003	-126	1 3/8	1 9/16	3/32	1.362±.012	.103±.003
-016	5/8	3/4	1/16	.614±.009	.070±.003	-127	1 7/16	1 5/8	3/32	1.424±.012	.103±.003
-017	11/16	13/16	1/16	.676±.009	.070±.003	-128	1 1/2	1 11/16	3/32	1.487±.012	.103±.003
-018	3/4	7/8	1/16	.739±.009	.070±.003	-129	1 9/16	1 3/4	3/32	1.549±.015	.103±.003
-019	13/16	15/16	1/16	.801±.009	.070±.003	-130	1 5/8	1 13/16	3/32	1.612±.015	.103±.003
-020	7/8	1	1/16	.864±.009	.070±.003	-131	1 11/16	1 7/8	3/32	1.674±.015	.103±.003
-021	15/16	1 1/16	1/16	.926±.009	.070±.003	-132	1 3/4	1 15/16	3/32	1.737±.015	.103±.003
-022	1	1 1/8	1/16	.989±.010	.070±.003	-133	1 13/16	2	3/32	1.799±.015	.103±.003
-023	1 1/16	1 3/16	1/16	1.051±.010	.070±.003	-134	1 7/8	2 1/16	3/32	1.862±.015	.103±.003
-024	1 1/8	1 1/4	1/16	1.114±.010	.070±.003	-135	1 15/16	2 1/8	3/32	1.925±.017	.103±.003
-025	1 3/16	1 5/16	1/16	1.176±.011	.070±.003	-136	2	2 3/16	3/32	1.987±.017	.103±.003
-026	1 1/4	1 3/8	1/16	1.239±.011	.070±.003	-137	2 1/16	2 1/4	3/32	2.050±.017	.103±.003
-027	1 5/16	1 7/16	1/16	1.301±.011	.070±.003	-138	2 1/8	2 5/16	3/32	2.112±.017	.103±.003
-028	1 3/8	1 1/2	1/16	1.364±.013	.070±.003	-139	2 3/16	2 3/8	3/32	2.175±.017	.103±.003
-029	1 1/2	1 5/8	1/16	1.489±.013	.070±.003	-140	2 1/4	2 7/16	3/32	2.237±.017	.103±.003
-030	1 5/8	1 3/4	1/16	1.614±.013	.070±.003	-141	2 5/16	2 1/2	3/32	2.300±.020	.103±.003
-031	1 3/4	1 7/8	1/16	1.739±.015	.070±.003	-142	2 3/8	2 9/16	3/32	2.362±.020	.103±.003
-032	1 7/8	2	1/16	1.864±.015	.070±.003	-143	2 7/16	2 5/8	3/32	2.425±.020	.103±.003
-033	2	2 1/8	1/16	1.989±.018	.070±.003	-144	2 1/2	2 11/16	3/32	2.487±.020	.103±.003
-034	2 1/8	2 1/4	1/16	2.114±.018	.070±.003	-145	2 9/16	2 3/4	3/32	2.550±.020	.103±.003
-035	2 1/4	2 3/8	1/16	2.239±.018	.070±.003	-146	2 5/8	2 13/16	3/32	2.612±.020	.103±.003
-036	2 3/8	2 1/2	1/16	2.364±.018	.070±.003	-147	2 11/16	2 7/8	3/32	2.675±.022	.103±.003
-037	2 1/2	2 5/8	1/16	2.489±.018	.070±.003	-148	2 3/4	2 15/16	3/32	2.737±.022	.103±.003
-038	2 5/8	2 3/4	1/16	2.614±.020	.070±.003	-149	2 13/16	3	3/32	2.800±.022	.103±.003
-039	2 3/4	2 7/8	1/16	2.739±.020	.070±.003	-150	2 7/8	3 1/16	3/32	2.862±.022	.103±.003
-040	2 7/8	3	1/16	2.864±.020	.070±.003	-151	3	3 3/16	3/32	2.987±.024	.103±.003
-041	3	3 1/8	1/16	2.989±.024	.070±.003	-152	3 1/4	3 7/16	3/32	3.237±.024	.103±.003
-042	3 1/4	3 3/8	1/16	3.239±.024	.070±.003	-153	3 1/2	3 11/16	3/32	3.487±.024	.103±.003
-043	3 1/2	3 5/8	1/16	3.489±.024	.070±.003	-154	3 3/4	3 15/16	3/32	3.737±.028	.103±.003
-044	3 3/4	3 7/8	1/16	3.739±.027	.070±.003	-155	4	4 3/16	3/32	3.987±.028	.103±.003
-045	4	4 1/8	1/16	3.989±.027	.070±.003	-156	4 1/4	4 7/16	3/32	4.237±.030	.103±.003
-046	4 1/4	4 3/8	1/16	4.239±.030	.070±.003	-157	4 1/2	4 11/16	3/32	4.487±.030	.103±.003
-047	4 1/2	4 5/8	1/16	4.489±.030	.070±.003	-158	4 3/4	4 15/16	3/32	4.737±.030	.103±.003
-048	4 3/4	4 7/8	1/16	4.739±.030	.070±.003	-159	5	5 3/16	3/32	4.987±.035	.103±.003
-049	5	5 1/8	1/16	4.989±.037	.070±.003	-160	5 1/4	5 7/16	3/32	5.237±.035	.103±.003
-050	5 1/4	5 3/8	1/16	5.239±.037	.070±.003	-161	5 1/2	5 11/16	3/32	5.487±.035	.103±.003
-102	1/16	1/4	3/32	.049±.005	.103±.003	-162	5 3/4	5 15/16	3/32	5.767±.035	.103±.003
-103	3/32	9/32	3/32	.081±.005	.103±.003	-163	6	6 3/16	3/32	5.987±.035	.103±.003
-104	1/8	5/16	3/32	.112±.005	.103±.003	-164	6 1/4	6 7/16	3/32	6.237±.040	.103±.003
-105	5/32	11/32	3/32	.143±.005	.103±.003	-165	6 1/2	6 11/16	3/32	6.487±.040	.103±.003
-106	3/16	3/8	3/32	.174±.005	.103±.003	-166	6 3/4	6 15/16	3/32	6.737±.040	.103±.003
-107	7/32	13/32	3/32	.206±.005	.103±.003	-167	7	7 3/16	3/32	6.987±.040	.103±.003
-108	1/4	7/16	3/32	.237±.005	.103±.003	-168	7 1/4	7 7/16	3/32	7.237±.045	.103±.003
-109	5/16	1/2	3/32	.299±.005	.103±.003	-169	7 1/2	7 11/16	3/32	7.487±.045	.103±.003
-110	3/8	9/16	3/32	.362±.005	.103±.003	-170	7 3/4	7 15/16	3/32	7.737±.045	.103±.003

# O-RING SIZE CHART

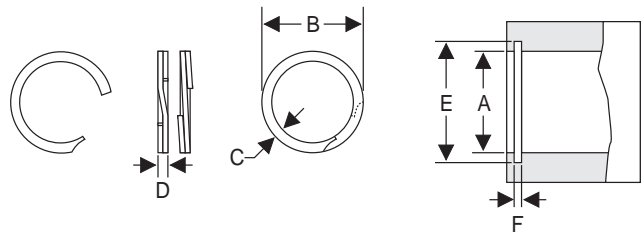
AS-568A SERIES	NOM. SIZE			ACTUAL DIMENSIONS	
	I.D.	O.D.	Width	I.D. Tol.	W. Tol.
-171	8	8 3/16	3/32	7.987±.045	.103±.003
-172	8 1/4	8 7/16	3/32	8.237±.050	.103±.003
-173	8 1/2	8 11/16	3/32	8.487±.050	.103±.003
-174	8 3/4	8 15/16	3/32	8.737±.050	.103±.003
-175	9	9 3/16	3/32	8.987±.050	.103±.003
-176	9 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 1/6	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
-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
-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	1.412±.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
-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

# O-RING SIZE CHART

AS-568A SERIES	NOM. SIZE			ACTUAL DIMENSIONS	
	I.D.	O.D.	Width	I.D. Tol.	W. Tol.
-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	3-1/2	3-16	3.100±.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
-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	19.955±.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
-425	4 1/2	5	1/4	4.475±.033	.275±.006

AS-568A SERIES	NOM. SIZE			ACTUAL DIMENSIONS	
	I.D.	O.D.	Width	I.D. Tol.	W. Tol.
-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
-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 1/4	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

# SPIRAL INTERNAL RETAINER RINGS

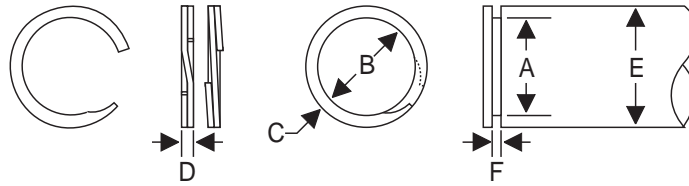


PART NUMBER	A HOUSING	B FREE O.D.	C RADIAL WALL	D THICKNESS	E GROOVE DIA.	F GROOVE WIDTH	THRUST CAP. RING SHEAR	THRUST CAP. GOOVE YIELD
WH-125	1.250	1.312	0.085	0.043	1.298 ±0.004	0.048 +0.004/-0	7770	2120
WH-62	0.625	0.658	0.045	0.025	0.651 ±0.002	0.030 +0.003/-0	2500	570
WHM-68	0.688	0.743	0.065	0.035	0.732 ±0.002	0.039 +0.003/-0	3480	1070
WH-78	0.781	0.821	0.065	0.031	0.812 ±0.003	0.036 +0.003/-0	3500	880
WH-87	0.875	0.922	0.065	0.031	0.912 ±0.003	0.036 +0.003/-0	3920	1180
WH-100	1.000	1.054	0.075	0.037	1.043 ±0.002	0.042 +0.003/-0	5350	1480
WH-112	1.125	1.180	0.075	0.037	1.167 ±0.004	0.042 +0.003/-0	6020	1670
WHT-131	1.312	1.395	0.093	0.050	1.385 ±0.004	0.056 +0.004/-0	8660	3430
WH-137	1.375	1.442	0.095	0.043	1.427 ±0.004	0.048 +0.004/-0	8540	2530
WH-150	1.500	1.567	0.095	0.043	1.552 ±0.004	0.048 +0.004/-0	9320	2760
WHT-150	1.500	1.591	0.108	0.050	1.580 ±0.004	0.056 +0.004/-0	9900	4240
VH-150	1.500	1.559	0.088	0.025	1.544 ±0.004	0.031 +0.002/-0	4950	2330
WH-156	1.562	1.634	0.108	0.049	1.617 ±0.005	0.056 +0.004/-0	10100	3090
VH-162	1.625	1.701	0.118	0.031	1.682 ±0.005	0.039 +0.003/-0	6650	3330
WHM-175	1.750	1.876	0.128	0.062	1.858 ±0.005	0.068 +0.004/-0	14320	6680
WH-175	1.750	1.834	0.118	0.049	1.813 ±0.005	0.056 +0.004/-0	11310	3840
WH-187	1.875	1.960	0.118	0.049	1.942 ±0.005	0.056 +0.004/-0	12120	4510
WHT-187	1.875	1.989	0.128	0.062	1.975 ±0.005	0.068 +0.004/-0	15340	6630
VH-187	1.875	1.953	0.118	0.031	1.932 ±0.005	0.039 +0.003/-0	7670	3840
WHT-200	2.000	2.125	0.138	0.062	2.110 ±0.005	0.068 +0.004/-0	16360	7780
WH-200	2.000	2.091	0.128	0.049	2.071 ±0.005	0.056 +0.004/-0	12930	4950
VH-200	2.000	2.079	0.118	0.031	2.057 ±0.005	0.039 +0.003/-0	8180	4100
WH-204	2.047	2.138	0.128	0.049	2.118 ±0.005	0.056 +0.004/-0	13240	5060
WHM-206	2.062	2.201	0.168	0.078	2.186 ±0.006	0.086 +0.005/-0	21220	9040
VH-206	2.062	2.162	0.158	0.031	2.138 ±0.006	0.039 +0.003/-0	8430	5540
WHM-218	2.188	2.334	0.168	0.078	2.318 ±0.006	0.086 +0.005/-0	2250	10050
VH-225	2.250	2.352	0.158	0.031	2.326 ±0.006	0.039 +0.003/-0	9200	6040
WHM-225	2.250	2.399	0.168	0.078	2.382 ±0.006	0.086 +0.005/-0	23160	10500
VH-231	2.312	2.415	0.158	0.031	2.388 ±0.006	0.039 +0.003/-0	9460	6210
WH-237	2.375	2.476	0.138	0.049	2.453 ±0.006	0.056 +0.004/-0	15360	6550
VH-243	2.437	2.541	0.158	0.031	2.513 ±0.006	0.039 +0.003/-0	9970	6550
WH-250	2.500	2.606	0.148	0.049	2.582 ±0.006	0.056 +0.004/-0	16160	7250
WHT-250	2.500	2.653	0.188	0.078	2.635 ±0.006	0.086 +0.005/-0	25730	12020
WHT-253	2.531	2.687	0.188	0.078	2.668 ±0.006	0.086 +0.005/-0	26050	12350
WHM-256	2.562	2.733	0.225	0.093	2.714 ±0.006	0.103 +0.005/-0	29940	13760
WHT-256	2.562	2.720	0.188	0.093	2.700 ±0.006	0.103 +0.005/-0	29940	12500
WHT-275	2.750	2.921	0.188	0.093	2.900 ±0.006	0.103 +0.005/-0	32140	14580
VH-281	2.812	2.920	0.158	0.031	2.888 ±0.006	0.039 +0.003/-0	11500	7550
WH-283	2.834	2.954	0.168	0.049	2.928 ±0.006	0.056 +0.004/-0	18320	9520
WHM-283	2.834	3.027	0.225	0.093	3.006 ±0.006	0.103 +0.005/-0	33120	17230
WHT-283	2.834	3.009	0.188	0.093	2.987 ±0.006	0.103 +0.005/-0	33120	15430
WH-287	2.875	2.995	0.168	0.049	2.969 ±0.006	0.056 +0.004/-0	18590	9550
WH-300	3.000	3.122	0.168	0.061	3.096 ±0.006	0.068 +0.005/-0	24150	10180
VH-300	3.000	3.110	0.158	0.031	3.076 ±0.006	0.039 +0.003/-0	12270	8060
WHT-300	3.000	3.188	0.188	0.093	3.165 ±0.006	0.103 +0.005/-0	35060	17600
WHT-312	3.125	3.318	0.250	0.111	3.295 ±0.006	0.120 +0.005/-0	43590	18780
WH-350	3.500	3.636	0.188	0.061	3.606 ±0.006	0.068 +0.005/-0	28170	13110
WHT-350	3.500	3.716	0.250	0.111	3.690 ±0.006	0.120 +0.005/-0	48820	23500
WHM-350	3.500	3.736	0.281	0.111	3.710 ±0.006	0.120 +0.005/-0	48820	25980

## SPIRAL INTERNAL RETAINER RINGS

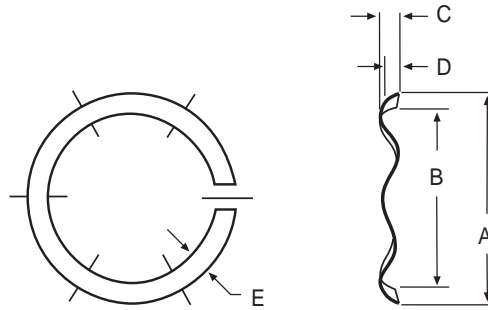
PART NUMBER	A HOUSING	B FREE O.D.	C RADIAL WALL	D THICKNESS	E GROOVE DIA.	F GROOVE WIDTH	THRUST CAP. RING SHEAR	THRUST CAP. GOOVE YIELD
WHL-371	3.500	3.714	0.188	0.093	3.688 ±0.006	0.103 +0.005/-0		
WH-356	3.562	3.703	0.198	0.061	3.672 ±0.006	0.068 +0.005/-0	28670	13850
WHM-400	4.000	4.270	0.312	0.111	4.240 ±0.006	0.120 +0.005/-0	55800	33930
WH-400	4.000	4.157	0.218	0.061	4.124 ±0.006	0.068 +0.005/-0	32200	17530
WHT-400	4.000	4.248	0.250	0.111	4.220 ±0.006	0.120 +0.005/-0	55800	31100
WH-406	4.063	4.222	0.218	0.061	4.187 ±0.006	0.068 +0.005/-0	32700	17810
VH-412	4.125	4.279	0.225	0.046	4.235 ±0.006	0.052 +0.004/-0	23850	16040
WHL-472	4.500	4.721	0.188	0.093	4.688 ±0.006	0.103 +0.005/-0		
WH-450	4.500	4.674	0.238	0.061	4.636 ±0.006	0.068 +0.005/-0	36220	21630
WHT-450	4.500	4.768	0.312	0.111	4.735 ±0.006	0.120 +0.005/-0	62770	37530
WHL-473	4.520	4.732	0.249	0.111	4.704 ±0.004	0.120 +0.005/-0		
VH-462	4.625	4.784	0.225	0.046	4.735 ±0.006	0.052 +0.004/-0	26740	17980
WHT-475	4.750	5.028	0.312	0.111	4.995 ±0.006	0.120 +0.005/-0	66260	41300
WH-500	5.000	5.185	0.250	0.072	5.144 ±0.006	0.079 +0.005/-0	47500	25450
WHT-500	5.000	5.295	0.312	0.111	5.260 ±0.006	0.120 +0.005/-0	69740	45950
WHL-574	5.500	5.735	0.188	0.093	5.688 ±0.006	0.103 +0.005/-0		
WHT-550	5.500	5.810	0.375	0.127	5.770 ±0.007	0.139 +0.006/-0	87780	52480
WH-551	5.511	5.703	0.250	0.072	5.658 ±0.007	0.079 +0.005/-0	52360	28830
WHL-573	5.520	5.739	0.249	0.109	5.700 +0/-0.003	0.120 +0.005/-0		
WH-550	5.550	5.693	0.250	0.072	5.647 ±0.007	0.079 +0.005/-0	52250	28770
WH-570	5.708	5.909	0.250	0.072	5.861 ±0.007	0.079 +0.005/-0	54230	31070
WH-600	6.000	6.202	0.250	0.072	6.153 ±0.007	0.079 +0.005/-0	57000	32660
WHT-600	6.000	6.314	0.375	0.127	6.270 ±0.007	0.139 +0.006/-0	95760	57260
WHM-600	6.000	6.314	0.350	0.127	6.270 ±0.007	0.139 +0.006/-0	95760	57260
WH-612	6.125	6.349	0.312	0.086	6.297 ±0.008	0.094 +0.006/-0	69500	37200
WHT-650	6.500	6.837	0.312	0.165	6.790 ±0.008	0.174 +0.008/-0	134780	66620
WHL-672	6.520	6.700	0.249	0.109	6.704 ±0.004	0.120 +0.005/-0		
WHT-662	6.625	6.973	0.312	0.165	6.925 ±0.008	0.174 +0.008/-0	137370	70240
WHT-700	7.000	7.366	0.312	0.165	7.315 ±0.008	0.174 +0.008/-0	145140	78180
WH-712	7.125	7.376	0.312	0.086	7.317 ±0.008	0.094 +0.006/-0	80850	48350
WH-700	7.182	7.239	0.312	0.086	7.182 ±0.008	0.094 +0.006/-0	79430	45030
WHL-770	7.500	7.700	0.250	0.111	7.658 ±0.004	0.120 +0.005/-0		
WH-750	7.500	7.754	0.312	0.086	7.692 ±0.008	0.094 +0.006/-0	85110	50890
WHL-871	8.500	8.710	0.250	0.111	8.658 ±0.004	0.120 +0.005/-0		
WH-850	8.500	8.780	0.375	0.086	8.712 ±0.008	0.094 +0.006/-0	96450	63690
WHL-876	8.520	8.760	0.250	0.109	8.704 ±0.004	0.120 +0.005/-0		
WHT-975	9.750	10.260	0.375	0.189	10.189 ±0.008	0.209 +0.008/-0	231570	151620
WHT-1050	10.500	11.072	0.375	0.189	10.970 ±0.008	0.209 +0.008/-0	249380	174420

## SPRIAL EXTERNAL RETAINER RINGS



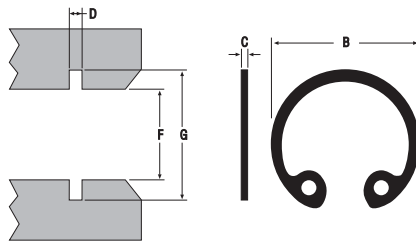
PART NUMBER	A SHAFT DIA.	B FREE I.D.	C RADIAL WALL	D THICKNESS	E GROOVE DIA.	F GROOVE WIDTH	THRUST CAP. RING SHEAR	THRUST CAP. GROOVE YIELD
WST-93	0.938	0.886	0.075	0.042	0.894 ±0.002	0.046 +0.003/-0	5690	1460
WST-106	1.062	1.005	0.088	0.050	1.015 ±0.002	0.056 +0.004/-0	7010	1800
WS-131	1.312	1.251	0.095	0.043	1.264 ±0.004	0.048 +0.004/-0	8150	2230
WS-137	1.375	1.308	0.095	0.043	1.323 ±0.004	0.048 +0.004/-0	8540	2530
WST-162	1.625	1.537	0.118	0.062	1.550 ±0.005	0.068 +0.004/-0	13290	4370
VS-162	1.625	1.550	0.118	0.031	1.568 ±0.005	0.039 +0.003/-0	6650	3330
WST-168	1.687	1.598	0.118	0.062	1.610 ±0.005	0.068 +0.004/-0	13800	4650
WST-175	1.750	1.657	0.118	0.062	1.670 ±0.005	0.068 +0.004/-0	14320	4950
WS-175	1.750	1.673	0.118	0.049	1.691 ±0.005	0.056 +0.004/-0	11310	3710
VS-187	1.875	1.798	0.118	0.031	1.818 ±0.005	0.039 +0.003/-0	7670	3840
WS-196	1.969	1.882	0.128	0.049	1.902 ±0.005	0.056 +0.004/-0	12730	4730
WS-225	2.250	2.153	0.138	0.049	2.176 ±0.006	0.056 +0.004/-0	14550	5890
WS-231	2.312	2.211	0.138	0.049	2.234 ±0.006	0.056 +0.004/-0	14950	6370
WS-236	2.362	2.261	0.138	0.049	2.284 ±0.006	0.056 +0.004/-0	15270	6510
WST-262	2.625	2.485	0.188	0.078	2.505 ±0.006	0.086 +0.005/-0	27020	11130
WST-275	2.750	2.604	0.188	0.093	2.625 ±0.006	0.103 +0.005/-0	32140	12250
WS-275	2.750	2.635	0.158	0.049	2.660 ±0.006	0.056 +0.004/-0	17780	8750
WST-300	3.000	2.838	0.188	0.093	2.860 ±0.006	0.103 +0.005/-0	35060	14840
WSM-325	3.250	3.054	0.225	0.093	3.076 ±0.006	0.103 +0.005/-0	37980	19990
WS-325	3.250	3.121	0.178	0.061	3.150 ±0.006	0.068 +0.005/-0	26160	11490
WST-343	3.437	3.254	0.188	0.093	3.280 ±0.006	0.103 +0.005/-0	40170	19190
WST-350	3.500	3.315	0.250	0.111	3.340 ±0.006	0.120 +0.005/-0	48820	19790
WST-375	3.750	3.550	0.250	0.111	3.577 ±0.006	0.120 +0.005/-0	52310	23060
WST-400	4.000	3.787	0.250	0.111	3.815 ±0.006	0.120 +0.005/-0	55800	26300
VS-412	4.125	3.973	0.225	0.046	4.015 ±0.006	0.052 +0.004/-0	23850	16040
WST-450	4.500	4.280	0.250	0.111	4.310 ±0.006	0.120 +0.005/-0	62770	30220
WS-450	4.500	4.326	0.238	0.061	4.364 ±0.006	0.068 +0.005/-0	36220	21630
WST-500	5.000	4.755	0.250	0.111	4.790 ±0.006	0.120 +0.005/-0	69740	37110
VS-525	5.250	5.067	0.225	0.061	5.119 ±0.007	0.067 +0.004/-0	40240	24490
WS-525	5.250	5.064	0.250	0.072	5.107 ±0.007	0.079 +0.005/-0	49880	26720
WS-537	5.375	5.187	0.250	0.072	5.228 ±0.007	0.079 +0.005/-0	51060	28120
WS-550	5.500	5.308	0.250	0.072	5.353 ±0.007	0.079 +0.005/-0	52250	28770
VS-625	6.250	6.033	0.265	0.061	6.094 ±0.008	0.067 +0.004/-0	47910	34460

## WAVE SPRINGS



PART NUMBER	A HOLE DIAM. (MIN.)	B ROD DIA. (MAX.)	C FREE HT.	D WORK HT.	E RADIAL WALL	RING THICK.	# OF WAVES	LOAD	VEE SET I.D.	VEE SET O.D.
SSR-0125	1.250	.960	.150	.078	.133	.016	3	22	3/4	1-1/4
SSR-0150	1.500	1.170	.170	.078	.143	.018	3	26	1	1-1/2
SSR-0175	1.750	1.440	.140	.078	.143	.018	4	30	1-1/4	1-3/4
SSR-0187	1.875	1.560	.150	.078	.143	.018	4	32	1-1/4	1-7/8
SSR-0200	2.000	1.680	.140	.093	.150	.024	4	34	1-3/8	2
SSR-0225	2.250	1.930	.170	.093	.150	.024	4	38	1-5/8	2-1/4
SSR-0237	2.375	1.990	.160	.093	.178	.024	4	40	1-3/4	2-3/8
SSR-0250	2.500	2.120	.170	.093	.178	.024	4	42	1-7/8	2-1/2
SSR-0262	2.625	2.240	.190	.093	.178	.024	4	44	2	2-5/8
SSR-0275	2.750	2.340	.170	.109	.188	.030	4	46	2-1/8	2-3/4
SSR-0300	3.000	2.590	.190	.109	.188	.030	4	50	2-3/8	3
SSR-0325	3.250	2.750	.200	.109	.233	.030	4	54	2-1/2	3-1/4
SSR-0348	3.475	2.975	.230	.109	.233	.030	4	58	2.725	3.475
SSR-0350	3.500	3.000	.230	.109	.233	.030	4	58	2-3/4	3-1/2
SSR-0375	3.750	3.250	.260	.109	.233	.030	4	62	3	3-3/4
SSR-0425	4.250	3.740	.210	.109	.233	.030	5	69	3-1/2	4-1/4
SSR-0512	5.125	4.610	.340	.125	.233	.030	5	80	4-1/4	5-1/8

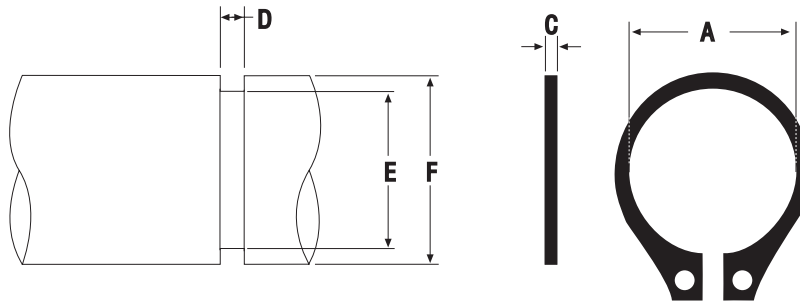
# INTERNAL RETAINER RINGS (TRU-ARC TYPE)



PART NUMBER	B RING O.D.	C RING THICKNESS	D GROOVE WIDTH	F NOM. BORE DIA.	G GROOVE DIA.
300-050	0.548 +0.010/-0.005	0.035 ±0.002	0.039 +0.003/-0	0.500	0.530 ±0.002
300-062	0.694 +0.010/-0.005	0.035 ±0.002	0.039 +0.003/-0	0.625	0.665 ±0.002
300-075	0.831 +0.010/-0.005	0.035 ±0.002	0.039 +0.003/-0	0.750	0.796 ±0.002
300-087	0.971 +0.015/-0.010	0.042 ±0.002	0.046 +0.003/-0	0.875	0.931 ±0.003
300-100	1.111 +0.015/-0.010	0.042 ±0.002	0.046 +0.003/-0	1.000	1.066 ±0.003
300-102	1.136 +0.015/-0.010	0.042 ±0.002	0.046 +0.003/-0	1.023	1.091 ±0.003
300-112	1.249 +0.025/-0.020	0.050 ±0.002	0.056 +0.004/-0	1.125	1.197 ±0.004
300-118	1.319 +0.025/-0.020	0.050 ±0.002	0.056 +0.004/-0	1.188	1.262 ±0.004
300-125	1.388 +0.025/-0.020	0.050 ±0.002	0.056 +0.004/-0	1.250	1.330 ±0.004
300-137	1.526 +0.025/-0.020	0.050 ±0.002	0.056 +0.004/-0	1.375	1.461 ±0.004
300-143	1.596 +0.025/-0.020	0.050 ±0.002	0.056 +0.004/-0	1.438	1.528 ±0.004
300-150	1.660 +0.025/-0.020	0.050 ±0.002	0.056 +0.004/-0	1.500	1.594 ±0.004
300-156	1.734 +0.035/-0.025	0.062 ±0.003	0.068 +0.004/-0	1.562	1.658 ±0.005
300-162	1.804 +0.035/-0.025	0.062 ±0.003	0.068 +0.004/-0	1.625	1.725 ±0.005
300-168	1.874 +0.035/-0.025	0.062 ±0.003	0.068 +0.004/-0	1.688	1.792 ±0.005
300-175	1.942 +0.035/-0.025	0.062 ±0.003	0.068 +0.004/-0	1.750	1.858 ±0.005
300-200	2.210 +0.035/-0.025	0.062 ±0.003	0.068 +0.004/-0	2.000	2.122 ±0.005
300-206	2.280 +0.040/-0.030	0.078 ±0.003	0.086 +0.005/-0	2.062	2.186 ±0.006
300-212	2.350 +0.040/-0.030	0.078 ±0.003	0.086 +0.005/-0	2.125	2.251 ±0.006
300-225	2.490 +0.040/-0.030	0.078 ±0.003	0.086 +0.005/-0	2.250	2.382 ±0.006
300-237	2.630 +0.040/-0.030	0.078 ±0.003	0.086 +0.005/-0	2.375	2.517 ±0.006
300-244	2.702 +0.040/-0.030	0.078 ±0.003	0.086 +0.005/-0	2.440	2.584 ±0.006
300-250	2.775 +0.040/-0.030	0.078 ±0.003	0.086 +0.005/-0	2.500	2.648 ±0.006
300-256	2.844 +0.040/-0.030	0.093 ±0.003	0.103 +0.005/-0	2.562	2.714 ±0.006
300-275	3.050 +0.040/-0.030	0.093 ±0.003	0.103 +0.005/-0	2.750	2.914 ±0.006
300-287	3.191 +0.040/-0.030	0.093 ±0.003	0.103 +0.005/-0	2.875	3.051 ±0.006
300-300	3.325 +0.040/-0.030	0.093 ±0.003	0.103 +0.005/-0	3.000	3.182 ±0.006
300-306	3.418 ±0.055	0.109 ±0.003	0.120 +0.005/-0	3.062	3.248 ±0.006
300-312	3.488 ±0.055	0.109 ±0.003	0.120 +0.005/-0	3.125	3.315 ±0.006
300-315	3.523 ±0.055	0.109 ±0.003	0.120 +0.005/-0	3.149	3.348 ±0.006
300-325	3.623 ±0.055	0.109 ±0.003	0.120 +0.005/-0	3.250	3.446 ±0.006
300-350	3.890 ±0.055	0.109 ±0.003	0.120 +0.005/-0	3.500	3.710 ±0.006
300-354	3.936 ±0.055	0.109 ±0.003	0.120 +0.005/-0	3.543	3.776 ±0.006
300-362	4.024 ±0.055	0.109 ±0.003	0.120 +0.005/-0	3.625	3.841 ±0.006
300-375	4.157 ±0.065	0.109 ±0.003	0.120 +0.005/-0	3.750	3.974 ±0.006
300-387	4.291 ±0.065	0.109 ±0.003	0.120 +0.005/-0	3.875	4.107 ±0.006
300-393	4.358 ±0.065	0.109 ±0.003	0.120 +0.005/-0	3.938	4.174 ±0.006
300-400	4.424 ±0.065	0.109 ±0.003	0.120 +0.005/-0	4.000	4.240 ±0.006
300-412	4.558 ±0.065	0.109 ±0.003	0.120 +0.005/-0	4.125	4.365 ±0.006
300-433	4.756 ±0.065	0.109 ±0.003	0.120 +0.005/-0	4.331	4.571 ±0.006
300-450	4.940 ±0.065	0.109 ±0.003	0.120 +0.005/-0	4.500	4.740 ±0.006
300-462	5.076 ±0.065	0.109 ±0.003	0.120 +0.005/-0	4.625	4.865 ±0.006
300-475	5.213 ±0.065	0.109 ±0.003	0.120 +0.005/-0	4.750	4.995 ±0.006
300-500	5.485 ±0.065	0.109 ±0.003	0.120 +0.005/-0	5.000	5.260 ±0.006
300-525	5.770 ±0.065	0.125 ±0.004	0.139 +0.005/-0	5.250	5.520 ±0.007
300-537	5.910 ±0.065	0.125 ±0.004	0.139 +0.006/-0	5.375	5.650 ±0.007
300-550	6.066 ±0.065	0.125 ±0.004	0.139 +0.006/-0	5.500	5.770 ±0.007
300-600	6.620 ±0.065	0.125 ±0.004	0.139 +0.006/-0	6.000	6.270 ±0.007
300-625	6.895 ±0.080	0.156 ±0.005	0.174 +0.008/-0	6.250	6.530 ±0.008
300-650	7.170 ±0.080	0.156 ±0.005	0.174 +0.008/-0	6.500	6.790 ±0.008



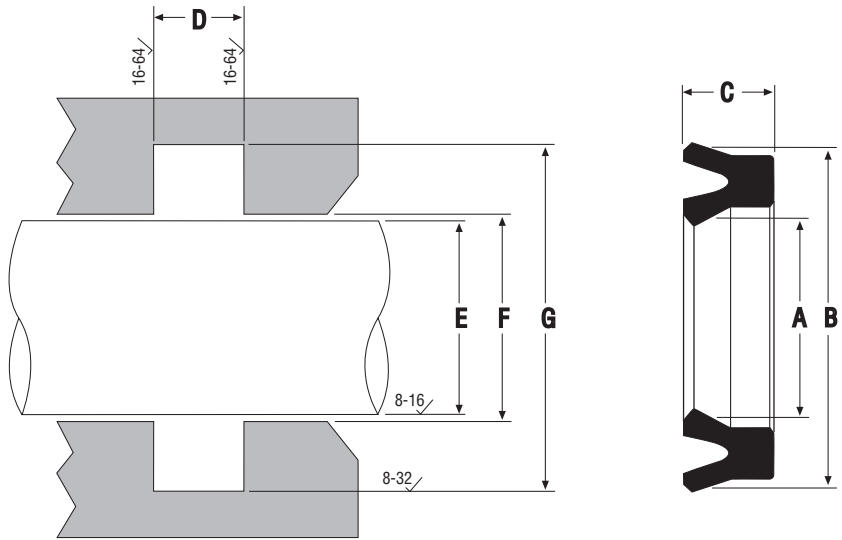
## EXTERNAL RETAINER RINGS (TRU-ARC TYPE)



PART NUMBER	A RING I.D.	C RING THICKNESS	D GROOVE WIDTH	E GROOVE DIA.	F NOM. ROD DIA.
310-050	0.461 +0.002/-0.005	0.035 ±0.002	0.039 +0.003/-0	0.468 ±0.002	0.500
310-062	0.579 +0.005/-0.010	0.035 ±0.002	0.039 +0.003/-0	0.588 ±0.003	0.625
310-068	0.635 +0.005/-0.010	0.042 ±0.002	0.046 +0.003/-0	0.646 ±0.003	0.688
310-075	0.693 +0.005/-0.010	0.042 ±0.002	0.046 +0.003/-0	0.704 ±0.003	0.750
310-087	0.810 +0.005/-0.010	0.042 ±0.002	0.046 +0.003/-0	0.821 ±0.003	0.875
310-093	0.857 +0.005/-0.010	0.042 ±0.002	0.046 +0.003/-0	0.882 ±0.003	0.938
310-100	0.925 +0.005/-0.010	0.042 ±0.002	0.046 +0.003/-0	0.940 ±0.003	1.000
310-112	1.041 +0.010/-0.015	0.050 ±0.002	0.056 +0.004/-0	1.059 ±0.004	1.125
310-118	1.098 +0.013/-0.020	0.050 ±0.002	0.056 +0.004/-0	1.118 ±0.004	1.188
310-125	1.156 +0.010/-0.015	0.050 ±0.002	0.056 +0.004/-0	1.176 ±0.004	1.250
310-137	1.272 +0.010/-0.015	0.050 ±0.002	0.056 +0.004/-0	1.291 ±0.004	1.375
310-150	1.387 +0.010/-0.015	0.050 ±0.002	0.056 +0.004/-0	1.406 ±0.004	1.500
310-162	1.503 +0.013/-0.020	0.062 ±0.003	0.068 +0.004/-0	1.524 ±0.004	1.625
310-175	1.618 +0.013/-0.020	0.062 ±0.003	0.068 +0.004/-0	1.650 ±0.005	1.750
310-175HD	1.608 +0.013/-0.020	0.109 ±0.003	0.120 +0.003/-0	1.650 ±0.003	1.750
310-200	1.850 +0.013/-0.020	0.062 ±0.003	0.068 +0.004/-0	1.886 ±0.005	2.000
310-212	1.964 +0.015/-0.025	0.078 ±0.003	0.086 +0.005/-0	2.003 ±0.006	2.125
310-225	2.081 +0.015/-0.025	0.078 ±0.003	0.086 +0.005/-0	2.120 ±0.006	2.250
310-250	2.313 +0.015/-0.025	0.078 ±0.003	0.086 +0.005/-0	2.360 ±0.006	2.500
310-262	2.428 +0.020/-0.030	0.078 ±0.003	0.086 +0.005/-0	2.481 ±0.006	2.625
310-287	2.650 +0.020/-0.030	0.093 ±0.003	0.103 +0.005/-0	2.721 ±0.006	2.875
310-275	2.543 +0.020/-0.030	0.093 ±0.003	0.103 +0.005/-0	2.602 ±0.006	2.750
310-300	2.775 +0.020/-0.030	0.093 ±0.003	0.103 +0.005/-0	2.838 ±0.006	3.000
310-350	3.237 +0.020/-0.030	0.093 ±0.003	0.103 +0.005/-0	3.316 ±0.006	3.500
310-400	3.700 +0.020/-0.030	0.109 ±0.003	0.120 +0.005/-0	3.792 ±0.006	4.000
310-425	3.989 +0.020/-0.030	0.109 ±0.003	0.120 +0.005/-0	4.065 ±0.006	4.250
310-437	4.106 +0.020/-0.030	0.109 ±0.003	0.120 +0.005/-0	4.190 ±0.006	4.375
310-450	4.223 +0.020/-0.030	0.109 ±0.003	0.120 +0.005/-0	4.310 ±0.006	4.500
310-500	4.692 +0.020/-0.030	0.109 ±0.003	0.120 +0.005/-0	4.790 ±0.006	5.000
310-575	5.396 +0.020/-0.040	0.125 ±0.004	0.139 +0.006/-0	5.505 ±0.007	5.750

# STYLE MRU ROD U-SEALS

All measurements on this page are in millimeters unless otherwise specified.



### HERCULES PART NUMBERS

**MRU - 20 x 28 x 5.7**

Style Prefix    I.D.    O.D.    Height

SEAL INFORMATION	
MATERIAL	94A URETHANE
TEMPERATURE RANGE	-30° TO +212° F
MAXIMUM PRESSURE	5,000 PSI
MAXIMUM VELOCITY	1 M/S

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
MRU-16x26x7.7	16.0	26.0	7.7	8.7 +0.3/-0	16.00 -0.020/-0.053	16.00 +0.052/-0	26.00 +0.084/-0
MRU-20x28x5.7	20.0	28.0	5.7	6.7 +0.3/-0	20.00 -0.020/-0.053	20.00 +0.052/-0	28.00 +0.084/-0
MRU-20x30x8	20.0	30.0	8.0	9.0 +0.3/-0	20.00 -0.020/-0.053	20.00 +0.052/-0	30.00 +0.084/-0
MRU-25x33x5.7	25.0	33.0	5.7	6.7 +0.3/-0	25.00 -0.020/-0.053	25.00 +0.052/-0	33.00 +0.100/-0
MRU-25x35x8	25.0	35.0	8.0	9.0 +0.3/-0	25.00 -0.020/-0.053	25.00 +0.052/-0	35.00 +0.100/-0
MRU-28x38x7.3	28.0	38.0	7.3	8.3 +0.3/-0	28.00 -0.020/-0.053	28.00 +0.052/-0	38.00 +0.100/-0
MRU-30x40x7	30.0	40.0	7.0	8.0 +0.3/-0	30.00 -0.020/-0.053	30.00 +0.052/-0	40.00 +0.100/-0
MRU-30x40x7.3	30.0	40.0	7.3	8.3 +0.3/-0	30.00 -0.020/-0.053	30.00 +0.052/-0	40.00 +0.100/-0
MRU-30x40x8	30.0	40.0	8.0	9.0 +0.3/-0	30.00 -0.020/-0.053	30.00 +0.052/-0	40.00 +0.100/-0
MRU-30x40x10	30.0	40.0	10.0	11.0 +0.3/-0	30.00 -0.020/-0.053	30.00 +0.052/-0	40.00 +0.100/-0
MRU-30x43x10	30.0	43.0	10.0	11.0 +0.3/-0	30.00 -0.020/-0.053	30.00 +0.052/-0	40.00 +0.100/-0
MRU-30x46x9	30.0	46.0	9.0	10.0 +0.3/-0	30.00 -0.020/-0.053	30.00 +0.052/-0	46.00 +0.100/-0
MRU-30x50x10	30.0	50.0	10.0	11.0 +0.3/-0	30.00 -0.020/-0.053	30.00 +0.052/-0	50.00 +0.100/-0
MRU-32x40x6	32.0	40.0	6.0	7.0 +0.3/-0	32.00 -0.025/-0.064	32.00 +0.062/-0	40.00 +0.100/-0
MRU-32x42x6	32.0	42.0	6.0	7.0 +0.3/-0	32.00 -0.025/-0.064	32.00 +0.062/-0	42.00 +0.100/-0
MRU-32x42x10	32.0	42.0	10.0	11.0 +0.3/-0	32.00 -0.025/-0.064	32.00 +0.062/-0	42.00 +0.100/-0
MRU35x51x9	35.0	51.0	9.0	10.0 +0.3/-0	35.00 -0.025/-0.064	35.00 +0.062/-0	51.00 +0.100/-0
MRU-36x46x10	36.0	46.0	10.0	11.0 +0.3/-0	36.00 -0.025/-0.064	36.00 +0.062/-0	46.00 +0.100/-0
MRU-40x48x5	40.0	48.0	5.0	6.0 +0.3/-0	40.00 -0.025/-0.064	40.00 +0.062/-0	48.00 +0.100/-0
MRU-40x50x7	40.0	50.0	7.0	8.0 +0.3/-0	40.00 -0.025/-0.064	40.00 +0.062/-0	50.00 +0.100/-0
MRU40x50x7.3	40.0	50.0	7.3	8.3 +0.3/-0	40.00 -0.025/-0.064	40.00 +0.062/-0	50.00 +0.100/-0
MRU-40x55x9	40.0	55.0	9.0	10.0 +0.3/-0	40.00 -0.025/-0.064	40.00 +0.062/-0	55.00 +0.120/-0
MRU-40x60x12	40.0	60.0	12.0	13.0 +0.3/-0	40.00 -0.025/-0.064	40.00 +0.062/-0	60.00 +0.120/-0
MRU-42x52x7.3	42.0	52.0	7.3	8.3 +0.3/-0	42.00 -0.025/-0.064	42.00 +0.062/-0	52.00 +0.120/-0
MRU-45x55x7.3	45.0	55.0	7.3	8.3 +0.3/-0	45.00 -0.025/-0.064	45.00 +0.062/-0	55.00 +0.120/-0
MRU-45x60x9	45.0	60.0	9.0	10.0 +0.3/-0	45.00 -0.025/-0.064	45.00 +0.062/-0	60.00 +0.120/-0
MRU-45x65x12	45.0	65.0	12.0	13.0 +0.3/-0	45.00 -0.025/-0.064	45.00 +0.062/-0	65.00 +0.120/-0
MRU-50x60x7.3	50.0	60.0	7.3	8.3 +0.3/-0	50.00 -0.025/-0.064	50.00 +0.062/-0	60.00 +0.120/-0
MRU-50x63x8	50.0	63.0	8.0	9.0 +0.3/-0	50.00 -0.025/-0.064	50.00 +0.062/-0	63.00 +0.120/-0
MRU-50x63x10	50.0	63.0	10.0	11.0 +0.3/-0	50.00 -0.025/-0.064	50.00 +0.062/-0	63.00 +0.120/-0
MRU-50x65x9	50.0	65.0	9.0	10.0 +0.3/-0	50.00 -0.025/-0.064	50.00 +0.062/-0	65.00 +0.120/-0
MRU-50x70x12	50.0	70.0	12.0	13.0 +0.3/-0	50.00 -0.025/-0.064	50.00 +0.062/-0	70.00 +0.120/-0
MRU-55x68x10	55.0	68.0	10.0	11.0 +0.3/-0	55.00 -0.030/-0.076	55.00 +0.074/-0	68.00 +0.120/-0
MRU-55x70x9	55.0	70.0	9.0	10.0 +0.3/-0	55.00 -0.030/-0.076	55.00 +0.074/-0	70.00 +0.120/-0
MRU-55x75x12	55.0	75.0	12.0	13.0 +0.3/-0	55.00 -0.030/-0.076	55.00 +0.074/-0	75.00 +0.120/-0

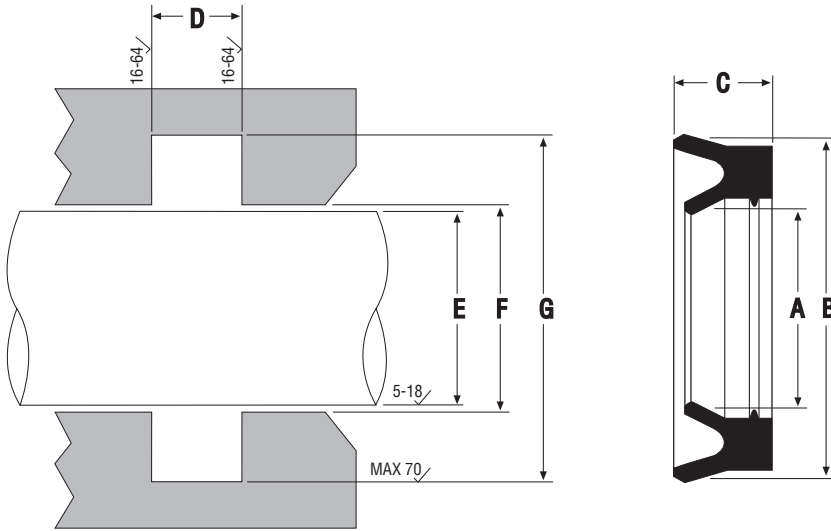
## STYLE MRU ROD U-SEALS

All measurements on this page are in millimeters unless otherwise specified.

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
MRU-56x66x7.3	56.0	66.0	7.3	8.3 +0.3/-0	56.00 -0.030/-0.076	56.00 +0.074/-0	66.00 +0.120/-0
MRU-60x73x10	60.0	73.0	10.0	11.0 +0.3/-0	60.00 -0.030/-0.076	60.00 +0.074/-0	73.00 +0.120/-0
MRU-60x75x9	60.0	75.0	9.0	10.0 +0.3/-0	60.00 -0.030/-0.076	60.00 +0.074/-0	75.00 +0.120/-0
MRU-60x80x12	60.0	80.0	12.0	13.0 +0.3/-0	60.00 -0.030/-0.076	60.00 +0.074/-0	80.00 +0.120/-0
MRU-63x83x12	63.0	83.0	12.0	13.0 +0.3/-0	63.00 -0.030/-0.076	63.00 +0.074/-0	83.00 +0.140/-0
MRU-65x75x6	65.0	75.0	6.0	7.0 +0.3/-0	65.00 -0.030/-0.076	65.00 +0.074/-0	75.00 +0.120/-0
MRU-65x78x10	65.0	78.0	10.0	11.0 +0.3/-0	65.00 -0.030/-0.076	65.00 +0.074/-0	78.00 +0.120/-0
MRU-65x80x9	65.0	80.0	9.0	10.0 +0.3/-0	65.00 -0.030/-0.076	65.00 +0.074/-0	80.00 +0.120/-0
MRU-65x85x12	65.0	85.0	12.0	13.0 +0.3/-0	65.00 -0.030/-0.076	65.00 +0.074/-0	85.00 +0.140/-0
MRU-70x83x10	70.0	83.0	10.0	11.0 +0.3/-0	70.00 -0.030/-0.076	70.00 +0.074/-0	83.00 +0.140/-0
MRU-70x85x9	70.0	85.0	9.0	10.0 +0.3/-0	70.00 -0.030/-0.076	70.00 +0.074/-0	85.00 +0.140/-0
MRU-70x90x12	70.0	90.0	12.0	13.0 +0.3/-0	70.00 -0.030/-0.076	70.00 +0.074/-0	90.00 +0.140/-0
MRU-75x88x10	75.0	88.0	10.0	11.0 +0.3/-0	75.00 -0.030/-0.076	75.00 +0.074/-0	88.00 +0.140/-0
MRU-75x90x9	75.0	90.0	9.0	10.0 +0.3/-0	75.00 -0.030/-0.076	75.00 +0.074/-0	90.00 +0.140/-0
MRU-75x95x12	75.0	95.0	12.0	13.0 +0.3/-0	75.00 -0.030/-0.076	75.00 +0.074/-0	95.00 +0.140/-0
MRU-80x93x10	80.0	93.0	10.0	11.0 +0.3/-0	80.00 -0.030/-0.076	80.00 +0.074/-0	93.00 +0.140/-0
MRU-80x95x9	80.0	95.0	9.0	10.0 +0.3/-0	80.00 -0.030/-0.076	80.00 +0.074/-0	95.00 +0.140/-0
MRU-80x95x10	80.0	95.0	10.0	11.0 +0.3/-0	80.00 -0.030/-0.076	80.00 +0.074/-0	95.00 +0.140/-0
MRU-85x100x9	85.0	100.0	9.0	10.0 +0.3/-0	85.00 -0.036/-0.090	85.00 +0.087/-0	100.00 +0.140/-0
MRU-85x100x10	85.0	100.0	10.0	11.0 +0.3/-0	85.00 -0.036/-0.090	85.00 +0.087/-0	100.00 +0.140/-0
MRU-80x100x12	80.0	100.0	12.0	13.0 +0.3/-0	80.00 -0.030/-0.076	80.00 +0.074/-0	100.00 +0.140/-0
MRU-85x105x12	85.0	105.0	12.0	13.0 +0.3/-0	85.00 -0.036/-0.090	85.00 +0.087/-0	105.00 +0.140/-0
MRU-90x105x9	90.0	105.0	9.0	10.0 +0.3/-0	90.00 -0.036/-0.090	90.00 +0.087/-0	105.00 +0.140/-0
MRU-90x105x10	90.0	105.0	10.0	11.0 +0.3/-0	90.00 -0.036/-0.090	90.00 +0.087/-0	105.00 +0.140/-0
MRU-90x110x12	90.0	110.0	12.0	13.0 +0.3/-0	90.00 -0.036/-0.090	90.00 +0.087/-0	110.00 +0.140/-0
MRU-95x110x9	95.0	110.0	9.0	10.0 +0.3/-0	95.00 -0.036/-0.090	95.00 +0.087/-0	110.00 +0.140/-0
MRU-95x110x10	95.0	110.0	10.0	11.0 +0.3/-0	95.00 -0.036/-0.090	95.00 +0.087/-0	110.00 +0.140/-0
MRU-95x115x12	95.0	115.0	12.0	13.0 +0.3/-0	95.00 -0.036/-0.090	95.00 +0.087/-0	115.00 +0.140/-0
MRU-100x115x10	100.0	115.0	10.0	11.0 +0.3/-0	100.00 -0.036/-0.090	100.00 +0.087/-0	115.00 +0.140/-0
MRU-100x120x12	100.0	120.0	12.0	13.0 +0.3/-0	100.00 -0.036/-0.090	100.00 +0.087/-0	120.00 +0.140/-0
MRU-105x120x9	105.0	120.0	9.0	10.0 +0.3/-0	105.00 -0.036/-0.090	105.00 +0.087/-0	120.00 +0.140/-0
MRU-105x125x12	105.0	125.0	12.0	13.0 +0.3/-0	105.00 -0.036/-0.090	105.00 +0.087/-0	125.00 +0.160/-0
MRU-105x125x15	105.0	125.0	15.0	16.0 +0.3/-0	105.00 -0.036/-0.090	105.00 +0.087/-0	125.00 +0.160/-0
MRU-110x125x10	110.0	125.0	10.0	11.0 +0.3/-0	110.00 -0.036/-0.090	110.00 +0.087/-0	125.00 +0.160/-0
MRU-110x125x9	110.0	125.0	9.0	10.0 +0.3/-0	110.00 -0.036/-0.090	110.00 +0.087/-0	125.00 +0.160/-0
MRU-110x130x10	110.0	130.0	10.0	11.0 +0.3/-0	110.00 -0.036/-0.090	110.00 +0.087/-0	130.00 +0.160/-0
MRU-110x130x12	110.0	130.0	12.0	13.0 +0.3/-0	110.00 -0.036/-0.090	110.00 +0.087/-0	130.00 +0.160/-0
MRU-110x130x13	110.0	130.0	13.0	14.0 +0.3/-0	110.00 -0.036/-0.090	110.00 +0.087/-0	130.00 +0.160/-0
MRU-110x130x15	110.0	130.0	15.0	15.0 +0.3/-0	110.00 -0.036/-0.090	110.00 +0.087/-0	130.00 +0.160/-0
MRU-115x130x9	115.0	130.0	9.0	10.0 +0.3/-0	115.00 -0.036/-0.090	115.00 +0.087/-0	130.00 +0.160/-0
MRU-115x135x12	115.0	135.0	12.0	13.0 +0.3/-0	115.00 -0.036/-0.090	115.00 +0.087/-0	135.00 +0.160/-0
MRU-120x135x9	120.0	135.0	9.0	10.0 +0.3/-0	120.00 -0.036/-0.090	120.00 +0.087/-0	135.00 +0.160/-0
MRU-120x140x12	120.0	140.0	12.0	13.0 +0.3/-0	120.00 -0.036/-0.090	120.00 +0.087/-0	140.00 +0.160/-0
MRU-120x140x13	120.0	140.0	13.0	14.0 +0.3/-0	120.00 -0.036/-0.090	120.00 +0.087/-0	140.00 +0.160/-0
MRU-120x140x15	120.0	140.0	15.0	16.0 +0.3/-0	120.00 -0.036/-0.090	120.00 +0.087/-0	140.00 +0.160/-0
MRU-130x145x9	130.0	145.0	9.0	10.0 +0.3/-0	130.00 -0.043/-0.106	130.00 +0.100/-0	145.00 +0.160/-0
MRU-130x150x12	130.0	150.0	12.0	13.0 +0.3/-0	130.00 -0.043/-0.106	130.00 +0.100/-0	150.00 +0.160/-0
MRU-140x160x12	140.0	160.0	12.0	13.0 +0.3/-0	140.00 -0.043/-0.106	140.00 +0.100/-0	160.00 +0.160/-0
MRU-150x170x12	150.0	170.0	12.0	13.0 +0.3/-0	150.00 -0.043/-0.106	150.00 +0.100/-0	170.00 +0.160/-0
MRU-150x170x14.6	150.0	170.0	14.6	15.6 +0.3/-0	150.00 -0.043/-0.106	150.00 +0.100/-0	170.00 +0.160/-0
MRU-150x170x16	150.0	170.0	16.0	17.0 +0.3/-0	150.00 -0.043/-0.106	150.00 +0.100/-0	170.00 +0.160/-0
MRU-160x180x12	160.0	180.0	12.0	13.0 +0.3/-0	160.00 -0.043/-0.106	160.00 +0.100/-0	180.00 +0.160/-0
MRU-160x185x16	160.0	185.0	16.0	17.0 +0.3/-0	160.00 -0.043/-0.106	160.00 +0.100/-0	185.00 +0.160/-0
MRU-160x185x14.6	160.0	185.0	14.6	15.6 +0.3/-0	160.00 -0.043/-0.106	160.00 +0.100/-0	185.00 +0.185/-0
MRU-170x195x16	170.0	195.0	16.0	17.0 +0.3/-0	170.00 -0.043/-0.106	170.00 +0.100/-0	195.00 +0.185/-0
MRU-180x205x16	180.0	205.0	16.0	17.0 +0.3/-0	180.00 -0.043/-0.106	180.00 +0.100/-0	205.00 +0.185/-0
MRU-200x225x16	200.0	225.0	16.0	17.0 +0.3/-0	200.00 -0.043/-0.106	200.00 +0.100/-0	225.00 +0.185/-0

# STYLE MRTU ROD U-SEALS

All measurements on this page are in millimeters unless otherwise specified.



## HERCULES PART NUMBERS

**MRTU - 12 x 20 x 5.7**

Style Prefix I.D. O.D. Height

SEAL INFORMATION	
MATERIAL	URETHANE
TEMPERATURE RANGE	-40° TO +230° F
MAXIMUM PRESSURE	6000 PSI
MAXIMUM VELOCITY	1 M/S

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
MRTU-12X18X5.7	12.00	18.00	5.70	6.70 +0.25/-0	12.00 -0.016/-0.059	12.00 +0.043/-0	18.00 ±0.07
MRTU-12X20X5.7	12.00	20.00	5.70	6.30 +0.25/-0	12.00 -0.016/-0.059	12.00 +0.043/-0	20.00 ±0.07
MRTU-16X24X5.7	16.00	24.00	5.70	6.30 +0.25/-0	16.00 -0.016/-0.059	16.00 +0.043/-0	24.00 ±0.07
MRTU-16X26X7.7	16.00	26.00	7.70	9.00 +0.25/-0	16.00 -0.016/-0.059	16.00 +0.043/-0	26.00 ±0.07
MRTU-18X25X5	18.00	25.00	5.00	6.00 +0.25/-0	18.00 -0.016/-0.059	18.00 +0.043/-0	25.00 ±0.07
MRTU-18X26X6	18.00	26.00	6.00	7.00 +0.25/-0	18.00 -0.016/-0.059	18.00 +0.043/-0	26.00 ±0.07
MRTU-20X26X5	20.00	26.00	5.00	6.00 +0.25/-0	20.00 -0.020/-0.072	20.00 +0.052/-0	26.00 ±0.07
MRTU-20X28X5.7	20.00	28.00	5.70	6.30 +0.25/-0	20.00 -0.020/-0.072	20.00 +0.052/-0	28.00 ±0.07
MRTU-20X30X7.7	20.00	30.00	7.70	9.00 +0.25/-0	20.00 -0.020/-0.072	20.00 +0.052/-0	30.00 ±0.07
MRTU-22X30X5.7	22.00	30.00	5.70	6.30 +0.25/-0	22.00 -0.020/-0.072	22.00 +0.052/-0	30.00 ±0.07
MRTU-22X32X7.3	22.00	32.00	7.30	8.00 +0.25/-0	22.00 -0.020/-0.072	22.00 +0.052/-0	32.00 ±0.08
MRTU-25X33X5.7	25.00	33.00	5.70	6.30 +0.25/-0	25.00 -0.020/-0.072	25.00 +0.052/-0	33.00 ±0.08
MRTU-25X35X7.7	25.00	35.00	7.70	9.00 +0.25/-0	25.00 -0.020/-0.072	25.00 +0.052/-0	35.00 ±0.08
MRTU-25X35X10	25.00	35.00	10.00	11.00 +0.25/-0	25.00 -0.020/-0.072	25.00 +0.052/-0	35.00 ±0.08
MRTU-28X38X7.3	28.00	38.00	7.30	8.00 +0.25/-0	28.00 -0.020/-0.072	28.00 +0.052/-0	38.00 ±0.08
MRTU-28X43X11.4	28.00	43.00	11.40	12.50 +0.25/-0	28.00 -0.020/-0.072	28.00 +0.052/-0	43.00 ±0.08
MRTU-30X38X6.3	30.00	38.00	6.30	7.00 +0.25/-0	30.00 -0.020/-0.072	30.00 +0.052/-0	38.00 ±0.08
MRTU-32X40X6	32.00	40.00	6.00	7.00 +0.25/-0	32.00 -0.020/-0.072	32.00 +0.052/-0	40.00 ±0.08
MRTU-30X40X10	30.00	40.00	10.00	11.00 +0.25/-0	30.00 -0.020/-0.072	30.00 +0.052/-0	40.00 ±0.08
MRTU-32X42X5.7	32.00	42.00	5.70	6.30 +0.25/-0	32.00 -0.025/-0.087	32.00 +0.062/-0	42.00 ±0.08
MRTU-32X42X7.3	32.00	42.00	7.30	8.00 +0.25/-0	32.00 -0.025/-0.087	32.00 +0.062/-0	42.00 ±0.08
MRTU-32X42X10	32.00	42.00	10.00	11.00 +0.25/-0	32.00 -0.025/-0.087	32.00 +0.062/-0	42.00 ±0.08
MRTU-32X47X9.1	32.00	37.00	9.10	10.00 +0.25/-0	32.00 -0.025/-0.087	32.00 +0.062/-0	37.00 ±0.08
MRTU-32X47X10	32.00	47.00	10.00	11.00 +0.25/-0	32.00 -0.025/-0.087	32.00 +0.062/-0	47.00 ±0.08
MRTU-33X43X10	33.00	43.00	10.00	11.00 +0.25/-0	33.00 -0.025/-0.087	33.00 +0.062/-0	43.00 ±0.08
MRTU-35X43X6.3	35.00	43.00	6.30	7.00 +0.25/-0	35.00 -0.025/-0.087	35.00 +0.062/-0	43.00 ±0.08
MRTU-35X43X8.2	35.00	43.00	8.20	9.00 +0.25/-0	35.00 -0.025/-0.087	35.00 +0.062/-0	43.00 ±0.08
MRTU-35X45X7.0	35.00	45.00	7.00	8.00 +0.25/-0	35.00 -0.025/-0.087	35.00 +0.062/-0	45.00 ±0.08
MRTU-35X45X10	35.00	45.00	10.00	11.00 +0.25/-0	35.00 -0.025/-0.087	35.00 +0.062/-0	45.00 ±0.08
MRTU-35X50X9	35.00	50.00	9.00	10.00 +0.25/-0	35.00 -0.025/-0.087	35.00 +0.062/-0	50.00 ±0.08
MRTU-35X50X10	35.00	50.00	10.00	11.00 +0.25/-0	35.00 -0.025/-0.087	35.00 +0.062/-0	50.00 ±0.08
MRTU-36X44X6.4	36.00	44.00	6.40	7.40 +0.25/-0	36.00 -0.025/-0.087	36.00 +0.062/-0	44.00 ±0.08
MRTU-36X44X8	36.00	44.00	8.00	9.00 +0.25/-0	36.00 -0.025/-0.087	36.00 +0.062/-0	44.00 ±0.08
MRTU-36X46X7	36.00	46.00	7.00	8.00 +0.25/-0	36.00 -0.025/-0.087	36.00 +0.062/-0	46.00 ±0.08
MRTU-36X46X10	36.00	46.00	10.00	11.00 +0.25/-0	36.00 -0.025/-0.087	36.00 +0.062/-0	46.00 ±0.08
MRTU-40X48X8.2	40.00	48.00	8.20	9.00 +0.25/-0	40.00 -0.025/-0.087	40.00 +0.062/-0	48.00 ±0.08

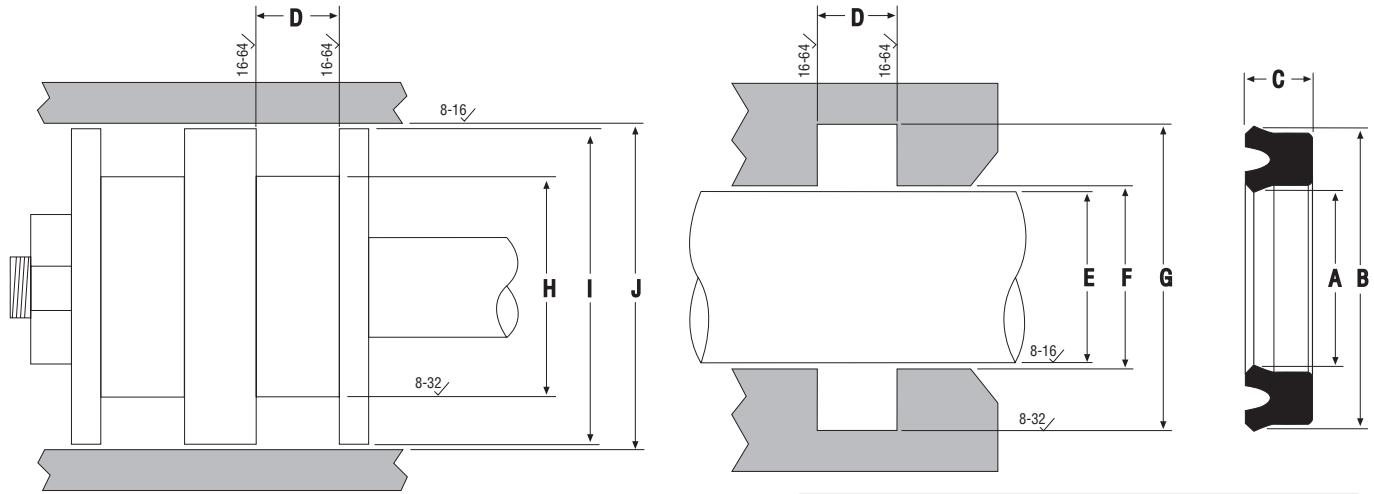
## STYLE MRTU ROD U-SEALS

All measurements on this page are in millimeters unless otherwise specified.

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
MRTU-40X50X7	40.00	50.00	7.00	8.00 +0.25/-0	40.00 -0.025/-0.087	40.00 +0.062/-0	50.00 ±0.08
MRTU-40X50X10	40.00	50.00	10.00	11.00 +0.25/-0	40.00 -0.025/-0.087	40.00 +0.062/-0	50.00 ±0.08
MRTU-40X55X10	40.00	55.00	10.00	11.00 +0.25/-0	40.00 -0.025/-0.087	40.00 +0.062/-0	55.00 ±0.10
MRTU-40X60X12	40.00	60.00	12.00	13.00 +0.25/-0	40.00 -0.025/-0.087	40.00 +0.062/-0	60.00 ±0.10
MRTU-45X53X8.1	45.00	53.00	8.10	9.00 +0.25/-0	45.00 -0.025/-0.087	45.00 +0.062/-0	53.00 ±0.10
MRTU-45X55X7.3	45.00	55.00	7.30	8.00 +0.25/-0	45.00 -0.025/-0.087	45.00 +0.062/-0	55.00 ±0.10
MRTU-45X55X10	45.00	55.00	10.00	11.00 +0.25/-0	45.00 -0.025/-0.087	45.00 +0.062/-0	55.00 ±0.10
MRTU-45X60X10	45.00	60.00	10.00	11.00 +0.25/-0	45.00 -0.025/-0.087	45.00 +0.062/-0	60.00 ±0.10
MRTU-45X65X10	45.00	65.00	10.00	11.00 +0.25/-0	45.00 -0.025/-0.087	45.00 +0.062/-0	65.00 ±0.10
MRTU-50X60X7.3	50.00	60.00	7.30	8.00 +0.25/-0	50.00 -0.025/-0.087	50.00 +0.062/-0	60.00 ±0.10
MRTU-50X60X10	50.00	60.00	10.00	11.00 +0.25/-0	50.00 -0.025/-0.087	50.00 +0.062/-0	60.00 ±0.10
MRTU-50X60X11.8	50.00	60.00	11.80	13.00 +0.25/-0	50.00 -0.025/-0.087	50.00 +0.062/-0	60.00 ±0.10
MRTU-50X65X9.5	50.00	65.00	9.50	10.50 +0.25/-0	50.00 -0.025/-0.087	50.00 +0.062/-0	65.00 ±0.10
MRTU-50X65X11	50.00	65.00	11.00	12.00 +0.25/-0	50.00 -0.025/-0.087	50.00 +0.062/-0	65.00 ±0.10
MRTU-50X65X14.5	50.00	65.00	14.50	16.00 +0.25/-0	50.00 -0.025/-0.087	50.00 +0.062/-0	65.00 ±0.10
MRTU-55X65X10	55.00	65.00	10.00	11.00 +0.25/-0	55.00 -0.030/-0.104	55.00 +0.074/-0	65.00 ±0.10
MRTU-55X70X11.8	55.00	70.00	11.80	13.00 +0.25/-0	55.00 -0.030/-0.104	55.00 +0.074/-0	70.00 ±0.10
MRTU-56X66X10	56.00	66.00	10.00	11.00 +0.25/-0	56.00 -0.030/-0.104	56.00 +0.074/-0	66.00 ±0.10
MRTU-56X71X10	56.00	71.00	10.00	11.00 +0.25/-0	56.00 -0.030/-0.104	56.00 +0.074/-0	71.00 ±0.10
MRTU-56X71X11	56.00	71.00	11.00	12.00 +0.25/-0	56.00 -0.030/-0.104	56.00 +0.074/-0	71.00 ±0.10
MRTU-60X70X10	60.00	70.00	10.00	11.00 +0.25/-0	60.00 -0.030/-0.104	60.00 +0.074/-0	70.00 ±0.10
MRTU-60X70X11.8	60.00	70.00	11.80	13.00 +0.25/-0	60.00 -0.030/-0.104	60.00 +0.074/-0	70.00 ±0.10
MRTU-60X72X10	60.00	72.00	10.00	11.00 +0.25/-0	60.00 -0.030/-0.104	60.00 +0.074/-0	72.00 ±0.10
MRTU-60X75X10	60.00	75.00	10.00	11.00 +0.25/-0	60.00 -0.030/-0.104	60.00 +0.074/-0	75.00 ±0.10
MRTU-60X75X11.8	60.00	75.00	11.80	13.00 +0.25/-0	60.00 -0.030/-0.104	60.00 +0.074/-0	75.00 ±0.10
MRTU-63X73X12	63.00	73.00	12.00	13.00 +0.25/-0	63.00 -0.030/-0.104	63.00 +0.074/-0	73.00 ±0.10
MRTU-63X78X10	63.00	78.00	10.00	11.00 +0.25/-0	63.00 -0.030/-0.104	63.00 +0.074/-0	78.00 ±0.10
MRTU-63X78X11	63.00	78.00	11.00	12.00 +0.25/-0	63.00 -0.030/-0.104	63.00 +0.074/-0	78.00 ±0.10
MRTU-65X75X11.8	65.00	75.00	11.80	13.00 +0.25/-0	65.00 -0.030/-0.104	65.00 +0.074/-0	75.00 ±0.10
MRTU-70X80X12	70.00	80.00	12.00	13.00 +0.25/-0	70.00 -0.030/-0.104	70.00 +0.074/-0	80.00 ±0.10
MRTU-70X85X10	70.00	85.00	10.00	11.00 +0.25/-0	70.00 -0.030/-0.104	70.00 +0.074/-0	85.00 ±0.11
MRTU-70X85X11.5	70.00	85.00	11.50	12.50 +0.25/-0	70.00 -0.030/-0.104	70.00 +0.074/-0	85.00 ±0.11
MRTU-75X85X11.5	75.00	85.00	11.80	13.00 +0.25/-0	75.00 -0.030/-0.104	75.00 +0.074/-0	85.00 ±0.11
MRTU-75X85X11.8	75.00	85.00	11.80	13.00 +0.25/-0	75.00 -0.030/-0.104	75.00 +0.074/-0	85.00 ±0.11
MRTU-78X86X11	78.00	86.00	11.00	12.00 +0.25/-0	78.00 -0.030/-0.104	78.00 +0.074/-0	86.00 ±0.11
MRTU-80X90X10	80.00	90.00	10.00	11.00 +0.25/-0	80.00 -0.030/-0.104	80.00 +0.074/-0	90.00 ±0.11
MRTU-80X90X12	80.00	90.00	12.00	12.00 +0.25/-0	80.00 -0.030/-0.104	80.00 +0.074/-0	90.00 ±0.11
MRTU-80X95X12	80.00	95.00	12.00	13.00 +0.25/-0	80.00 -0.030/-0.104	80.00 +0.074/-0	95.00 ±0.11
MRTU-80X100X14.5	80.00	100.00	14.50	16.00 +0.25/-0	80.00 -0.030/-0.104	80.00 +0.074/-0	100.00 ±0.11
MRTU-90X105X11.4	90.00	105.00	11.40	12.50 +0.25/-0	90.00 -0.036/-0.123	90.00 +0.087/-0	105.00 ±0.11
MRTU-100X115X9	100.00	115.00	9.00	10.00 +0.25/-0	100.00 -0.036/-0.123	100.00 +0.087/-0	115.00 ±0.11
MRTU-100X115X12	100.00	115.00	12.00	13.00 +0.25/-0	100.00 -0.036/-0.123	100.00 +0.087/-0	115.00 ±0.11
MRTU-100X120X11.8	100.00	120.00	11.80	13.00 +0.25/-0	100.00 -0.036/-0.123	100.00 +0.087/-0	120.00 ±0.11
MRTU-100X120X14.5	100.00	120.00	14.50	16.00 +0.25/-0	100.00 -0.036/-0.123	100.00 +0.087/-0	120.00 ±0.11
MRTU-105X115X13.2	105.00	115.00	13.20	14.50 +0.25/-0	105.00 -0.036/-0.123	105.00 +0.087/-0	115.00 ±0.11
MRTU-110X130X11.8	110.00	130.00	11.80	13.00 +0.25/-0	110.00 -0.036/-0.123	110.00 +0.087/-0	130.00 ±0.13
MRTU-110X130X14.5	110.00	130.00	14.50	16.00 +0.25/-0	110.00 -0.036/-0.123	110.00 +0.087/-0	130.00 ±0.13
MRTU-125X145X14.5	125.00	145.00	14.50	16.00 +0.25/-0	125.00 -0.043/-0.143	125.00 +0.100/-0	145.00 ±0.13
MRTU-130X140X14.5	130.00	140.00	14.50	16.00 +0.25/-0	130.00 -0.043/-0.143	130.00 +0.100/-0	140.00 ±0.13
MRTU-130X150X14.5	130.00	150.00	14.50	16.00 +0.25/-0	130.00 -0.043/-0.143	130.00 +0.100/-0	150.00 ±0.13
MRTU-140X160X11.8	140.00	160.00	11.80	13.00 +0.25/-0	140.00 -0.043/-0.143	140.00 +0.100/-0	160.00 ±0.13
MRTU-140X160X14.5	140.00	160.00	14.50	16.00 +0.25/-0	140.00 -0.043/-0.143	140.00 +0.100/-0	160.00 ±0.13
MRTU-160X170X11.5	160.00	170.00	11.50	12.50 +0.25/-0	160.00 -0.043/-0.143	160.00 +0.100/-0	170.00 ±0.13
MRTU-160X180X14.5	160.00	180.00	14.50	16.00 +0.25/-0	160.00 -0.043/-0.143	160.00 +0.100/-0	180.00 ±0.13

# STYLE MUSN SYMMETRICAL U-SEALS

All measurements on this page are in millimeters unless otherwise specified.



## HERCULES PART NUMBERS

**MUSN - 6.3 x 16.3 x 8**

Style Prefix I.D. O.D. Height

SEAL INFORMATION		
MATERIAL	90A NITRILE	
TEMPERATURE RANGE	-15° TO +212° F	
MAXIMUM PRESSURE	W/O BU RING	W/ BU RING
	2,000 PSI	3,000 PSI
MAXIMUM VELOCITY	1 M/S	

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
MUSN-6.3x16.3x8	6.3	16.3	8.0	9.0 +0.3/-0	6.30 -0.013/-0.035	6.30 +0.036/-0	16.30 +0.070/-0	6.30 +0/-0.058	16.30 -0.016/-0.043	16.30 +0.043/-0
MUSN-7.1x17.1x8	7.1	17.1	8.0	9.0 +0.3/-0	7.10 -0.013/-0.035	7.10 +0.036/-0	17.10 +0.070/-0	7.10 +0/-0.058	17.10 -0.016/-0.043	17.10 +0.043/-0
MUSN-8x18x8	8.0	18.0	8.0	9.0 +0.3/-0	8.00 -0.013/-0.035	8.00 +0.036/-0	18.00 +0.070/-0	8.00 +0/-0.058	18.00 -0.016/-0.043	18.00 +0.043/-0
MUSN-9x19x8	9.0	19.0	8.0	9.0 +0.3/-0	9.00 -0.013/-0.035	9.00 +0.036/-0	19.00 +0.084/-0	9.00 +0/-0.058	19.00 -0.016/-0.043	19.00 +0.052/-0
MUSN-10x20x8	10.0	20.0	8.0	9.0 +0.3/-0	10.00 -0.013/-0.035	10.00 +0.036/-0	20.00 +0.084/-0	10.00 +0/-0.058	20.00 -0.020/-0.053	20.00 +0.052/-0
MUSN-11.2x21.2x8	11.2	21.2	8.0	9.0 +0.3/-0	11.20 -0.016/-0.043	11.20 +0.043/-0	21.20 +0.084/-0	11.20 +0/-0.070	21.20 -0.020/-0.053	21.20 +0.052/-0
MUSN-12.5x22.5x8	12.5	22.5	8.0	9.0 +0.3/-0	12.50 -0.016/-0.043	12.50 +0.043/-0	22.50 +0.084/-0	12.50 +0/-0.070	22.50 -0.020/-0.053	22.50 +0.052/-0
MUSN-14x24x8	14.0	24.0	8.0	9.0 +0.3/-0	14.00 -0.016/-0.043	14.00 +0.043/-0	24.00 +0.084/-0	14.00 +0/-0.070	24.00 -0.020/-0.053	24.00 +0.052/-0
MUSN-15x25x8	15.0	25.0	8.0	9.0 +0.3/-0	15.00 -0.016/-0.043	15.00 +0.043/-0	25.00 +0.084/-0	15.00 +0/-0.070	25.00 -0.020/-0.053	25.00 +0.052/-0
MUSN-16x24x5	16.0	24.0	5.0	5.5 +0.3/-0	16.00 -0.016/-0.043	16.00 +0.043/-0	24.00 +0.084/-0	16.00 +0/-0.070	24.00 -0.020/-0.053	24.00 +0.052/-0
MUSN-16x26x8	16.0	26.0	8.0	9.0 +0.3/-0	16.00 -0.016/-0.043	16.00 +0.043/-0	26.00 +0.084/-0	16.00 +0/-0.070	26.00 -0.020/-0.053	26.00 +0.052/-0
MUSN-18x26x5	18.0	26.0	5.0	5.5 +0.3/-0	18.00 -0.016/-0.043	18.00 +0.043/-0	26.00 +0.084/-0	18.00 +0/-0.070	26.00 -0.020/-0.053	26.00 +0.052/-0
MUSN-18x28x8	18.0	28.0	8.0	9.0 +0.3/-0	18.00 -0.016/-0.043	18.00 +0.043/-0	28.00 +0.084/-0	18.00 +0/-0.070	28.00 -0.020/-0.053	28.00 +0.052/-0
MUSN-20x28x5	20.0	28.0	5.0	5.5 +0.3/-0	20.00 -0.020/-0.053	20.00 +0.052/-0	28.00 +0.084/-0	20.00 +0/-0.084	28.00 -0.020/-0.053	28.00 +0.052/-0
MUSN-20x30x8	20.0	30.0	8.0	9.0 +0.3/-0	20.00 -0.020/-0.053	20.00 +0.052/-0	30.00 +0.084/-0	20.00 +0/-0.084	30.00 -0.020/-0.053	30.00 +0.052/-0
MUSN-22.4x30x5	22.4	30.0	5.0	5.5 +0.3/-0	22.40 -0.020/-0.053	22.40 +0.052/-0	30.00 +0.084/-0	22.40 +0/-0.084	30.00 -0.020/-0.053	30.00 +0.052/-0
MUSN-22.4x32.4x8	22.4	32.4	8.0	9.0 +0.3/-0	22.40 -0.020/-0.053	22.40 +0.052/-0	32.40 +0.100/-0	22.40 +0/-0.084	32.40 -0.025/-0.064	32.40 +0.062/-0
MUSN-23.5x31.5x5	23.5	31.5	5.0	5.5 +0.3/-0	23.50 -0.020/-0.053	23.50 +0.052/-0	31.50 +0.100/-0	23.50 +0/-0.084	31.50 -0.025/-0.064	31.50 +0.062/-0
MUSN-25x33x5	25.0	33.0	5.0	5.5 +0.3/-0	25.00 -0.020/-0.053	25.00 +0.052/-0	33.00 +0.100/-0	25.00 +0/-0.084	33.00 -0.025/-0.064	33.00 +0.062/-0
MUSN-25x35x8	25.0	35.0	8.0	9.0 +0.3/-0	25.00 -0.020/-0.053	25.00 +0.052/-0	35.00 +0.100/-0	25.00 +0/-0.084	35.00 -0.025/-0.064	35.00 +0.062/-0
MUSN-28x35.5x5	28.0	35.5	5.0	5.5 +0.3/-0	28.00 -0.020/-0.053	28.00 +0.052/-0	35.50 +0.100/-0	28.00 +0/-0.084	35.50 -0.025/-0.064	35.50 +0.062/-0
MUSN-28x43x10	28.0	43.0	10.0	11.0 +0.3/-0	28.00 -0.020/-0.053	28.00 +0.052/-0	43.00 +0.100/-0	28.00 +0/-0.084	43.00 -0.025/-0.064	43.00 +0.062/-0
MUSN-30x40x6	30.0	40.0	6.0	7.0 +0.3/-0	30.00 -0.020/-0.053	30.00 +0.052/-0	40.00 +0.100/-0	30.00 +0/-0.084	40.00 -0.025/-0.064	40.00 +0.062/-0
MUSN-30x45x10	30.0	45.0	10.0	11.0 +0.3/-0	30.00 -0.020/-0.053	30.00 +0.052/-0	45.00 +0.100/-0	30.00 +0/-0.084	45.00 -0.025/-0.064	45.00 +0.062/-0
MUSN-31.5x41.5x6	31.5	41.5	6.0	7.0 +0.3/-0	31.50 -0.025/-0.064	31.50 +0.062/-0	41.50 +0.100/-0	31.50 +0/-0.100	41.50 -0.025/-0.064	41.50 +0.062/-0
MUSN-31.5x46.5x10	31.5	46.5	10.0	11.0 +0.3/-0	31.50 -0.025/-0.064	31.50 +0.062/-0	46.50 +0.100/-0	31.50 +0/-0.100	46.50 -0.025/-0.064	46.50 +0.062/-0
MUSN-35x45x6	35.0	45.0	6.0	7.0 +0.3/-0	35.00 -0.025/-0.064	35.00 +0.062/-0	45.00 +0.100/-0	35.00 +0/-0.100	45.00 -0.025/-0.064	45.00 +0.062/-0
MUSN-35x50x10	35.0	50.0	10.0	11.0 +0.3/-0	35.00 -0.025/-0.064	35.00 +0.062/-0	50.00 +0.100/-0	35.00 +0/-0.100	50.00 -0.025/-0.064	50.00 +0.062/-0
MUSN-35.5x45x6	35.5	45.0	6.0	7.0 +0.3/-0	35.50 -0.025/-0.064	35.50 +0.062/-0	45.00 +0.100/-0	35.50 +0/-0.100	45.00 -0.025/-0.064	45.00 +0.062/-0
MUSN-35.5x50.5x10	35.5	50.5	10.0	11.0 +0.3/-0	35.50 -0.025/-0.064	35.50 +0.062/-0	50.50 +0.120/-0	35.50 +0/-0.100	50.50 -0.025/-0.064	50.50 +0.074/-0

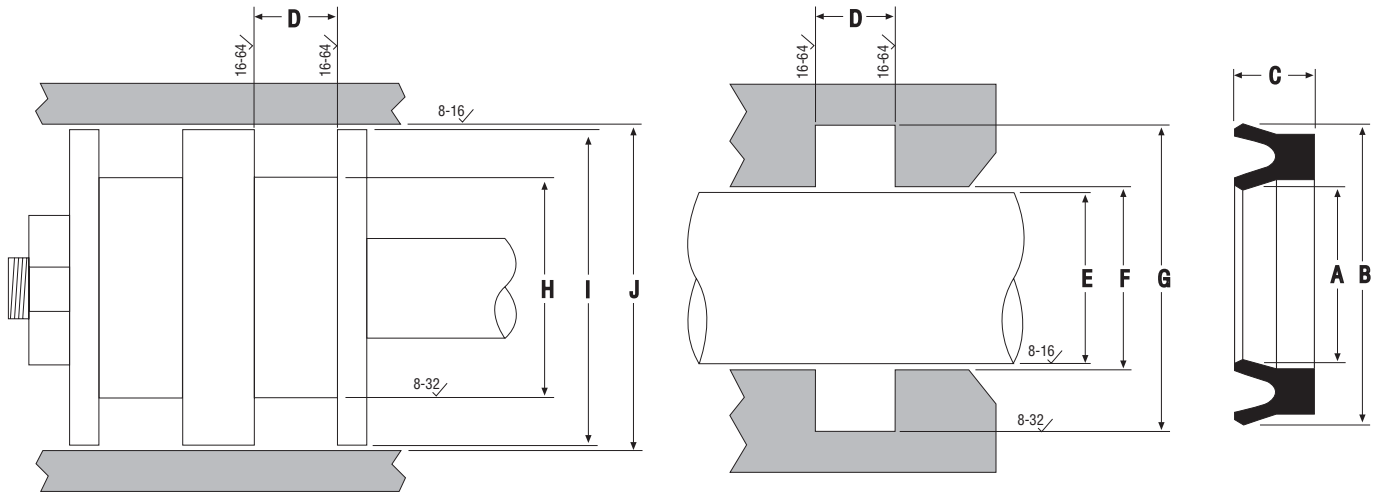
# STYLE MUSN METRIC U-SEALS

All measurements on this page are in millimeters unless otherwise specified.

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
MUSN-36x46x6	36.0	46.0	6.0	7.0 +0.3/-0	36.00 -0.025/-0.064	36.00 +0.062/-0	46.00 +0.100/-0	36.00 +0/-0.100	46.00 -0.025/-0.064	46.00 +0.062/-0
MUSN-40x50x6	40.0	50.0	6.0	7.0 +0.3/-0	40.00 -0.025/-0.064	40.00 +0.062/-0	50.00 +0.100/-0	40.00 +0/-0.100	50.00 -0.025/-0.064	50.00 +0.062/-0
MUSN-40x53x9	40.0	53.0	9.0	10.0 +0.3/-0	40.00 -0.025/-0.064	40.00 +0.062/0	53.00 +0.100/-0	40.00 +0/-0.100	53.00 -0.025/-0.064	53.00 +0.062/0
MUSN-40x55x10	40.0	55.0	10.0	11.0 +0.3/-0	40.00 -0.025/-0.064	40.00 +0.062/-0	55.00 +0.120/-0	40.00 +0/-0.100	55.00 -0.030/-0.076	55.00 +0.074/-0
MUSN-45x55x6	45.0	55.0	6.0	7.0 +0.3/-0	45.00 -0.025/-0.064	45.00 +0.062/-0	55.00 +0.120/-0	45.00 +0/-0.100	55.00 -0.030/-0.076	55.00 +0.074/-0
MUSN-45x56x7	45.0	56.0	7.0	8.0 +0.3/-0	45.00 -0.025/-0.064	45.00 +0.062/-0	56.00 +0.120/-0	45.00 +0/-0.100	56.00 -0.030/-0.076	56.00 +0.074/-0
MUSN-45x60x10	45.0	60.0	10.0	11.0 +0.3/-0	45.00 -0.025/-0.064	45.00 +0.062/-0	60.00 +0.120/-0	45.00 +0/-0.100	60.00 -0.030/-0.076	60.00 +0.074/-0
MUSN-48x63x10	48.0	63.0	10.0	11.0 +0.3/-0	48.00 -0.025/-0.064	48.00 +0.062/-0	63.00 +0.120/-0	48.00 +0/-0.100	63.00 -0.030/-0.076	63.00 +0.074/-0
MUSN-50x60x6	50.0	60.0	6.0	7.0 +0.3/-0	50.00 -0.025/-0.064	50.00 +0.062/-0	60.00 +0.120/-0	50.00 +0/-0.100	60.00 -0.030/-0.076	60.00 +0.074/-0
MUSN-50x65x10	50.0	65.0	10.0	11.0 +0.3/-0	50.00 -0.025/-0.064	50.00 +0.062/-0	65.00 +0.120/-0	50.00 +0/-0.100	65.00 -0.030/-0.076	65.00 +0.074/-0
MUSN-53x63x6	53.0	63.0	6.0	7.0 +0.3/-0	53.00 -0.030/-0.076	53.00 +0.074/-0	63.00 +0.120/-0	53.00 +0/-0.120	63.00 -0.030/-0.076	63.00 +0.074/-0
MUSN-53x73x12	53.0	73.0	12.0	13.0 +0.3/-0	53.00 -0.030/-0.076	53.00 +0.074/-0	73.00 +0.120/-0	53.00 +0/-0.120	73.00 -0.030/-0.076	73.00 +0.074/-0
MUSN-55x65x6	55.0	65.0	6.0	7.0 +0.3/-0	55.00 -0.030/-0.076	55.00 +0.074/-0	65.00 +0.120/-0	55.00 +0/-0.120	65.00 -0.030/-0.076	65.00 +0.074/-0
MUSN-55x75x12	55.0	75.0	12.0	13.0 +0.3/-0	55.00 -0.030/-0.076	55.00 +0.074/-0	75.00 +0.120/-0	55.00 +0/-0.120	75.00 -0.030/-0.076	75.00 +0.074/-0
MUSN-56x66x6	56.0	66.0	6.0	7.0 +0.3/-0	56.00 -0.030/-0.076	56.00 +0.074/-0	66.00 +0.120/-0	56.00 +0/-0.120	66.00 -0.030/-0.076	66.00 +0.074/-0
MUSN-56x66x10	56.0	66.0	10.0	11.0 +0.3/-0	56.00 -0.030/-0.076	56.00 +0.074/-0	66.00 +0.120/-0	56.00 +0/-0.120	66.00 -0.030/-0.076	66.00 +0.074/-0
MUSN-56x76x12	56.0	76.0	12.0	13.0 +0.3/-0	56.00 -0.030/-0.076	56.00 +0.074/-0	76.00 +0.120/-0	56.00 +0/-0.120	76.00 -0.030/-0.076	76.00 +0.074/-0
MUSN-60x70x6	60.0	70.0	6.0	7.0 +0.3/-0	60.00 -0.030/-0.076	60.00 +0.074/-0	70.00 +0.120/-0	60.00 +0/-0.120	70.00 -0.030/-0.076	70.00 +0.074/-0
MUSN-60x71x7	60.0	71.0	7.0	8.0 +0.3/-0	60.00 -0.030/-0.076	60.00 +0.074/-0	71.00 +0.120/-0	60.00 +0/-0.120	71.00 -0.030/-0.076	71.00 +0.074/-0
MUSN-60x80x12	60.0	80.0	12.0	13.0 +0.3/-0	60.00 -0.030/-0.076	60.00 +0.074/-0	80.00 +0.120/-0	60.00 +0/-0.120	80.00 -0.030/-0.076	80.00 +0.074/-0
MUSN-63x73x6	63.0	73.0	6.0	7.0 +0.3/-0	63.00 -0.030/-0.076	63.00 +0.074/-0	73.00 +0.120/-0	63.00 +0/-0.120	73.00 -0.030/-0.076	73.00 +0.074/-0
MUSN-63x83x12	63.0	83.0	12.0	13.0 +0.3/-0	63.00 -0.030/-0.076	63.00 +0.074/-0	83.00 +0.140/-0	63.00 +0/-0.120	83.00 -0.036/-0.090	83.00 +0.087/-0
MUSN-64x80x12	64.0	80.0	12.0	13.0 +0.3/-0	64.00 -0.030/-0.076	64.00 +0.074/-0	80.00 +0.140/-0	64.00 +0/-0.120	80.00 -0.036/-0.090	80.00 +0.087/-0
MUSN-65x75x6	65.0	75.0	6.0	7.0 +0.3/-0	65.00 -0.030/-0.076	65.00 +0.074/-0	75.00 +0.120/-0	65.00 +0/-0.120	75.00 -0.030/-0.076	75.00 +0.074/-0
MUSN-65x85x12	65.0	85.0	12.0	13.0 +0.3/-0	65.00 -0.030/-0.076	65.00 +0.074/-0	85.00 +0.140/-0	65.00 +0/-0.120	85.00 -0.036/-0.090	85.00 +0.087/-0
MUSN-67x77x6	67.0	77.0	6.0	7.0 +0.3/-0	67.00 -0.030/-0.076	67.00 +0.074/-0	77.00 +0.120/-0	67.00 +0/-0.120	77.00 -0.030/-0.076	77.00 +0.074/-0
MUSN-67x87x12	67.0	87.0	12.0	13.0 +0.3/-0	67.00 -0.030/-0.076	67.00 +0.074/-0	87.00 +0.140/-0	67.00 +0/-0.120	87.00 -0.036/-0.090	87.00 +0.087/-0
MUSN-70x80x6	70.0	80.0	6.0	7.0 +0.3/-0	70.00 -0.030/-0.076	70.00 +0.074/-0	80.00 +0.120/-0	70.00 +0/-0.120	80.00 -0.030/-0.076	80.00 +0.074/-0
MUSN-70x90x12	70.0	90.0	12.0	13.0 +0.3/-0	70.00 -0.030/-0.076	70.00 +0.074/-0	90.00 +0.140/-0	70.00 +0/-0.120	90.00 -0.036/-0.090	90.00 +0.087/-0
MUSN-71x80x6	71.0	80.0	6.0	7.0 +0.3/-0	71.00 -0.030/-0.076	71.00 +0.074/-0	80.00 +0.120/-0	71.00 +0/-0.120	80.00 -0.030/-0.076	80.00 +0.074/-0
MUSN-71x91x12	71.0	91.0	12.0	13.0 +0.3/-0	71.00 -0.030/-0.076	71.00 +0.074/-0	91.00 +0.140/-0	71.00 +0/-0.120	91.00 -0.036/-0.090	91.00 +0.087/-0
MUSN-75x85x6	75.0	85.0	6.0	7.0 +0.3/-0	75.00 -0.030/-0.076	75.00 +0.074/-0	85.00 +0.140/-0	75.00 +0/-0.120	85.00 -0.036/-0.090	85.00 +0.087/-0
MUSN-75x95x12	75.0	95.0	12.0	13.0 +0.3/-0	75.00 -0.030/-0.076	75.00 +0.074/-0	95.00 +0.140/-0	75.00 +0/-0.120	95.00 -0.036/-0.090	95.00 +0.087/-0
MUSN-80x90x6	80.0	90.0	6.0	7.0 +0.3/-0	80.00 -0.030/-0.076	80.00 +0.074/-0	90.00 +0.140/-0	80.00 +0/-0.120	90.00 -0.036/-0.090	90.00 +0.087/-0
MUSN-80x100x12	80.0	100.0	12.0	13.0 +0.3/-0	80.00 -0.030/-0.076	80.00 +0.074/-0	100.00 +0.140/-0	80.00 +0/-0.120	100.00 -0.036/-0.090	100.00 +0.087/-0
MUSN-85x100x9	85.0	100.0	9.0	10.0 +0.3/-0	85.00 -0.036/-0.090	85.00 +0.087/-0	100.00 +0.140/-0	85.00 +0/-0.140	100.00 -0.036/-0.090	100.00 +0.087/-0
MUSN-85x105x12	85.0	105.0	12.0	13.0 +0.3/-0	85.00 -0.036/-0.090	85.00 +0.087/-0	105.00 +0.140/-0	85.00 +0/-0.140	105.00 -0.036/-0.090	105.00 +0.087/-0
MUSN-90x105x9	90.0	105.0	9.0	10.0 +0.3/-0	90.00 -0.036/-0.090	90.00 +0.087/-0	105.00 +0.140/-0	90.00 +0/-0.140	105.00 -0.036/-0.090	105.00 +0.087/-0
MUSN-90x110x12	90.0	110.0	12.0	13.0 +0.3/-0	90.00 -0.036/-0.090	90.00 +0.087/-0	110.00 +0.140/-0	90.00 +0/-0.140	110.00 -0.036/-0.090	110.00 +0.087/-0
MUSN-95x110x9	95.0	110.0	9.0	10.0 +0.3/-0	95.00 -0.036/-0.090	95.00 +0.087/-0	110.00 +0.140/-0	95.00 +0/-0.140	110.00 -0.036/-0.090	110.00 +0.087/-0
MUSN-95x115x12	95.0	115.0	12.0	13.0 +0.3/-0	95.00 -0.036/-0.090	95.00 +0.087/-0	115.00 +0.140/-0	95.00 +0/-0.140	115.00 -0.036/-0.090	115.00 +0.087/-0
MUSN-98x112x9	98.0	112.0	9.0	10.0 +0.3/-0	98.00 -0.036/-0.090	98.00 +0.087/-0	112.00 +0.140/-0	98.00 +0/-0.140	112.00 -0.036/-0.090	112.00 +0.087/-0
MUSN-100x115x9	100.0	115.0	9.0	10.0 +0.3/-0	100.00 -0.036/-0.090	100.00 +0.087/-0	115.00 +0.140/-0	100.00 +0/-0.140	115.00 -0.036/-0.090	115.00 +0.087/-0
MUSN-100x120x12	100.0	120.0	12.0	13.0 +0.3/-0	100.00 -0.036/-0.090	100.00 +0.087/-0	120.00 +0.140/-0	100.00 +0/-0.140	120.00 -0.036/-0.090	120.00 +0.087/-0
MUSN-105x125x15	105.0	125.0	15.0	16.0 +0.3/-0	105.00 -0.036/-0.090	105.00 +0.087/-0	125.00 +0.160/-0	105.00 +0/-0.140	125.00 -0.043/-0.106	125.00 +0.100/-0
MUSN-106x126x15	106.0	126.0	15.0	16.0 +0.3/-0	106.00 -0.036/-0.090	106.00 +0.087/-0	126.00 +0.160/-0	106.00 +0/-0.140	126.00 -0.043/-0.106	126.00 +0.100/-0
MUSN-110x130x15	110.0	130.0	15.0	16.0 +0.3/-0	110.00 -0.036/-0.090	110.00 +0.087/-0	130.00 +0.160/-0	110.00 +0/-0.140	130.00 -0.043/-0.106	130.00 +0.100/-0
MUSN-112x125x9	112.0	125.0	9.0	10.0 +0.3/-0	112.00 -0.036/-0.090	112.00 +0.087/-0	125.00 +0.160/-0	112.00 +0/-0.140	125.00 -0.043/-0.106	125.00 +0.100/-0
MUSN-112x132x15	112.0	132.0	15.0	16.0 +0.3/-0	112.00 -0.036/-0.090	112.00 +0.087/-0	132.00 +0.160/-0	112.00 +0/-0.140	132.00 -0.043/-0.106	132.00 +0.100/-0
MUSN-118x138x15	118.0	138.0	15.0	16.0 +0.3/-0	118.00 -0.036/-0.090	118.00 +0.087/-0	138.00 +0.160/-0	118.00 +0/-0.140	138.00 -0.043/-0.106	138.00 +0.100/-0
MUSN-120x140x15	120.0	140.0	15.0	16.0 +0.3/-0	120.00 -0.036/-0.090	120.00 +0.087/-0	140.00 +0.160/-0	120.00 +0/-0.140	140.00 -0.043/-0.106	140.00 +0.100/-0
MUSN-125x140x9	125.0	140.0	9.0	10.0 +0.3/-0	125.00 -0.043/-0.106	125.00 +0.087/-0	140.00 +0.160/-0	125.00 +0/-0.160	140.00 -0.043/-0.106	140.00 +0.100/-0
MUSN-125x145x15	125.0	145.0	15.0	16.0 +0.3/-0	125.00 -0.043/-0.106	125.00 +0.087/-0	145.00 +0.160/-0	125.00 +0/-0.160	145.00 -0.043/-0.106	145.00 +0.100/-0
MUSN-130x150x15	130.0	150.0	15.0	16.0 +0.3/-0	130.00 -0.043/-0.106	130.00 +0.087/-0	150.00 +0.160/-0	130.00 +0/-0.160	150.00 -0.043/-0.106	150.00 +0.100/-0
MUSN-136x150x9	136.0	150.0	9.0	10.0 +0.3/-0	136.00 -0.043/-0.106	136.00 +0.087/-0	150.00 +0.160/-0	136.00 +0/-0.160	150.00 -0.043/-0.106	150.00 +0.100/-0
MUSN-140x160x15	140.0	160.0	15.0	16.0 +0.3/-0	140.00 -0.043/-0.106	140.00 +0.087/-0	160.00 +0.160/-0	140.00 +0/-0.160	160.00 -0.043/-0.106	160.00 +0.100/-0
MUSN-145x160x9	145.0	160.0	9.0	10.0 +0.3/-0	145.00 -0.043/-0.106	145.00 +0.087/-0	160.00 +0.160/-0	145.00 +0/-0.160	160.00 -0.043/-0.106	160.00 +0.100/-0
MUSN-150x165x9	150.0	165.0	9.0	10.0 +0.3/-0	150.00 -0.043/-0.106	150.00 +0.087/-0	165.00 +0.160/-0	150.00 +0/-0.160	165.00 -0.043/-0.106	165.00 +0.100/-0
MUSN-150x170x15	150.0	170.0	15.0	16.0 +0.3/-0	150.00 -0.043/-0.106	150.00 +0.087/-0	170.00 +0.160/-0	150.00 +0/-0.160	170.00 -0.043/-0.106	170.00 +0.100/-0
MUSN-160x175x9	160.0	175.0	9.0	10.0 +0.3/-0	160.00 -0.043/-0.106	160.00 +0.100/-0	175.00 +0.160/-0	160.00 +0/-0.160	175.00 -0.043/-0.106	175.00 +0.100/-0
MUSN-165x180x9	165.0	180.0	9.0	10.0 +0.3/-0	165.00 -0.043/-0.106	165.00 +0.100/-0	180.00 +0.160/-0	165.00 +0/-0.160	180.00 -0.043/-0.106	180.00 +0.100/-0
MUSN-180x200x12	180.0	200.0	12.0	13.0 +0.3/-0	180.00 -0.043/-0.106	180.00 +0.100/-0	200.00 +0.185/-0	180.00 +0/-0.160	200.00 -0.043/-0.106	200.00 +0.115/-0
MUSN-200x220x12	200.0	220.0	12.0	13.0 +0.3/-0	200.00 -0.050/-0.122	200.00 +0.115/-0	220.00 +0.185/-0	200.00 +0/-0.185	220.00 -0.043/-0.106	220.00 +0.115/-0
MUSN-204x224x12	204.0	224.0	12.0	13.0 +0.3/-0	204.00 -0.050/-0.122	204.00 +0.115/-0	224.00 +0.185/-0	204.00 +0/-0.185	224.00 -0.043/-0.106	224.00 +0.115/-0
MUSN-230x250x12	230.0	250.0	12.0	13.0 +0.3/-0	230.00 -0.050/-0.122	230.00 +0.115/-0	250.00 +0.185/-0	230.00 +0/-0.185	250.00 -0.043/-0.106	250.00 +0.115/-0

# STYLE MUU SYMMETRICAL U-SEALS

All measurements on this page are in millimeters unless otherwise specified.



### HERCULES PART NUMBERS

**MUU - 7.1 x 17.1 x 8**

Style Prefix    I.D.    O.D.    Height

SEAL INFORMATION	
MATERIAL	94A URETHANE
TEMPERATURE RANGE	-30° TO +212°F
MAXIMUM PRESSURE	5,000 PSI
MAXIMUM VELOCITY	1 M/S

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
MUU-7.1x17.1x8	7.1	17.1	8.0	9.00 +0.3/-0	7.10 -0.013/-0.035	7.10 +0.036/-0	17.10 +0.070/-0	7.10 +0/-0.058	16.10 -0.016/-0.043	17.10 +0.043/-0
MUU-8x18x8	8.0	18.0	8.0	9.00 +0.3/-0	8.00 -0.013/-0.035	8.00 +0.036/-0	18.00 +0.070/-0	8.00 +0/-0.058	17.00 -0.016/-0.043	18.00 +0.043/-0
MUU-11.2x19.2x5	11.2	19.2	5.0	6.00 +0.3/-0	11.20 -0.016/-0.043	11.20 +0.043/-0	19.20 +0.084/-0	11.20 +0/-0.070	18.20 -0.020/-0.053	19.20 +0.052/-0
MUU-11.2x21.2x8	11.2	21.2	8.0	9.00 +0.3/-0	11.20 -0.016/-0.043	11.20 +0.043/-0	21.20 +0.084/-0	11.20 +0/-0.070	20.20 -0.020/-0.053	21.20 +0.052/-0
MUU-14x22x5	14.0	22.0	5.0	6.00 +0.3/-0	14.00 -0.016/-0.043	14.00 +0.043/-0	22.00 +0.084/-0	14.00 +0/-0.070	21.00 -0.020/-0.053	22.00 +0.052/-0
MUU-16x24x5	16.0	24.0	5.0	6.00 +0.3/-0	16.00 -0.016/-0.043	16.00 +0.043/-0	24.00 +0.084/-0	16.00 +0/-0.070	23.00 -0.020/-0.053	24.00 +0.052/-0
MUU-18x26x5	18.0	26.0	5.0	6.00 +0.3/-0	18.00 -0.016/-0.043	18.00 +0.043/-0	26.00 +0.084/-0	18.00 +0/-0.070	25.00 -0.020/-0.053	26.00 +0.052/-0
MUU-18x26x6	18.0	26.0	6.0	7.00 +0.3/-0	18.00 -0.016/-0.043	18.00 +0.043/-0	26.00 +0.084/-0	18.00 +0/-0.070	25.00 -0.020/-0.053	26.00 +0.052/-0
MUU-18x28x8	18.0	28.0	8.0	9.00 +0.3/-0	18.00 -0.016/-0.043	18.00 +0.043/-0	28.00 +0.084/-0	18.00 +0/-0.070	27.00 -0.020/-0.053	28.00 +0.052/-0
MUU-18x34x8	18.0	34.0	8.0	9.00 +0.3/-0	18.00 -0.016/-0.043	18.00 +0.043/-0	34.00 +0.100/-0	18.00 +0/-0.070	33.00 -0.025/-0.064	34.00 +0.062/-0
MUU-20x28x5	20.0	28.0	5.0	6.00 +0.3/-0	20.00 -0.020/-0.053	20.00 +0.052/-0	28.00 +0.084/-0	20.00 +0/-0.084	27.00 -0.020/-0.053	28.00 +0.052/-0
MUU-20x40x12	20.0	40.0	12.0	13.00 +0.3/-0	20.00 -0.020/-0.053	20.00 +0.052/-0	40.00 +0.084/-0	20.00 +0/-0.084	40.00 -0.020/-0.053	40.00 +0.052/-0
MUU-22x30x7	22.0	30.0	7.0	8.00 +0.3/-0	22.00 -0.020/-0.053	22.00 +0.052/-0	30.00 +0.084/-0	22.00 +0/-0.084	30.00 -0.020/-0.053	30.00 +0.052/-0
MUU-22x40x10	22.0	40.0	10.0	11.00 +0.3/-0	22.00 -0.020/-0.053	22.00 +0.052/-0	40.00 +0.100/-0	22.00 +0/-0.084	39.00 -0.025/-0.064	40.00 +0.062/-0
MUU-22.4x30x5	22.4	30.0	5.0	6.00 +0.3/-0	22.40 -0.020/-0.053	22.40 +0.052/-0	30.00 +0.084/-0	22.40 +0/-0.084	29.00 -0.020/-0.053	30.00 +0.052/-0
MUU-23.5x31.5x5	23.5	31.5	5.0	6.00 +0.3/-0	23.50 -0.020/-0.053	23.50 +0.052/-0	31.50 +0.100/-0	23.50 +0/-0.084	30.50 -0.025/-0.064	31.50 +0.062/-0
MUU-25x33x5	25.0	33.0	5.0	6.00 +0.3/-0	25.00 -0.020/-0.053	25.00 +0.052/-0	33.00 +0.100/-0	25.00 +0/-0.084	32.00 -0.025/-0.064	33.00 +0.062/-0
MUU-25x35x6	25.0	35.0	6.0	7.00 +0.3/-0	25.00 -0.020/-0.053	25.00 +0.052/-0	35.00 +0.100/-0	25.00 +0/-0.084	34.00 -0.025/-0.064	35.00 +0.062/-0
MUU-25x40x10	25.0	40.0	10.0	11.00 +0.3/-0	25.00 -0.020/-0.053	25.00 +0.052/-0	40.00 +0.100/-0	25.00 +0/-0.084	39.00 -0.025/-0.064	40.00 +0.062/-0
MUU-25x45x10	25.0	45.0	10.0	11.00 +0.3/-0	25.00 -0.020/-0.053	25.00 +0.052/-0	45.00 +0.100/-0	25.00 +0/-0.084	44.00 -0.025/-0.064	45.00 +0.062/-0
MUU-28x35.5x5	28.0	35.5	5.0	6.00 +0.3/-0	28.00 -0.020/-0.053	28.00 +0.052/-0	35.50 +0.100/-0	28.00 +0/-0.084	34.50 -0.025/-0.064	35.50 +0.062/-0
MUU-30x38x5	30.0	38.0	5.0	6.00 +0.3/-0	30.00 -0.020/-0.053	30.00 +0.052/-0	38.00 +0.100/-0	30.00 +0/-0.084	37.00 -0.025/-0.064	38.00 +0.062/-0
MUU-30x40x6	30.0	40.0	6.0	7.00 +0.3/-0	30.00 -0.020/-0.053	30.00 +0.052/-0	40.00 +0.100/-0	30.00 +0/-0.084	39.00 -0.025/-0.064	40.00 +0.062/-0
MUU-30x40x7	30.0	40.0	7.0	8.00 +0.3/-0	30.00 -0.020/-0.053	30.00 +0.052/-0	40.00 +0.100/-0	30.00 +0/-0.084	39.00 -0.025/-0.064	40.00 +0.062/-0
MUU-30x42x6	30.0	42.0	6.0	7.00 +0.3/-0	30.00 -0.020/-0.053	30.00 +0.052/-0	42.00 +0.100/-0	30.00 +0/-0.084	41.00 -0.025/-0.064	42.00 +0.062/-0



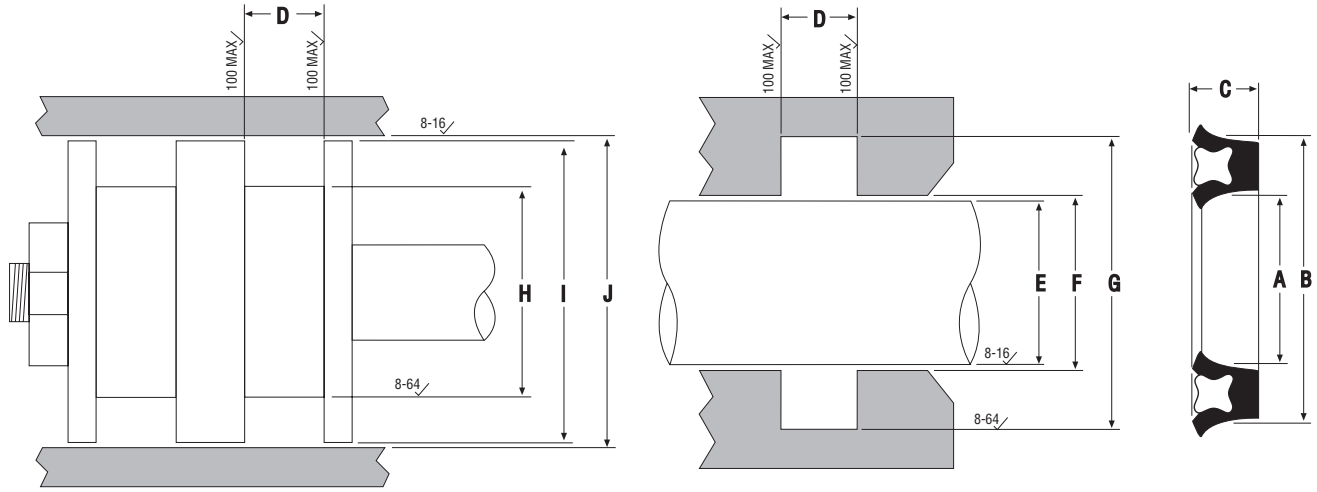
# STYLE MUU SYMMETRICAL U-SEALS

All measurements on this page are in millimeters unless otherwise specified.

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
MUU-30x42x9	30.0	42.0	9.0	10.00 +0.3/-0	30.00 -0.020/-0.053	30.00 +0.052/-0	42.00 +0.100/-0	30.00 +0/-0.084	41.00 -0.025/-0.064	42.00 +0.062/-0
MUU-30x42x10	30.0	42.0	10.0	11.00 +0.3/-0	30.00 -0.020/-0.053	30.00 +0.052/-0	42.00 +0.100/-0	30.00 +0/-0.084	41.00 -0.025/-0.064	42.00 +0.062/-0
MUU-30x45x10	30.0	45.0	10.0	11.00 +0.3/-0	30.00 -0.020/-0.053	30.00 +0.052/-0	45.00 +0.100/-0	30.00 +0/-0.084	45.00 -0.025/-0.064	45.00 +0.062/-0
MUU-31.5x41.5x6	31.5	41.5	6.0	7.00 +0.3/-0	31.50 -0.025/-0.064	31.50 +0.062/-0	41.50 +0.100/-0	31.50 +0/-0.100	40.50 -0.025/-0.064	41.50 +0.062/-0
MUU-31.5x46.5x10	31.5	46.5	10.0	11.00 +0.3/-0	31.50 -0.025/-0.064	31.50 +0.062/-0	46.50 +0.100/-0	31.50 +0/-0.100	45.50 -0.025/-0.064	46.50 +0.062/-0
MUU-32x42x5.6	32.0	42.0	5.6	6.60 +0.3/-0	32.00 -0.025/-0.064	32.00 +0.062/-0	42.00 +0.100/-0	32.00 +0/-0.100	41.00 -0.025/-0.064	42.00 +0.062/-0
MUU-32x42x10	32.0	42.0	10.0	11.00 +0.3/-0	32.00 -0.025/-0.064	32.00 +0.062/-0	42.00 +0.100/-0	32.00 +0/-0.100	41.00 -0.025/-0.064	42.00 +0.062/-0
MUU-32x46x10	32.0	46.0	10.0	11.00 +0.3/-0	32.00 -0.025/-0.064	32.00 +0.062/-0	46.00 +0.100/-0	32.00 +0/-0.100	45.00 -0.025/-0.064	46.00 +0.062/-0
MUU-33x43x10	33.0	43.0	10.0	11.00 +0.3/-0	33.00 -0.025/-0.064	33.00 +0.062/-0	43.00 +0.100/-0	33.00 +0/-0.100	42.00 -0.025/-0.064	43.00 +0.062/-0
MUU-35x45x6	35.0	45.0	6.0	7.00 +0.3/-0	35.00 -0.025/-0.064	35.00 +0.062/-0	45.00 +0.100/-0	35.00 +0/-0.100	44.00 -0.025/-0.064	45.00 +0.062/-0
MUU-35x45x7	35.0	45.0	7.0	8.00 +0.3/-0	35.00 -0.025/-0.064	35.00 +0.062/-0	45.00 +0.100/-0	35.00 +0/-0.100	44.00 -0.025/-0.064	45.00 +0.062/-0
MUU-35x45x10	35.0	45.0	10.0	11.00 +0.3/-0	35.00 -0.025/-0.064	35.00 +0.062/-0	45.00 +0.100/-0	35.00 +0/-0.100	45.00 -0.025/-0.064	45.00 +0.062/-0
MUU-35.5x45x6	35.5	45.0	6.0	7.00 +0.3/-0	35.50 -0.025/-0.064	35.50 +0.062/-0	45.00 +0.100/-0	35.50 +0/-0.100	44.00 -0.025/-0.064	45.00 +0.062/-0
MUU-38x48x6	38.0	48.0	6.0	7.00 +0.3/-0	38.00 -0.025/-0.064	38.00 +0.062/-0	48.00 +0.100/-0	38.00 +0/-0.100	47.00 -0.025/-0.064	48.00 +0.062/-0
MUU-40x48x8	40.0	48.0	8.0	9.00 +0.3/-0	40.00 -0.025/-0.064	40.00 +0.062/-0	48.00 +0.100/-0	40.00 +0/-0.100	47.00 -0.025/-0.064	48.00 +0.062/-0
MUU-40x50x6	40.0	50.0	6.0	7.00 +0.3/-0	40.00 -0.025/-0.064	40.00 +0.062/-0	50.00 +0.100/-0	40.00 +0/-0.100	49.00 -0.025/-0.064	50.00 +0.062/-0
MUU-40x53x9	40.0	53.0	9.0	10.00 +0.3/-0	40.00 -0.025/-0.064	40.00 +0.062/-0	53.00 +0.120/-0	40.00 +0/-0.100	53.00 -0.030/-0.076	53.00 +0.074/-0
MUU-40x55x10	40.0	55.0	10.0	11.00 +0.3/-0	40.00 -0.025/-0.064	40.00 +0.062/-0	55.00 +0.120/-0	40.00 +0/-0.100	54.00 -0.030/-0.076	55.00 +0.074/-0
MUU-40x60x12	40.0	60.0	12.0	13.00 +0.3/-0	40.00 -0.025/-0.064	40.00 +0.062/-0	60.00 +0.120/-0	40.00 +0/-0.100	59.00 -0.030/-0.076	60.00 +0.074/-0
MUU-45x55x6	45.0	55.0	6.0	7.00 +0.3/-0	45.00 -0.025/-0.064	45.00 +0.062/-0	55.00 +0.120/-0	45.00 +0/-0.100	54.00 -0.030/-0.076	55.00 +0.074/-0
MUU-45x56x7	45.0	56.0	7.0	8.00 +0.3/-0	45.00 -0.025/-0.064	45.00 +0.062/-0	56.00 +0.120/-0	45.00 +0/-0.100	55.00 -0.030/-0.076	56.00 +0.074/-0
MUU-48x63x10	48.0	63.0	10.0	11.00 +0.3/-0	48.00 -0.025/-0.064	48.00 +0.062/-0	63.00 +0.120/-0	48.00 +0/-0.100	62.00 -0.030/-0.076	63.00 +0.074/-0
MUU-50x60x6	50.0	60.0	6.0	7.00 +0.3/-0	50.00 -0.025/-0.064	50.00 +0.062/-0	60.00 +0.120/-0	50.00 +0/-0.100	59.00 -0.030/-0.076	60.00 +0.074/-0
MUU-50x65x10	50.0	65.0	10.0	11.00 +0.3/-0	50.00 -0.025/-0.064	50.00 +0.062/-0	65.00 +0.120/-0	50.00 +0/-0.100	64.00 -0.030/-0.076	65.00 +0.074/-0
MUU-50x65x11	50.0	65.0	11.0	12.00 +0.3/-0	50.00 -0.025/-0.064	50.00 +0.062/-0	65.00 +0.120/-0	50.00 +0/-0.100	64.00 -0.030/-0.076	65.00 +0.074/-0
MUU-53x63x6	53.0	63.0	6.0	7.00 +0.3/-0	53.00 -0.030/-0.076	53.00 +0.074/-0	63.00 +0.120/-0	53.00 +0/-0.120	62.00 -0.030/-0.076	63.00 +0.074/-0
MUU-53x73x12	53.0	73.0	12.0	13.00 +0.3/-0	53.00 -0.030/-0.076	53.00 +0.074/-0	73.00 +0.120/-0	53.00 +0/-0.120	72.00 -0.030/-0.076	73.00 +0.074/-0
MUU-55x65x6	55.0	65.0	6.0	7.00 +0.3/-0	55.00 -0.030/-0.076	55.00 +0.074/-0	65.00 +0.120/-0	55.00 +0/-0.120	64.00 -0.030/-0.076	65.00 +0.074/-0
MUU-56x66x6	56.0	66.0	6.0	7.00 +0.3/-0	56.00 -0.030/-0.076	56.00 +0.074/-0	66.00 +0.120/-0	56.00 +0/-0.120	65.00 -0.030/-0.076	66.00 +0.074/-0
MUU-56x76x12	56.0	76.0	12.0	13.00 +0.3/-0	56.00 -0.030/-0.076	56.00 +0.074/-0	76.00 +0.120/-0	56.00 +0/-0.120	75.00 -0.030/-0.076	76.00 +0.074/-0
MUU-58x68x6	58.0	68.0	6.0	7.00 +0.3/-0	58.00 -0.030/-0.076	58.00 +0.074/-0	68.00 +0.120/-0	58.00 +0/-0.120	67.00 -0.030/-0.076	68.00 +0.074/-0
MUU-60x70x6	60.0	70.0	6.0	7.00 +0.3/-0	60.00 -0.030/-0.076	60.00 +0.074/-0	70.00 +0.120/-0	60.00 +0/-0.120	69.00 -0.030/-0.076	70.00 +0.074/-0
MUU-63x73x6	63.0	73.0	6.0	7.00 +0.3/-0	63.00 -0.030/-0.076	63.00 +0.074/-0	73.00 +0.120/-0	63.00 +0/-0.120	72.00 -0.030/-0.076	73.00 +0.074/-0
MUU-63x78x11	63.0	78.0	11.0	12.00 +0.3/-0	63.00 -0.030/-0.076	63.00 +0.074/-0	78.00 +0.120/-0	63.00 +0/-0.120	77.00 -0.030/-0.076	78.00 +0.074/-0
MUU-65x75x6	65.0	75.0	6.0	7.00 +0.3/-0	65.00 -0.030/-0.076	65.00 +0.074/-0	75.00 +0.120/-0	65.00 +0/-0.120	74.00 -0.030/-0.076	75.00 +0.074/-0
MUU-67x77x6	67.0	77.0	6.0	7.00 +0.3/-0	67.00 -0.030/-0.076	67.00 +0.074/-0	77.00 +0.120/-0	67.00 +0/-0.120	76.00 -0.030/-0.076	77.00 +0.074/-0
MUU-67x87x12	67.0	87.0	12.0	13.00 +0.3/-0	67.00 -0.030/-0.076	67.00 +0.074/-0	87.00 +0.120/-0	67.00 +0/-0.120	86.00 -0.036/-0.090	87.00 +0.087/-0
MUU-70x80x6	70.0	80.0	6.0	7.00 +0.3/-0	70.00 -0.030/-0.076	70.00 +0.074/-0	80.00 +0.120/-0	70.00 +0/-0.120	79.00 -0.030/-0.076	80.00 +0.074/-0
MUU-70x85x8.4	70.0	85.0	8.4	9.40 +0.3/0	70.00 -0.030/-0.076	70.00 +0.074/-0	85.00 +0.140/-0	70.00 +0/-0.120	85.00 -0.036/-0.090	85.00 +0.087/-0
MUU-71x80x6	71.0	80.0	6.0	7.00 +0.3/-0	71.00 -0.030/-0.076	71.00 +0.074/-0	80.00 +0.120/-0	71.00 +0/-0.120	79.00 -0.030/-0.076	80.00 +0.074/-0
MUU-75x85x6	75.0	85.0	6.0	7.00 +0.3/-0	75.00 -0.030/-0.076	75.00 +0.074/-0	85.00 +0.140/-0	75.00 +0/-0.120	84.00 -0.036/-0.090	85.00 +0.087/-0
MUU-80x90x6	80.0	90.0	6.0	7.00 +0.3/-0	80.00 -0.030/-0.076	80.00 +0.074/-0	90.00 +0.140/-0	80.00 +0/-0.120	89.00 -0.036/-0.090	90.00 +0.087/-0
MUU-80x90x12	80.0	90.0	12.0	13.00 +0.3/-0	80.00 -0.030/-0.076	80.00 +0.074/-0	90.00 +0.140/-0	80.00 +0/-0.120	89.00 -0.036/-0.090	90.00 +0.087/-0
MUU-80x95x8.4	80.0	95.0	8.4	9.4 +0.3/0	80.00 -0.030/-0.076	80.00 +0.074/-0	95.00 +0.140/-0	80.00 +0/-0.120	95.00 -0.036/-0.090	95.00 +0.087/-0
MUU-84x104x12	84.0	104.0	12.0	13.00 +0.3/-0	84.00 -0.036/-0.090	84.00 +0.087/-0	104.00 +0.140/-0	84.00 +0/-0.140	103.00 -0.036/-0.090	104.00 +0.087/-0
MUU-85x95x8.4	85.0	95.0	8.4	9.40 +0.3/-0	85.00 -0.036/-0.090	85.00 +0.087/-0	95.00 +0.140/-0	85.00 +0/-0.140	95.00 -0.036/-0.090	95.00 +0.087/-0
MUU-85x100x9	85.0	100.0	9.0	10.00 +0.3/-0	85.00 -0.036/-0.090	85.00 +0.087/-0	100.00 +0.140/-0	85.00 +0/-0.140	99.00 -0.036/-0.090	100.00 +0.087/-0
MUU-90x100x12	90.0	100.0	12.0	13.00 +0.3/-0	90.00 -0.036/-0.090	90.00 +0.087/-0	100.00 +0.140/-0	90.00 +0/-0.140	99.00 -0.036/-0.090	100.00 +0.087/-0
MUU-90x105x9	90.0	105.0	9.0	10.00 +0.3/-0	90.00 -0.036/-0.090	90.00 +0.087/-0	105.00 +0.140/-0	90.00 +0/-0.140	104.00 -0.036/-0.090	105.00 +0.087/-0
MUU-95x110x9	95.0	110.0	9.0	10.00 +0.3/-0	95.00 -0.036/-0.090	95.00 +0.087/-0	110.00 +0.140/-0	95.00 +0/-0.140	109.00 -0.036/-0.090	110.00 +0.087/-0
MUU-98x112x9	98.0	112.0	9.0	10.00 +0.3/-0	98.00 -0.036/-0.090	98.00 +0.087/-0	112.00 +0.140/-0	98.00 +0/-0.140	111.00 -0.036/-0.090	112.00 +0.087/-0
MUU-100x115x9	100.0	115.0	9.0	10.00 +0.3/-0	100.00 -0.036/-0.090	100.00 +0.087/-0	115.00 +0.140/-0	100.00 +0/-0.140	114.00 -0.036/-0.090	115.00 +0.087/-0
MUU-100x120x11	100.0	120.0	11.0	12.00 +0.3/-0	100.00 -0.036/-0.090	100.00 +0.087/-0	120.00 +0.140/-0	100.00 +0/-0.140	119.00 -0.036/-0.090	120.00 +0.087/-0
MUU-112x125x9	112.0	125.0	9.0	10.00 +0.3/-0	112.00 -0.036/-0.090	112.00 +0.087/-0	125.00 +0.160/-0	112.00 +0/-0.140	125.00 -0.043/-0.106	125.00 +0.100/-0
MUU-120x140x15	120.0	140.0	15.0	16.00 +0.3/-0	120.00 -0.036/-0.090	120.00 +0.087/-0	140.00 +0.160/-0	120.00 +0/-0.140	140.00 -0.043/-0.106	140.00 +0.100/-0
MUU-136x150x9	136.0	150.0	9.0	10.00 +0.3/-0	136.00 -0.043/-0.106	136.00 +0.100/-0	150.00 +0.160/-0	136.00 +0/-0.160	150.00 -0.043/-0.106	150.00 +0.100/-0
MUU-140x155x9	140.0	155.0	9.0	10.00 +0.3/-0	140.00 -0.043/-0.106	140.00 +0.100/-0	155.00 +0.160/-0	140.00 +0/-0.160	155.00 -0.043/-0.106	155.00 +0.100/-0
MUU-145x160x9	145.0	160.0	9.0	10.00 +0.3/-0	145.00 -0.043/-0.106	145.00 +0.100/-0	160.00 +0.160/-0	145.00 +0/-0.160	160.00 -0.043/-0.106	160.00 +0.100/-0
MUU-225x250x18	225.0	250.0	18.0	20.00 +0.3/-0	225.00 -0.050/-0.122	225.00 +0.115/-0	250.00 +0.185/-0	225.00 +0/-0.185	249.00 -0.050/-0.122	250.00 +0.115/-0

# STYLE MUUL LOADED SYMMETRICAL U-SEALS

All measurements on this page are in millimeters unless otherwise specified.



## HERCULES PART NUMBERS

**MUUL - 9 x 19 x 8**

Style Prefix    I.D.    O.D.    Height

SEAL INFORMATION	
MATERIAL	95A URETHANE
TEMPERATURE RANGE	-70° TO +212° F
MAXIMUM PRESSURE	5,000 PSI
MAXIMUM VELOCITY	0.5 M/S

PART NUMBER	A NOM. ID.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
MUUL-9x19x8	9.0	19.0	8.0	9.0 +0.25/-0	9.00 -0.13/-0.35	9.00 +0.022/-0	19.00 +0.033/-0	9.00 +0/-0.022	19.00 -0.020/-0.053	19.00 +0.033/-0
MUUL-10x20x8	10.0	20.0	8.0	9.0 +0.25/-0	10.00 -0.13/-0.35	10.00 +0.022/-0	20.00 +0.033/-0	10.00 +0/-0.022	20.00 -0.020/-0.053	20.00 +0.033/-0
MUUL-12x22x7.7	12.0	22.0	7.7	8.7 +0.25/-0	12.00 -0.16/-0.43	12.00 +0.027/-0	22.00 +0.033/-0	12.00 +0/-0.027	22.00 -0.020/-0.053	22.00 +0.033/-0
MUUL-12.5x22.5x8	12.5	22.5	8.0	9.0 +0.25/-0	12.50 -0.16/-0.43	12.50 +0.027/-0	22.50 +0.033/-0	12.50 +0/-0.027	22.50 -0.020/-0.053	22.50 +0.033/-0
MUUL-14x22x5	14.0	22.0	5.0	6.0 +0.25/-0	14.00 -0.16/-0.43	14.00 +0.027/-0	22.00 +0.033/-0	22.00 +0/-0.027	14.00 -0.020/-0.053	22.00 +0.033/-0
MUUL-14x24x8	14.0	24.0	8.0	9.0 +0.25/-0	14.00 -0.16/-0.43	14.00 +0.027/-0	24.00 +0.033/-0	14.00 +0/-0.027	24.00 -0.020/-0.053	24.00 +0.033/-0
MUUL-15x25x8	15.0	25.0	8.0	9.0 +0.25/-0	15.00 -0.16/-0.43	15.00 +0.027/-0	25.00 +0.033/-0	15.00 +0/-0.027	25.00 -0.020/-0.053	25.00 +0.033/-0
MUUL-16x24x5	16.0	24.0	5.0	5.5 +0.25/-0	16.00 -0.16/-0.43	16.00 +0.027/-0	24.00 +0.033/-0	16.00 +0/-0.027	24.00 -0.020/-0.053	24.00 +0.033/-0
MUUL-16x26x8	16.0	26.0	8.0	9.0 +0.25/-0	16.00 -0.16/-0.43	16.00 +0.027/-0	26.00 +0.033/-0	16.00 +0/-0.027	26.00 -0.020/-0.053	26.00 +0.033/-0
MUUL-18x26x5	18.0	26.0	5.0	6.0 +0.25/-0	18.00 -0.16/-0.43	18.00 +0.027/-0	26.00 +0.033/-0	18.00 +0/-0.027	26.00 -0.020/-0.053	26.00 +0.033/-0
MUUL-18x28x8	18.0	28.0	8.0	9.0 +0.25/-0	18.00 -0.16/-0.43	18.00 +0.027/-0	28.00 +0.033/-0	18.00 +0/-0.027	28.00 -0.020/-0.053	28.00 +0.033/-0
MUUL-20x26x5	20.0	26.0	5.0	5.5 +0.25/-0	20.00 -0.20/-0.53	20.00 +0.033/-0	26.00 +0.033/-0	20.00 +0/-0.033	26.00 -0.020/-0.053	26.00 +0.033/-0
MUUL-20x28x5	20.0	28.0	5.0	6.0 +0.25/-0	20.00 -0.20/-0.53	20.00 +0.033/-0	28.00 +0.033/-0	20.00 +0/-0.033	28.00 -0.020/-0.053	28.00 +0.033/-0
MUUL-20x30x8	20.0	30.0	8.0	9.0 +0.25/-0	20.00 -0.20/-0.53	20.00 +0.033/-0	30.00 +0.033/-0	20.00 +0/-0.033	30.00 -0.020/-0.053	30.00 +0.033/-0
MUUL-20x35x10	20.0	35.0	10.0	11.0 +0.25/-0	20.00 -0.20/-0.53	20.00 +0.033/-0	35.00 +0.039/-0	20.00 +0/-0.033	35.00 -0.025/-0.064	35.00 +0.039/-0
MUUL-20x40x12	20.0	40.0	12.0	13.0 +0.25/-0	20.00 -0.20/-0.53	20.00 +0.033/-0	40.00 +0.039/-0	20.00 +0/-0.033	40.00 -0.025/-0.064	40.00 +0.039/-0
MUUL-22x30x5.7	22.0	30.0	5.7	6.7 +0.25/-0	22.00 -0.20/-0.53	22.00 +0.033/-0	30.00 +0.033/-0	22.00 +0/-0.033	30.00 -0.025/-0.064	30.00 +0.033/-0
MUUL-22x35x8	22.0	35.0	8.0	9.0 +0.25/-0	22.00 -0.20/-0.53	22.00 +0.033/-0	35.00 +0.039/-0	22.00 +0/-0.033	35.00 -0.025/-0.064	35.00 +0.039/-0
MUUL-22x35x10	22.0	35.0	10.0	11.0 +0.25/-0	22.00 -0.20/-0.53	22.00 +0.033/-0	35.00 +0.039/-0	22.00 +0/-0.033	35.00 -0.025/-0.064	35.00 +0.039/-0
MUUL-22x40x12	22.0	40.0	12.0	13.0 +0.25/-0	22.00 -0.20/-0.53	22.00 +0.033/-0	40.00 +0.039/-0	22.00 +0/-0.033	40.00 -0.025/-0.064	40.00 +0.039/-0
MUUL-22.4x32.4x8	22.4	32.4	8.0	9.0 +0.25/-0	22.40 -0.20/-0.53	22.40 +0.033/-0	32.40 +0.039/-0	22.40 +0/-0.033	32.40 -0.025/-0.064	32.40 +0.039/-0
MUUL-25x33x5	25.0	33.0	5.0	6.0 +0.25/-0	25.00 -0.20/-0.53	25.00 +0.033/-0	33.00 +0.033/-0	25.00 +0/-0.033	33.00 -0.025/-0.064	33.00 +0.039/-0
MUUL-25x33x8	25.0	33.0	8.0	9.0 +0.25/-0	25.00 -0.20/-0.53	25.00 +0.033/-0	33.00 +0.039/-0	25.00 +0/-0.033	33.00 -0.025/-0.064	33.00 +0.039/-0
MUUL-25x35x8	25.0	35.0	8.0	9.0 +0.25/-0	25.00 -0.20/-0.53	25.00 +0.033/-0	35.00 +0.039/-0	25.00 +0/-0.033	35.00 -0.025/-0.064	35.00 +0.039/-0
MUUL-25x35x10	25.0	35.0	10.0	11.0 +0.25/-0	25.00 -0.20/-0.53	25.00 +0.033/-0	35.00 +0.039/-0	25.00 +0/-0.033	35.00 -0.025/-0.064	35.00 +0.039/-0
MUUL-28x35.5x5	28.0	35.5	5.0	6.0 +0.25/-0	28.00 -0.20/-0.53	28.00 +0.033/-0	35.50 +0.033/-0	28.00 +0/-0.033	35.50 -0.025/-0.064	35.50 +0.039/-0
MUUL-28x38x8	28.0	38.0	8.0	9.0 +0.25/-0	28.00 -0.20/-0.53	28.00 +0.033/-0	38.00 +0.033/-0	28.00 +0/-0.033	38.00 -0.025/-0.064	38.00 +0.039/-0
MUUL-28x40x10	28.0	40.0	10.0	11.0 +0.25/-0	28.00 -0.20/-0.53	28.00 +0.033/-0	40.00 +0.039/-0	28.00 +0/-0.033	40.00 -0.025/-0.064	40.00 +0.039/-0

# STYLE MUUL LOADED SYMMETRICAL U-SEALS

All measurements on this page are in millimeters unless otherwise specified.

PART NUMBER	A NOM. ID.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
MUUL-28x43x10	28.0	43.0	10.0	11.0 +0.25/-0	28.00 -0.20/-0.53	28.00 +0.033/-0	43.00 +0.039/-0	28.00 +0/-0.033	43.00 -0.025/-0.064	43.00 +0.039/-0
MUUL-30x40x6	30.0	40.0	6.0	7.0 +0.25/-0	30.00 -0.20/-0.53	30.00 +0.033/-0	40.00 +0.039/-0	30.00 +0/-0.033	40.00 -0.025/-0.064	40.00 +0.039/-0
MUUL-30x40x10	30.0	40.0	10.0	11.0 +0.25/-0	30.00 -0.20/-0.53	30.00 +0.033/-0	40.00 +0.039/-0	30.00 +0/-0.033	40.00 -0.025/-0.064	40.00 +0.039/-0
MUUL-30x42x9	30.0	42.0	9.0	10.0 +0.25/-0	30.00 -0.20/-0.53	30.00 +0.033/-0	42.00 +0.039/-0	30.00 +0/-0.033	42.00 -0.025/-0.064	42.00 +0.039/-0
MUUL-30x45x10	30.0	45.0	10.0	11.0 +0.25/-0	30.00 -0.20/-0.53	30.00 +0.033/-0	45.00 +0.039/-0	30.00 +0/-0.033	45.00 -0.025/-0.064	45.00 +0.039/-0
MUUL-30x50x10	30.0	50.0	10.0	11.0 +0.25/-0	30.00 -0.20/-0.53	30.00 +0.033/-0	50.00 +0.039/-0	30.00 +0/-0.033	50.00 -0.025/-0.064	50.00 +0.039/-0
MUUL-32x40x8	32.0	40.0	8.0	9.0 +0.25/-0	32.00 -0.25/-0.64	32.00 +0.039/-0	40.00 +0.039/-0	32.00 +0/-0.039	40.00 -0.025/-0.064	40.00 +0.039/-0
MUUL-32x42x7.3	32.0	42.0	7.3	8.3 +0.25/-0	32.00 -0.25/-0.64	32.00 +0.039/-0	42.00 +0.039/-0	32.00 +0/-0.039	42.00 -0.025/-0.064	42.00 +0.039/-0
MUUL-32x42x10	32.0	42.0	10.0	11.0 +0.25/-0	32.00 -0.25/-0.64	32.00 +0.039/-0	42.00 +0.039/-0	32.00 +0/-0.039	42.00 -0.025/-0.064	42.00 +0.039/-0
MUUL-32x47x10	32.0	47.0	10.0	11.0 +0.25/-0	32.00 -0.25/-0.64	32.00 +0.039/-0	47.00 +0.039/-0	32.00 +0/-0.039	47.00 -0.025/-0.064	47.00 +0.039/-0
MUUL-32x48x10	32.0	48.0	10.0	11.0 +0.25/-0	32.00 -0.25/-0.64	32.00 +0.039/-0	48.00 +0.039/-0	32.00 +0/-0.039	48.00 -0.025/-0.064	48.00 +0.039/-0
MUUL-35x45x6	35.0	45.0	6.0	7.0 +0.25/-0	35.00 -0.25/-0.64	35.00 +0.039/-0	45.00 +0.039/-0	35.00 +0/-0.039	45.00 -0.025/-0.064	45.00 +0.039/-0
MUUL-35x45x10	35.0	45.0	10.0	11.0 +0.25/-0	35.00 -0.25/-0.64	35.00 +0.039/-0	45.00 +0.039/-0	35.00 +0/-0.039	45.00 -0.025/-0.064	45.00 +0.039/-0
MUUL-35x50x10	35.0	50.0	10.0	11.0 +0.25/-0	35.00 -0.25/-0.64	35.00 +0.039/-0	50.00 +0.039/-0	35.00 +0/-0.039	50.00 -0.025/-0.064	50.00 +0.039/-0
MUUL-35x55x10	35.0	55.0	10.0	11.0 +0.25/-0	35.00 -0.25/-0.64	35.00 +0.039/-0	55.00 +0.046/-0	35.00 +0/-0.039	55.00 -0.030/-0.076	55.00 +0.046/-0
MUUL-36x44x6	36.0	44.0	6.0	7.0 +0.25/-0	36.00 -0.25/-0.64	36.00 +0.039/-0	44.00 +0.039/-0	36.00 +0/-0.039	44.00 -0.025/-0.064	44.00 +0.039/-0
MUUL-36x46x10	36.0	46.0	10.0	11.0 +0.25/-0	36.00 -0.25/-0.64	36.00 +0.039/-0	46.00 +0.039/-0	36.00 +0/-0.039	46.00 -0.025/-0.064	46.00 +0.039/-0
MUUL-40x48x8	40.0	48.0	8.0	9.0 +0.25/-0	40.00 -0.25/-0.64	40.00 +0.039/-0	48.00 +0.039/-0	40.00 +0/-0.039	48.00 -0.025/-0.064	48.00 +0.039/-0
MUUL-40x50x6	40.0	50.0	6.0	7.0 +0.25/-0	40.00 -0.25/-0.64	40.00 +0.039/-0	50.00 +0.039/-0	40.00 +0/-0.039	50.00 -0.025/-0.064	50.00 +0.039/-0
MUUL-40x50x10	40.0	50.0	10.0	11.0 +0.25/-0	40.00 -0.25/-0.64	40.00 +0.039/-0	50.00 +0.039/-0	40.00 +0/-0.039	50.00 -0.025/-0.064	50.00 +0.039/-0
MUUL-40x53x8	40.0	53.0	8.0	9.0 +0.25/-0	40.00 -0.25/-0.64	40.00 +0.039/-0	53.00 +0.046/-0	40.00 +0/-0.039	53.00 -0.030/-0.076	53.00 +0.046/-0
MUUL-40x55x9	40.0	55.0	9.0	10.0 +0.25/-0	40.00 -0.25/-0.64	40.00 +0.039/-0	55.00 +0.046/-0	40.00 +0/-0.039	55.00 -0.030/-0.076	55.00 +0.046/-0
MUUL-40x55x10	40.0	55.0	10.0	11.0 +0.25/-0	40.00 -0.25/-0.64	40.00 +0.039/-0	55.00 +0.046/-0	40.00 +0/-0.039	55.00 -0.030/-0.076	55.00 +0.046/-0
MUUL-40x60x12	40.0	60.0	12.0	13.0 +0.25/-0	40.00 -0.25/-0.64	40.00 +0.039/-0	60.00 +0.046/-0	40.00 +0/-0.039	60.00 -0.030/-0.076	60.00 +0.046/-0
MUUL-42x55x7	42.0	55.0	7.0	8.0 +0.25/-0	42.00 -0.25/-0.64	42.00 +0.039/-0	55.00 +0.046/-0	42.00 +0/-0.039	55.00 -0.030/-0.076	55.00 +0.046/-0
MUUL-45x55x6	45.0	55.0	6.0	7.0 +0.25/-0	45.00 -0.25/-0.64	45.00 +0.039/-0	55.00 +0.046/-0	45.00 +0/-0.039	55.00 -0.030/-0.076	55.00 +0.046/-0
MUUL-45x55x7.3	45.0	55.0	7.3	8.3 +0.25/-0	45.00 -0.25/-0.64	45.00 +0.039/-0	55.00 +0.046/-0	45.00 +0/-0.039	55.00 -0.030/-0.076	55.00 +0.046/-0
MUUL-45x55x10	45.0	55.0	10.0	11.0 +0.25/-0	45.00 -0.25/-0.64	45.00 +0.039/-0	55.00 +0.046/-0	45.00 +0/-0.039	55.00 -0.030/-0.076	55.00 +0.046/-0
MUUL-45x60x9	45.0	60.0	9.0	10.0 +0.25/-0	45.00 -0.25/-0.64	45.00 +0.039/-0	60.00 +0.046/-0	45.00 +0/-0.039	60.00 -0.030/-0.076	60.00 +0.046/-0
MUUL-45x60x10	45.0	60.0	10.0	11.0 +0.25/-0	45.00 -0.25/-0.64	45.00 +0.039/-0	60.00 +0.046/-0	45.00 +0/-0.039	60.00 -0.030/-0.076	60.00 +0.046/-0
MUUL-45x65x12	45.0	65.0	12.0	13.0 +0.25/-0	45.00 -0.25/-0.64	45.00 +0.039/-0	65.00 +0.046/-0	45.00 +0/-0.039	65.00 -0.030/-0.076	65.00 +0.046/-0
MUUL-50x60x6	50.0	60.0	6.0	7.0 +0.25/-0	50.00 -0.25/-0.64	50.00 +0.039/-0	60.00 +0.046/-0	50.00 +0/-0.039	60.00 -0.030/-0.076	60.00 +0.046/-0
MUUL-50x60x7.3	50.0	60.0	7.3	8.3 +0.25/-0	50.00 -0.25/-0.64	50.00 +0.039/-0	60.00 +0.046/-0	50.00 +0/-0.039	60.00 -0.030/-0.076	60.00 +0.046/-0
MUUL-50x60x10	50.0	60.0	10.0	11.0 +0.25/-0	50.00 -0.25/-0.64	50.00 +0.039/-0	60.00 +0.046/-0	50.00 +0/-0.039	60.00 -0.030/-0.076	60.00 +0.046/-0
MUUL-50x65x9	50.0	65.0	9.0	10.0 +0.25/-0	50.00 -0.25/-0.64	50.00 +0.039/-0	65.00 +0.046/-0	50.00 +0/-0.039	65.00 -0.030/-0.076	65.00 +0.046/-0
MUUL-50x65x10	50.0	65.0	10.0	11.0 +0.25/-0	50.00 -0.25/-0.64	50.00 +0.039/-0	65.00 +0.046/-0	50.00 +0/-0.039	65.00 -0.030/-0.076	65.00 +0.046/-0
MUUL-50x70x12	50.0	70.0	12.0	13.0 +0.25/-0	50.00 -0.25/-0.64	50.00 +0.039/-0	70.00 +0.046/-0	50.00 +0/-0.039	70.00 -0.030/-0.076	70.00 +0.046/-0
MUUL-53x63x6	53.0	63.0	6.0	7.0 +0.25/-0	53.00 -0.30/-0.76	53.00 +0.046/-0	63.00 +0.046/-0	53.00 +0/-0.046	63.00 -0.030/-0.076	63.00 +0.046/-0
MUUL-55x65x12	55.0	65.0	12.0	13.0 +0.25/-0	55.00 -0.30/-0.76	55.00 +0.046/-0	65.00 +0.046/-0	55.00 +0/-0.046	65.00 -0.030/-0.076	65.00 +0.046/-0
MUUL-55x65x6	55.0	65.0	6.0	7.0 +0.25/-0	55.00 -0.30/-0.76	55.00 +0.046/-0	65.00 +0.046/-0	55.00 +0/-0.046	65.00 -0.030/-0.076	65.00 +0.046/-0
MUUL-55x70x9	55.0	70.0	9.0	10.0 +0.25/-0	55.00 -0.30/-0.76	55.00 +0.046/-0	70.00 +0.046/-0	55.00 +0/-0.046	70.00 -0.030/-0.076	70.00 +0.046/-0
MUUL-55x75x12	55.0	75.0	12.0	13.0 +0.25/-0	55.00 -0.30/-0.76	55.00 +0.046/-0	75.00 +0.046/-0	55.00 +0/-0.046	75.00 -0.030/-0.076	75.00 +0.046/-0
MUUL-56x66x6	56.0	66.0	6.0	7.0 +0.25/-0	56.00 -0.30/-0.76	56.00 +0.046/-0	66.00 +0.046/-0	56.00 +0/-0.046	66.00 -0.030/-0.076	66.00 +0.046/-0
MUUL-60x70x6	60.0	70.0	6.0	7.0 +0.25/-0	60.00 -0.30/-0.76	60.00 +0.046/-0	70.00 +0.046/-0	60.00 +0/-0.046	70.00 -0.030/-0.076	70.00 +0.046/-0
MUUL-60x70x10	60.0	70.0	10.0	11.0 +0.25/-0	60.00 -0.30/-0.76	60.00 +0.046/-0	70.00 +0.046/-0	60.00 +0/-0.046	70.00 -0.030/-0.076	70.00 +0.046/-0
MUUL-60x71x7	60.0	71.0	7.0	8.0 +0.25/-0	60.00 -0.30/-0.76	60.00 +0.046/-0	71.00 +0.046/-0	60.00 +0/-0.046	71.00 -0.030/-0.076	71.00 +0.046/-0
MUUL-60x75x9	60.0	75.0	9.0	10.0 +0.25/-0	60.00 -0.30/-0.76	60.00 +0.046/-0	75.00 +0.046/-0	60.00 +0/-0.046	75.00 -0.030/-0.076	75.00 +0.046/-0
MUUL-60x80x12	60.0	80.0	12.0	13.0 +0.25/-0	60.00 -0.30/-0.76	60.00 +0.046/-0	80.00 +0.046/-0	60.00 +0/-0.046	80.00 -0.030/-0.076	80.00 +0.046/-0
MUUL-63x75x8.7	63.0	75.0	8.7	9.7 0.25/0	63.00 -0.30/-0.76	63.00 +0.046/-0	75.00 +0.046/-0	63.00 +0/-0.046	75.00 -0.030/-0.076	75.00 +0.046/-0
MUUL-63x83x15	63.0	83.0	15.0	16.5 +0.25/-0	63.00 -0.30/-0.76	63.00 +0.046/-0	83.00 +0.054/-0	63.00 +0/-0.046	83.00 -0.036/-0.090	83.00 +0.054/-0
MUUL-65x75x6	65.0	75.0	6.0	7.0 0.25/0	65.00 -0.30/-0.76	65.00 +0.046/-0	75.00 +0.046/-0	65.00 +0/-0.046	75.00 -0.030/-0.076	75.00 +0.046/-0
MUUL-65x80x9	65.0	80.0	9.0	10.0 +0.25/-0	65.00 -0.30/-0.76	65.00 +0.046/-0	80.00 +0.046/-0	65.00 +0/-0.046	80.00 -0.030/-0.076	80.00 +0.046/-0
MUUL-65x85x12	65.0	85.0	12.0	13.0 +0.25/-0	65.00 -0.30/-0.76	65.00 +0.046/-0	85.00 +0.054/-0	65.00 +0/-0.046	85.00 -0.036/-0.090	85.00 +0.054/-0
MUUL-70x80x6	70.0	80.0	6.0	7.0 0.25/0	70.00 -0.30/-0.76	70.00 +0.046/-0	80.00 +0.046/-0	70.00 +0/-0.046	80.00 -0.030/-0.076	80.00 +0.046/-0
MUUL-70x80x12	70.0	80.0	12.0	13.0 +0.25/-0	70.00 -0.30/-0.76	70.00 +0.046/-0	80.00 +0.046/-0	70.00 +0/-0.046	80.00 -0.030/-0.076	80.00 +0.046/-0
MUUL-70x85x9	70.0	85.0	9.0	10.0 0.25/0	70.00 -0.30/-0.76	70.00 +0.046/-0	85.00 +0.054/-0	70.00 +0/-0.046	85.00 -0.036/-0.090	85.00 +0.054/-0
MUUL-70x85x10	70.0	85.0	10.0	11.0 +0.25/-0	70.00 -0.30/-0.76	70.00 +0.046/-0	85.00 +0.054/-0	70.00 +0/-0.046	85.00 -0.036/-0.090	85.00 +0.054/-0
MUUL-70x90x12	70.0	90.0	12.0	13.0 +0.25/-0	70.00 -0.30/-0.76	70.00 +0.046/-0	90.00 +0.054/-0	70.00 +0/-0.046	90.00 -0.036/-0.090	90.00 +0.054/-0
MUUL-71x80x6	71.0	80.0	6.0	7.0 0.25/0	71.00 -0.30/-0.76	71.00 +0.046/-0	80.00 +0.046/-0	71.00 +0/-0.046	80.00 -0.030/-0.076	80.00 +0.046/-0
MUUL-75x85x6	75.0	85.0	6.0	7.0 0.25/0	75.00 -0.30/-0.76	75.00 +0.046/-0	85.00 +0.054/-0	75.00 +0/-0.046	85.00 -0.036/-0.090	85.00 +0.054/-0
MUUL-75x85x12	75.0	85.0	12.0	13.0 +0.25/-0	75.00 -0.30/-0.76	75.00 +0.046/-0	85.00 +0.054/-0	75.00 +0/-0.046	85.00 -0.036/-0.090	85.00 +0.054/-0
MUUL-75x90x9	75.0	90.0	9.0	10.0 +0.25/-0	75.00 -0.30/-0.76	75.00 +0.046/-0	90.00 +0.054/-0	75.00 +0/-0.046	90.00 -0.036/-0.090	90.00 +0.054/-0
MUUL-75x95x12	75.0	95.0	12.0	13.0 +0.25/-0	75.00 -0.30/-0.76	75.00 +0.046/-0	95.00 +0.054/-0	75.00 +0/-0.046	95.00 -0.036/-0.090	95.00 +0.054/-0

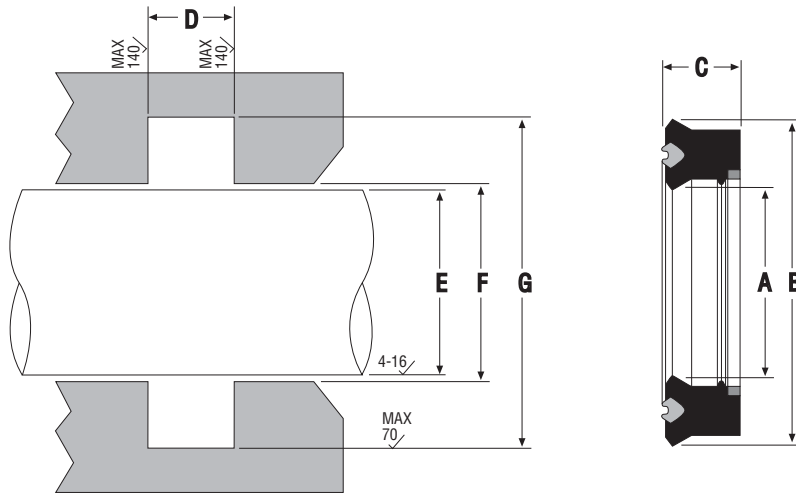
# STYLE MUUL LOADED SYMMETRICAL U-SEALS

All measurements on this page are in millimeters unless otherwise specified.

PART NUMBER	A NOM. ID.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
MUUL-80x90x6	80.0	90.0	6.0	7.0 +0.25/-0	80.00 -0.30/-0.76	80.00 +0.046/-0	90.00 +0.054/-0	80.00 +0/-0.046	90.00 -0.036/-0.090	90.00 +0.054/-0
MUUL-80x100x12	80.0	100.0	12.0	13.0 +0.25/-0	80.00 -0.30/-0.76	80.00 +0.046/-0	100.00 +0.054/-0	80.00 +0/-0.046	100.00 -0.036/-0.090	100.00 +0.054/-0
MUUL-85x100x9	85.0	100.0	9.0	10.0 +0.25/-0	85.00 -0.36/-0.90	85.00 +0.054/-0	100.00 +0.054/-0	85.00 +0/-0.054	100.00 -0.036/-0.090	100.00 +0.054/-0
MUUL-85x100x12.5	85.0	100.0	12.5	13.5 +0.25/-0	85.00 -0.36/-0.90	85.00 +0.054/-0	100.00 +0.054/-0	85.00 +0/-0.054	100.00 -0.036/-0.090	100.00 +0.054/-0
MUUL-85x105x12	85.0	105.0	12.0	13.0 +0.25/-0	85.00 -0.36/-0.90	85.00 +0.054/-0	105.00 +0.054/-0	85.00 +0/-0.054	105.00 -0.036/-0.090	105.00 +0.054/-0
MUUL-90x100x6	90.0	100.0	6.0	7.0 +0.25/-0	90.00 -0.36/-0.90	90.00 +0.054/-0	100.00 +0.054/-0	90.00 +0/-0.054	100.00 -0.036/-0.090	100.00 +0.054/-0
MUUL-90x105x9	90.0	105.0	9.0	10.0 +0.25/-0	90.00 -0.36/-0.90	90.00 +0.054/-0	105.00 +0.054/-0	90.00 +0/-0.054	105.00 -0.036/-0.090	105.00 +0.054/-0
MUUL-90x110x12	90.0	110.0	12.0	13.0 +0.25/-0	90.00 -0.36/-0.90	90.00 +0.054/-0	110.00 +0.054/-0	90.00 +0/-0.054	110.00 -0.036/-0.090	110.00 +0.054/-0
MUUL-95x115x12	95.0	115.0	12.0	13.0 +0.25/-0	95.00 -0.36/-0.90	95.00 +0.054/-0	115.00 +0.054/-0	95.00 +0/-0.054	115.00 -0.036/-0.090	115.00 +0.054/-0
MUUL-100x115x9	100.0	115.0	9.0	10.0 +0.25/-0	100.00 -0.36/-0.90	100.00 +0.054/-0	115.00 +0.054/-0	100.00 +0/-0.054	115.00 -0.036/-0.090	115.00 +0.054/-0
MUUL-100x120x12	100.0	120.0	12.0	13.0 +0.25/-0	100.00 -0.36/-0.90	100.00 +0.054/-0	120.00 +0.054/-0	100.00 +0/-0.054	120.00 -0.036/-0.090	120.00 +0.054/-0
MUUL-105x120x9	105.0	120.0	9.0	10.0 +0.25/-0	105.00 -0.36/-0.90	105.00 +0.054/-0	120.00 +0.054/-0	105.00 +0/-0.054	120.00 -0.036/-0.090	120.00 +0.054/-0
MUUL-105x125x15	105.0	125.0	15.0	16.0 +0.25/-0	105.00 -0.36/-0.90	105.00 +0.054/-0	125.00 +0.054/-0	105.00 +0/-0.054	125.00 -0.036/-0.090	125.00 +0.054/-0
MUUL-105x125x16	105.0	125.0	16.0	17.5 +0.25/-0	105.00 -0.36/-0.90	105.00 +0.054/-0	125.00 +0.063/-0	105.00 +0/-0.054	125.00 -0.043/-0.106	125.00 +0.063/-0
MUUL-105x125x5	105.0	125.0	5.0	6.0 +0.25/-0	105.00 -0.36/-0.90	105.00 +0.054/-0	125.00 +0.063/-0	105.00 +0/-0.054	125.00 -0.043/-0.106	125.00 +0.063/-0
MUUL-110x125x9	110.0	125.0	9.0	10.0 +0.25/-0	110.00 -0.36/-0.90	110.00 +0.054/-0	125.00 +0.063/-0	110.00 +0/-0.054	125.00 -0.043/-0.106	125.00 +0.063/-0
MUUL-110x130x12	110.0	130.0	12.0	13.0 +0.25/-0	110.00 -0.36/-0.90	110.00 +0.054/-0	130.00 +0.063/-0	110.00 +0/-0.054	130.00 -0.043/-0.106	130.00 +0.063/-0
MUUL-110x130x14.5	110.0	130.0	14.5	15.5 +0.25/-0	110.00 -0.36/-0.90	110.00 +0.054/-0	130.00 +0.063/-0	110.00 +0/-0.054	130.00 -0.043/-0.106	130.00 +0.063/-0
MUUL-110x130x15	110.0	130.0	15.0	16.0 +0.25/-0	110.00 -0.36/-0.90	110.00 +0.054/-0	130.00 +0.063/-0	110.00 +0/-0.054	130.00 -0.043/-0.106	130.00 +0.063/-0
MUUL-112x125x9	112.0	125.0	9.0	10.0 +0.25/-0	112.00 -0.36/-0.90	112.00 +0.054/-0	125.00 +0.063/-0	112.00 +0/-0.054	125.00 -0.043/-0.106	125.00 +0.063/-0
MUUL-115x135x12	115.0	135.0	12.0	13.0 +0.25/-0	115.00 -0.36/-0.90	115.00 +0.054/-0	135.00 +0.063/-0	115.00 +0/-0.054	135.00 -0.043/-0.106	135.00 +0.063/-0
MUUL-120x140x12	120.0	140.0	12.0	13.0 +0.25/-0	120.00 -0.36/-0.90	120.00 +0.054/-0	140.00 +0.063/-0	120.00 +0/-0.054	140.00 -0.043/-0.106	140.00 +0.063/-0
MUUL-120x140x14.5	120.0	140.0	14.5	15.5 +0.25/-0	120.00 -0.36/-0.90	120.00 +0.054/-0	140.00 +0.063/-0	120.00 +0/-0.054	140.00 -0.043/-0.106	140.00 +0.063/-0
MUUL-120x140x15	120.0	140.0	15.0	16.0 +0.25/-0	120.00 -0.36/-0.90	120.00 +0.054/-0	140.00 +0.063/-0	120.00 +0/-0.054	140.00 -0.043/-0.106	140.00 +0.063/-0
MUUL-125x140x9	125.0	140.0	9.0	10.0 +0.25/-0	125.00 -0.36/-0.90	125.00 +0.054/-0	140.00 +0.063/-0	125.00 +0/-0.054	140.00 -0.043/-0.106	140.00 +0.063/-0
MUUL-125x145x15	125.0	145.0	15.0	16.0 +0.25/-0	125.00 -0.36/-0.90	125.00 +0.054/-0	145.00 +0.063/-0	125.00 +0/-0.054	145.00 -0.043/-0.106	145.00 +0.063/-0
MUUL-130x150x16	130.0	150.0	16.0	17.0 +0.25/-0	130.00 -0.36/-0.90	130.00 +0.054/-0	150.00 +0.063/-0	130.00 +0/-0.054	150.00 -0.043/-0.106	150.00 +0.063/-0
MUUL-136x150x9	136.0	150.0	9.0	10.0 +0.25/-0	136.00 -0.36/-0.90	136.00 +0.054/-0	150.00 +0.063/-0	136.00 +0/-0.054	150.00 -0.043/-0.106	150.00 +0.063/-0
MUUL-140x155x9	140.0	155.0	9.0	10.0 +0.25/-0	140.00 -0.36/-0.90	140.00 +0.054/-0	155.00 +0.063/-0	140.00 +0/-0.054	155.00 -0.043/-0.106	155.00 +0.063/-0
MUUL-140x160x12	140.0	160.0	12.0	13.0 +0.25/-0	140.00 -0.36/-0.90	140.00 +0.054/-0	160.00 +0.063/-0	140.00 +0/-0.054	160.00 -0.043/-0.106	160.00 +0.063/-0
MUUL-140x160x15	140.0	160.0	15.0	16.0 +0.25/-0	140.00 -0.36/-0.90	140.00 +0.054/-0	160.00 +0.063/-0	140.00 +0/-0.054	160.00 -0.043/-0.106	160.00 +0.063/-0
MUUL-145x160x9	145.0	160.0	9.0	10.0 +0.25/-0	145.00 -0.36/-0.90	145.00 +0.054/-0	160.00 +0.063/-0	145.00 +0/-0.054	160.00 -0.043/-0.106	160.00 +0.063/-0
MUUL-150x170x16	150.0	170.0	16.0	17.0 +0.25/-0	150.00 -0.36/-0.90	150.00 +0.054/-0	170.00 +0.063/-0	150.00 +0/-0.054	170.00 -0.043/-0.106	170.00 +0.063/-0

# STYLE MRTUB ROD U-SEALS WITH BACK-UP RINGS

All measurements on this page are in millimeters unless otherwise specified.



**HERCULES  
PART NUMBERS**

**MRTUB - 60 x 73 x 13**

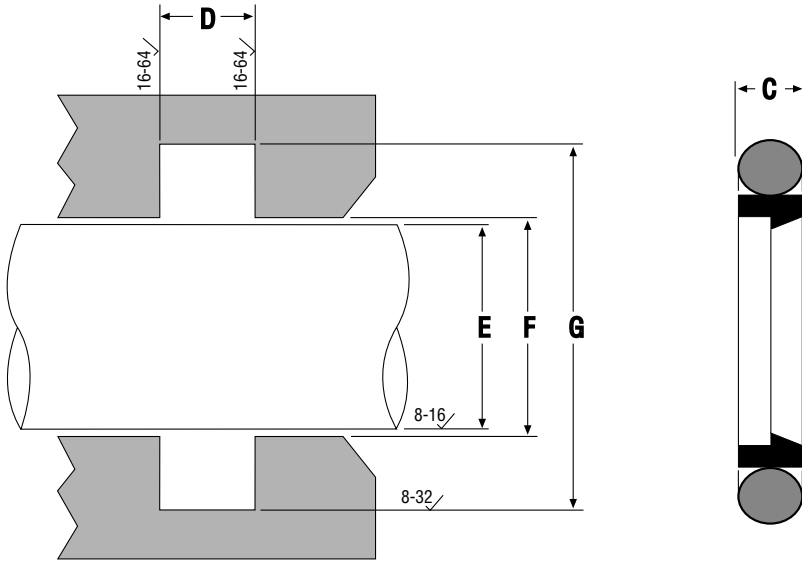
Style Prefix | I.D. | O.D. | Height

SEAL INFORMATION	
MATERIAL	92A URETHANE SEAL 70A RUBBER ENERGIZER POLYACETAL ANTI-EXTRUSION RING
TEMPERATURE RANGE	-40° TO +230° F
PRESSURE RANGE	0 TO 7,500 PSI
MAXIMUM VELOCITY	90 FPM

PART NUMBER	A NOM. ID.	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
MRTUB-60x73x13	60.0	73.0	13.0	14.0 +0.25/-0	60.0 -0.030/-0.104	60.0	73.0 ±0.10
MRTUB-75x88x13	75.0	88.0	13.0	14.0 +0.25/-0	75.0 -0.030/-0.104	75.0	88.0 ±0.11
MRTUB-80x95x13	80.0	95.0	13.0	14.0 +0.25/-0	80.0 -0.030/-0.104	80.0	95.0 ±0.11
MRTUB-85x100x13	85.0	100.0	13.0	14.0 +0.25/-0	85.0 -0.036/-0.123	85.0	100.0 ±0.11
MRTUB-90x105x13	90.0	105.0	13.0	14.0 +0.25/-0	90.0 -0.036/-0.123	90.0	105.0 ±0.11
MRTUB-95x110x13	95.0	110.0	13.0	14.0 +0.25/-0	95.0 -0.036/-0.123	95.0	110.0 ±0.11
MRTUB-100x115x13	100.0	115.0	13.0	14.0 +0.25/-0	100.0 -0.036/-0.123	100.0	115.0 ±0.11
MRTUB-110x130x13	110.0	130.0	13.0	14.0 +0.25/-0	110.0 -0.036/-0.123	110.0	130.0 ±0.11
MRTUB-120x140x13	120.0	140.0	13.0	14.0 +0.25/-0	120.0 -0.036/-0.123	120.0	140.0 ±0.13
MRTUB-140x160x13	140.0	160.0	13.0	14.0 +0.25/-0	140.0 -0.043/-0.143	140.0	160.0 ±0.13

# STYLE MKR ROD BUFFER SEALS

All measurements on this page are in millimeters unless otherwise specified.



## HERCULES PART NUMBERS

**MKR - 25 x 35.7 x 4**

Style Prefix / I.D. / O.D. / Height

SEAL INFORMATION	
MATERIAL	40% BRONZE FILLED PTFE
ENERGIZER	70A NITRILE
TEMPERATURE RANGE	-40° TO +212° F
MAXIMUM PRESSURE	5,000 PSI
MAXIMUM VELOCITY	1.5 M/S

PART NUMBER	C NOM. WIDTH	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
MKR-25x35.7x4	4.0	4.20 +0.2/-0	25.00 -0.020/-0.053	25.00 +0.052/-0	35.70 +0.2/-0
MKR-30x40.7x3.9	3.9	4.20 +0.2/-0	30.00 -0.020/-0.053	30.00 +0.052/-0	40.70 +0.2/-0
MKR-35x42.5x3	3.0	3.20 +0.2/-0	35.00 -0.025/-0.064	35.00 +0.062/-0	42.30 +0.2/-0
MKR-40x52.6x4	4.0	4.20 +0.2/-0	40.00 -0.025/-0.064	40.00 +0.062/-0	52.60 +0.2/-0
MKR-40x53.5x4	4.0	4.20 +0.2/-0	40.00 -0.025/-0.064	40.00 +0.062/-0	50.70 +0.2/-0
MKR-40x55.5x5.9	5.9	6.30 +0.2/-0	40.00 -0.025/-0.064	40.00 +0.062/-0	55.50 +0.2/-0
MKR-45x57.7x4	4.0	4.20 +0.2/-0	45.00 -0.025/-0.064	45.00 +0.062/-0	57.60 +0.2/-0
MKR-45x58x4	4.0	4.20 +0.2/-0	45.00 -0.025/-0.064	45.00 +0.062/-0	55.70 +0.2/-0
MKR-50x60x4.5	4.5	4.70 +0.2/-0	50.00 -0.025/-0.064	50.00 +0.062/-0	0.00 +0.2/-0
MKR-50x60.7x4	4.0	4.20 +0.2/-0	50.00 -0.025/-0.064	50.00 +0.062/-0	60.70 +0.2/-0
MKR-50x62.6x4	4.0	4.20 +0.2/-0	50.00 -0.025/-0.064	50.00 +0.062/-0	62.60 +0.2/-0
MKR-50x63.5x5.9	5.9	6.30 +0.2/-0	50.00 -0.025/-0.064	50.00 +0.062/-0	63.50 +0.2/-0
MKR-50x65.5x5.9	5.9	6.30 +0.2/-0	50.00 -0.025/-0.064	50.00 +0.062/-0	65.50 +0.2/-0
MKR-55x70.5x5.9	5.9	6.30 +0.2/-0	55.00 -0.030/-0.076	55.00 +0.074/-0	70.50 +0.2/-0
MKR-56x66.7x4	4.0	4.20 +0.2/-0	56.00 -0.030/-0.076	56.00 +0.074/-0	66.70 +0.2/-0
MKR-56x68.6x4	4.0	4.20 +0.2/-0	56.00 -0.030/-0.076	56.00 +0.074/-0	68.60 +0.2/-0
MKR-56x71.1x5.9	5.9	6.30 +0.2/-0	56.00 -0.030/-0.076	56.00 +0.074/-0	71.50 +0.2/-0
MKR-60x75.5x5.9	5.9	6.30 +0.2/-0	60.00 -0.030/-0.076	60.00 +0.074/-0	75.50 +0.2/-0
MKR-65x80.5x5.9	5.9	6.30 +0.2/-0	65.00 -0.030/-0.076	65.00 +0.074/-0	80.50 +0.2/-0
MKR-70x85.5x5.9	5.9	6.30 +0.2/-0	70.00 -0.030/-0.076	70.00 +0.074/-0	85.50 +0.2/-0
MKR-75x90.5x5.9	5.9	6.30 +0.2/-0	75.00 -0.030/-0.076	75.00 +0.074/-0	90.50 +0.2/-0
MKR-80x95.5x5.9	5.9	6.30 +0.2/-0	80.00 -0.030/-0.076	80.00 +0.074/-0	95.50 +0.2/-0
MKR-85x100.5x5.9	5.9	6.30 +0.2/-0	85.00 -0.036/-0.090	85.00 +0.087/-0	100.50 +0.2/-0
MKR-90x105.5x5.9	5.9	6.30 +0.2/-0	90.00 -0.036/-0.090	90.00 +0.087/-0	105.50 +0.2/-0
MKR-95x110.5x5.9	5.9	6.30 +0.2/-0	95.00 -0.036/-0.090	95.00 +0.087/-0	110.50 +0.2/-0
MKR-100x115.5x5.9	5.9	6.30 +0.2/-0	100.00 -0.036/-0.090	100.00 +0.087/-0	115.50 +0.2/-0
MKR-105x120.5x5.9	5.9	6.30 +0.2/-0	105.00 -0.036/-0.090	105.00 +0.087/-0	120.50 +0.2/-0
MKR-110x125.5x5.9	5.9	6.30 +0.2/-0	110.00 -0.036/-0.090	110.00 +0.087/-0	125.50 +0.2/-0
MKR-115x130.5x5.9	5.9	6.30 +0.2/-0	115.00 -0.036/-0.090	115.00 +0.087/-0	130.50 +0.2/-0

## STYLE MKR ROD BUFFER SEALS

All measurements on this page are in millimeters unless otherwise specified.

PART NUMBER	C NOM. WIDTH	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
MKR-120x135.5x5.9	5.9	6.30 +0.2/-0	120.00 -0.036/-0.090	120.00 +0.087/-0	135.50 +0.2/-0
MKR-125x140.5x5.9	5.9	6.30 +0.2/-0	125.00 -0.043/-0.103	125.00 +0.100/-0	140.50 +0.2/-0
MKR-130x145.5x5.9	5.9	6.30 +0.2/-0	130.00 -0.043/-0.103	130.00 +0.100/-0	145.50 +0.2/-0
MKR-140x155.5x5.9	5.9	6.30 +0.2/-0	140.00 -0.043/-0.103	140.00 +0.100/-0	155.50 +0.2/-0
MKR-150x165.5x5.9	5.9	6.30 +0.2/-0	150.00 -0.043/-0.103	150.00 +0.100/-0	165.50 +0.2/-0
MKR-160x175.5x5.9	5.9	6.30 +0.2/-0	160.00 -0.043/-0.103	160.00 +0.100/-0	175.50 +0.2/-0
MKR-170x185.5x5.9	5.9	6.30 +0.2/-0	170.00 -0.043/-0.103	170.00 +0.100/-0	185.50 +0.2/-0

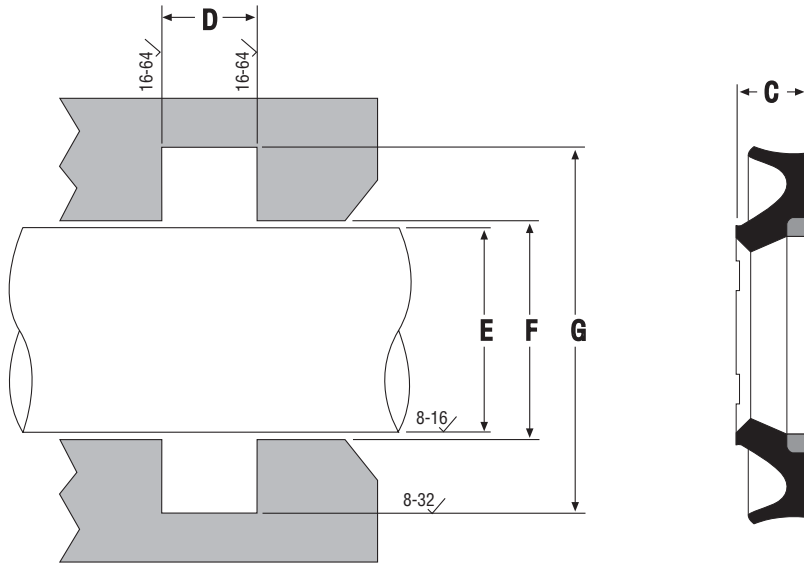
# STYLE MYR ROD BUFFER SEALS

All measurements on this page are in millimeters unless otherwise specified.

## HERCULES PART NUMBERS

**MYR - 40 x 55.5 x 5.9**

Style Prefix / I.D. | O.D. | Height



SEAL INFORMATION	
MATERIAL	94A URETHANE NYLON BACK-UP RING
TEMPERATURE RANGE	-30° TO +212° F
MAXIMUM PRESSURE	7,000 PSI
MAXIMUM VELOCITY	1 M/S

PART NUMBER	C NOM. WIDTH	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
MYR-40x55.5x5.9	5.9	6.30 +0.2/-0	40.00 -0.025/-0.064	40.00 +0.062/-0	55.50 +0.2/-0
MYR-60x75.5x5.9	5.9	6.30 +0.2/-0	60.00 -0.030/-0.076	60.00 +0.074/-0	75.50 +0.2/-0
MYR-65x80.5x5.9	5.9	6.30 +0.2/-0	65.00 -0.030/-0.076	65.00 +0.074/-0	80.50 +0.2/-0
MYR-70x85.5x5.9	5.9	6.30 +0.2/-0	70.00 -0.030/-0.076	70.00 +0.074/-0	85.50 +0.2/-0
MYR-75x90.5x5.9	5.9	6.30 +0.2/-0	75.00 -0.030/-0.076	75.00 +0.074/-0	90.50 +0.2/-0
MYR-80x95.5x5.9	5.9	6.30 +0.2/-0	80.00 -0.030/-0.076	80.00 +0.074/-0	95.50 +0.2/-0
MYR-85x100.5x5.9	5.9	6.30 +0.2/-0	85.00 -0.036/-0.090	85.00 +0.087/-0	100.50 +0.2/-0
MYR-90x105.5x5.9	5.9	6.30 +0.2/-0	90.00 -0.036/-0.090	90.00 +0.087/-0	105.50 +0.2/-0
MYR-95x110.5x5.9	5.9	6.30 +0.2/-0	95.00 -0.036/-0.090	95.00 +0.087/-0	110.50 +0.2/-0
MYR-100x115.5x5.9	5.9	6.30 +0.2/-0	100.00 -0.036/-0.090	100.00 +0.087/-0	115.50 +0.2/-0
MYR-110x125.5x5.9	5.9	6.30 +0.2/-0	110.00 -0.036/-0.090	110.00 +0.087/-0	125.50 +0.2/-0
MYR-120x135.5x5.9	5.9	6.30 +0.2/-0	120.00 -0.036/-0.090	120.00 +0.087/-0	135.50 +0.2/-0
MYR-130x145.5x5.9	5.9	6.30 +0.2/-0	130.00 -0.036/-0.090	130.00 +0.087/-0	145.50 +0.2/-0
MYR-140x155.5x5.9	5.9	6.30 +0.2/-0	140.00 -0.036/-0.090	140.00 +0.087/-0	155.50 +0.2/-0
MYR-180x195.5x5.9	5.9	6.30 +0.2/-0	180.00 -0.036/-0.090	180.00 +0.087/-0	195.50 +0.2/-0



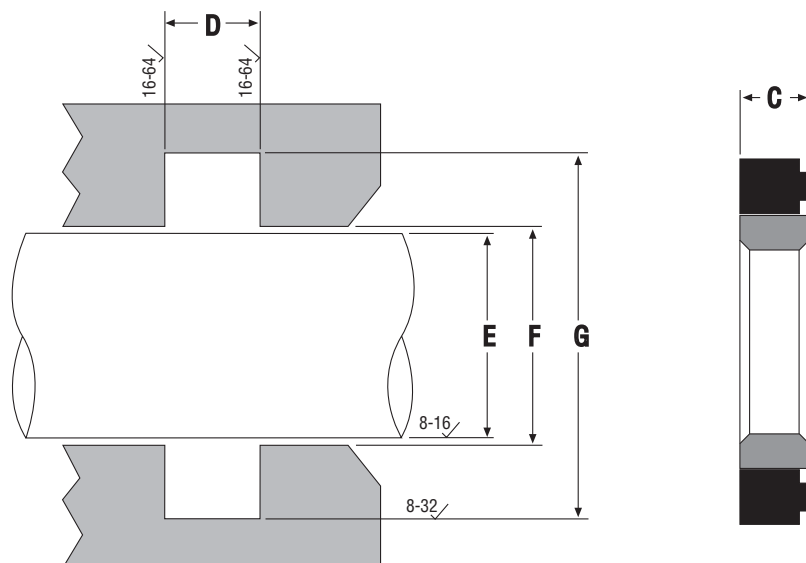
# STYLE MYBR ROD BUFFER SEALS

All measurements on this page are in millimeters unless otherwise specified.

## HERCULES PART NUMBERS

**MYBR - 55 x 70.5 x 5.9**

Style Prefix    I.D.    O.D.    Height



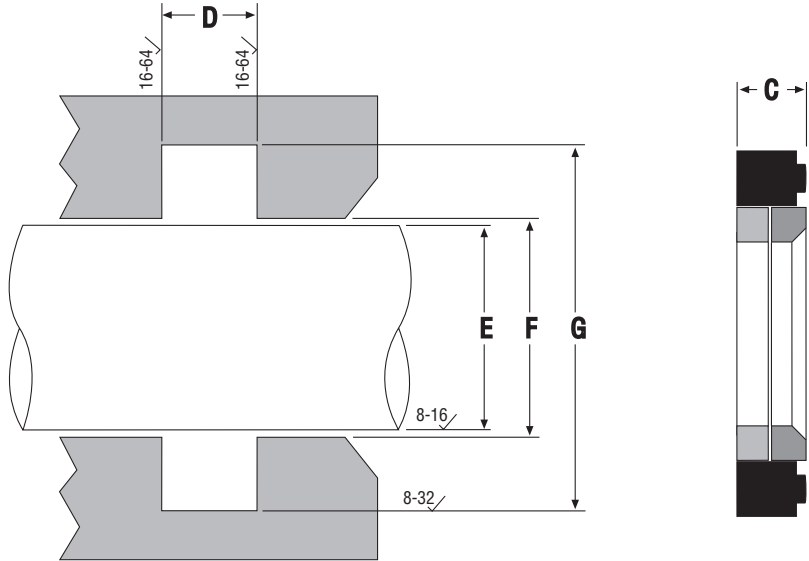
## SEAL INFORMATION

MATERIAL	PTFE
ENERGIZER	70A NITRILE
TEMPERATURE RANGE	-40° TO +212° F
MAXIMUM PRESSURE	5,000 PSI
MAXIMUM VELOCITY	1 M/S

PART NUMBER	C NOM. WIDTH	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
MYBR-40x55.5x5.9	5.9	6.30 +0.2/-0	40.0 -0.025/-0.064	40.0 +0.060/-0	55.5 +0.2/-0
MYBR-45x60.5x5.9	5.9	6.30 +0.2/-0	45.0 -0.025/-0.064	45.0 +0.060/-0	60.5 +0.2/-0
MYBR-55x70.5x5.9	5.9	6.30 +0.2/-0	55.00 -0.030/-0.076	55.00 +0.074/-0	70.50 +0.2/-0
MYBR-60x75.5x5.9	5.9	6.30 +0.2/-0	60.00 -0.030/-0.076	60.00 +0.074/-0	75.50 +0.2/-0
MYBR-65x80.5x5.9	5.9	6.30 +0.2/-0	65.00 -0.030/-0.076	65.00 +0.074/-0	80.50 +0.2/-0
MYBR-70x85.5x5.9	5.9	6.30 +0.2/-0	70.00 -0.030/-0.076	70.00 +0.074/-0	85.50 +0.2/-0
MYBR-75x90.5x5.9	5.9	6.30 +0.2/-0	75.00 -0.030/-0.076	75.00 +0.074/-0	90.50 +0.2/-0
MYBR-80x95.5x5.9	5.9	6.30 +0.2/-0	80.00 -0.030/-0.076	80.00 +0.074/-0	95.50 +0.2/-0
MYBR-85x100.5x5.9	5.9	6.30 +0.2/-0	85.00 -0.036/-0.090	85.00 +0.087/-0	100.50 +0.2/-0
MYBR-90x105.5x5.9	5.9	6.30 +0.2/-0	90.00 -0.036/-0.090	90.00 +0.087/-0	105.50 +0.2/-0
MYBR-95x110.5x5.9	5.9	6.30 +0.2/-0	95.00 -0.036/-0.090	95.00 +0.087/-0	110.50 +0.2/-0
MYBR-100x115.5x5.9	5.9	6.30 +0.2/-0	100.00 -0.036/-0.090	100.00 +0.087/-0	115.50 +0.2/-0
MYBR-105x120.5x5.9	5.9	6.30 +0.2/-0	105.00 -0.036/-0.090	105.00 +0.087/-0	120.50 +0.2/-0
MYBR-110x125.5x5.9	5.9	6.30 +0.2/-0	110.00 -0.036/-0.090	110.00 +0.087/-0	125.50 +0.2/-0
MYBR-120x135.5x5.9	5.9	6.30 +0.2/-0	120.00 -0.036/-0.090	120.00 +0.087/-0	135.50 +0.2/-0

# STYLE MNBR ROD BUFFER SEALS

All measurements on this page are in millimeters unless otherwise specified.



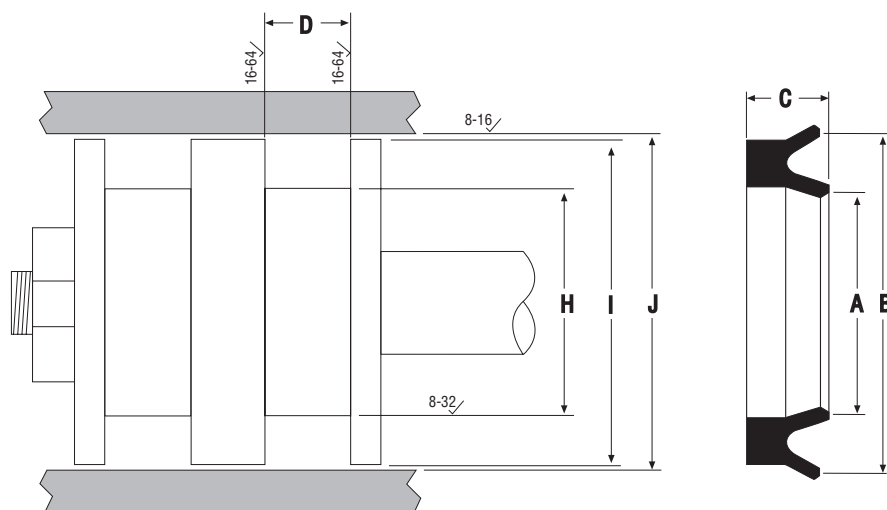
**HERCULES  
PART NUMBERS**  
**MNBR - 55 x 70.5 x 5.9**  
 Prefix / I.D. | O.D. \ Height

SEAL INFORMATION	
MATERIAL	PTFE WITH POLYACETAL ANTI-EXTRUSION RING
ENERGIZER	NITRILE
TEMPERATURE RANGE	-40° TO +212° F
MAXIMUM PRESSURE	5,000 PSI
MAXIMUM VELOCITY	1.5 M/S

PART NUMBER	C NOM. WIDTH	D GROOVE WIDTH	E ROD DIA.	F THROAT DIA.	G HOUSING DIA.
MNBR-55x70.5x5.9	5.9	6.30 +0.2/-0	55.00 -0.030/-0.076	55.00 +0.074/-0	70.50 +0.2/-0
MNBR-60x75.5x5.9	5.9	6.30 +0.2/-0	60.00 -0.030/-0.076	60.00 +0.074/-0	75.50 +0.2/-0
MNBR-65x80.5x5.9	5.9	6.30 +0.2/-0	65.00 -0.030/-0.076	65.00 +0.074/-0	80.50 +0.2/-0
MNBR-70x85.5x5.9	5.9	6.30 +0.2/-0	70.00 -0.030/-0.076	70.00 +0.074/-0	85.50 +0.2/-0
MNBR-75x90.5x5.9	5.9	6.30 +0.2/-0	75.00 -0.030/-0.076	75.00 +0.074/-0	90.50 +0.2/-0
MNBR-80x95.5x5.9	5.9	6.30 +0.2/-0	80.00 -0.030/-0.076	80.00 +0.074/-0	95.50 +0.2/-0
MNBR-85x100.5x5.9	5.9	6.30 +0.2/-0	85.00 -0.036/-0.090	85.00 +0.087/-0	100.50 +0.2/-0
MNBR-90x105.5x5.9	5.9	6.30 +0.2/-0	90.00 -0.036/-0.090	90.00 +0.087/-0	105.50 +0.2/-0
MNBR-95x110.5x5.9	5.9	6.30 +0.2/-0	95.00 -0.036/-0.090	95.00 +0.087/-0	110.50 +0.2/-0
MNBR-100x115.5x5.9	5.9	6.30 +0.2/-0	100.00 -0.036/-0.090	100.00 +0.087/-0	115.50 +0.2/-0
MNBR-105x120.5x5.9	5.9	6.30 +0.2/-0	105.00 -0.036/-0.090	105.00 +0.087/-0	120.50 +0.2/-0
MNBR-110x125.5x5.9	5.9	6.30 +0.2/-0	110.00 -0.036/-0.090	110.00 +0.087/-0	125.50 +0.2/-0
MNBR-115x130.5x5.9	5.9	6.30 +0.2/-0	115.00 -0.036/-0.090	115.00 +0.087/-0	130.50 +0.2/-0
MNBR-120x135.5x5.9	5.9	6.30 +0.2/-0	120.00 -0.036/-0.090	120.00 +0.087/-0	135.50 +0.2/-0
MNBR-130x145.5x5.9	5.9	6.30 +0.2/-0	130.00 -0.043/-0.103	130.00 +0.100/-0	145.50 +0.2/-0

# STYLE MPU PISTON U-SEALS

All measurements on this page are in millimeters unless otherwise specified.



SEAL INFORMATION	
MATERIAL	92A URETHANE
TEMPERATURE RANGE	-40° TO +250° F
PRESSURE RANGE	0 TO 6,000 PSI
MAXIMUM VELOCITY	1 M/S

PART NUMBER	A I.D.	B O.D.	C HT.	D GROOVE WIDTH	H GROOVE DIA.	I BEARING DIA.	@1000 PSI	@3000 PSI	@5000 PSI	J BORE DIA.
MPU-15X25X8.2	15	25	8.2	9.2 +0.3/-0	15 +0/-0.070	25	+0/-0.8	+0/-0.36	+0/-0.16	25 +0.052/-0
MPU-17X25X5.7	17	25	5.7	6.7 +0.3/-0	17 +0/-0.070	25	+0/-0.8	+0/-0.36	+0/-0.16	25 +0.052/-0
MPU-20X30X8	20	30	8	9 +0.3/-0	20 +0/-0.084	30	+0/-0.8	+0/-0.36	+0/-0.16	30 +0.062/-0
MPU-21X37X11.8	21	37	11.8	12.8 +0.3/-0	21 +0/-0.084	37	+0/-0.8	+0/-0.36	+0/-0.16	37 +0.062/-0
MPU-24X32X5.7	24	32	5.7	6.7 +0.3/-0	24 +0/-0.084	32	+0/-0.8	+0/-0.36	+0/-0.16	32 +0.062/-0
MPU-25X35X7.3	25	35	7.3	8.3 +0.3/-0	25 +0/-0.084	35	+0/-0.8	+0/-0.36	+0/-0.16	35 +0.062/-0
MPU-30X40X10	30	40	10	11 +0.3/-0	30 +0/-0.100	40	+0/-0.8	+0/-0.36	+0/-0.16	40 +0.062/-0
MPU-30X40X7.3	30	40	7.3	8.3 +0.3/-0	30 +0/-0.100	40	+0/-0.8	+0/-0.36	+0/-0.16	40 +0.062/-0
MPU-35X45X6	35	45	6	7 +0.3/-0	35 +0/-0.100	45	+0/-0.8	+0/-0.36	+0/-0.16	45 +0.062/-0
MPU-35X45X7	35	45	7	8 +0.3/-0	35 +0/-0.100	45	+0/-0.8	+0/-0.36	+0/-0.16	45 +0.062/-0
MPU-40X50X6	40	50	6	7 +0.3/-0	40 +0/-0.100	50	+0/-0.8	+0/-0.36	+0/-0.16	50 +0.074/-0
MPU-40X50X7.3	40	50	7.3	8.3 +0.3/-0	40 +0/-0.100	50	+0/-0.8	+0/-0.36	+0/-0.16	50 +0.074/-0
MPU-45X55X6	45	55	6	7 +0.3/-0	45 +0/-0.100	55	+0/-0.8	+0/-0.36	+0/-0.16	55 +0.074/-0
MPU-45X55X7.3	45	55	7.3	8.3 +0.3/-0	45 +0/-0.100	55	+0/-0.8	+0/-0.36	+0/-0.16	55 +0.074/-0
MPU-45X60X10	45	60	10	11 +0.3/-0	45 +0/-0.100	60	+0/-0.8	+0/-0.36	+0/-0.16	60 +0.074/-0
MPU-48X63X11.4	48	63	11.4	12.4 +0.3/-0	48 +0/-0.100	63	+0/-0.8	+0/-0.36	+0/-0.16	63 +0.074/-0
MPU-50X60X7	50	60	7	8 +0.3/-0	50 +0/-0.120	60	+0/-0.8	+0/-0.36	+0/-0.16	60 +0.074/-0
MPU-50X65X10	50	65	10	11 +0.3/-0	50 +0/-0.120	65	+0/-0.8	+0/-0.36	+0/-0.16	65 +0.074/-0
MPU-50X70X12	50	70	12	13 +0.3/-0	50 +0/-0.120	70	+0/-0.8	+0/-0.36	+0/-0.16	70 +0.074/-0
MPU-50X70X13.5	50	70	13.5	14.5 +0.3/-0	50 +0/-0.120	70	+0/-0.8	+0/-0.36	+0/-0.16	70 +0.074/-0
MPU-53X63X11.8	53	63	11.8	12.8 +0.3/-0	53 +0/-0.120	63	+0/-0.8	+0/-0.36	+0/-0.16	63 +0.074/-0
MPU-53X63X12	53	63	12	13 +0.3/-0	53 +0/-0.120	63	+0/-0.8	+0/-0.36	+0/-0.16	63 +0.074/-0
MPU-53X63X7.3	53	63	7.3	8.3 +0.3/-0	53 +0/-0.120	63	+0/-0.8	+0/-0.36	+0/-0.16	63 +0.074/-0
MPU-55X70X9	55	70	9	10 +0.3/-0	55 +0/-0.120	70	+0/-0.8	+0/-0.36	+0/-0.16	70 +0.074/-0
MPU-55X70X10	55	70	10	11 +0.3/-0	55 +0/-0.120	70	+0/-0.8	+0/-0.36	+0/-0.16	70 +0.074/-0
MPU-57X73X10	57	73	10	11 +0.3/-0	57 +0/-0.120	73	+0/-0.8	+0/-0.36	+0/-0.16	73 +0.074/-0
MPU-60X70X6	60	70	6	7 +0.3/-0	60 +0/-0.120	70	+0/-0.8	+0/-0.36	+0/-0.16	70 +0.074/-0
MPU-60X80X12	60	80	12	13 +0.3/-0	60 +0/-0.120	80	+0/-0.8	+0/-0.36	+0/-0.16	80 +0.087/-0
MPU-61X71X6	61	71	6	7 +0.3/-0	61 +0/-0.120	71	+0/-0.8	+0/-0.36	+0/-0.16	71 +0.074/-0
MPU-62X78X10	62	78	10	11 +0.3/-0	62 +0/-0.120	78	+0/-0.8	+0/-0.36	+0/-0.16	78 +0.074/-0
MPU-65X75X6	65	75	6	7 +0.3/-0	65 +0/-0.120	75	+0/-0.8	+0/-0.36	+0/-0.16	75 +0.074/-0
MPU-65X80X11.4	65	80	11.4	12.4 +0.3/-0	65 +0/-0.120	80	+0/-0.8	+0/-0.36	+0/-0.16	80 +0.087/-0
MPU-65X80X9	65	80	9	10 +0.3/-0	65 +0/-0.120	80	+0/-0.8	+0/-0.36	+0/-0.16	80 +0.087/-0
MPU-67X75X8.8	67	75	8.8	9.8 +0.3/-0	67 +0/-0.120	75	+0/-0.8	+0/-0.36	+0/-0.16	75 +0.074/-0
MPU-70X80X6	70	80	6	7 +0.3/-0	70 +0/-0.120	80	+0/-0.8	+0/-0.36	+0/-0.16	80 +0.087/-0

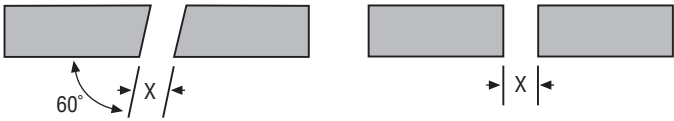
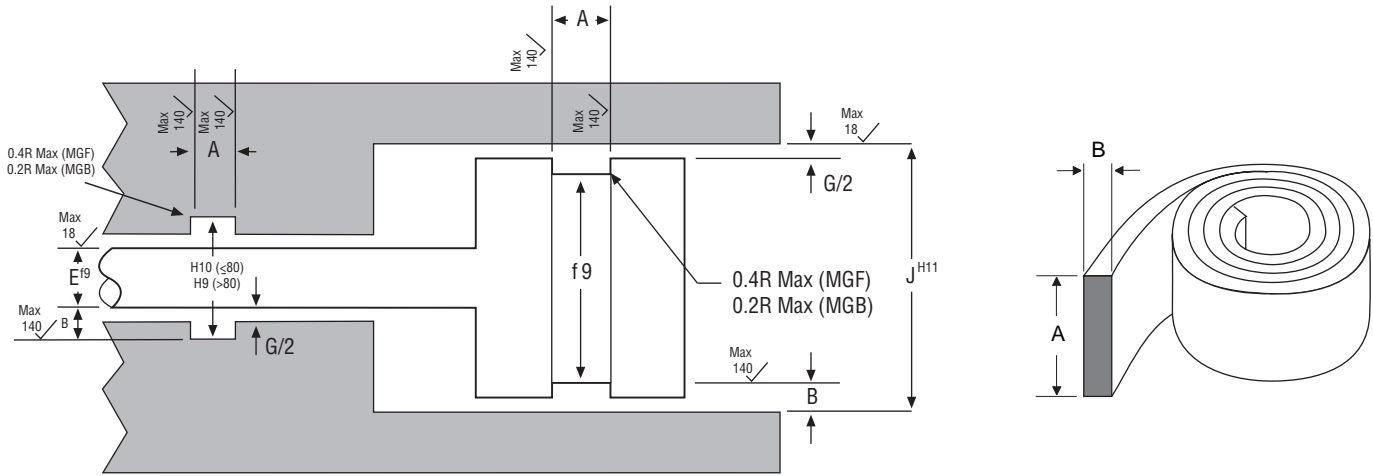
# STYLE MPU PISTON U-SEALS

All measurements on this page are in millimeters unless otherwise specified.

PART NUMBER	A I.D.	B O.D.	C HT.	D GROOVE WIDTH	H GROOVE DIA.	I BEARING DIA.	@1000 PSI	@3000 PSI	@5000 PSI	J BORE DIA.
MPU-70X80X6.8	70	80	6.8	7.8 +0.3/-0	70 +0/-0.120	80	+0/-0.8	+0/-0.36	+0/-0.16	80 +0.087/-0
MPU-70X90X12	70	90	12	13 +0.3/-0	70 +0/-0.120	90	+0/-0.8	+0/-0.36	+0/-0.16	90 +0.087/-0
MPU-72X80X12	72	80	12	13 +0.3/-0	72 +0/-0.120	80	+0/-0.8	+0/-0.36	+0/-0.16	80 +0.087/-0
MPU-75X90X9	75	90	9	10 +0.3/-0	75 +0/-0.120	90	+0/-0.8	+0/-0.36	+0/-0.16	90 +0.087/-0
MPU-80X90X6	80	90	6	7 +0.3/-0	80 +0/-0.140	90	+0/-0.8	+0/-0.36	+0/-0.16	90 +0.087/-0
MPU-80X100X12	80	100	12	13 +0.3/-0	80 +0/-0.140	100	+0/-0.8	+0/-0.36	+0/-0.16	100 +0.087/-0
MPU-85X100X11.4	85	100	11.4	12.4 +0.3/-0	85 +0/-0.140	100	+0/-0.8	+0/-0.36	+0/-0.16	100 +0.087/-0
MPU-85X100X9	85	100	9	10 +0.3/-0	85 +0/-0.140	100	+0/-0.8	+0/-0.36	+0/-0.16	100 +0.087/-0
MPU-85X105X15	85	105	15	16 +0.3/-0	85 +0/-0.140	105	+0/-0.8	+0/-0.36	+0/-0.16	105 +0.087/-0
MPU-90X100X6.8	90	100	6.8	7.8 +0.3/-0	90 +0/-0.140	100	+0/-0.8	+0/-0.36	+0/-0.16	100 +0.087/-0
MPU-100X110X8	100	110	8	9 +0.3/-0	100 +0/-0.140	110	+0/-0.8	+0/-0.36	+0/-0.16	110 +0.087/-0
MPU-105X125X14.5	105	125	14.5	15.5 +0.3/-0	105 +0/-0.140	125	+0/-0.8	+0/-0.36	+0/-0.16	125 +0.100/-0
MPU-115X130X9	115	130	9	10 +0.3/-0	115 +0/-0.140	130	+0/-0.8	+0/-0.36	+0/-0.16	130 +0.100/-0
MPU-130X150X14.5	130	150	14.5	15.5 +0.3/-0	130 +0/-0.160	150	+0/-0.8	+0/-0.36	+0/-0.16	150 +0.100/-0
MPU-135X150X9	135	150	9	10 +0.3/-0	135 +0/-0.160	150	+0/-0.8	+0/-0.36	+0/-0.16	150 +0.100/-0
MPU-140X150X13.6	140	150	13.6	14.6 +0.3/-0	140 +0/-0.160	150	+0/-0.8	+0/-0.36	+0/-0.16	150 +0.100/-0
MPU-140X160X18.2	140	160	18.2	19.2 +0.3/-0	140 +0/-0.160	160	+0/-0.8	+0/-0.36	+0/-0.16	160 +0.100/-0
MPU-155X170X9	155	170	9	10 +0.3/-0	155 +0/-0.160	170	+0/-0.8	+0/-0.36	+0/-0.16	170 +0.100/-0
MPU-160X180X15	160	180	15	16 +0.3/-0	160 +0/-0.160	180	+0/-0.8	+0/-0.36	+0/-0.16	180 +0.115/-0
MPU-165X180X9	165	180	9	10 +0.3/-0	165 +0/-0.160	180	+0/-0.8	+0/-0.36	+0/-0.16	180 +0.115/-0
MPU-180X200X14.5	180	200	14.5	15.5 +0.3/-0	180 +0/-0.185	200	+0/-0.8	+0/-0.36	+0/-0.16	200 +0.115/-0
MPU-250X270X12	250	270	12	13 +0.3/-0	250 +0/-0.210	270	+0/-0.8	+0/-0.36	+0/-0.16	270 +0.130/-0

# STYLE MGF FLEXIBLE GUIDE BEARINGS

All measurements on this page are in millimeters unless otherwise specified.



### Bearing End Gap

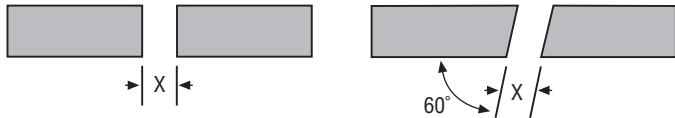
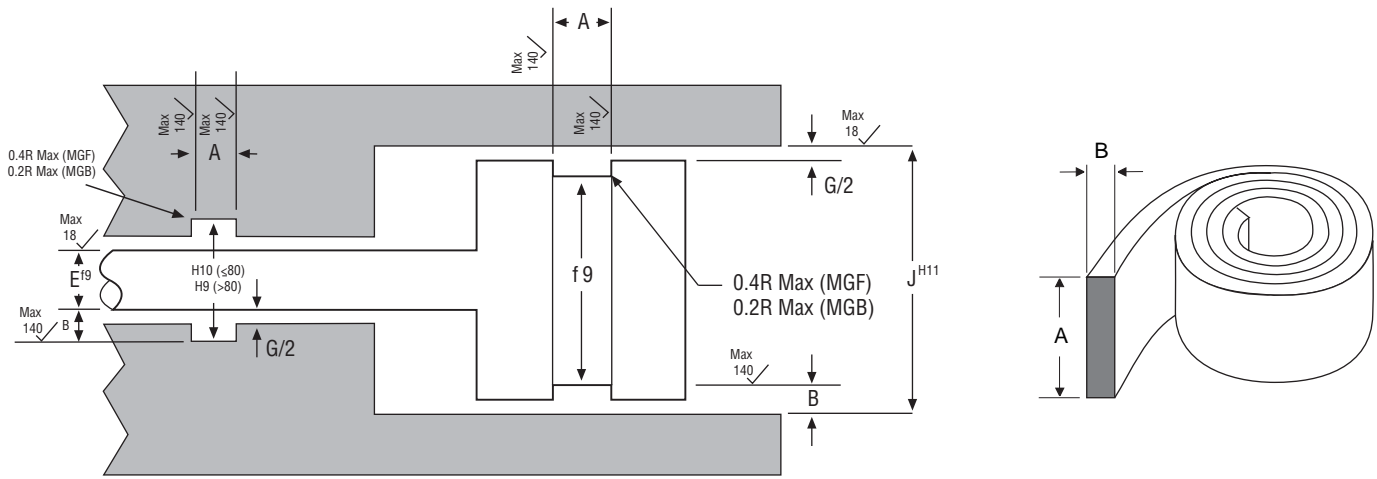
	0	X
Up to 50		3.00-1.50
Up to 120		5.00-3.50
Up to 250		9.00-7.25
Up to 550		17.00-15.00

SEAL INFORMATION	
MATERIAL	Fabric Reinforced Polyester
TEMPERATURE RANGE	-40° TO +250° F
COMPRESSIVE STRENGTH	8,500 PSI

PART NUMBER	A WIDTH	B THICKNESS	G GAP
MGF-5.6x2.5	5.6	2.50	0.70/1.60
MGF-9.7x2.5	9.7	2.50	0.70/1.60
MGF-13x2.5	13.0	2.50	0.80/1.60
MGF-14x3.5	14.0	3.50	0.80/1.60
MFG-15x2.5	15.0	2.50	0.80/1.60
MFG-20x2.5	20.0	2.50	0.80/1.60
MFG-25x2.5	25.0	2.50	0.80/1.60

# STYLE MGB FLEXIBLE GUIDE BEARINGS

All measurements on this page are in millimeters unless otherwise specified.



### Bearing End Gap

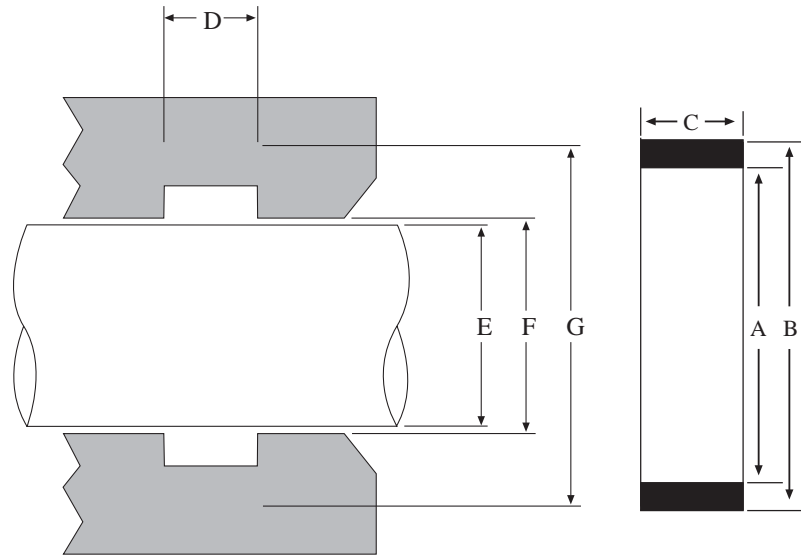
	0	X
Up to 50		1.50-1.00
Up to 120		3.50-1.50
Up to 250		6.00-2.00
Up to 550		8.00-4.00

SEAL INFORMATION	
MATERIAL	40% - 60% Bronze filled PTFE
TEMPERATURE RANGE	-50° TO +390° F
COMPRESSIVE STRENGTH	1,700 PSI

PART NUMBER	A WIDTH	B THICKNESS	G GAP
MGB-4x2.5	4.0	2.50	0.80/1.60
MGB-6x4	6.0	4.00	0.80/1.60
MGB-6.1x2.5	6.1	2.50	0.80/1.60
MGB-7.9x2.5	7.9	2.50	0.80/1.60
MGB-7.9x4	7.9	4.00	0.80/1.60
MGB-8.9x4	8.9	4.00	0.80/1.60
MGB-9.5x2.5	9.5	2.50	0.80/1.60
MGB-9.5x4	9.5	4.00	0.80/1.60
MGB-10x2	10.0	2.00	0.80/1.60
MGB-11.8x4	11.8	4.00	0.80/1.60
MGB-14x3.5	14.0	3.50	0.80/1.60
MGB-14.5x4	14.5	4.00	0.80/1.60
MGB-15x2.5	15.0	2.50	0.80/1.60
MGB-20x2	20.0	2.00	0.80/1.60
MFB-20x2.5	20.0	2.50	0.80/1.60
MGB-50x2	50.0	2.00	0.80/1.60

# STYLE MDU ROD BUSHINGS

All measurements on this page are in millimeters unless otherwise specified.



## HERCULES PART NUMBERS

**MDU - 30 x 34 x 40**  
 Style Prefix / I.D. / O.D. / W

SEAL INFORMATION	
LINING	BRONZE
OVERLAY	PTFE/LEAD
BACKING	STEEL
TEMPERATURE	-325° TO +536° F
COMPRESSIVE STRENGTH	44,000 PSI
STATIC LOAD CAPACITY	36,000 PSI
DYNAMIC LOAD CAPACITY	20,000 PSI
SPEEDS	5M/S (DRY) - 10M/S (LUBRICATED)
PV LIMITS	50,000 PSI - FPM (CONTINUOUS) 100,000 PSI - FPM (INTERMITTENT)

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D ROD DIA.	E HOUSING DIA.	G GROOVE WIDTH
MDU-22x25x25	22	25	25	22 -0.020/-0.041	25 +0.021/-0	25 ±0.25
MDU-30x34x40	30	34	40	30 -0.020/-0.041	34 +0.025/-0	40 ±0.25
MDU-30x35x40	30	35	40	30 -0.020/-0.041	35 +0.025/-0	40 ±0.25
MDU-40x44x30	40	44	30	40 -0.025/-0.050	44 +0.025/-0	30 ±0.25
MDU-40x45x30	40	45	30	40 -0.025/-0.050	45 +0.025/-0	30 ±0.25
MDU-45x50x30	45	50	30	45 -0.025/-0.050	50 +0.030/-0	30 ±0.25
MDU-50x55x30	50	55	30	50 -0.025/-0.050	55 +0.030/-0	30 ±0.25
MDU-50x55x40	50	55	40	50 -0.025/-0.050	55 +0.030/-0	40 ±0.25
MDU-55x60x30	55	60	30	55 -0.030/-0.060	60 +0.030/-0	30 ±0.25
MDU-55x60x40	55	60	40	55 -0.030/-0.060	60 +0.030/-0	40 ±0.25
MDU-60x65x40	60	65	40	60 -0.030/-0.060	65 +0.030/-0	40 ±0.25
MDU-65x70x30	65	70	30	65 -0.030/-0.060	70 +0.030/-0	30 ±0.25
MDU-65x70x40	65	70	40	65 -0.030/-0.060	70 +0.030/-0	40 ±0.25
MDU-65x70x60	65	70	60	65 -0.030/-0.060	70 +0.030/-0	60 ±0.25
MDU-70x75x15	70	75	15	70 -0.030/-0.060	75 +0.030/-0	15 ±0.25
MDU-70x75x30	70	75	30	70 -0.030/-0.060	75 +0.030/-0	30 ±0.25
MDU-70x75x40	70	75	40	70 -0.030/-0.060	75 +0.030/-0	40 ±0.25
MDU-75x80x30	75	80	30	75 -0.030/-0.060	80 +0.030/-0	30 ±0.25
MDU-75x80x40	75	80	40	75 -0.030/-0.060	80 +0.030/-0	40 ±0.25
MDU-75x80x60	75	80	60	75 -0.030/-0.060	80 +0.030/-0	60 ±0.25
MDU-80x85x30	80	85	30	80 +0/-0.054	85 +0.035/-0	30 ±0.25
MDU-80x85x40	80	85	40	80 +0/-0.054	85 +0.035/-0	40 ±0.25
MDU-80x85x60	80	85	60	80 +0/-0.054	85 +0.035/-0	60 ±0.25

## STYLE MDU ROD BUSHINGS

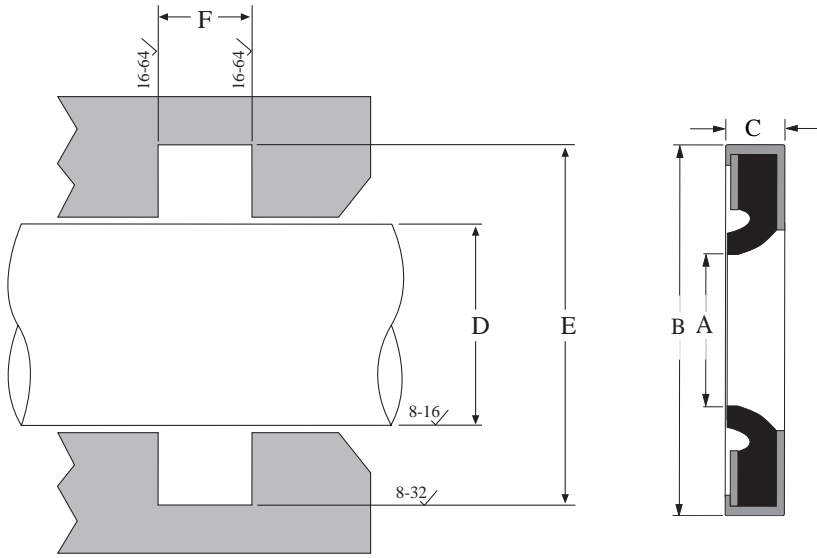
All measurements on this page are in millimeters unless otherwise specified.

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. HT.	D ROD DIA.	E HOUSING DIA.	G GROOVE WIDTH
MDU-85x90x30	85	90	30	85 +0/-0.054	90 +0.035/-0	30 ±0.25
MDU-85x90x40	85	90	40	85 +0/-0.054	90 +0.035/-0	40 ±0.25
MDU-90x95x20	90	95	20	90 +0/-0.054	95 +0.035/-0	20 ±0.25
MDU-90x95x35	90	95	35	90 +0/-0.054	95 +0.035/-0	35 ±0.25
MDU-90x95x40	90	95	40	90 +0/-0.054	95 +0.035/-0	40 ±0.25
MDU-90x95x50	90	95	50	90 +0/-0.054	95 +0.035/-0	50 ±0.25
MDU-95x100x30	95	100	30	95 +0/-0.054	100 +0.035/-0	30 ±0.25
MDU-95x100x40	95	100	40	95 +0/-0.054	100 +0.035/-0	40 ±0.25
MDU-100x105x20	100	105	20	100 +0/-0.054	105 +0.035/-0	20 ±0.25
MDU-100x105x35	100	105	35	100 +0/-0.054	105 +0.035/-0	35 ±0.25
MDU-100x105x40	100	105	40	100 +0/-0.054	105 +0.035/-0	40 ±0.25
MDU-100x105x50	100	105	50	100 +0/-0.054	105 +0.035/-0	50 ±0.25
MDU-105x110x40	105	110	40	105 +0/-0.054	110 +0.035/-0	40 ±0.25
MDU-105x110x50	105	110	50	105 +0/-0.054	110 +0.035/-0	50 ±0.25
MDU-110x115x40	110	115	40	110 +0/-0.054	115 +0.035/-0	40 ±0.25
MDU-110x115x50	110	115	50	110 +0/-0.054	115 +0.035/-0	50 ±0.25
MDU-110x115x55	110	115	55	110 +0/-0.054	115 +0.035/-0	55 ±0.25
MDU-110x115x60	110	115	60	110 +0/-0.054	115 +0.035/-0	60 ±0.25
MDU-115x120x35	115	120	35	115 +0/-0.054	120 +0.035/-0	35 ±0.25
MDU-115x120x50	115	120	50	115 +0/-0.054	120 +0.035/-0	50 ±0.25
MDU-120x125x20	120	125	20	120 +0/-0.054	125 +0.040/-0	20 ±0.25
MDU-120x125x40	120	125	40	120 +0/-0.054	125 +0.040/-0	40 ±0.25
MDU-120x125x50	120	125	50	120 +0/-0.054	125 +0.040/-0	50 ±0.25
MDU-120x125x60	120	125	60	120 +0/-0.054	125 +0.040/-0	60 ±0.25
MDU-130x135x40	130	135	40	130 +0/-0.063	135 +0.040/-0	40 ±0.25
MDU-130x135x50	130	135	50	130 +0/-0.063	135 +0.040/-0	50 ±0.25
MDU-130x135x100	130	135	100	130 +0/-0.063	135 +0.040/-0	100 ±0.25
MDU-140x145x50	140	145	50	140 +0/-0.063	145 +0.040/-0	50 ±0.25
MDU-140x145x60	140	145	60	140 +0/-0.063	145 +0.040/-0	60 ±0.25
MDU-140x145x70	140	145	70	140 +0/-0.063	145 +0.040/-0	70 ±0.25
MDU-150x155x40	150	155	40	150 +0/-0.063	155 +0.040/-0	40 ±0.25
MDU-160x165x40	160	165	40	160 +0/-0.063	165 +0.040/-0	40 ±0.25
MDU-160x165x50	160	165	50	160 +0/-0.063	165 +0.040/-0	50 ±0.25
MDU-170x175x60	170	175	60	170 +0/-0.063	175 +0.040/-0	60 ±0.25
MDU-200x205x50	200	205	50	200 +0/-0.072	205 +0.046/-0	50 ±0.25
MDU-240x245x60	240	245	60	240 +0/-0.072	245 +0.052/-0	60 ±0.25



# STYLE MDS LINK PIN DUST SEALS

All measurements on this page are in millimeters unless otherwise specified.

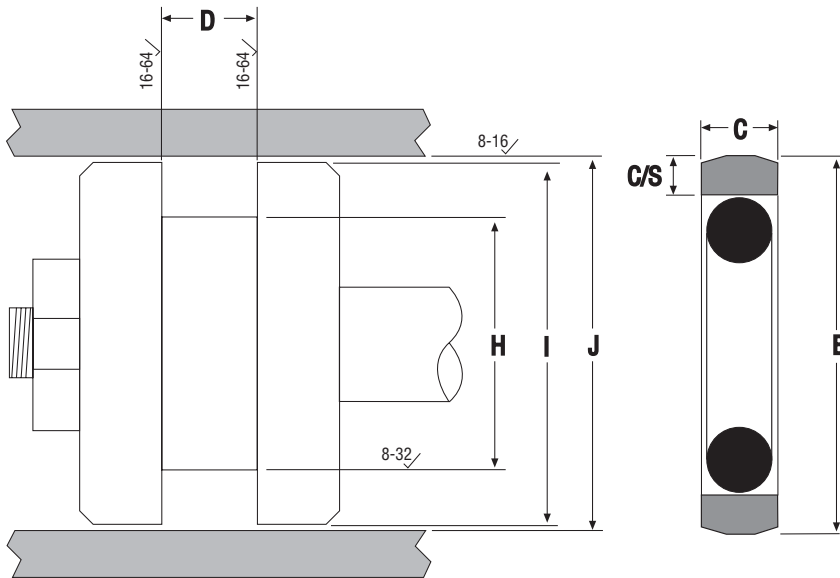


SEAL INFORMATION	
MATERIAL	NITRILE/URETHANE
CASE	STEEL
TEMPERATURE RANGE	-40° TO +250° F

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. WIDTH	D ROD DIA.	E GROOVE DIA.	F GROOVE WIDTH
MDS-45X55X4	45	55	4	45 +0/-0.16	55 +0.046/-0	4 +0.3 min
MDS-50X60X4	50	60	4	50 +0/-0.16	60 +0.046/-0	4 +0.3 min
MDS-50X65X6	50	65	6	50 +0/-0.16	65 +0.046/-0	6 +0.3 min
MDS-55X68X4	55	68	4	55 +0/-0.19	68 +0.046/-0	4 +0.3 min
MDS-60X75X4	60	75	4	60 +0/-0.19	75 +0.046/-0	4 +0.3 min
MDS-65X80X4	65	80	4	65 +0/-0.19	80 +0.046/-0	4 +0.3 min
MDS-70X85X4	70	85	4	70 +0/-0.19	85 +0.054/-0	4 +0.3 min
MDS-75X90X4	75	90	4	75 +0/-0.19	90 +0.054/-0	4 +0.3 min
MDS-80X95X4	80	95	4	80 +0/-0.19	95 +0.054/-0	4 +0.3 min
MDS-85X100X4	85	100	4	85 +0/-0.22	100 +0.054/-0	4 +0.3 min
MDS-90X105X4	90	105	4	90 +0/-0.22	105 +0.054/-0	4 +0.3 min
MDS-95X110X4	95	110	4	95 +0/-0.22	110 +0.054/-0	4 +0.3 min
MDS-100X115X4	100	115	4	100 +0/-0.22	115 +0.054/-0	4 +0.3 min
MDS-100X120X4	100	120	4	100 +0/-0.22	120 +0.054/-0	4 +0.3 min
MDS-110X120X4	110	120	4	110 +0/-0.22	120 +0.054/-0	4 +0.3 min
MDS-110X125X4	110	125	4	110 +0/-0.22	125 +0.063/-0	4 +0.3 min
MDS-120X135X4	120	135	4	120 +0/-0.22	135 +0.063/-0	4 +0.3 min

# STYLE MPS TWO PIECE PISTON SEALS

All measurements on this page are in millimeters unless otherwise specified.



## HERCULES PART NUMBERS

**MPS - 45 x 3.8 x 1.5**

Style Prefix / I.D. / Height / Seal C/S

SEAL INFORMATION	
MATERIAL	CARBON GRAPHITE / PTFE
ENERGIZER	70A NITRILE
TEMPERATURE RANGE	-40° TO +220° F
MAXIMUM PRESSURE	5,000 PSI
MAXIMUM VELOCITY	1.5 M/S

PART NUMBER	B NOM. O.D.	C NOM. HT.	C/S NOM. SEAL CROSS SECTION	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
MPS-45x3.8x1.5	45.0	3.80	1.50	4.20 +0.2/-0	34.00 +0/-0.062	45.00 -0.025/-0.064	45.00 +0.062/-0
MPS-45x4.3x2	45.0	4.30	2.00	4.50 +0.2/-0	35.00 +0/-0.062	45.00 -0.025/-0.064	45.00 +0.062/-0
MPS-45x4.4x1.2	45.0	4.40	1.20	4.60 +0.2/-0	37.10 +0/-0.062	45.00 -0.025/-0.064	45.00 +0.062/-0
MPS-50x2.7x2.5	50.0	2.70	2.50	2.70 +0.2/-0	41.30 +0/-0.062	50.00 -0.025/-0.064	50.00 +0.062/-0
MPS-50x3.8x1.6	50.0	3.80	1.60	4.20 +0.2/-0	39.00 +0/-0.062	50.00 -0.025/-0.064	50.00 +0.062/-0
MPS-50x4.3x2	50.0	4.30	2.00	4.50 +0.2/-0	40.00 +0/-0.062	50.00 -0.025/-0.064	50.00 +0.062/-0
MPS-50x4.4x1.2	50.0	4.40	1.20	4.60 +0.2/-0	41.95 +0/-0.062	50.00 -0.025/-0.064	50.00 +0.062/-0
MPS-50x6x3.5	50.0	6.00	3.50	6.30 +0.2/-0	34.50 +0/-0.062	50.00 -0.025/-0.064	50.00 +0.062/-0
MPS-53x4x2.5	53.0	4.00	2.50	4.20 +0.2/-0	42.35 +0/-0.062	53.00 -0.030/-0.076	53.00 +0.074/-0
MPS-55x4.3x2	55.0	4.30	2.00	4.50 +0.2/-0	45.00 +0/-0.062	55.00 -0.030/-0.076	55.00 +0.074/-0
MPS-55x6x3.4	55.0	6.00	3.40	6.30 +0.2/-0	39.50 +0/-0.062	55.00 -0.030/-0.076	55.00 +0.074/-0
MPS-60x3.8x2	60.0	3.80	2.00	4.20 +0.2/-0	51.10 +0/-0.062	60.00 -0.030/-0.076	60.00 +0.074/-0
MPS-60x4.4x1.3	60.0	4.40	1.30	4.60 +0.2/-0	52.50 +0/-0.074	60.00 -0.030/-0.076	60.00 +0.074/-0
MPS-60x4.9x2.5	60.0	4.90	2.50	5.10 +0.2/-0	49.50 +0/-0.062	60.00 -0.030/-0.076	60.00 +0.074/-0
MPS-60x6x3.5	60.0	6.00	3.50	6.30 +0.2/-0	44.50 +0/-0.062	60.00 -0.030/-0.076	60.00 +0.074/-0
MPS-63x6x3.5	63.0	6.00	3.50	6.30 +0.2/-0	47.50 +0/-0.062	63.00 -0.030/-0.076	63.00 +0.074/-0
MPS-63x7.3x2.5	63.0	7.30	2.50	7.50 +0.2/-0	48.00 +0/-0.062	63.00 -0.030/-0.076	63.00 +0.074/-0
MPS-65x6x3.5	65.0	6.00	3.50	6.30 +0.2/-0	49.50 +0/-0.062	65.00 -0.030/-0.076	65.00 +0.074/-0
MPS-70x4x1.8	70.0	4.00	1.80	4.20 +0.2/-0	61.45 +0/-0.074	70.00 -0.030/-0.076	70.00 +0.074/-0
MPS-70x4x2.9	70.0	4.00	2.90	4.20 +0.2/-0	59.00 +0/-0.074	70.00 -0.030/-0.076	70.00 +0.074/-0
MPS-70x6x3.5	70.0	6.00	3.50	6.30 +0.2/-0	54.50 +0/-0.074	70.00 -0.030/-0.076	70.00 +0.074/-0
MPS-70x6.2x2.5	70.0	6.20	2.50	6.50 +0.2/-0	55.90 +0/-0.074	70.00 -0.030/-0.076	70.00 +0.074/-0
MPS-71x7.3x2.5	71.0	7.30	2.50	7.50 +0.2/-0	56.00 +0/-0.074	71.00 -0.030/-0.076	71.00 +0.074/-0
MPS-75x6.2x2.5	75.0	6.20	2.50	6.50 +0.2/-0	60.90 +0/-0.074	75.00 -0.030/-0.076	75.00 +0.074/-0
MPS-75x7.2x2.5	75.0	7.20	2.50	7.40 +0.2/-0	61.00 +0/-0.074	75.00 -0.030/-0.076	75.00 +0.074/-0
MPS-80x6x3.5	80.0	6.00	3.50	6.30 +0.2/-0	64.50 +0/-0.074	80.00 -0.030/-0.076	80.00 +0.074/-0
MPS-80x6.2x2.5	80.0	6.20	2.50	6.50 +0.2/-0	65.90 +0/-0.074	80.00 -0.030/-0.076	80.00 +0.074/-0
MPS-80x7x2.5	80.0	7.00	2.50	7.30 +0.2/-0	65.90 +0/-0.074	80.00 -0.030/-0.076	80.00 +0.074/-0
MPS-80x7.3x2.5	80.0	7.30	2.50	7.70 +0.2/-0	65.65 +0/-0.074	80.00 -0.030/-0.076	80.00 +0.074/-0
MPS-80x7.9x5	80.0	7.90	5.00	8.10 +0.2/-0	59.00 +0/-0.074	80.00 -0.030/-0.076	80.00 +0.074/-0
MPS-85x6x3.5	85.0	6.00	3.50	6.30 +0.2/-0	69.50 +0/-0.074	85.00 -0.036/-0.090	85.00 +0.087/-0
MPS-85x7.9x5	85.0	7.90	5.00	8.10 +0.2/-0	64.00 +0/-0.074	85.00 -0.036/-0.090	85.00 +0.087/-0
MPS-90x6x3.5	90.0	6.00	3.50	6.30 +0.2/-0	74.50 +0/-0.074	90.00 -0.036/-0.090	90.00 +0.087/-0
MPS-90x7x2.5	90.0	7.00	2.50	7.30 +0.2/-0	75.90 +0/-0.074	90.00 -0.036/-0.090	90.00 +0.087/-0
MPS-90x7.3x2.5	90.0	7.30	2.50	7.50 +0.2/-0	75.00 +0/-0.074	90.00 -0.036/-0.090	90.00 +0.087/-0

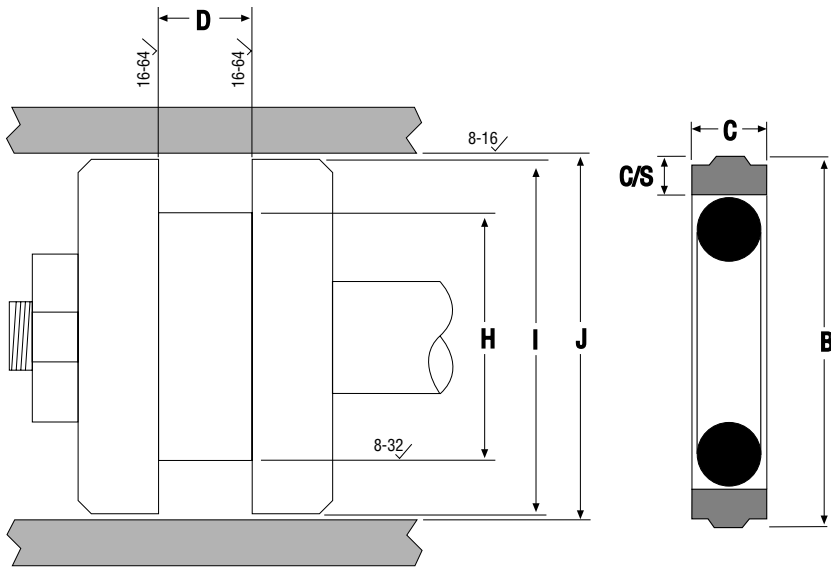
## STYLE MPS TWO PIECE PISTON SEALS

All measurements on this page are in millimeters unless otherwise specified.

PART NUMBER	B NOM. O.D.	C NOM. HT.	C/S NOM. SEAL CROSS SECTION	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
MPS-90x7.9x5	90.0	7.90	5.00	8.10 +0.2/-0	69.00 +0/-0.074	90.00 -0.036/-0.090	90.00 +0.087/-0
MPS-95x6x3.5	95.0	6.00	3.50	6.30 +0.2/-0	79.50 +0/-0.074	95.00 -0.036/-0.090	95.00 +0.087/-0
MPS-95x7.9x5	95.0	7.90	5.00	8.10 +0.2/-0	74.00 +0/-0.074	95.00 -0.036/-0.090	95.00 +0.087/-0
MPS-100x6x3.5	100.0	6.00	3.50	6.30 +0.2/-0	84.50 +0/-0.087	100.00 -0.036/-0.090	100.00 +0.087/-0
MPS-100x7.9x5	100.0	7.90	5.00	8.10 +0.2/-0	79.00 +0/-0.074	100.00 -0.036/-0.090	100.00 +0.087/-0
MPS-105x6x3.5	105.0	6.00	3.50	6.30 +0.2/-0	89.50 +0/-0.087	105.00 -0.036/-0.090	105.00 +0.087/-0
MPS-105x7.9x5	105.0	7.90	5.00	8.10 +0.2/-0	84.00 +0/-0.087	105.00 -0.036/-0.090	105.00 +0.087/-0
MPS-110x6x3.5	110.0	6.00	3.50	6.30 +0.2/-0	94.50 +0/-0.087	110.00 -0.036/-0.090	110.00 +0.087/-0
MPS-110x7.9x5	110.0	7.90	5.00	8.10 +0.2/-0	89.00 +0/-0.087	110.00 -0.036/-0.090	110.00 +0.087/-0
MPS-115x6x3.5	115.0	6.00	3.50	6.30 +0.2/-0	99.50 +0/-0.087	115.00 -0.036/-0.090	115.00 +0.087/-0
MPS-115x7.9x5	115.0	7.90	5.00	8.10 +0.2/-0	94.00 +0/-0.087	115.00 -0.036/-0.090	115.00 +0.087/-0
MPS-120x6x3.5	120.0	6.00	3.50	6.30 +0.2/-0	104.50 +0/-0.087	120.00 -0.036/-0.090	120.00 +0.087/-0
MPS-120x7.9x5	120.0	7.90	5.00	8.10 +0.2/-0	99.00 +0/-0.087	120.00 -0.036/-0.090	120.00 +0.087/-0
MPS-125x6x3.5	125.0	6.00	3.50	6.30 +0.2/-0	109.50 +0/-0.087	125.00 -0.043/-0.106	125.00 +0.100/-0
MPS-125x7x2.5	125.0	7.00	2.50	7.30 +0.2/-0	110.90 +0/-0.087	125.00 -0.043/-0.106	125.00 +0.100/-0
MPS-125x7.9x5	125.0	7.90	5.00	8.10 +0.2/-0	104.00 +0/-0.087	125.00 -0.043/-0.106	125.00 +0.100/-0
MPS-130x6x3.5	130.0	6.00	3.50	6.30 +0.2/-0	114.50 +0/-0.087	130.00 -0.043/-0.106	130.00 +0.100/-0
MPS-130x7.9x5	130.0	7.90	5.00	8.10 +0.2/-0	109.00 +0/-0.087	130.00 -0.043/-0.106	130.00 +0.100/-0
MPS-135x7.9x5	135.0	7.90	5.00	8.10 +0.2/-0	114.00 +0/-0.087	135.00 -0.043/-0.106	135.00 +0.100/-0
MPS-140x7.9x5	140.0	7.90	5.00	8.10 +0.2/-0	119.00 +0/-0.087	140.00 -0.043/-0.106	140.00 +0.100/-0
MPS-145x7.9x5	145.0	7.90	5.00	8.10 +0.2/-0	124.00 +0/-0.100	145.00 -0.043/-0.106	145.00 +0.100/-0
MPS-150x7.9x5	150.0	7.90	5.00	8.10 +0.2/-0	129.00 +0/-0.100	150.00 -0.043/-0.106	150.00 +0.100/-0
MPS-155x7.9x5	155.0	7.90	5.00	8.10 +0.2/-0	134.00 +0/-0.100	155.00 -0.043/-0.106	155.00 +0.100/-0
MPS-160x7.9x5	160.0	7.90	5.00	8.10 +0.2/-0	139.00 +0/-0.100	160.00 -0.043/-0.106	160.00 +0.100/-0
MPS-160x8.9x3.5	160.0	8.90	3.50	9.10 +0.2/-0	140.50 +0/-0.100	160.00 -0.043/-0.106	160.00 +0.100/-0
MPS-165x7.9x5	165.0	7.90	5.00	8.10 +0.2/-0	144.00 +0/-0.100	165.00 -0.043/-0.106	165.00 +0.100/-0
MPS-170x7.9x5	170.0	7.90	5.00	8.10 +0.2/-0	149.00 +0/-0.100	170.00 -0.043/-0.106	170.00 +0.100/-0
MPS-180x7.9x5	180.0	7.90	5.00	8.10 +0.2/-0	159.00 +0/-0.100	180.00 -0.043/-0.106	180.00 +0.100/-0
MPS-190x7.9x5	190.0	7.90	5.00	8.10 +0.2/-0	169.00 +0/-0.100	190.00 -0.050/-0.122	190.00 +0.115/-0
MPS-200x7.9x5	200.0	7.90	5.00	8.10 +0.2/-0	179.00 +0/-0.100	200.00 -0.050/-0.122	200.00 +0.115/-0
MPS-215x7.9x5	215.0	7.90	5.00	8.10 +0.2/-0	194.00 +0/-0.115	215.00 -0.050/-0.122	215.00 +0.115/-0
MPS-225x7.9x5	225.0	7.90	5.00	8.10 +0.2/-0	204.00 +0/-0.115	225.00 -0.050/-0.122	225.00 +0.115/-0
MPS-240x7.9x5	240.0	7.90	5.00	8.10 +0.2/-0	219.00 +0/-0.115	240.00 -0.050/-0.122	240.00 +0.115/-0

# STYLE MPSU TWO PIECE PISTON SEALS

All measurements on this page are in millimeters unless otherwise specified.



## HERCULES PART NUMBERS

**MPSU - 25 x 3 x 2**

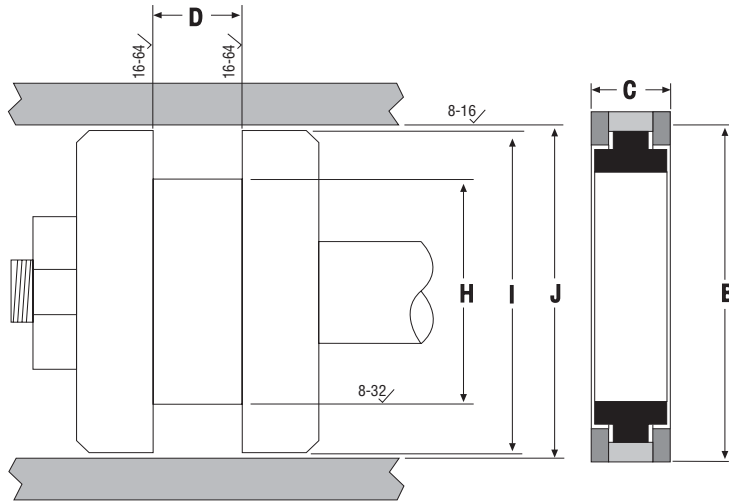
Style Prefix | I.D. | Height | Seal C/S

SEAL INFORMATION	
MATERIAL	URETHANE
ENERGIZER	70 NITRILE
TEMPERATURE RANGE	-40° TO +230° F
MAXIMUM PRESSURE	5,000 PSI
MAXIMUM VELOCITY	1 M/S

PART NUMBER	B NOM. O.D.	C NOM. HT.	C/S NOM. SEAL CROSS SECTION	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
MPSU-25X3X2	25.0	3.0	2.0	3.20 +0.2/-0	17.50 -0.16/-0.043	25.00 -0.020/-0.053	25.00 +0.052/-0
MPSU-30X3X2	30.0	3.0	2.0	3.20 +0.2/-0	22.50 -0.020/-0.053	30.00 -0.020/-0.053	30.00 +0.052/-0
MPSU-32X3X2	32.0	3.0	2.0	3.20 +0.2/-0	24.50 -0.020/-0.053	32.00 -0.025/-0.064	32.00 +0.062/-0
MPSU-40X4X2.9	40.0	4.0	2.9	4.20 +0.2/-0	29.00 -0.020/-0.053	40.00 -0.025/-0.064	40.00 +0.062/-0
MPSU-45X4X2.9	45.0	4.0	2.9	4.20 +0.2/-0	34.00 -0.025/-0.064	45.00 -0.025/-0.064	45.00 +0.062/-0
MPSU-50X4X2.9	50.0	4.0	2.9	4.20 +0.2/-0	39.00 -0.025/-0.064	50.00 -0.025/-0.064	50.00 +0.062/-0
MPSU-60X4X2.9	60.0	4.0	2.9	4.20 +0.2/-0	49.00 -0.025/-0.064	60.00 -0.030/-0.076	60.00 +0.074/-0
MPSU-63X4X2.9	63.0	4.0	2.9	4.20 +0.2/-0	52.00 -0.030/-0.076	63.00 -0.030/-0.076	63.00 +0.074/-0
MPSU-70X4X2.9	70.0	4.0	2.9	4.20 +0.2/-0	59.00 -0.030/-0.076	70.00 -0.030/-0.076	70.00 +0.074/-0
MPSU-70X6X2.8	70.0	6.0	2.8	6.30 +0.2/-0	57.00 -0.030/-0.076	70.00 -0.030/-0.076	70.00 +0.074/-0
MPSU-75X4X2.9	75.0	4.0	2.9	4.20 +0.2/-0	64.00 -0.030/-0.076	75.00 -0.030/-0.076	75.00 +0.074/-0
MPSU-80X6X3.5	80.0	6.0	3.5	6.30 +0.2/-0	64.50 -0.030/-0.076	80.00 -0.030/-0.076	80.00 +0.074/-0
MPSU-100X6X3.5	100.0	6.0	3.5	6.30 +0.2/-0	84.50 -0.036/-0.090	100.00 -0.036/-0.090	100.00 +0.100/-0
MPSU-125X6X3.5	125.0	6.0	3.5	6.30 +0.2/-0	109.50 -0.036/-0.090	125.00 -0.043/-0.106	125.00 +0.100/-0
MPSU-130X6X3.5	130.0	6.0	3.5	6.30 +0.2/-0	114.50 -0.036/-0.090	130.00 -0.043/-0.106	130.00 +0.100/-0
MPSU-140X7.9X5	140.0	7.9	5.0	8.10 +0.2/-0	119.00 -0.036/-0.090	140.00 -0.043/-0.106	140.00 +0.100/-0
MPSU-150X7.9X5	150.0	7.9	5.0	8.10 +0.2/-0	129.00 -0.043/-0.106	150.00 -0.043/-0.106	150.00 +0.100/-0
MPSU-160X7.9X5	160.0	7.9	5.0	8.10 +0.2/-0	139.00 -0.043/-0.106	160.00 -0.043/-0.106	160.00 +0.100/-0
MPSU-170X7.9X5	170.0	7.9	5.0	8.10 +0.2/-0	149.00 -0.043/-0.106	170.00 -0.043/-0.106	170.00 +0.100/-0
MPSU-180X7.9X5	180.0	7.9	5.0	8.10 +0.2/-0	159.00 -0.043/-0.106	180.00 -0.043/-0.106	180.00 +0.100/-0
MPSU-210X7.9X5	210.0	7.9	5.0	8.10 +0.2/-0	189.00 -0.050/-0.122	210.00 -0.050/-0.122	210.00 +0.115/-0

# STYLE MCPS FOUR PIECE PISTON SEALS

All measurements on this page are in millimeters unless otherwise specified.



## HERCULES PART NUMBERS

**MCPS - 50 x 40 x 7.5**

Style Prefix O.D. I.D. Height

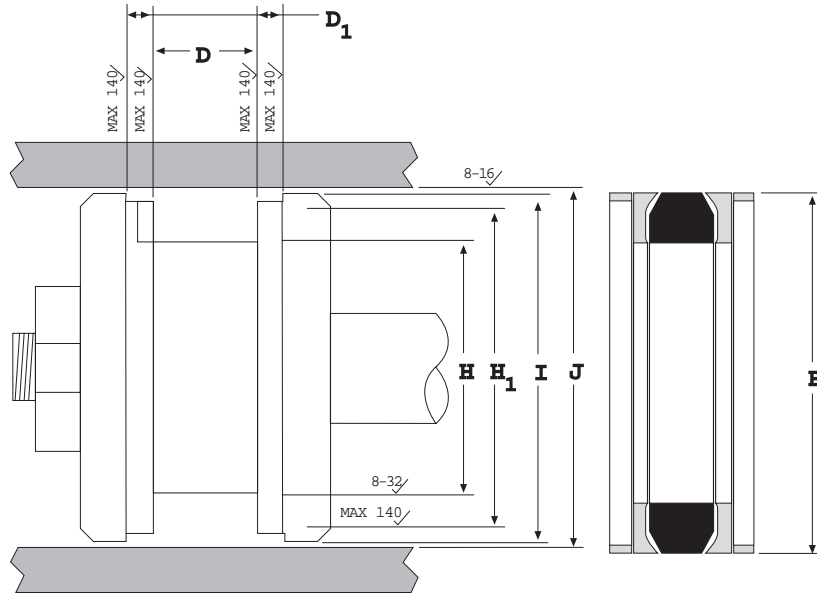
### SEAL INFORMATION

MATERIAL	PTFE PISTON SEAL NITRILE ENERGIZER NYLON BACK-UP RINGS
TEMPERATURE RANGE	-20° TO +225° F
MAXIMUM PRESSURE	6,000 PSI
MAXIMUM VELOCITY	1.5 M/S

PART NUMBER	B NOM. O.D.	C NOM. HT.	D GROOVE WIDTH	H GROOVE DIA.	I PISTON DIA.	J BORE DIA.
MCPS-50x40x7.5	50.0	7.5	8.0 +0.2/-0	40.00 +0/- .062	50.00 -0.025/-0.064	50.00 +0.062/-0
MCPS-60x46x8.5	60.0	8.5	9.0 +0.2/-0	46.00 +0/- .062	60.00 -0.030/-0.076	60.00 +0.074/-0
MCPS-70x55x10.5	70.0	10.5	11.0 +0.2/-0	55.00 +0/- .074	70.00 -0.030/-0.076	70.00 +0.074/-0
MCPS-70x60x7.5	70.0	7.5	8.0 +0.2/-0	60.00 +0/- .074	70.00 -0.030/-0.076	70.00 +0.074/-0
MCPS-70x60x10.5	70.0	10.5	11.0 +0.2/-0	60.00 +0/- .074	70.00 -0.030/-0.076	70.00 +0.074/-0
MCPS-75x60x10.5	75.0	10.5	11.0 +0.2/-0	60.00 +0/- .074	75.00 -0.030/-0.076	75.00 +0.074/-0
MCPS-75x63x8.6	75.0	8.6	9.1 +0.2/-0	63.00 +0/- .074	75.00 -0.030/-0.076	75.00 +0.074/-0
MCPS-80x65x10.5	80.0	10.5	11.0 +0.2/-0	65.00 +0/- .074	80.00 -0.030/-0.076	80.00 +0.074/-0
MCPS-80x65x11.5	80.0	11.5	12.0 +0.2/-0	65.00 +0/- .074	80.00 -0.030/-0.076	80.00 +0.074/-0
MCPS-85x70x10.5	85.0	10.5	11.0 +0.2/-0	70.00 +0/- .074	85.00 -0.036/-0.090	85.00 +0.087/-0
MCPS-90x75x10.5	90.0	10.5	11.0 +0.2/-0	75.00 +0/- .074	90.00 -0.036/-0.090	90.00 +0.087/-0
MCPS-90x75x11.5	90.0	11.5	12.0 +0.2/-0	75.00 +0/- .074	90.00 -0.036/-0.090	90.00 +0.087/-0
MCPS-95x80x10.5	95.0	10.5	11.0 +0.2/-0	80.00 +0/- .074	95.00 -0.036/-0.090	95.00 +0.087/-0
MCPS-100x85x12	100.0	12.0	12.5 +0.2/-0	85.00 +0/- .087	100.00 -0.036/-0.090	100.00 +0.087/-0
MCPS-105x90x12	105.0	12.0	12.5 +0.2/-0	90.00 +0/- .087	105.00 -0.036/-0.090	105.00 +0.087/-0
MCPS-110x95x12	110.0	12.0	12.5 +0.2/-0	95.00 +0/- .087	110.00 -0.036/-0.090	110.00 +0.087/-0
MCPS-115x100x12	115.0	12.0	12.5 +0.2/-0	100.00 +0/- .087	115.00 -0.036/-0.090	115.00 +0.087/-0
MCPS-120x100x15.5	120.0	15.5	16.0 +0.2/-0	100.00 +0/- .087	120.00 -0.036/-0.090	120.00 +0.087/-0
MCPS-120x105x12	120.0	12.0	12.5 +0.2/-0	105.00 +0/- .087	120.00 -0.036/-0.090	120.00 +0.087/-0
MCPS-125x105x15.5	125.0	15.5	16.0 +0.2/-0	105.00 +0/- .087	125.00 -0.043/-0.106	125.00 +0.100/-0
MCPS-125x102x15.5	125.0	15.5	16.0 +0.2/-0	102.00 +0/- .087	125.00 -0.043/-0.106	125.00 +0.100/-0
MCPS-130x107x15.5	130.0	15.5	16.0 +0.2/-0	107.00 +0/- .087	130.00 -0.043/-0.106	130.00 +0.100/-0
MCPS-135x112x15.5	135.0	15.5	16.0 +0.2/-0	112.00 +0/- .087	135.00 -0.043/-0.106	135.00 +0.100/-0
MCPS-140x117x15.5	140.0	15.5	16.0 +0.2/-0	117.00 +0/- .087	140.00 -0.043/-0.106	140.00 +0.100/-0
MCPS-140x120x15.5	140.0	15.5	16.0 +0.2/-0	120.00 +0/- .087	140.00 -0.043/-0.106	140.00 +0.100/-0
MCPS-145x122x15.5	145.0	15.5	16.0 +0.2/-0	122.00 +0/- .100	145.00 -0.043/-0.106	145.00 +0.100/-0
MCPS-150x127x15.5	150.0	15.5	16.0 +0.2/-0	127.00 +0/- .100	150.00 -0.043/-0.106	150.00 +0.100/-0
MCPS-160x137x15.5	160.0	15.5	16.0 +0.2/-0	137.00 +0/- .100	160.00 -0.043/-0.106	160.00 +0.100/-0
MCPS-160x140x15.5	160.0	15.5	16.0 +0.2/-0	140.00 +0/- .100	160.00 -0.043/-0.106	160.00 +0.100/-0
MCPS-165x142x15.5	165.0	15.5	16.0 +0.2/-0	142.00 +0/- .100	165.00 -0.043/-0.106	165.00 +0.100/-0
MCPS-170x147x15.5	170.0	15.5	16.0 +0.2/-0	147.00 +0/- .100	170.00 -0.043/-0.106	170.00 +0.100/-0
MCPS-180x157x15.5	180.0	15.5	16.0 +0.2/-0	157.00 +0/- .100	180.00 -0.043/-0.106	180.00 +0.100/-0
MCPS-180x160x15.5	180.0	15.5	16.0 +0.2/-0	160.00 +0/- .100	180.00 -0.043/-0.106	180.00 +0.100/-0
MCPS-185x162x15.5	185.0	15.5	16.0 +0.2/-0	162.00 +0/- .100	185.00 -0.050/-0.122	185.00 +0.115/-0
MCPS-190x167x15.5	190.0	15.5	16.0 +0.2/-0	167.00 +0/- .100	190.00 -0.050/-0.122	190.00 +0.115/-0
MCPS-200x177x15.5	200.0	15.5	16.0 +0.2/-0	177.00 +0/- .100	200.00 -0.050/-0.122	200.00 +0.115/-0
MCPS-225x202x15.5	225.0	15.5	16.0 +0.2/-0	202.00 +0/- .115	225.00 -0.050/-0.122	225.00 +0.115/-0
MCPS-250x222x17	250.0	17.0	17.5 +0.2/-0	222.00 +0/- .115	250.00 -0.050/-0.122	250.00 +0.115/-0
MCPS-260x232x17	260.0	17.0	17.5 +0.2/-0	232.00 +0/- .115	260.00 -0.056/-0.137	260.00 +0.115/-0
MCPS-280x252x17	280.0	17.0	17.5 +0.2/-0	252.00 +0/- .130	280.00 -0.056/-0.137	280.00 +0.130/-0
MCPS-300x272x17	300.0	17.0	17.5 +0.2/-0	272.00 +0/- .130	300.00 -0.056/-0.137	300.00 +0.130/-0

# STYLE MPSA FIVE PIECE PISTON SEALS

All measurements on this page are in millimeters unless otherwise specified.



## HERCULES PART NUMBERS

### MPSA - 032A

Style Prefix O.D.

SEAL INFORMATION	
MATERIAL	NITRILE PISTON SEAL POLYACETAL BACK-UP RINGS POLYACETAL BEARINGS
TEMPERATURE RANGE	-20° TO +230° F
MAXIMUM PRESSURE	5000 PSI
MAXIMUM VELOCITY	0.5 M/S

PART NUMBER	B NOM. O.D.	D SEAL GROOVE WIDTH	D1 BEARING GROOVE WIDTH	H SEAL GROOVE DIA.	H1 BEARING GROOVE DIA.	I PISTON DIA.	J BORE DIA.
MPSA-020	20.0	13.50 +0.20/-0	2.10 +0.10/-0	11.00 ±0.10	17.00 +0/-0.05	19.00 ±0.20	20.00 +0.084/-0
MPSA-022	22.0	13.50 +0.20/-0	2.10 +0.10/-0	13.00 ±0.10	19.00 +0/-0.05	21.00 ±0.20	22.00 +0.084/-0
MPSA-025	25.0	16.30 +0.20/-0	4.00 +0.10/-0	15.00 ±0.10	22.00 +0/-0.05	24.00 ±0.20	25.00 +0.084/-0
MPSA-025A	25.0	16.30 +0.20/-0	6.40 +0.10/-0	15.00 ±0.10	21.40 +0/-0.05	23.50 ±0.20	25.00 +0.084/-0
MPSA-025B	25.0	13.50 +0.20/-0	2.10 +0.10/-0	16.00 ±0.10	22.00 +0/-0.05	24.00 ±0.20	25.00 +0.084/-0
MPSA-028	28.0	13.50 +0.20/-0	2.10 +0.10/-0	19.00 ±0.10	25.00 +0/-0.05	27.00 ±0.20	28.00 +0.084/-0
MPSA-030A	30.0	13.50 +0.20/-0	2.10 +0.10/-0	21.00 ±0.10	27.00 +0/-0.05	29.00 ±0.20	30.00 +0.100/-0
MPSA-032	32.0	16.40 +0.20/-0	6.40 +0.10/-0	22.00 ±0.10	28.50 +0/-0.05	30.50 ±0.20	32.00 +0.100/-0
MPSA-032A	32.0	12.60 +0.20/-0	4.00 +0.10/-0	22.00 ±0.10	29.00 +0/-0.05	31.00 ±0.20	32.00 +0.100/-0
MPSA-032B	32.0	10.00 +0.20/-0	4.00 +0.10/-0	24.00 ±0.10	29.00 +0/-0.05	31.00 ±0.20	32.00 +0.100/-0
MPSA-032C	32.0	15.50 +0.20/-0	2.60 +0.10/-0	22.00 ±0.10	28.00 +0/-0.05	31.00 ±0.20	32.00 +0.100/-0
MPSA-032D	32.0	15.50 +0.20/-0	3.20 +0.10/-0	24.00 ±0.10	28.00 +0/-0.05	31.40 ±0.20	32.00 +0.100/-0
MPSA-035	35.0	16.30 +0.20/-0	6.40 +0.10/-0	25.00 ±0.10	31.40 +0/-0.05	33.50 ±0.20	35.00 +0.100/-0
MPSA-035A	35.0	13.50 +0.20/-0	2.60 +0.10/-0	25.00 ±0.10	31.00 +0/-0.05	34.00 ±0.20	35.00 +0.100/-0
MPSA-040	40.0	18.50 +0.20/-0	6.35 +0.10/-0	24.00 ±0.10	35.40 +0/-0.05	38.70 ±0.20	40.00 +0.100/-0
MPSA-040D	40.0	15.50 +0.20/-0	2.60 +0.10/-0	26.00 ±0.10	36.00 +0/-0.05	39.00 ±0.20	40.00 +0.100/-0
MPSA-040E	40.0	16.30 +0.20/-0	6.40 +0.10/-0	30.00 ±0.10	35.40 +0/-0.05	38.70 ±0.20	40.00 +0.100/-0
MPSA-040F	40.0	12.50 +0.20/-0	4.00 +0.10/-0	30.00 ±0.10	37.00 +0/-0.05	39.00 ±0.20	40.00 +0.100/-0
MPSA-040G	40.0	15.50 +0.20/-0	3.20 +0.10/-0	32.00 ±0.10	36.00 +0/-0.05	39.40 ±0.20	40.00 +0.100/-0
MPSA-045	45.0	16.40 +0.20/-0	6.40 +0.10/-0	35.00 ±0.10	40.40 +0/-0.05	43.50 ±0.20	45.00 +0.100/-0
MPSA-045A	45.0	18.30 +0.20/-0	6.40 +0.10/-0	29.00 ±0.10	40.40 +0/-0.05	43.70 ±0.20	45.00 +0.100/-0
MPSA-045B	45.0	15.50 +0.20/-0	2.60 +0.10/-0	31.00 ±0.10	41.00 +0/-0.05	44.00 ±0.20	45.00 +0.100/-0
MPSA-050	50.0	18.40 +0.20/-0	6.35 +0.10/-0	34.00 ±0.10	45.40 +0/-0.05	48.60 ±0.20	50.00 +0.100/-0
MPSA-050A	50.0	20.50 +0.20/-0	4.20 +0.10/-0	38.00 ±0.10	46.00 +0/-0.05	49.40 ±0.20	50.00 +0.100/-0
MPSA-050B	50.0	12.60 +0.20/-0	4.00 +0.10/-0	40.00 ±0.10	47.00 +0/-0.05	47.00 ±0.20	50.00 +0.100/-0
MPSA-050D	50.0	20.50 +0.20/-0	3.10 +0.10/-0	34.00 ±0.10	46.00 +0/-0.05	49.00 ±0.20	50.00 +0.100/-0
MPSA-055	55.0	18.40 +0.20/-0	6.40 +0.10/-0	39.00 ±0.10	50.40 +0/-0.05	53.60 ±0.20	55.00 +0.120/-0
MPSA-055B	55.0	20.50 +0.20/-0	3.10 +0.10/-0	39.00 ±0.10	51.00 +0/-0.05	54.00 ±0.20	55.00 +0.120/-0
MPSA-060	60.0	18.40 +0.20/-0	6.35 +0.10/-0	44.00 ±0.10	55.40 +0/-0.05	58.60 ±0.20	60.00 +0.120/-0
MPSA-060B	60.0	20.60 +0.20/-0	4.20 +0.10/-0	48.00 ±0.10	56.00 +0/-0.05	59.40 ±0.20	60.00 +0.120/-0
MPSA-063	63.0	19.40 +0.20/-0	6.35 +0.10/-0	47.00 ±0.10	58.40 +0/-0.05	61.50 ±0.20	63.00 +0.120/-0
MPSA-063A	63.0	20.50 +0.20/-0	4.20 +0.10/-0	51.00 ±0.10	59.00 +0/-0.05	62.40 ±0.20	63.00 +0.120/-0
MPSA-063B	63.0	12.60 +0.20/-0	4.00 +0.10/-0	53.00 ±0.10	60.00 +0/-0.05	62.00 ±0.20	63.00 +0.120/-0
MPSA-065	65.0	18.40 +0.20/-0	6.35 +0.10/-0	50.00 ±0.10	60.40 +0/-0.05	63.60 ±0.20	65.00 +0.120/-0
MPSA-070	70.0	22.40 +0.20/-0	6.35 +0.10/-0	50.00 ±0.10	64.20 +0/-0.05	68.30 ±0.20	70.00 +0.120/-0

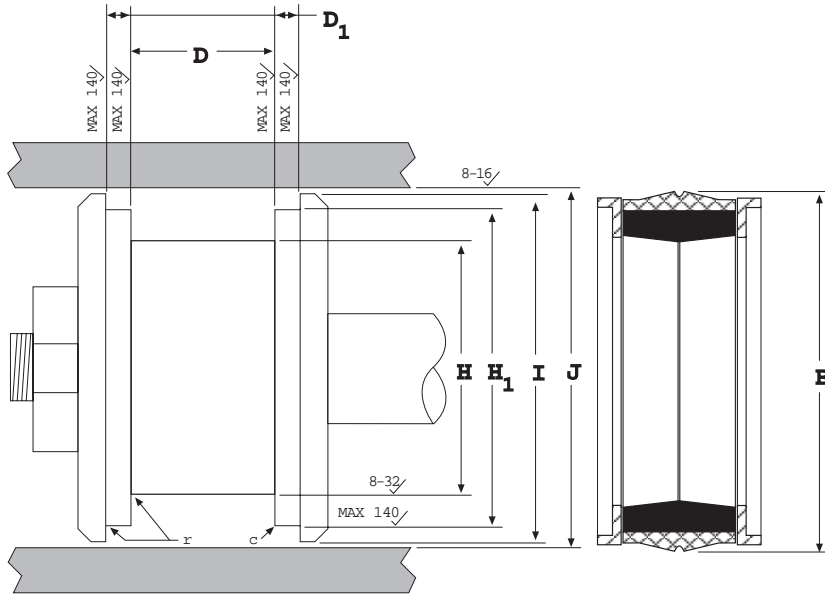
# STYLE MPSA FIVE PIECE PISTON SEALS

All measurements on this page are in millimeters unless otherwise specified.

PART NUMBER	B NOM. O.D.	D SEAL GROOVE WIDTH	D1 BEARING GROOVE WIDTH	H SEAL GROOVE DIA.	H1 BEARING GROOVE DIA.	I PISTON DIA.	J BORE DIA.
MPSA-070A	70.0	20.50 +0.20/-0	4.20 +0.10/-0	58.00 ±0.10	66.00 +0/-0.05	69.40 ±0.20	70.00 +0.120/-0
MPSA-070B	70.0	20.60 +0.20/-0	3.10 +0.10/-0	54.00 ±0.10	66.00 +0/-0.05	69.00 ±0.20	70.00 +0.120/-0
MPSA-075	75.0	22.40 +0.20/-0	6.35 +0.10/-0	55.00 ±0.10	69.20 +0/-0.05	73.30 ±0.20	75.00 +0.120/-0
MPSA-080	80.0	22.40 +0.20/-0	6.35 +0.10/-0	60.00 ±0.10	74.15 +0/-0.05	78.30 ±0.20	80.00 +0.120/-0
MPSA-080A	80.0	22.50 +0.20/-0	5.20 +0.10/-0	66.00 ±0.10	76.00 +0/-0.05	79.40 ±0.20	80.00 +0.120/-0
MPSA-080C	80.0	22.60 +0.20/-0	3.60 +0.10/-0	62.00 ±0.10	76.00 +0/-0.05	78.00 ±0.20	80.00 +0.120/-0
MPSA-080D	80.0	25.10 +0.20/-0	6.30 +0.10/-0	60.00 ±0.10	75.00 +0/-0.05	78.00 ±0.20	80.00 +0.120/-0
MPSA-085	85.0	22.40 +0.20/-0	6.35 +0.10/-0	65.00 ±0.10	79.15 +0/-0.05	83.30 ±0.20	85.00 +0.140/-0
MPSA-090	90.0	22.40 +0.20/-0	6.35 +0.10/-0	70.00 ±0.10	84.15 +0/-0.05	88.30 ±0.20	90.00 +0.140/-0
MPSA-090B	90.0	22.60 +0.20/-0	5.20 +0.10/-0	76.00 ±0.10	86.00 +0/-0.05	89.40 ±0.20	90.00 +0.140/-0
MPSA-090C	90.0	22.50 +0.20/-0	3.60 +0.10/-0	72.00 ±0.10	86.00 +0/-0.05	89.00 ±0.20	90.00 +0.140/-0
MPSA-092	92.0	13.10 +0.20/-0	6.35 +0.10/-0	82.00 ±0.10	88.00 +0/-0.05	90.30 ±0.20	92.00 +0.140/-0
MPSA-095	95.0	22.40 +0.20/-0	6.40 +0.10/-0	75.00 ±0.10	89.15 +0/-0.05	93.30 ±0.20	95.00 +0.140/-0
MPSA-100	100.0	22.40 +0.20/-0	6.35 +0.10/-0	75.00 ±0.10	93.15 +0/-0.05	98.00 ±0.20	100.00 +0.140/-0
MPSA-100A	100.0	20.10 +0.20/-0	5.00 +0.10/-0	85.00 ±0.10	96.00 +0/-0.05	98.50 ±0.20	100.00 +0.140/-0
MPSA-100B	100.0	25.10 +0.20/-0	6.30 +0.10/-0	80.00 ±0.10	95.00 +0/-0.05	98.00 ±0.20	100.00 +0.140/-0
MPSA-100E	100.0	22.50 +0.20/-0	3.60 +0.10/-0	82.00 ±0.10	96.00 +0/-0.05	99.00 ±0.20	102.00 +0.140/-0
MPSA-100F	100.0	22.50 +0.20/-0	5.20 +0.10/-0	86.00 ±0.10	96.00 +0/-0.05	99.40 ±0.20	100.00 +0.140/-0
MPSA-105	105.0	22.40 +0.20/-0	6.35 +0.10/-0	80.00 ±0.10	98.10 +0/-0.05	103.00 ±0.20	105.00 +0.140/-0
MPSA-105A	105.0	14.80 +0.20/-0	6.35 +0.10/-0	92.50 ±0.10	99.15 +0/-0.05	103.30 ±0.20	105.00 +0.140/-0
MPSA-110	110.0	22.40 +0.20/-0	6.35 +0.10/-0	85.00 ±0.10	103.10 +0/-0.05	108.00 ±0.20	110.00 +0.140/-0
MPSA-110A	110.0	25.40 +0.20/-0	6.35 +0.10/-0	85.00 ±0.10	103.10 +0/-0.05	108.00 ±0.20	110.00 +0.140/-0
MPSA-110B	110.0	22.50 +0.20/-0	5.20 +0.10/-0	96.0 ±0.10	106.00 +0/-0.05	109.40 ±0.20	110.00 +0.140/-0
MPSA-110D	110.0	22.50 +0.20/-0	3.60 +0.10/-0	92.00 ±0.10	106.00 +0/-0.05	109.00 ±0.20	110.00 +0.140/-0
MPSA-115	115.0	22.40 +0.20/-0	6.35 +0.10/-0	90.00 ±0.10	108.10 +0/-0.05	113.00 ±0.20	115.00 +0.140/-0
MPSA-115B	115.0	22.50 +0.20/-0	3.60 +0.10/-0	97.00 ±0.10	111.00 +0/-0.05	114.00 ±0.20	115.00 +0.140/-0
MPSA-120	120.0	22.40 +0.20/-0	6.35 +0.10/-0	95.00 ±0.10	113.10 +0/-0.05	118.00 ±0.20	120.00 +0.140/-0
MPSA-120B	120.0	22.50 +0.20/-0	5.20 +0.10/-0	106.00 ±0.10	116.00 +0/-0.05	119.40 ±0.20	120.00 +0.160/-0
MPSA-125	125.0	25.40 +0.20/-0	6.35 +0.10/-0	100.00 ±0.10	118.10 +0/-0.05	123.00 ±0.20	125.00 +0.160/-0
MPSA-125A	125.0	24.90 +0.20/-0	6.35 +0.10/-0	105.00 ±0.10	120.00 +0/-0.05	123.00 ±0.20	125.00 +0.160/-0
MPSA-125E	125.0	26.50 +0.20/-0	5.10 +0.10/-0	103.00 ±0.10	121.00 +0/-0.05	124.00 ±0.20	125.00 +0.160/-0
MPSA-125F	125.0	26.50 +0.20/-0	7.20 +0.10/-0	108.00 ±0.10	121.00 +0/-0.05	124.40 ±0.20	125.00 +0.160/-0
MPSA-130	130.0	25.40 +0.20/-0	9.52 +0.10/-0	105.00 ±0.10	122.60 +0/-0.05	127.50 ±0.20	130.00 +0.160/-0
MPSA-135	135.0	25.40 +0.20/-0	9.50 +0.10/-0	110.00 ±0.10	127.60 +0/-0.05	132.50 ±0.20	135.00 +0.160/-0
MPSA-140	140.0	25.40 +0.20/-0	9.52 +0.10/-0	115.00 ±0.10	132.60 +0/-0.05	137.50 ±0.20	140.00 +0.160/-0
MPSA-140A	140.0	45.40 +0.20/-0	12.70 +0.10/-0	115.00 ±0.10	131.70 +0/-0.05	137.40 ±0.20	140.00 +0.160/-0
MPSA-140B	140.0	25.40 +0.20/-0	6.35 +0.10/-0	115.00 ±0.10	133.00 +0/-0.05	138.00 ±0.20	140.00 +0.160/-0
MPSA-140C	140.0	25.10 +0.20/-0	6.30 +0.10/-0	120.00 ±0.10	135.00 +0/-0.05	138.00 ±0.20	140.00 +0.160/-0
MPSA-150	150.0	25.40 +0.20/-0	9.52 +0.10/-0	125.00 ±0.10	142.60 +0/-0.05	147.50 ±0.20	150.00 +0.160/-0
MPSA-155	155.0	25.30 +0.20/-0	9.50 +0.10/-0	130.00 ±0.10	147.60 +0/-0.05	152.50 ±0.20	155.00 +0.160/-0
MPSA-160	160.0	25.40 +0.20/-0	9.50 +0.10/-0	135.00 ±0.10	152.60 +0/-0.05	157.50 ±0.20	160.00 +0.160/-0
MPSA-160A	160.0	25.40 +0.20/-0	6.35 +0.10/-0	130.00 ±0.10	153.00 +0/-0.05	158.00 ±0.20	160.00 +0.160/-0
MPSA-160B	160.0	25.10 +0.20/-0	6.30 +0.10/-0	140.00 ±0.10	155.00 +0/-0.05	158.00 ±0.20	160.00 +0.160/-0
MPSA-170	170.0	25.10 +0.20/-0	12.70 +0.10/-0	145.00 ±0.10	161.70 +0/-0.05	168.00 ±0.20	170.00 +0.160/-0
MPSA-170A	170.0	25.10 +0.20/-0	6.35 +0.10/-0	140.00 ±0.10	163.00 +0/-0.05	168.00 ±0.20	170.00 +0.160/-0
MPSA-175B	175.0	25.30 +0.20/-0	12.70 +0.10/-0	150.00 ±0.10	167.00 +0/-0.05	174.00 ±0.20	175.00 +0.160/-0
MPSA-180A	180.0	35.40 +0.20/-0	6.35 +0.10/-0	150.00 ±0.10	173.00 +0/-0.05	178.00 ±0.20	180.00 +0.160/-0
MPSA-190	190.0	25.30 +0.20/-0	12.70 +0.10/-0	165.00 ±0.10	181.70 +0/-0.05	187.00 ±0.20	190.00 +0.185/-0
MPSA-220A	220.0	25.40 +0.20/-0	12.70 +0.10/-0	195.00 ±0.10	211.60 +0/-0.05	217.00 ±0.20	220.00 +0.185/-0

# STYLE MPSB FIVE PIECE PISTON SEALS

All measurements on this page are in millimeters unless otherwise specified.



## HERCULES PART NUMBERS

### MPSB - 125

Style Prefix      O.D.

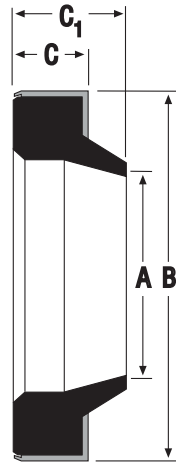
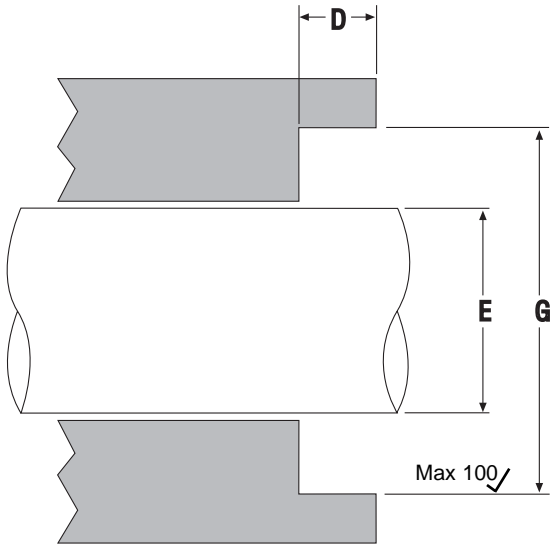
SEAL INFORMATION	
MATERIAL	NITRILE / FABRIC POLYACETAL BEARINGS
TEMPERATURE RANGE	-20° TO +195° F
MAXIMUM PRESSURE	5,000 PSI
MAXIMUM VELOCITY	1 M/S

PART NUMBER	B NOM. O.D.	D SEAL GROOVE WIDTH	D1 BEARING GROOVE WIDTH	H SEAL GROOVE DIA.	H1 BEARING GROOVE DIA.	I PISTON DIA.	J BORE DIA.
MPSB-070	70	20.5 +0.20/-0	4.2 +0.10/-0	58.0 +0/-0.190	66.0 +0-0.05	69.4 ±0.10	70.0 +0.120/-0
MPSB-100	100	22.5 +0.20/-0	5.2 +0.10/-0	86.0 +0/-0.220	96.0 +0-0.05	99.4 ±0.10	100.0 +0.140/-0
MPSB-125	125	26.5 +0.20/-0	7.2 +0.10/-0	108.0 +0/-0.220	121.0 +0-0.05	124.4 ±0.10	125.0 +0.16/-0
MPSB-180	180	26.5 +0.20/-0	7.2 +0.10/-0	163.0 +0/-0.250	176.0 +0-0.05	179.4 ±0.10	180.0 +0.185/-0



# STYLE MCW METAL CLAD WIPERS

All measurements on this page are in millimeters unless otherwise specified.



## HERCULES PART NUMBERS

**MCW - 20 x 30 x 4**

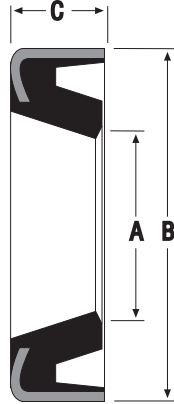
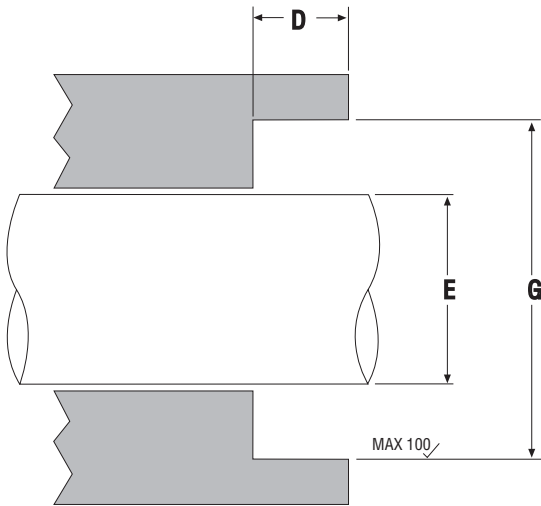
Style Prefix    I.D.    O.D.    Base Height

SEAL INFORMATION	
MATERIAL	94A URETHANE/METAL
TEMPERATURE RANGE	-30° TO +212° F

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C BASE HEIGHT	C1 OVERALL HT.	D GROOVE WIDTH	E ROD DIA.	G HOUSING DIA.
MCW-12X20X4	12.0	20.0	4.0	6.0	4.0 +0.1/-0	12.0 -0.016/-0.043	20.0 +0.033/-0
MCW-20X30X4	20.0	30.0	4.0	5.0	4.0 +0.1/-0	20.0 -0.020/-0.053	30.0 +0.033/-0
MCW-20X30X7	20.0	30.0	7.0	9.0	7.0 +0.1/-0	20.0 -0.020/-0.053	30.0 +0.033/-0
MCW-25X35X7	25.0	35.0	7.0	9.0	7.0 +0.1/-0	25.0 -0.020/-0.053	35.0 +0.039/-0
MCW-25X37X6	25.0	37.0	6.0	9.0	6.3 +0.1/-0	25.0 -0.020/-0.053	37.0 +0.039/-0
MCW-28X38X5	28.0	38.0	5.0	7.0	5.0 +0.1/-0	28.0 -0.020/-0.053	38.0 +0.039/-0
MCW-28X38X7	28.0	38.0	7.0	9.0	7.0 +0.1/-0	28.0 -0.020/-0.053	38.0 +0.039/-0
MCW-30X42X6	30.0	42.0	6.0	9.0	6.3 +0.1/-0	30.0 -0.020/-0.053	42.0 +0.039/-0
MCW-30X45X7	30.0	45.0	7.0	10.0	7.0 +0.1/-0	30.0 -0.020/-0.053	45.0 +0.039/-0
MCW-32X44X7	32.0	44.0	7.0	10.0	6.3 +0.1/-0	32.0 -0.025/-0.064	44.0 +0.039/-0
MCW-32X45X7	32.0	45.0	7.0	10.0	7.0 +0.1/-0	32.0 -0.025/-0.064	45.0 +0.039/-0
MCW-32X52X8	32.0	52.0	8.0	11.0	8.0 +0.1/-0	32.0 -0.025/-0.064	52.0 +0.039/-0
MCW-35X47X7	35.0	47.0	7.0	10.0	7.3 +0.1/-0	35.0 -0.025/-0.064	47.0 +0.039/-0
MCW-36X45X7	36.0	45.0	7.0	10.0	7.0 +0.1/-0	36.0 -0.025/-0.064	45.0 +0.039/-0
MCW-38X50X7	38.0	50.0	7.0	10.0	7.3 +0.1/-0	38.0 -0.025/-0.064	50.0 +0.039/-0
MCW-40X52X7	40.0	52.0	7.0	10.0	7.3 +0.1/-0	40.0 -0.025/-0.064	52.0 +0.046/-0
MCW-45X57X7	45.0	57.0	7.0	10.0	7.3 +0.1/-0	45.0 -0.025/-0.064	57.0 +0.046/-0
MCW-50X62X7	50.0	62.0	7.0	10.0	7.3 +0.1/-0	50.0 -0.025/-0.064	62.0 +0.046/-0
MCW-55X69X8	55.0	69.0	8.0	11.0	8.3 +0.1/-0	55.0 -0.030/-0.076	69.0 +0.046/-0
MCW-56X70X8	56.0	70.0	8.0	11.0	8.3 +0.1/-0	56.0 -0.030/-0.076	70.0 +0.046/-0
MCW-60X74X8	60.0	74.0	8.0	11.0	8.3 +0.1/-0	60.0 -0.030/-0.076	74.0 +0.046/-0
MCW-65X79X8	65.0	79.0	8.0	11.0	8.3 +0.1/-0	65.0 -0.030/-0.076	79.0 +0.046/-0
MCW-70X80X7	70.0	80.0	7.0	10.0	7.3 +0.1/-0	70.0 -0.030/-0.076	80.0 +0.046/-0
MCW-70X84X8	70.0	84.0	8.0	11.0	8.3 +0.1/-0	70.0 -0.030/-0.076	84.0 +0.054/-0
MCW-75X85X7	75.0	85.0	7.0	9.0	7.0 +0.1/-0	75.0 -0.030/-0.076	85.0 +0.054/-0
MCW-75X89X8	75.0	89.0	8.0	11.0	8.3 +0.1/-0	75.0 -0.030/-0.076	89.0 +0.054/-0
MCW-80X94X8	80.0	94.0	8.0	11.0	8.3 +0.1/-0	80.0 -0.030/-0.076	94.0 +0.054/-0
MCW-85X99X8	85.0	99.0	8.0	11.0	8.3 +0.1/-0	85.0 -0.036/-0.090	99.0 +0.054/-0
MCW-90X104X8	90.0	104.0	8.0	11.0	8.3 +0.1/-0	90.0 -0.036/-0.090	104.0 +0.054/-0
MCW-95X109X8	95.0	109.0	8.0	11.0	8.3 +0.1/-0	95.0 -0.036/-0.090	109.0 +0.054/-0
MCW-100X114X8	100.0	114.0	8.0	11.0	8.3 +0.1/-0	100.0 -0.036/-0.090	114.0 +0.054/-0
MCW-105X119X9	105.0	119.0	9.0	12.0	9.0 +0.1/-0	105.0 -0.036/-0.090	119.0 +0.054/-0
MCW-105X121X9	105.0	121.0	9.0	12.0	9.4 +0.1/-0	105.0 -0.036/-0.090	121.0 +0.063/-0
MCW-110X126X9	110.0	126.0	9.0	12.0	9.4 +0.1/-0	110.0 -0.036/-0.090	126.0 +0.063/-0
MCW-115X131X9	115.0	131.0	9.0	12.0	9.0 +0.1/-0	115.0 -0.036/-0.090	131.0 +0.063/-0
MCW-120X136X9	120.0	136.0	9.0	12.0	9.4 +0.1/-0	120.0 -0.036/-0.090	136.0 +0.063/-0
MCW-130X146X9	130.0	146.0	9.0	12.0	9.4 +0.1/-0	130.0 -0.043/-0.106	146.0 +0.063/-0
MCW-140X160X10	140.0	160.0	10.0	14.0	10.4 +0.1/-0	140.0 -0.043/-0.106	160.0 +0.063/-0
MCW-150X170X10	150.0	170.0	10.0	14.0	10.4 +0.1/-0	150.0 -0.043/-0.106	170.0 +0.063/-0
MCW-160X180X10	160.0	180.0	10.0	14.0	10.4 +0.1/-0	160.0 -0.043/-0.106	180.0 +0.063/-0

# STYLE MCWA METAL CLAD WIPERS

All measurements on this page are in millimeters unless otherwise specified.



## HERCULES PART NUMBERS

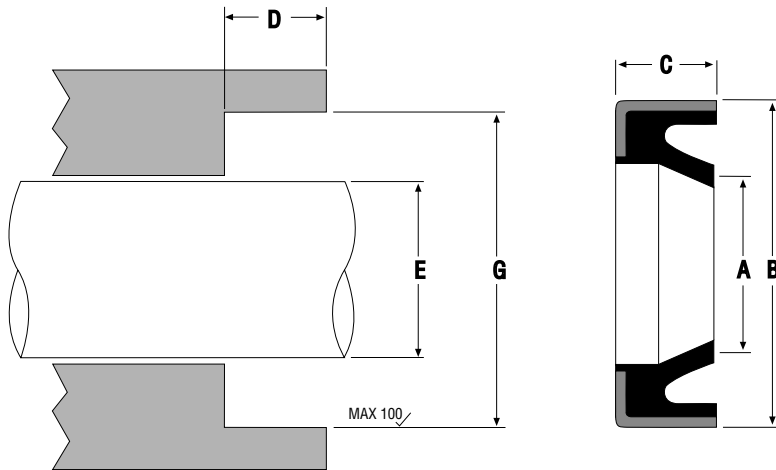
**MCWA - 60 x 70 x 7**  
 Style Prefix    I.D.    O.D.    Height

SEAL INFORMATION	
MATERIAL	URETHANE/METAL
TEMPERATURE RANGE	-40° TO +210° F

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C OVERALL HT.	D GROOVE WIDTH	E NOM. ROD DIA.	G HOUSING DIA.
MCWA-60X70X7	60.0	70.0	7.0	7.0 +0.2/-0	60.0	70.0 +0.046/-0
MCWA-75X90X8	75.0	90.0	8.0	8.0 +0.2/-0	75.0	90.0 +0.046/-0
MCWA-70X80X7	70.0	80.0	7.0	7.0 +0.2/-0	70.0	80.0 +0.046/-0
MCWA-80X90X7	80.0	90.0	7.0	7.0 +0.2/-0	80.0	90.0 +0.046/-0
MCWA-85X100X8	85.0	100.0	8.0	8.0 +0.2/-0	85.0	100.0 +0.046/-0
MCWA-90x100x7	90.0	100.0	7.0	7.0 +0.2/-0	90.0	100.0 +0.046/-0

# STYLE MCWI METAL CLAD WIPERS

All measurements on this page are in millimeters unless otherwise specified.



**HERCULES  
PART NUMBERS**

**MCWI - 35 x 50 x 9**

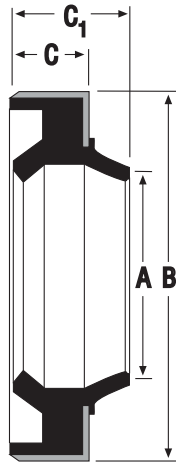
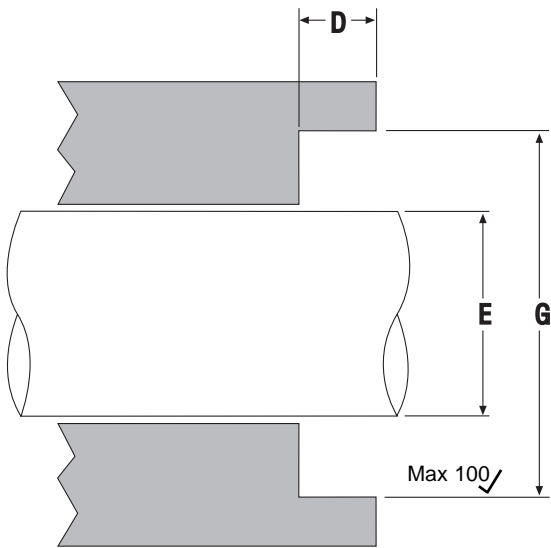
Style Prefix    I.D.    O.D.    Height

SEAL INFORMATION	
MATERIAL	URETHANE / METAL
TEMPERATURE RANGE	-60° TO +220° F

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C OVERALL MAX. HT.	D GROOVE WIDTH	E ROD DIA.	G HOUSING DIA.
MCWI-35x50x9	35.0	50.0	9.00	9.00 +0.4/-0	35.0 ±0.076	50.0 ±0.025
MCWI-40x50x3.18	40.0	50.0	3.18	3.18 +0.4/-0	40.0 ±0.076	50.0 ±0.025
MCWI-40x55x9	40.0	55.0	9.00	9.00 +0.4/-0	40.0 ±0.076	55.0 ±0.025
MCWI-45x55x3.18	45.0	55.0	3.18	3.18 +0.4/-0	45.0 ±0.076	55.0 ±0.025
MCWI-50x65x9	50.0	65.0	9.00	9.00 +0.4/-0	50.0 ±0.076	65.0 ±0.025
MCWI-55x65x3.18	55.0	65.0	3.18	3.18 +0.4/-0	55.0 ±0.076	65.0 ±0.025
MCWI-55x69x8	55.0	69.0	8.00	8.00 +0.4/-0	55.0 ±0.076	69.0 ±0.025
MCWI-56x70x7.5	56.0	70.0	7.50	7.50 +0.4/-0	56.0 ±0.076	70.0 ±0.025
MCWI-56x71x9	56.0	71.0	9.00	9.00 +0.4/-0	56.0 ±0.076	71.0 ±0.025
MCWI-60x73x6	60.0	73.0	6.00	6.00 +0.4/-0	60.0 ±0.076	73.0 ±0.025
MCWI-60x74x8	60.0	74.0	8.00	8.00 +0.4/-0	60.0 ±0.076	74.0 ±0.025
MCWI-60x75x5	60.0	75.0	5.00	5.00 +0.4/-0	60.0 ±0.076	75.0 ±0.025
MCWI-60x75x6	60.0	75.0	6.00	6.00 +0.4/-0	60.0 ±0.076	75.0 ±0.025
MCWI-63x78x9	63.0	78.0	9.00	9.00 +0.4/-0	63.0 ±0.076	78.0 ±0.038
MCWI-65x79x8	65.0	79.0	8.00	8.00 +0.4/-0	65.0 ±0.076	79.0 ±0.038
MCWI-65x80x5	65.0	80.0	5.00	5.00 +0.4/-0	65.0 ±0.076	80.0 ±0.038
MCWI-70x80x5	70.0	80.0	5.00	5.00 +0.4/-0	70.0 ±0.076	80.0 ±0.038
MCWI-70x84x8	70.0	84.0	8.00	8.00 +0.4/-0	70.0 ±0.076	84.0 ±0.038
MCWI-70x85x7	70.0	85.0	7.00	7.00 +0.4/-0	70.0 ±0.076	85.0 ±0.038
MCWI-71x86x5	71.0	86.0	5.00	5.00 +0.4/-0	71.0 ±0.076	86.0 ±0.038
MCWI-75x89x8	75.0	89.0	8.00	8.00 +0.4/-0	75.0 ±0.076	89.0 ±0.038
MCWI-80x94x8	80.0	94.0	8.00	8.00 +0.4/-0	80.0 ±0.076	94.0 ±0.038
MCWI-80x90x3.18	80.0	90.0	3.18	3.18 +0.4/-0	80.0 ±0.076	90.0 ±0.038
MCWI-80x90x7	80.0	90.0	7.00	7.00 +0.4/-0	80.0 ±0.076	90.0 ±0.038
MCWI-80x95x5	80.0	95.0	5.00	5.00 +0.4/-0	80.0 ±0.076	95.0 ±0.038
MCWI-80x100x7	80.0	100.0	7.00	7.00 +0.4/-0	80.0 ±0.076	100.0 ±0.038
MCWI-85x99x8	85.0	99.0	8.00	8.00 +0.4/-0	85.0 ±0.076	99.0 ±0.038
MCWI-90x100x7	90.0	100.0	7.00	7.00 +0.4/-0	90.0 ±0.076	100.0 ±0.038
MCWI-90x104x8	90.0	104.0	8.00	8.00 +0.4/-0	90.0 ±0.076	104.0 ±0.038
MCWI-90x105x6	90.0	105.0	6.00	6.00 +0.4/-0	90.0 ±0.076	105.0 ±0.038
MCWI-90x105x7	90.0	105.0	7.00	7.00 +0.4/-0	90.0 ±0.076	105.0 ±0.038
MCWI-90x106x8	90.0	106.0	8.00	8.00 +0.4/-0	90.0 ±0.076	106.0 ±0.038
MCWI-90x110x7	90.0	110.0	7.00	7.00 +0.4/-0	90.0 ±0.076	110.0 ±0.038
MCWI-95x104x8	95.0	104.0	8.00	8.00 +0.4/-0	95.0 ±0.076	104.0 ±0.038
MCWI-100x114x8	100.0	114.0	8.00	8.00 +0.4/-0	100.0 ±0.076	114.0 ±0.038
MCWI-100x115x7	100.0	115.0	7.00	7.00 +0.4/-0	100.0 ±0.076	115.0 ±0.038
MCWI-100x116x8	100.0	116.0	8.00	8.00 +0.4/-0	100.0 ±0.076	116.0 ±0.038
MCWI-105x121x9	105.0	121.0	9.00	9.00 +0.4/-0	105.0 ±0.076	121.0 ±0.038
MCWI-110x125x8	110.0	125.0	8.00	8.00 +0.4/-0	110.0 ±0.076	125.0 ±0.038
MCWI-110x126x9	110.0	126.0	9.00	9.00 +0.4/-0	110.0 ±0.076	126.0 ±0.038
MCWI-110x130x8	110.0	130.0	8.00	8.00 +0.4/-0	110.0 ±0.076	130.0 ±0.038
MCWI-110x130x10	110.0	130.0	10.00	10.00 +0.4/-0	110.0 ±0.076	130.0 ±0.038
MCWI-125x140x9	125.0	140.0	9.00	9.00 +0.4/-0	125.0 ±0.076	140.0 ±0.038
MCWI-130x146x9	130.0	146.0	9.00	9.00 +0.4/-0	130.0 ±0.076	146.0 ±0.038

# STYLE MCKBI METAL CLAD WIPERS

All measurements on this page are in millimeters unless otherwise specified.



**HERCULES  
PART NUMBERS**

**MCKBI - 40 x 52 x 7**

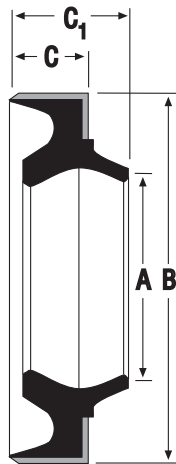
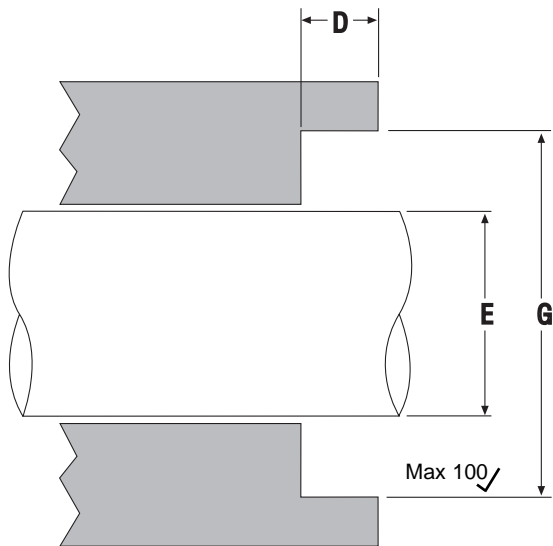
Style Prefix    I.D.    O.D.    Base Height

SEAL INFORMATION	
MATERIAL	94A URETHANE / METAL
TEMPERATURE RANGE	-70° TO +212° F

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. BASE HT.	C1 NOM. OVERALL HT.	D GROOVE WIDTH	E ROD DIA.	G HOUSING DIA.
MCKBI-30x42x6	30.0	42.0	6.0	9.0	6.3 +0.2/-0	30.0 -0.025/-0.064	42.0 +0.039/-0
MCKBI-35x47x7	35.0	47.0	7.0	10.0	7.3 +0.2/-0	35.0 -0.025/-0.064	47.0 +0.039/-0
MCKBI-40x52x7	40.0	52.0	7.0	10.0	7.3 +0.2/-0	40.0 -0.025/-0.064	52.0 +0.074/-0
MCKBI-50x62x7	50.0	62.0	7.0	10.0	7.3 +0.2/-0	50.0 -0.025/-0.064	62.0 +0.074/-0
MCKBI-55x69x8	55.0	69.0	8.0	11.0	8.4 +0.2/-0	55.0 -0.030/-0.076	69.0 +0.074/-0
MCKBI-60x74x8	60.0	74.0	8.0	11.0	8.4 +0.2/-0	60.0 -0.030/-0.076	74.0 +0.074/-0
MCKBI-65x79x8	65.0	79.0	8.0	11.0	8.4 +0.2/-0	65.0 -0.030/-0.076	79.0 +0.074/-0
MCKBI-70x84x8	70.0	84.0	8.0	11.0	8.4 +0.2/-0	70.0 -0.030/-0.076	84.0 +0.087/-0
MCKBI-75x89x8	75.0	89.0	8.0	11.0	8.4 +0.2/-0	75.0 -0.030/-0.076	89.0 +0.087/-0
MCKBI-80x94x8	80.0	94.0	8.0	11.0	8.4 +0.2/-0	80.0 -0.030/-0.076	94.0 +0.087/-0
MCKBI-85x99x8	85.0	99.0	8.0	11.0	8.4 +0.2/-0	85.0 -0.036/-0.090	99.0 +0.087/-0
MCKBI-95x109x8	95.0	109.0	8.0	11.0	8.4 +0.2/-0	95.0 -0.036/-0.090	109.0 +0.087/-0
MCKBI-90x104x8	90.0	104.0	8.0	11.0	8.4 +0.2/-0	90.0 -0.036/-0.090	104.0 +0.087/-0
MCKBI-100x114x8	100.0	114.0	8.0	11.0	8.4 +0.2/-0	100.0 -0.036/-0.090	114.0 +0.087/-0
MCKBI-105x121x9	105.0	121.0	9.0	12.0	9.4 +0.2/-0	105.0 -0.036/-0.090	121.0 +0.100/-0
MCKBI-110x126x9	110.0	126.0	9.0	12.0	9.4 +0.2/-0	110.0 -0.036/-0.090	126.0 +0.100/-0
MCKBI-120x136x9	120.0	136.0	9.0	12.0	9.4 +0.2/-0	120.0 -0.036/-0.090	136.0 +0.100/-0
MCKBI-130x146x9	130.0	146.0	9.0	12.0	9.4 +0.2/-0	130.0 -0.043/-0.106	146.0 +0.100/-0
MCKBI-140x160x10	140.0	160.0	10.0	14.0	10.4 +0.2/-0	140.0 -0.043/-0.106	160.0 +0.100/-0
MCKBI-150x170x10	150.0	170.0	10.0	14.0	10.4 +0.2/-0	150.0 -0.043/-0.106	170.0 +0.100/-0
MCKBI-160x180x10	160.0	180.0	10.0	14.0	10.4 +0.2/-0	160.0 -0.043/-0.106	180.0 +0.100/-0
MCKBI-170x190x10	170.0	190.0	10.0	14.0	10.4 +0.2/-0	170.0 -0.043/-0.106	190.0 +0.115/-0
MCKBI-180x200x10	180.0	200.0	10.0	14.0	10.4 +0.2/-0	180.0 -0.043/-0.106	200.0 +0.115/-0

# STYLE MCKB METAL CLAD WIPERS

All measurements on this page are in millimeters unless otherwise specified.



**HERCULES  
PART NUMBERS**

**MCKB - 20 x 32 x 6**

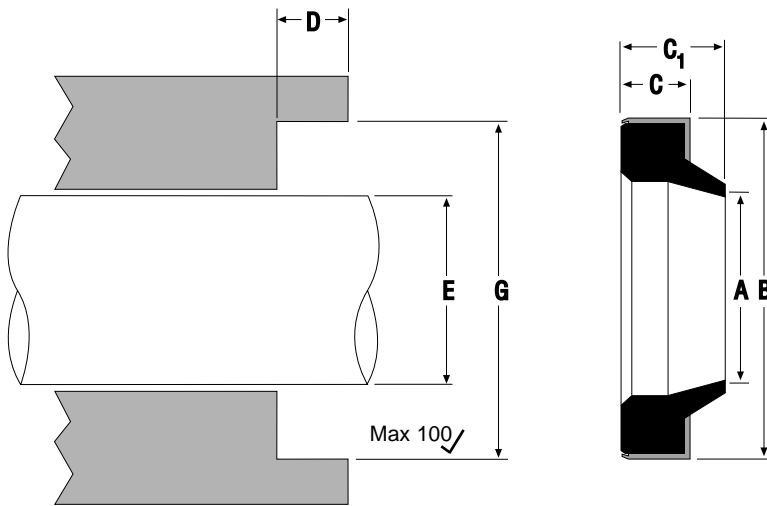
Style Prefix    I.D.    O.D.    Base Height

SEAL INFORMATION	
MATERIAL	80A NITRILE / METAL
TEMPERATURE RANGE	-20° TO +212° F

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. BASE HT.	C1 NOM. OVERALL HT.	D GROOVE WIDTH	E ROD DIA.	G HOUSING DIA.
MCKB-20x32x6	20.0	32.0	6.0	9.0	6.3 +0.20/-0	20.0 -0.020/-0.053	32.0 +0.039/-0
MCKB-22x34x6	22.0	34.0	6.0	9.0	6.3 +0.20/-0	22.0 -0.020/-0.053	34.0 +0.039/-0
MCKB-25x37x6	25.0	37.0	6.0	9.0	6.3 +0.20/-0	25.0 -0.020/-0.053	37.0 +0.039/-0
MCKB-30x42x6	30.0	42.0	6.0	9.0	6.3 +0.20/-0	30.0 -0.020/-0.053	42.0 +0.039/-0
MCKB-30x47x7	30.0	47.0	7.0	10.0	7.3 +0.20/-0	30.0 -0.020/-0.053	47.0 +0.039/-0
MCKB-32x44x7	32.0	44.0	7.0	10.0	7.3 +0.20/-0	32.0 -0.025/-0.064	44.0 +0.039/-0
MCKB-35x47x7	35.0	47.0	7.0	10.0	7.3 +0.20/-0	35.0 -0.025/-0.064	47.0 +0.039/-0
MCKB-35x48x7	35.0	48.0	7.0	10.0	7.3 +0.20/-0	35.0 -0.025/-0.064	48.0 +0.039/-0
MCKB-40x52x7	40.0	52.0	7.0	10.0	7.3 +0.20/-0	40.0 -0.025/-0.064	52.0 +0.046/-0
MCKB-40x62x8	40.0	62.0	8.0	11.0	8.4 +0.20/-0	40.0 -0.025/-0.064	62.0 +0.046/-0
MCKB-45x57x7	45.0	57.0	7.0	10.0	7.3 +0.20/-0	45.0 -0.025/-0.064	57.0 +0.046/-0
MCKB-50x62x7	50.0	62.0	7.0	10.0	7.3 +0.20/-0	50.0 -0.025/-0.064	62.0 +0.046/-0
MCKB-50x72x8	50.0	72.0	8.0	11.0	8.4 +0.20/-0	50.0 -0.025/-0.064	72.0 +0.046/-0
MCKB-55x69x8	55.0	69.0	8.0	11.0	8.4 +0.20/-0	55.0 -0.030/-0.076	69.0 +0.046/-0
MCKB-60x74x8	60.0	74.0	8.0	11.0	8.4 +0.20/-0	60.0 -0.030/-0.076	74.0 +0.046/-0
MCKB-65x79x8	65.0	79.0	8.0	11.0	8.4 +0.20/-0	65.0 -0.030/-0.076	79.0 +0.046/-0
MCKB-70x84x8	70.0	84.0	8.0	11.0	8.4 +0.20/-0	70.0 -0.030/-0.076	84.0 +0.054/-0
MCKB-75x89x8	75.0	89.0	8.0	11.0	8.4 +0.20/-0	75.0 -0.030/-0.076	89.0 +0.054/-0
MCKB-80x94x8	80.0	94.0	8.0	11.0	8.4 +0.20/-0	80.0 -0.030/-0.076	94.0 +0.054/-0
MCKB-85x99x8	85.0	99.0	8.0	11.0	8.4 +0.20/-0	85.0 -0.036/-0.090	99.0 +0.054/-0
MCKB-90x104x8	90.0	104.0	8.0	11.0	8.4 +0.20/-0	90.0 -0.036/-0.090	104.0 +0.054/-0
MCKB-95x109x8	95.0	109.0	8.0	11.0	8.4 +0.20/-0	95.0 -0.036/-0.090	109.0 +0.054/-0
MCKB-100x114x8	100.0	114.0	8.0	11.0	8.4 +0.20/-0	100.0 -0.036/-0.090	114.0 +0.054/-0

# STYLE MCWE METAL CLAD WIPERS

All measurements on this page are in millimeters unless otherwise specified.



**HERCULES  
PART NUMBERS**

**MCWE - 18 x 28 x 7**

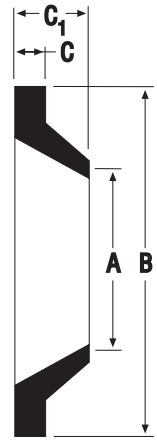
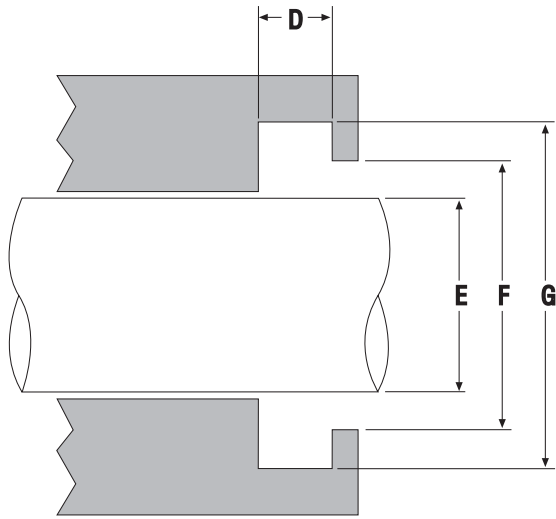
Style Prefix | I.D. | O.D. | Base Height

SEAL INFORMATION	
MATERIAL	90A URETHANE / METAL
TEMPERATURE RANGE	-15° TO +175° F

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. BASE HT.	C1 NOM. OVERALL HT.	D GROOVE WIDTH	E ROD DIA.	G HOUSING DIA.
MCWE-18x28x7	18.0	28.0	7.0	10.0	7.0 +0.5/-0	18.0 -0.020/-0.072	28.0 +0.033/-0
MCWE-20x28x3.5	20.0	28.0	3.5	5.0	3.5 +0.5/-0	20.0 -0.020/-0.072	28.0 +0.033/-0
MCWE-20x30x5	20.0	30.0	5.0	8.0	5.0 +0.5/-0	20.0 -0.020/-0.072	30.0 +0.033/-0
MCWE-20x30x7	20.0	30.0	7.0	10.0	7.0 +0.5/-0	20.0 -0.020/-0.072	30.0 +0.033/-0
MCWE-22x32x6	22.0	32.0	5.5	7.0	5.5 +0.5/-0	22.0 -0.020/-0.072	32.0 +0.039/-0
MCWE-25x35x5	25.0	35.0	5.0	8.0	5.0 +0.5/-0	25.0 -0.020/-0.072	35.0 +0.039/-0
MCWE-28x38x7	28.0	38.0	7.0	10.0	7.0 +0.2/-0	28.0 -0.020/-0.072	38.0 +0.039/-0
MCWE-30x40x5	30.0	40.0	5.0	8.0	5.0 +0.5/-0	30.0 -0.020/-0.072	40.0 +0.039/-0
MCWE-30x40x7	30.0	40.0	7.0	10.0	7.0 +0.5/-0	30.0 -0.020/-0.072	40.0 +0.039/-0
MCWE-32x42x7	32.0	42.0	7.0	10.0	7.0 +0.2/-0	32.0 -0.025/-0.087	42.0 +0.039/-0
MCWE-32x45x5	32.0	45.0	5.0	7.0	5.0 +0.5/-0	32.0 -0.025/-0.087	45.0 +0.039/-0
MCWE-32x45x7	32.0	45.0	7.0	10.0	7.0 +0.5/-0	32.0 -0.025/-0.072	45.0 +0.039/-0
MCWE-33x43x7	33.0	43.0	7.0	10.0	7.0 +0.5/-0	33.0 -0.025/-0.087	43.0 +0.039/-0
MCWE-35x45x7	35.0	45.0	7.0	10.0	7.0 +0.5/-0	35.0 -0.025/-0.087	45.0 +0.039/-0
MCWE-36x46x7	36.0	46.0	7.0	10.0	7.0 +0.2/-0	36.0 -0.025/-0.087	46.0 +0.039/-0
MCWE-40x50x7	40.0	50.0	7.0	10.0	7.0 +0.5/-0	40.0 -0.025/-0.087	50.0 +0.039/-0
MCWE-42x52x7	42.0	52.0	7.0	10.0	7.0 +0.5/-0	42.0 -0.025/-0.087	52.0 +0.046/-0
MCWE-45x55x7	45.0	55.0	7.0	10.0	7.0 +0.5/-0	45.0 -0.025/-0.087	55.0 +0.046/-0
MCWE-50x60x7	50.0	60.0	7.0	10.0	7.0 +0.5/-0	50.0 -0.025/-0.087	60.0 +0.046/-0
MCWE-55x65x7	55.0	65.0	7.0	10.0	7.0 +0.5/-0	55.0 -0.030/-0.104	65.0 +0.046/-0
MCWE-56x66x7	56.0	66.0	7.0	10.0	7.0 +0.2/-0	56.0 -0.030/-0.104	66.0 +0.046/-0
MCWE-60x70x7	60.0	70.0	7.0	10.0	7.0 +0.5/-0	60.0 -0.030/-0.104	70.0 +0.046/-0
MCWE-63x75x7	63.0	75.0	7.0	10.0	7.0 +0.2/-0	63.0 -0.030/-0.104	75.0 +0.046/-0
MCWE-65x75x7	65.0	75.0	7.0	10.0	7.0 +0.5/-0	65.0 -0.030/-0.104	75.0 +0.046/-0
MCWE-70x80x7	70.0	80.0	7.0	10.0	7.0 +0.5/-0	70.0 -0.030/-0.104	80.0 +0.046/-0
MCWE-80x90x7	80.0	90.0	7.0	10.0	7.0 +0.5/-0	80.0 -0.030/-0.104	90.0 +0.054/-0
MCWE-85x95x7	85.0	95.0	7.0	10.0	7.0 +0.5/-0	85.0 -0.036/-0.123	95.0 +0.054/-0
MCWE-90x100x7	90.0	100.0	7.0	10.0	7.0 +0.2/-0	90.0 -0.036/-0.123	100.0 +0.054/-0
MCWE-95x105x7	95.0	105.0	7.0	10.0	7.0 +0.5/-0	95.0 -0.036/-0.123	105.0 +0.054/-0
MCWE-100x110x7	100.0	110.0	7.0	10.0	7.0 +0.5/-0	100.0 -0.036/-0.123	110.0 +0.054/-0
MCWE-105x115x7	105.0	115.0	7.0	10.0	7.0 +0.2/-0	105.0 -0.036/-0.123	115.0 +0.054/-0
MCWE-110x120x7	110.0	120.0	7.0	10.0	7.0 +0.5/-0	110.0 -0.036/-0.123	120.0 +0.054/-0
MCWE-115x125x7	115.0	125.0	7.0	10.0	7.0 +0.5/-0	115.0 -0.036/-0.123	125.0 +0.063/-0
MCWE-120x130x7	120.0	130.0	7.0	10.0	7.0 +0.5/-0	120.0 -0.036/-0.123	130.0 +0.063/-0

# STYLE MDK SNAP-IN WIPERS

All measurements on this page are in millimeters unless otherwise specified.



## HERCULES PART NUMBERS

**MDK - 30 x 37.5 x 1.6**

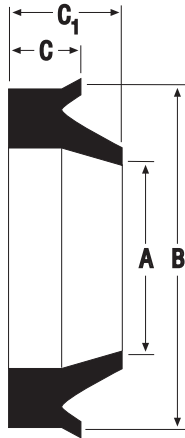
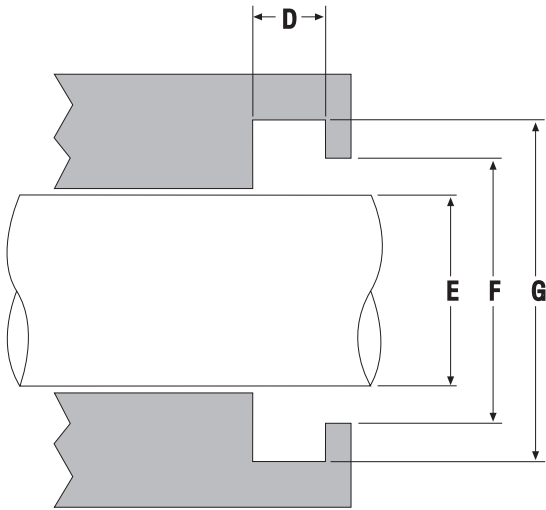
Style Prefix    I.D.    O.D.    Base Height

SEAL INFORMATION	
MATERIAL	90A NITRILE
TEMPERATURE RANGE	-20° TO +190° F

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. BASE HT.	C1 NOM. OVERALL HT.	D GROOVE WIDTH	E NOM. ROD DIA.	F THROAT DIA.	G HOUSING DIA.
MDK-30x37.5x1.6	30.0	37.5	1.60	4.5	1.6 +0.08/-0	30.0	32.9 +0.16/-0	37.5 +0.16/-0
MDK-32x39.5x1.6	32.0	39.5	1.60	4.5	1.6 +0.08/-0	32.0	34.9 +0.16/-0	39.5 +0.16/-0
MDK-33x40.5x1.6	33.0	40.5	1.60	4.5	1.6 +0.08/-0	33.0	35.9 +0.16/-0	40.5 +0.16/-0
MDK-50x60x2.15	50.0	60.0	2.15	6.0	2.2 +0.08/-0	50.0	54.6 +0.19/-0	60.0 +0.19/-0
MDK-63x73x2.15	63.0	73.0	2.15	6.0	2.2 +0.08/-0	63.0	67.6 +0.19/-0	73.0 +0.19/-0
MDK-70x80x2.15	70.0	80.0	2.15	6.0	2.2 +0.08/-0	70.0	74.6 +0.19/-0	80.0 +0.19/-0
MDK-80x90x2.15	80.0	90.0	2.15	6.0	2.2 +0.08/-0	80.0	84.6 +0.22/-0	90.0 +0.22/-0
MDK-90x100x2.15	90.0	100.0	2.15	6.0	2.2 +0.08/-0	90.0	94.6 +0.22/-0	100.0 +0.22/-0
MDK-100x110x2.15	100.0	110.0	2.15	6.0	2.2 +0.08/-0	100.0	104.6 +0.22/-0	110.0 +0.22/-0
MDK-140x150x2.15	140.0	150.0	2.15	6.0	2.2 +0.10/-0	140.0	144.6 +0.25/-0	150.0 +0.25/-0

# STYLE MSW SNAP-IN WIPERS

All measurements on this page are in millimeters unless otherwise specified.



## HERCULES PART NUMBERS

**MSW - 35 x 43 x 5**

Style Prefix I.D. O.D. Base Height

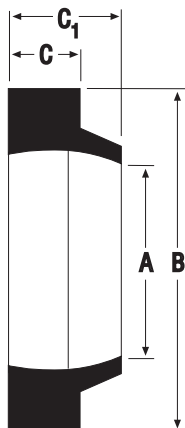
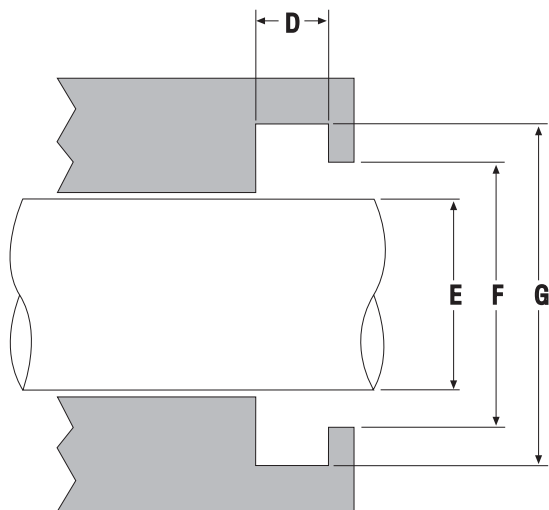
SEAL INFORMATION	
MATERIAL	94A URETHANE
TEMPERATURE RANGE	-30° TO +212° F

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. BASE HT.	C1 NOM. OVERALL HT.	D GROOVE WIDTH	E NOM. ROD DIA.	F THROAT DIA.	G HOUSING DIA.
MSW-18X26X5	18.0	26.0	5.0	7.0	5.50 +0.30/-0	18.0	22.00 ±0.10	26.00 +0.10/-0
MSW-20X28X4.5	20.0	28.0	4.5	7.0	5.00 +0.30/-0	20.0	24.00 ±0.10	28.00 +0.10/-0
MSW-35X43X5	35.0	43.0	5.0	7.0	5.50 +0.30/-0	35.0	39.00 ±0.10	43.00 +0.10/-0
MSW-40X50X6	40.0	50.0	6.0	8.0	7.00 +0.30/-0	40.0	45.00 ±0.10	50.00 +0.10/-0
MSW-45X55X6	45.0	55.0	6.0	8.0	7.00 +0.30/-0	45.0	50.00 ±0.10	55.00 +0.12/-0
MSW-50X60X6	50.0	60.0	6.0	8.0	7.00 +0.30/-0	50.0	55.00 ±0.10	60.00 +0.12/-0
MSW-55X65X6	55.0	65.0	6.0	8.0	7.00 +0.30/-0	55.0	60.00 ±0.10	65.00 +0.12/-0
MSW-60X73X7	60.0	73.0	7.0	10.0	8.00 +0.30/-0	60.0	67.00 ±0.10	73.00 +0.12/-0
MSW-65X79X7	65.0	79.0	7.0	10.0	8.00 +0.30/-0	65.0	72.00 ±0.10	79.00 +0.12/-0
MSW-70X84X7	70.0	84.0	7.0	10.0	8.00 +0.30/-0	70.0	77.00 ±0.10	84.00 +0.14/-0
MSW-75X88X7	75.0	88.0	7.0	10.0	8.00 +0.30/-0	75.0	82.00 ±0.10	88.00 +0.14/-0
MSW-80X93X7	80.0	93.0	7.0	10.0	8.00 +0.30/-0	80.0	87.00 ±0.10	93.00 +0.14/-0
MSW-85X98X7	85.0	98.0	7.0	10.0	8.00 +0.30/-0	85.0	92.00 ±0.10	98.00 +0.14/-0
MSW-90X103X7	90.0	103.0	7.0	10.0	8.00 +0.30/-0	90.0	97.00 ±0.10	103.00 +0.14/-0
MSW-95X108X7	95.0	108.0	7.0	10.0	8.00 +0.30/-0	95.0	102.00 ±0.10	108.00 +0.14/-0
MSW-100X113X7	100.0	113.0	7.0	10.0	8.00 +0.30/-0	100.0	107.00 ±0.10	113.00 +0.14/-0
MSW-110X123X7	110.0	123.0	7.0	10.0	8.00 +0.30/-0	110.0	117.00 ±0.10	123.00 +0.14/-0
MSW-120X133X7	120.0	133.0	7.0	10.0	8.00 +0.30/-0	120.0	127.00 ±0.10	133.00 +0.14/-0



# STYLE MSWE SNAP-IN WIPERS

All measurements on this page are in millimeters unless otherwise specified.



## HERCULES PART NUMBERS

**MSWE - 25 x 33 x 5**

Style Prefix I.D. O.D. Base Height

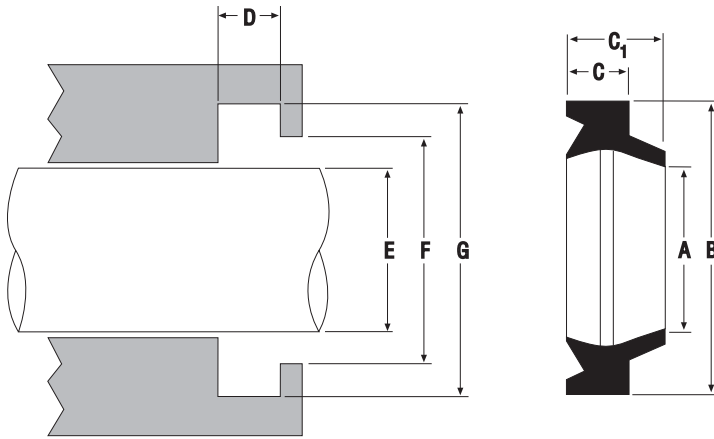
## SEAL INFORMATION

MATERIAL	94A URETHANE
TEMPERATURE RANGE	-40° TO +205° F

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. BASE HT.	C1 NOM. OVERALL HT.	D GROOVE WIDTH	E NOM. ROD DIA.	F THROAT DIA.	G HOUSING DIA.
MSWE-25x33x5	25.0	33.0	5.0	8.0	5.30 +0.10/-0	25.0	28.00 +0.13/-0	33.60 +0.10/-0
MSWE-30x38x5	30.0	38.0	5.0	7.0	5.30 +0.10/-0	30.0	33.00 +0.16/-0	38.60 +0.10/-0
MSWE-35x43x5	35.0	43.0	5.0	6.5	5.30 +0.10/-0	35.0	38.00 +0.16/-0	43.60 +0.10/-0
MSWE-36x44x5	36.0	44.0	5.0	8.0	5.30 +0.10/-0	36.0	39.00 +0.16/-0	44.60 +0.10/-0
MSWE-40x48x5	40.0	48.0	5.0	6.5	5.30 +0.10/-0	40.0	43.00 +0.16/-0	48.60 +0.10/-0
MSWE-40x50x5	40.0	50.0	5.0	8.0	5.30 +0.10/-0	40.0	43.00 +0.16/-0	50.60 +0.12/-0
MSWE-45x53x5	45.0	53.0	5.0	8.0	5.30 +0.10/-0	45.0	48.00 +0.16/-0	53.60 +0.12/-0
MSWE-46x54x4	46.0	54.0	4.0	6.8	4.30 +0.10/-0	46.0	46.00 +0.16/-0	54.00 +0.12/-0
MSWE-55x63x5	55.0	63.0	5.0	6.5	5.30 +0.10/-0	55.0	58.00 +0.16/-0	63.60 +0.12/-0
MSWE-56x66x6.3	56.0	66.0	6.3	10.0	6.30 +0.20/-0	56.0	63.00 +0.19/-0	66.00 +0.12/-0
MSWE-60x68x5	60.0	68.0	5.0	6.5	5.30 +0.20/-0	60.0	63.00 +0.19/-0	68.60 +0.12/-0
MSWE-63x71.6x5	63.0	71.6	5.0	7.0	5.30 +0.10/-0	63.0	66.00 +0.19/-0	72.20 +0.12/-0
MSWE-63x73x6.3	63.0	73.0	6.3	10.0	6.30 +0.20/-0	63.0	70.00 +0.19/-0	73.00 +0.12/-0
MSWE-65x73x5	65.0	73.0	5.0	6.5	5.30 +0.20/-0	65.0	68.00 +0.19/-0	73.60 +0.12/-0
MSWE-70x78x4	70.0	78.0	4.0	7.0	4.00 +0.20/-0	70.0	76.00 +0.19/-0	78.00 +0.12/-0
MSWE-70x78x5	70.0	78.0	5.0	6.5	5.30 +0.20/-0	70.0	73.00 +0.19/-0	78.60 +0.12/-0
MSWE-75x83x5	75.0	83.0	5.0	7.0	5.30 +0.10/-0	75.0	78.00 +0.19/-0	83.60 +0.14/-0
MSWE-78x86x5	78.0	86.0	5.0	6.5	5.30 +0.10/-0	78.0	84.50 +0.22/-0	86.00 +0.14/-0
MSWE-80x88x5	80.0	88.0	5.0	6.5	5.30 +0.10/-0	80.0	83.00 +0.22/-0	88.60 +0.14/-0
MSWE-80x92x7	80.0	92.0	7.0	12.0	7.20 +0.10/-0	80.0	86.00 +0.22/-0	92.20 +0.14/-0
MSWE-90x98x5	90.0	98.0	5.0	7.0	5.30 +0.10/-0	90.0	93.00 +0.22/-0	98.60 +0.14/-0
MSWE-90x100x6.3	90.0	100.0	6.3	10.0	6.30 +0.20/-0	90.0	97.00 +0.22/-0	100.00 +0.14/-0
MSWE-90x102x7.1	90.0	102.0	7.1	11.0	7.20 +0.10/-0	90.0	96.00 +0.22/-0	102.20 +0.14/-0
MSWE-95x107x7	95.0	107.0	7.0	11.0	7.10 +0.10/-0	95.0	101.00 +0.22/-0	107.20 +0.14/-0
MSWE-100x115x9.5	100.0	115.0	9.5	14.0	9.50 +0.20/-0	100.0	110.00 +0.22/-0	115.00 +0.14/-0
MSWE-105x113x5	105.0	113.0	5.0	7.0	5.30 +0.10/-0	105.0	108.00 +0.22/-0	113.60 +0.14/-0
MSWE-110x122x7	110.0	122.0	7.0	11.0	7.10 +0.10/-0	110.0	110.00 +0.22/-0	122.20 +0.14/-0
MSWE-120x128x5	120.0	128.0	5.0	7.0	5.30 +0.10/-0	120.0	123.00 +0.25/-0	128.60 +0.16/-0
MSWE-120x132x7	120.0	132.0	7.0	11.0	7.10 +0.10/-0	120.0	126.00 +0.25/-0	132.20 +0.16/-0
MSWE-125x137x7	125.0	137.0	7.0	11.0	7.10 +0.10/-0	125.0	136.00 +0.25/-0	137.20 +0.16/-0
MSWE-130x142x7	130.0	142.0	7.0	11.0	7.10 +0.10/-0	130.0	136.00 +0.25/-0	142.20 +0.16/-0
MSWE-140x148x5	140.0	148.0	5.0	7.0	5.30 +0.10/-0	140.0	143.00 +0.25/-0	148.60 +0.16/-0
MSWE-160x168x5	160.0	168.0	5.0	7.0	5.30 +0.10/-0	160.0	163.00 +0.25/-0	168.60 +0.16/-0
MSWE-200x220x10	200.0	220.0	10.0	18.0	10.20 +0.10/-0	200.0	210.00 +0.29/-0	220.00 +0.185/-0

# STYLE MSWH SNAP-IN WIPERS

All measurements on this page are in millimeters unless otherwise specified.



## HERCULES PART NUMBERS

**MSWH - 11.2 x 19.2 x 4.5**

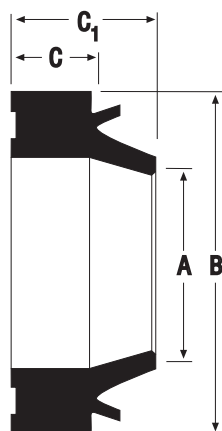
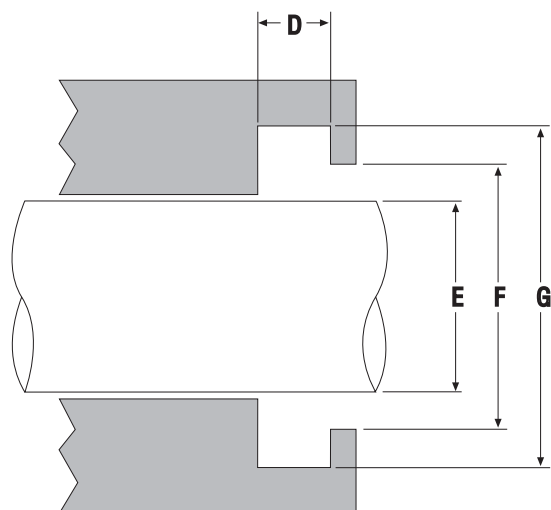
Style Prefix | I.D. | O.D. | Base Height

SEAL INFORMATION	
MATERIAL	94A URETHANE
TEMPERATURE RANGE	-30° TO +212° F

PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. BASE HT.	C1 NOM. OVERALL HT.	D GROOVE WIDTH	E NOM. ROD DIA.	F THROAT DIA.	G HOUSING DIA.
MSWH-11.2x19.2x4.5	11.2	19.2	4.5	6.0	5.00 +0.20/-0	11.2	15.50 ±0.10	19.20 +0/-0.20
MSWH-12x18x4	12.0	18.0	4.0	5.0	4.00 +0.20/-0	12.0	14.50 ±0.10	18.00 +0.11/-0
MSWH-14x22x4.5	14.0	22.0	4.5	6.0	5.00 +0.20/-0	14.0	18.30 ±0.10	22.00 +0/-0.20
MSWH-16x24x4.5	16.0	24.0	4.5	6.0	5.00 +0.20/-0	16.0	20.30 ±0.10	24.00 +0/-0.20
MSWH-18x26x4.5	18.0	26.0	4.5	6.0	5.00 +0.20/-0	18.0	22.30 ±0.10	26.00 +0/-0.20
MSWH-20x28x4.5	20.0	28.0	4.5	6.0	5.00 +0.20/-0	20.0	24.30 ±0.10	28.00 +0/-0.20
MSWH-22.4x30.4x4.5	22.4	30.4	4.5	6.0	5.00 +0.20/-0	22.4	26.70 ±0.10	30.40 +0/-0.20
MSWH-23.5x31.5x4.5	23.5	31.5	4.5	6.0	5.00 +0.20/-0	23.5	27.80 ±0.10	31.50 +0/-0.20
MSWH-25x33x4.5	25.0	33.0	4.5	6.0	5.00 +0.20/-0	25.0	29.30 ±0.10	33.00 +0/-0.20
MSWH-28x36x4.5	28.0	36.0	4.5	6.0	5.00 +0.20/-0	28.0	32.30 ±0.10	36.00 +0/-0.20
MSWH-30x38x5	30.0	38.0	5.0	6.5	6.00 +0.20/-0	30.0	34.00 ±0.10	38.00 +0/-0.20
MSWH-31.5x39.5x5	31.5	39.5	5.0	6.5	6.00 +0.20/-0	31.5	35.50 ±0.10	39.50 +0/-0.20
MSWH-35x43x5	35.0	43.0	5.0	6.5	6.00 +0.20/-0	35.0	39.00 ±0.10	43.00 +0/-0.20
MSWH-35.5x43.5x5	35.5	43.5	5.0	6.5	6.00 +0.20/-0	35.5	39.50 ±0.10	43.50 +0/-0.20
MSWH-36x44x4.5	36.0	44.0	4.5	6.0	5.00 +0.20/-0	36.0	39.00 ±0.10	44.00 +0/-0.20
MSWH-40x48x5	40.0	48.0	5.0	6.5	6.00 +0.20/-0	40.0	44.00 ±0.10	48.00 +0/-0.20
MSWH-40x50.6x4.6	40.0	50.6	4.6	6.9	5.10 +0.20/-0	40.0	40.00 ±0.10	50.60 +0/-0.20
MSWH-42x51x4.5	42.0	51.0	4.5	6.0	5.00 +0.20/-0	42.0	47.30 ±0.10	51.00 +0/-0.20
MSWH-45x53x5	45.0	53.0	5.0	6.5	6.00 +0.20/-0	45.0	49.00 ±0.10	53.00 +0/-0.20
MSWH-50x58x5	50.0	58.0	5.0	6.5	6.00 +0.20/-0	50.0	54.00 ±0.10	58.00 +0/-0.20
MSWH-50x59x3.6	50.0	59.0	3.6	4.8	4.00 +0.20/-0	50.0	50.00 ±0.10	59.00 +0/-0.20
MSWH-50x60x5	50.0	60.0	5.0	6.5	6.00 +0.20/-0	50.0	50.00 ±0.10	60.00 +0/-0.20
MSWH-53x61x5	53.0	61.0	5.0	6.5	6.00 +0.20/-0	53.0	57.00 ±0.10	61.00 +0/-0.20
MSWH-55x63x5	55.0	63.0	5.0	6.5	6.00 +0.20/-0	55.0	59.00 ±0.10	63.00 +0/-0.20
MSWH-56x64x5	56.0	64.0	5.0	6.5	6.00 +0.20/-0	56.0	60.00 ±0.10	64.00 +0/-0.20
MSWH-60x68x5	60.0	68.0	5.0	6.5	6.00 +0.20/-0	60.0	64.00 ±0.10	68.00 +0/-0.20
MSWH-63x71x5	63.0	71.0	5.0	6.5	6.00 +0.20/-0	63.0	67.00 ±0.10	71.00 +0/-0.20
MSWH-65x73x5	65.0	73.0	5.0	6.5	6.00 +0.20/-0	65.0	69.00 ±0.10	73.00 +0/-0.20
MSWH-67x75x5	67.0	75.0	5.0	6.5	6.00 +0.20/-0	67.0	71.00 ±0.10	75.00 +0/-0.20
MSWH-70x80x5.5	70.0	80.0	5.5	7.0	6.00 +0.20/-0	70.0	73.00 ±0.10	80.00 +0/-0.20
MSWH-70x80x6	70.0	80.0	6.0	8.0	7.00 +0.20/-0	70.0	75.00 ±0.10	80.00 +0/-0.20
MSWH-71x81x6	71.0	81.0	6.0	8.0	7.00 +0.20/-0	71.0	76.00 ±0.10	81.00 +0/-0.20
MSWH-75x85x6	75.0	85.0	6.0	8.0	7.00 +0.20/-0	75.0	80.00 ±0.10	85.00 +0/-0.20
MSWH-80x90x6	80.0	90.0	6.0	8.0	7.00 +0.20/-0	80.0	85.00 ±0.10	90.00 +0/-0.20
MSWH-85x95x6	85.0	95.0	6.0	8.0	7.00 +0.20/-0	85.0	90.00 ±0.10	95.00 +0/-0.20
MSWH-90x100x6	90.0	100.0	6.0	8.0	7.00 +0.20/-0	90.0	95.00 ±0.10	100.00 +0/-0.20
MSWH-98x108x6	98.0	108.0	6.0	8.0	7.00 +0.20/-0	98.0	103.00 ±0.10	108.00 +0/-0.20
MSWH-100x110x6	100.0	110.0	6.0	8.0	7.00 +0.20/-0	100.0	105.00 ±0.10	110.00 +0/-0.20
MSWH-112x122x6	112.0	122.0	6.0	8.0	7.00 +0.20/-0	112.0	117.00 ±0.10	122.00 +0/-0.20
MSWH-125x138x7	125.0	138.0	7.0	9.5	8.00 +0.20/-0	125.0	132.00 ±0.10	138.00 +0/-0.20
MSWH-136x149x7	136.0	149.0	7.0	9.5	8.00 +0.20/-0	136.0	143.00 ±0.10	149.00 +0/-0.20
MSWH-140x153x7	140.0	153.0	7.0	9.5	8.00 +0.20/-0	140.0	147.00 ±0.10	153.00 +0/-0.20
MSWH-145x158x7	145.0	158.0	7.0	9.5	8.00 +0.20/-0	145.0	152.00 ±0.10	158.00 +0/-0.20
MSWH-160x174x7	160.0	174.0	7.0	9.5	8.00 +0.20/-0	160.0	167.00 ±0.10	174.00 +0/-0.20

# STYLE MSWP SNAP-IN WIPERS

All measurements on this page are in millimeters unless otherwise specified.



## HERCULES PART NUMBERS

**MSWP - 20 x 28 x 4**

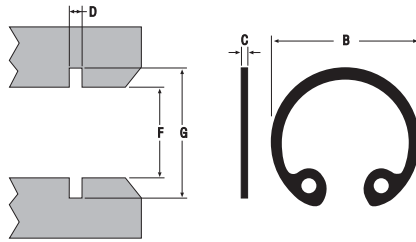
Style Prefix / I.D. / O.D. / Base Height

## SEAL INFORMATION

MATERIAL	92A URETHANE
TEMPERATURE RANGE	-22° TO +212° F

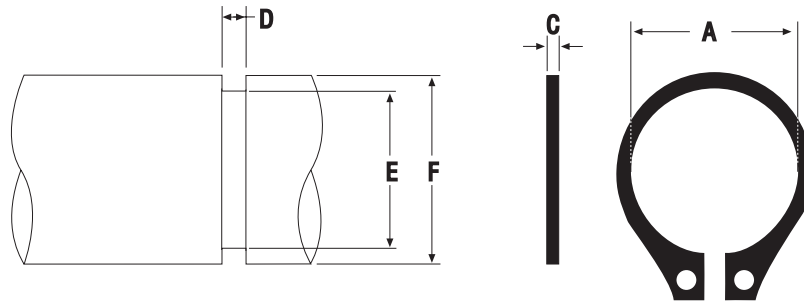
PART NUMBER	A NOM. I.D.	B NOM. O.D.	C NOM. BASE HT.	C1 NOM. OVERALL HT.	D GROOVE WIDTH	E NOM. ROD DIA.	F THROAT DIA.	G HOUSING DIA.
MSWP-20x28x4	20.0	28.0	4.0	7.0	4.00 +0.20/-0	20.0	26.00 +0.13/-0	28.00 +0.84/-0
MSWP-22x30x4	22.0	30.0	4.0	7.0	4.00 +0.20/-0	22.0	28.00 +0.13/-0	30.00 +0.84/-0
MSWP-25x33x4	25.0	33.0	4.0	7.0	4.00 +0.20/-0	25.0	31.00 +0.16/-0	33.00 +0.10/-0
MSWP-30x38x4	30.0	38.0	4.0	7.0	4.00 +0.20/-0	30.0	36.00 +0.16/-0	38.00 +0.10/-0
MSWP-32x40x4	32.0	40.0	4.0	7.0	4.00 +0.20/-0	32.0	38.00 +0.16/-0	40.00 +0.10/-0
MSWP-35x43x4	35.0	43.0	4.0	7.0	4.00 +0.20/-0	35.0	41.00 +0.16/-0	43.00 +0.10/-0
MSWP-36x44x4	36.0	44.0	4.0	7.0	4.00 +0.20/-0	36.0	42.00 +0.16/-0	44.00 +0.10/-0
MSWP-40x48x4	40.0	48.0	4.0	7.0	4.00 +0.20/-0	40.0	46.00 +0.16/-0	48.00 +0.10/-0
MSWP-40x48x5	40.0	48.0	5.0	7.0	5.00 +0.20/-0	40.0	45.50 +0.16/-0	48.00 +0.10/-0
MSWP-45x53x4	45.0	53.0	4.0	7.0	4.00 +0.20/-0	45.0	51.00 +0.19/-0	53.00 +0.12/-0
MSWP-50x58x4	50.0	58.0	4.0	7.0	4.00 +0.20/-0	50.0	56.00 +0.19/-0	58.00 +0.12/-0
MSWP-50x58x5	50.0	58.0	5.0	7.0	5.00 +0.20/-0	50.0	55.50 +0.19/-0	58.00 +0.12/-0
MSWP-55x63x4	55.0	63.0	4.0	7.0	4.00 +0.20/-0	55.0	61.00 +0.19/-0	63.00 +0.12/-0
MSWP-56x64x4	56.0	64.0	4.0	7.0	4.00 +0.20/-0	56.0	62.00 +0.19/-0	64.00 +0.12/-0
MSWP-60x68x4	60.0	68.0	4.0	7.0	4.00 +0.20/-0	60.0	66.00 +0.19/-0	68.00 +0.12/-0
MSWP-63x71x4	63.0	71.0	4.0	7.0	4.00 +0.20/-0	63.0	69.00 +0.19/-0	71.00 +0.12/-0
MSWP-65x73x4	65.0	73.0	4.0	7.0	4.00 +0.20/-0	65.0	71.00 +0.19/-0	73.00 +0.12/-0
MSWP-70x78x4	70.0	78.0	4.0	7.0	4.00 +0.20/-0	70.0	76.00 +0.19/-0	78.00 +0.12/-0
MSWP-70x80x6.3	70.0	80.0	6.3	8.0	6.30 +0.20/-0	70.0	76.00 +0.19/-0	80.00 +0.14/-0
MSWP-75x83x4	75.0	83.0	4.0	7.0	4.00 +0.20/-0	75.0	81.00 +0.22/-0	83.00 +0.14/-0
MSWP-80x88x4	80.0	88.0	4.0	7.0	4.00 +0.20/-0	80.0	86.00 +0.22/-0	88.00 +0.14/-0
MSWP-80x90x6.3	80.0	90.0	6.3	8.0	6.30 +0.20/-0	80.0	86.00 +0.22/-0	90.00 +0.14/-0
MSWP-85x93x4	85.0	93.0	4.0	7.0	4.00 +0.20/-0	85.0	91.00 +0.22/-0	93.00 +0.25/-0
MSWP-90x98x4	90.0	98.0	4.0	7.0	4.00 +0.20/-0	90.0	96.00 +0.22/-0	98.00 +0.25/-0
MSWP-100x108x4	100.0	108.0	4.0	7.0	4.00 +0.20/-0	100.0	106.00 +0.22/-0	108.00 +0.25/-0
MSWP-140x152x5.5	140.0	152.0	5.5	10.0	5.50 +0.20/-0	140.0	149.00 +0.22/-0	152.00 +0.25/-0

**METRIC INTERNAL RETAINER RINGS**



PART NUMBER	B RING O.D.	C RING THICKNESS	D GROOVE WIDTH	F NOM. BORE DIA.	G GROOVE DIA.
M300-30	32.1 +0.50/-0.25	1.20 +0/-0.06	1.30 +0.14/-0	30	31.4 +0.25/-0
M300-32	34.4 +0.50/-0.25	1.20 +0/-0.06	1.30 +0.14/-0	32	33.7 +0.25/-0
M300-42	45.5 +0.90/-0.39	1.75 +0/-0.06	1.85 +0.14/-0	42	44.5 +0.25/-0
M300-45	48.5 +0.90/-0.39	1.75 +0/-0.06	1.85 +0.14/-0	45	47.5 +0.25/-0
M300-47	50.5 +1.10/-0.46	1.75 +0/-0.06	1.85 +0.14/-0	47	49.5 +0.25/-0
M300-48	51.5 +1.10/-0.46	1.75 +0/-0.06	1.85 +0.14/-0	48	50.5 +0.30/-0
M300-50	54.2 +1.10/-0.46	2.00 +0/-0.07	2.15 +0.14/-0	50	53.0 +0.30/-0
M300-52	56.2 +1.10/-0.46	2.00 +0/-0.07	2.15 +0.14/-0	52	55.0 +0.30/-0
M300-55	59.2 +1.10/-0.46	2.00 +0/-0.07	2.15 +0.14/-0	55	58.0 +0.30/-0
M300-60	64.2 +1.10/-0.46	2.00 +0/-0.07	2.15 +0.14/-0	60	63.0 +0.30/-0
M300-62	66.2 +1.10/-0.46	2.00 +0/-0.07	2.15 +0.14/-0	62	65.0 +0.30/-0
M300-72	76.5 +1.10/-0.46	2.50 +0/-0.07	2.65 +0.14/-0	72	75.0 +0.30/-0
M300-80	85.5 +1.30/-0.54	2.50 +0/-0.07	2.65 +0.14/-0	80	83.5 +0.35/-0
M300-82	87.5 +1.30/-0.54	2.50 +0/-0.07	2.65 +0.14/-0	82	85.5 +0.35/-0

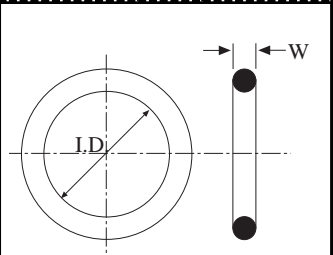
## METRIC EXTERNAL RETAINER RINGS



PART NUMBER	A RING I.D.	C RING THICKNESS	D GROOVE WIDTH	E GROOVE DIA.	F NOM. ROD DIA.
M310-14	12.9 +0.10/-0.36	1.00 +0/-0.06	1.10 +0.14/-0	13.4 +0/-0.11	14
M310-25	23.2 +0.21/-0.42	1.20 +0/-0.06	1.30 +0.14/-0	23.9 +0/-0.21	25
M310-45	41.5 +0.39/-0.90	1.75 +0/-0.06	1.85 +0.14/-0	42.5 +0/-0.25	45
M310-50	45.8 +0.39/-0.90	2.00 +0/-0.07	2.15 +0.14/-0	47.0 +0/-0.25	50
M310-60	55.8 +0.46/-1.10	2.00 +0/-0.07	2.15 +0.14/-0	57.0 +0/-0.30	60
M310-65	60.8 +0.46/-1.10	2.50 +0/-0.07	2.65 +0.14/-0	62.0 +0/-0.30	65

# O-RING SIZE CHART FOR METRIC SEALS

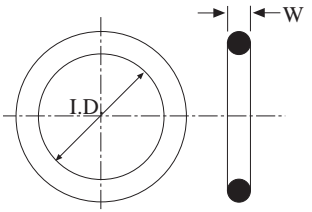
JIS B 2401	WIDTH	I.D.		JIS B 2401	WIDTH	I.D.		JIS B 2401	WIDTH	I.D.		JIS B 2401	WIDTH	I.D.	
P - 3	1.9 ±0.08	2.8	±0.14	P - 71	5.7 ±0.13	70.6	±0.62	G - 25	3.1 ±0.1	24.4	±0.25	G - 335	5.7 ±0.13	334.3	±2.42
P - 4		3.8	±0.14	P - 75		74.6	±0.65	G - 30		29.4	±0.29	G - 340		339.3	±2.45
P - 5		4.8	±0.15	P - 80		79.6	±0.69	G - 35		34.4	±0.33	G - 345		344.3	±2.48
P - 6		5.8	±0.15	P - 85		84.6	±0.73	G - 40		39.4	±0.37	G - 350		349.3	±2.51
P - 7		6.8	±0.16	P - 90		89.6	±0.77	G - 45		44.4	±0.41	G - 355		354.3	±2.54
P - 8		7.8	±0.16	P - 95		94.6	±0.81	G - 50		49.4	±0.45	G - 360		359.3	±2.57
P - 9		8.8	±0.17	P - 100		99.6	±0.84	G - 55		54.4	±0.49	G - 365		364.3	±2.60
P - 10		9.8	±0.17	P - 102		101.6	±0.85	G - 60		59.4	±0.53	G - 370		369.3	±2.63
				P - 105		104.6	±0.87	G - 65		64.4	±0.57	G - 375		374.3	±2.67
				P - 110		109.6	±0.91	G - 70		69.4	±0.61	G - 380		379.3	±2.70
P - 10A	2.4 ±0.09	9.8	±0.17	P - 112	8.4 ±0.15	111.6	±0.92	G - 75	5.7 ±0.13	74.4	±0.65	G - 385	5.7 ±0.13	384.3	±2.73
P - 11		10.8	±0.18	P - 115		114.6	±0.94	G - 80		79.4	±0.69	G - 390		389.3	±2.76
P - 11.2		11.0	±0.18	P - 120		119.6	±0.98	G - 85		84.4	±0.73	G - 395		394.3	±2.79
P - 12		12.3	±0.19	P - 125		124.6	±1.01	G - 90		89.4	±0.77	G - 400		399.3	±2.82
P - 12.5		13.8	±0.19	P - 130		129.6	±1.05	G - 95		94.4	±0.81				
P - 14		14.8	±0.20	P - 132		131.6	±1.06	G - 100		99.4	±0.85				
P - 15		15.8	±0.20	P - 135		134.6	±1.09	G - 105		104.4	±0.87				
P - 16		17.8	±0.21	P - 140		139.6	±1.12	G - 110		109.4	±0.91				
P - 18		19.8	±0.22	P - 145		144.6	±1.16	G - 115		114.4	±0.94				
P - 20		20.8	±0.23	P - 150		149.6	±1.19	G - 120		119.4	±0.98				
P - 21		21.8	±0.24					G - 125		124.4	±1.01				
P - 22								G - 130		129.4	±1.05				
			P - 150A	149.5	±1.19	G - 135	134.4	±1.08							
P - 22A	3.5 ±0.10	21.7	±0.24	P - 155	8.4 ±0.15	154.5	±1.23	G - 140	5.7 ±0.13	139.4	±1.12		5.7 ±0.13		
P - 22.4		22.1	±0.24	P - 160		159.5	±1.26	G - 145		144.4	±1.16				
P - 24		23.7	±0.24	P - 165		164.5	±1.30	G - 150		149.3	±1.19				
P - 25		24.7	±0.25	P - 170		169.5	±1.33	G - 155		154.3	±1.23				
P - 25.5		25.2	±0.25	P - 175		174.5	±1.37	G - 160		159.3	±1.26				
P - 26		25.7	±0.26	P - 180		179.5	±1.40	G - 165		164.3	±1.30				
P - 28		27.7	±0.28	P - 185		184.5	±1.44	G - 170		169.3	±1.33				
P - 29		28.7	±0.29	P - 190		189.5	±1.48	G - 175		174.3	±1.37				
P - 29.5		29.2	±0.29	P - 195		194.5	±1.51	G - 180		179.3	±1.40				
P - 30		29.7	±0.29	P - 200		199.5	±1.55	G - 185		184.3	±1.44				
P - 31		30.7	±0.30	P - 205		204.5	±1.58	G - 190		189.3	±1.47				
P - 31.5		31.2	±0.31	P - 209		208.5	±1.61	G - 195		194.3	±1.51				
P - 32		31.7	±0.31	P - 210		209.5	±1.62	G - 200		199.3	±1.55				
P - 34		33.7	±0.33	P - 215		214.5	±1.65	G - 205		204.3	±1.58				
P - 35		34.7	±0.34	P - 220		219.5	±1.68	G - 210		209.3	±1.61				
P - 35.5		35.2	±0.34	P - 225		224.5	±1.71	G - 215		214.3	±1.64				
P - 36		35.7	±0.34	P - 230		229.5	±1.75	G - 220		219.3	±1.68				
P - 38		37.7	±0.37	P - 235		234.5	±1.78	G - 225		224.3	±1.71				
P - 39		38.7	±0.37	P - 240		239.5	±1.81	G - 230		229.3	±1.73				
P - 40		39.7	±0.37	P - 245		244.5	±1.84	G - 235		234.3	±1.77				
P - 41	40.7	±0.38	P - 250	249.5	±1.88	G - 240	239.3	±1.81							
P - 42	41.7	±0.39	P - 255	254.5	±1.91	G - 245	244.3	±1.84							
P - 44	43.7	±0.41	P - 260	259.5	±1.94	G - 250	249.3	±1.88							
P - 45	44.7	±0.41	P - 265	264.5	±1.97	G - 255	254.3	±1.91							
P - 46	45.7	±0.42	P - 270	269.5	±2.01	G - 260	259.3	±1.94							
P - 48	47.7	±0.44	P - 275	274.5	±2.04	G - 265	264.3	±1.97							
P - 49	48.7	±0.45	P - 280	279.5	±2.07	G - 270	269.3	±2.01							
P - 50	49.7	±0.45	P - 285	284.5	±2.10	G - 275	274.3	±2.04							
			P - 290	289.5	±2.14	G - 280	279.3	±2.07							
P - 48A	5.7 ±1.13	47.6	±0.45	P - 295	8.4 ±0.15	294.5	±2.17	G - 285	5.7 ±0.13	284.3	±2.10		5.7 ±0.13		
P - 50A		49.6	±0.45	P - 300		299.5	±2.20	G - 290		289.3	±2.14				
P - 52		51.6	±0.47	P - 315		314.5	±2.30	G - 295		294.3	±2.17				
P - 53		52.6	±0.48	P - 320		319.5	±2.33	G - 300		299.3	±2.20				
P - 55		54.6	±0.49	P - 335		334.5	±2.42	G - 305		304.3	±2.24				
P - 56		55.6	±0.50	P - 340		339.5	±2.45	G - 310		309.3	±2.27				
P - 58		57.6	±0.52	P - 355		354.5	±2.54	G - 315		314.3	±2.30				
P - 62		59.6	±0.53	P - 360		359.5	±2.57	G - 320		319.3	±2.33				
P - 63		61.6	±0.55	P - 375		374.5	±2.67	G - 325		324.3	±2.36				
P - 65		62.6	±0.56	P - 385		384.5	±2.73	G - 330		329.3	±2.39				
P - 67		64.6	±0.57	P - 400		399.5	±2.82								
P - 70		66.6	±0.59												
		69.6	±0.61												



The JIS number indicates the Japanese Industrial Size. This o-ring size can be cross-referenced by finding the width and inside diameter on the chart provided.

# O-RING SIZE CHART FOR METRIC SEALS

JIS B 2401	WIDTH	I.D.		SM - O RINGS	WIDTH	I.D.		KS-O RINGS	WIDTH		I.D.	
V - 15	4 ±0.10	14.5	±0.20	SM - 3	1.5±0.1	2.5	±0.15	KS - 1	1.70  ±0.08	2.75	±0.13	
V - 24		23.5	±0.24	SM - 4		3.5	±0.15	KS - 2		3.75	±0.13	
V - 34		33.5	±0.33	SM - 5		4.5	±0.15	KS - 3		4.75	±0.13	
V - 40		39.5	±0.37	SM - 6		5.5	±0.15	KS - 4		5.75	±0.13	
V - 55		54.5	±0.49	SM - 7		6.5	±0.15	KS - 5		6.75	±0.13	
V - 70		69.0	±0.61	SM - 8		7.5	±0.15	KS - 6		7.75	±0.13	
V - 85		84.0	±0.72	SM - 9		8.5	±0.15	KS - 7		8.75	±0.13	
V - 100		99.0	±0.83	SM - 10		9.5	±0.15	KS - 8		9.75	±0.13	
V - 120		119.0	±0.97	SM - 11.2		10.7	±0.15	2.25		KS - 9	9.70	±0.13
V - 150		148.5	±1.18	SM - 12		11.5	±0.15			KS - 10	11.70	±0.13
V - 175	173.0	±1.36	SM - 12.5	12.0	±0.15	KS - 11	13.70		±0.13			
V - 225	222.5	±1.70	SM - 14	13.5	±0.15	KS - 12	15.70		±0.13			
V - 275	6 ±0.15	272.0	±2.02	SM - 15	2.0±0.1	14.5	±0.15	KS - 13	3.30 ±0.10	17.70	±0.13	
V - 325		321.5	±2.34	SM - 16		15.5	±0.15	KS - 14		19.70	±0.13	
V - 380		376.0	±2.68	SM - 18		17.5	±0.15	KS - 15		19.60	±0.15	
V - 430		425.5	±2.99	SM - 20		19.5	±0.15	KS - 16		21.60	±0.15	
V - 480		475.0	±3.30	SM - 22		21.5	±0.15	KS - 17		23.60	±0.15	
V - 530	10 ±0.30	524.5	±3.60	SM - 24	2.0±0.1	23.5	±0.15	KS - 18	3.30 ±0.10	24.60	±0.15	
V - 585		579.0	±3.92	SM - 25		24.5	±0.15	KS - 19		25.60	±0.15	
V - 640		633.5	±4.24	SM - 26		25.5	±0.15	KS - 20		27.60	±0.15	
V - 690		683.0	±4.54	SM - 28		27.5	±0.15	KS - 21		29.60	±0.15	
V - 740		732.5	±4.83	SM - 29		28.5	±0.15	KS - 22		31.60	±0.15	
V - 790		782.0	±5.12	SM - 30		29.5	±0.15	KS - 23		33.60	±0.15	
V - 845		836.5	±5.44	SM - 31.5		31.0	±0.15	KS - 24		35.60	±0.15	
V - 950		940.5	±6.06	SM - 32		31.5	±0.15	KS - 25		37.60	±0.15	
V - 1055		1044.0	±6.67	SM - 34		33.5	±0.15	KS - 26		39.60	±0.15	
				SM - 35		34.5	±0.15					
			SM - 35.5	35.0	±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 - 135	134.5	±0.6							
			SM - 140	139.5	±0.6							
			SM - 145	144.5	±0.6							
			SM - 150	149.5	±0.6							



Unit: mm  
25.4 mm = 1 inch

# APPENDIX

## CONTENTS

**Engineering Action Request .....194 - 195**

For assistance in designing sealing systems, please fill out both pages of the Engineering Action Request and fax it to Hercules. Our Engineering Department will review your design and provide recommendations for proper seal selection.

**Seal Failure Checklist .....196**

To receive recommendations and suggestions for improving seal performance, complete the seal failure checklist and fax it to Hercules. With the information provided on this sheet, Hercules' staff will analyze the operation parameters and make recommendations for improved seal performance.

**Fluid Compatibility Chart .....197 - 212**

This fluid compatibility chart is intended to give the designer a basis for choosing the proper elastomer for use in various fluid sealing applications. To determine fluid / seal material compatibility, locate the fluid media to be sealed in the first column of the chart. In the same row as the fluid name, codes are given for the fluid's compatibility with each of the seal materials listed at the top of the chart. As explained in the chart legend, fluid / seal material combinations which are compatible will show a "1". Combinations showing a "4" are unsatisfactory and combinations showing an "X" are undocumented at this time. Because of the many factors affecting seal performance, fluid / seal material combinations should be tested in actual service conditions before finalizing a design. Please consult Hercules if you have any questions.



# ENGINEERING ACTION REQUEST

Page 1 of 2

(Please describe only **one** sealing application per E.A.R)

## • CUSTOMER DATA •

Company Name \_\_\_\_\_ Customer # \_\_\_\_\_  
 Address \_\_\_\_\_ Date Submitted: \_\_\_\_\_  
 City \_\_\_\_\_ Date Required: \_\_\_\_\_  
 State, Zip, Country \_\_\_\_\_ Submitted By: \_\_\_\_\_  
 Telephone # \_\_\_\_\_ Fax # \_\_\_\_\_  
 Email \_\_\_\_\_  
 Contact Person \_\_\_\_\_ Title \_\_\_\_\_  
 Products Mfd/Sold/Service \_\_\_\_\_

- OEM  
 Distributor  
 Rebuilder

## • APPLICATION DATA •

1. Is this application:  New Design  Retrofit
2. Type of Seal:  Piston (O.D.)  Rod Scraper  
 Rod (I.D.)  Face ( Ext.  Int.)
3. Specs: Part Number: \_\_\_\_\_ Size: \_\_\_\_\_  
 Material: \_\_\_\_\_ Profile: \_\_\_\_\_  
 Companion Parts: \_\_\_\_\_
4. Type of Motion:  Reciprocating  Rotary  
 Static  Oscillatory
5. Sudden changes in:  Temperature  Surface Speed  
 Pressure
6. Temperature:  °C  °F Min. \_\_\_\_\_ Normal \_\_\_\_\_ Max. \_\_\_\_\_
7. Pressure:  Unidirectional  Bidirectional  
 kg/cm<sup>2</sup>  PSI Min. \_\_\_\_\_ Normal \_\_\_\_\_ Max. \_\_\_\_\_  
 Vacuum:  in Hg  Torr Min. \_\_\_\_\_ Normal \_\_\_\_\_ Max. \_\_\_\_\_
8. Stroke Length:  mm  in Min. \_\_\_\_\_ Normal \_\_\_\_\_ Max. \_\_\_\_\_
9. Surface Speed:  mm/sec  ft/min Min. \_\_\_\_\_ Normal \_\_\_\_\_ Max. \_\_\_\_\_
10. Cycle rate:  strokes/sec  strokes/min Min. \_\_\_\_\_ Normal \_\_\_\_\_ Max. \_\_\_\_\_
11. Degrees of Rotation: Min. \_\_\_\_\_ Normal \_\_\_\_\_ Max. \_\_\_\_\_
12. RPM: Min. \_\_\_\_\_ Normal \_\_\_\_\_ Max. \_\_\_\_\_
13. Media being sealed: \_\_\_\_\_
14. If retrofit, please describe why customer wants to consider a new seal. \_\_\_\_\_

## • PERFORMANCE DATA •

1. Maximum Allowable:  
 Static Friction \_\_\_\_\_  
 Dynamic Friction \_\_\_\_\_  
 Fluid Leakage \_\_\_\_\_  Drops/Cycle  cc/Hour  Other \_\_\_\_\_
2. Desired service life: \_\_\_\_\_  Revolutions  Surface meters  Surface feet  
 Cycles  Hours  Years
3. Any Special Requirements: \_\_\_\_\_

# ENGINEERING ACTION REQUEST

## • HARDWARE DATA •

All dimensions are in:  Millimeters  Inches

Bore:  $\phi B$  \_\_\_\_\_ Tol. \_\_\_\_\_ Mat'l \_\_\_\_\_ Finish \_\_\_\_\_ Hardness \_\_\_\_\_

Piston:  $\phi P$  \_\_\_\_\_ Tol. \_\_\_\_\_ Mat'l \_\_\_\_\_ Finish \_\_\_\_\_ Hardness \_\_\_\_\_

Throat:  $\phi T$  \_\_\_\_\_ Tol. \_\_\_\_\_ Mat'l \_\_\_\_\_ Finish \_\_\_\_\_ Hardness \_\_\_\_\_

Groove:  $\phi G$  \_\_\_\_\_ Tol. \_\_\_\_\_ Mat'l \_\_\_\_\_ Finish \_\_\_\_\_ Hardness \_\_\_\_\_

Width: W \_\_\_\_\_ Tol. \_\_\_\_\_ Mat'l \_\_\_\_\_ Finish \_\_\_\_\_ Hardness \_\_\_\_\_

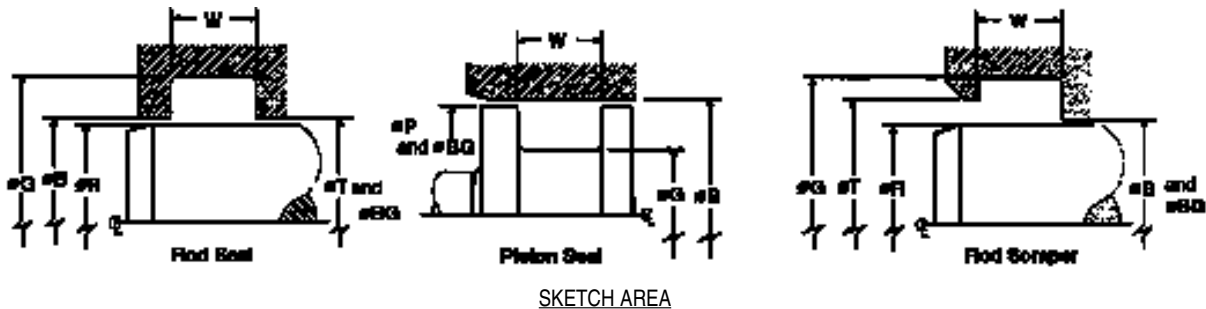
Rod:  $\phi R$  \_\_\_\_\_ Tol. \_\_\_\_\_ Mat'l \_\_\_\_\_ Finish \_\_\_\_\_ Hardness \_\_\_\_\_

Bearing:  $\phi BG$  \_\_\_\_\_ Tol. \_\_\_\_\_ Mat'l \_\_\_\_\_ Finish \_\_\_\_\_ Hardness \_\_\_\_\_

1. Can hardware design be changed  Yes  No How? \_\_\_\_\_

2. Reference design specifications: \_\_\_\_\_

3. Indicate applicable hardware design requirements in sketches below while showing pressure magnitude and directions (with arrows).



4. Drawings, sketches, other information attached:  Yes  No How? \_\_\_\_\_

## • COMPETITIVE DATA •

1. Who is competitor? \_\_\_\_\_

2. What is competitor's product? \_\_\_\_\_

3. What wins the order?  Performance  Price  Delivery  Other \_\_\_\_\_

4. Are prototypes required?  Yes  No How many? When?

5. Estimated sales volume: \_\_\_\_\_ Pieces, sets/month, year, project...

# SEAL FAILURE CHECKLIST

Company Name \_\_\_\_\_ Customer # \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_  
 State, Zip, Country \_\_\_\_\_  OEM  
 Telephone # \_\_\_\_\_ Fax # \_\_\_\_\_  Distributor  
 Email \_\_\_\_\_  Rebuilder  
 Contact Person \_\_\_\_\_ Title \_\_\_\_\_  
 Products Mfd/Sold/Service \_\_\_\_\_

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:**  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 pages 7 & 8

\_\_\_\_\_  
 \_\_\_\_\_  
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# FLUID COMPATIBILITY CHART

**COMPATIBILITY RATING:**  
 1 = Satisfactory  
 2 = Fair (Usually OK for Static Seal)  
 3 = Doubtful (Sometimes OK for Static Seal)  
 4 = Unsatisfactory  
 X = Insufficient Data

FLUID NAME	Nitrile	Ethylene Propylene	Fluorocarbon	Neoprene	SBR	Polyacrylate	Polyurethane	Butyl	Butadiene	Isoprene	Natural Rubber	Hypalon	Fluorosilicone	Silicone
1-Butene 2-Ethyl	1	4	1	4	4	1	4	4	4	4	4	4	3	4
1-Chloro 1-Nitro Ethane	4	4	4	4	4	4	4	4	4	4	4	4	4	4
AN-O-3 Grade M	1	4	1	2	4	1	1	4	4	4	4	2	1	2
AN-O-6	1	4	1	2	4	1	1	4	4	4	4	2	1	4
AN-VV-O-366b Hydr. Fluid	1	4	1	2	4	2	2	4	4	4	4	2	1	4
ASTM Oil, No.1	1	4	1	1	4	1	1	4	4	4	4	2	1	1
ASTM Oil, No.2	1	4	1	2	4	1	2	4	4	4	4	4	1	4
ASTM Oil, No.3	1	4	1	4	4	1	2	4	4	4	4	4	1	3
ASTM Oil, No.4	2	4	1	4	4	2	4	4	4	4	4	4	2	4
ASTM Reference Fuel A	1	4	1	2	4	2	1	4	4	4	4	2	1	4
ASTM Reference Fuel B	1	4	1	4	4	4	2	4	4	4	4	4	1	4
ASTM Reference Fuel C	2	4	1	4	4	4	4	4	4	4	4	4	2	4
ATL-857	2	4	1	4	4	2	4	4	4	4	4	4	2	4
Acetaldehyde	3	2	4	3	3	4	4	2	2	2	2	3	4	2
Acetamide	1	1	3	1	4	4	4	2	4	4	4	2	1	2
Acetic Acid, 5%	2	1	1	1	2	4	4	1	2	2	2	1	2	1
Acetic Acid, Glacial	2	2	4	4	2	4	4	2	2	2	2	3	4	2
Acetic Acid, Hot, High Pressure	4	3	4	4	4	4	4	4	4	4	4	3	4	3
Acetic Anhydride	4	2	4	2	2	4	4	2	2	2	2	2	4	2
Acetone	4	1	4	4	4	4	4	1	4	4	4	3	4	4
Acetophenone	4	1	4	4	4	4	4	2	4	4	4	4	4	4
Acetyl Acetone	4	1	4	4	4	4	4	1	4	4	4	4	4	4
Acetyl Chloride	4	4	1	4	4	4	4	4	4	4	4	4	1	3
Acetylene	1	1	1	2	2	4	4	1	2	2	2	2	X	2
Acetylene Tetrabromide	4	1	1	2	4	X	4	1	X	X	X	X	X	X
Acrylonitrile	4	4	3	4	3	4	4	4	X	3	3	3	4	4
Aero Lubriplate	1	4	1	1	2	1	1	4	4	4	4	1	1	2
Aero Shell 17 Grease	1	4	1	2	4	1	1	4	4	4	4	1	1	2
Aero Shell 750	2	4	1	4	4	2	4	4	4	4	4	4	2	4
Aero Shell 7A Grease	2	4	1	2	4	1	1	4	4	4	4	1	1	2
Aero Shell IAC	1	4	1	2	4	1	1	4	4	4	4	1	1	2
Aerosafe 2300	4	1	4	4	4	4	4	2	4	4	4	4	3	3
Aerosafe 2300W	4	1	4	4	4	4	4	2	4	4	4	4	3	3
Aerozene 50 (50% Hydrazine 50% UDMH)	3	1	4	4	4	X	4	1	4	4	4	4	4	4
Air Below 200° F	2	1	1	1	2	1	2	1	2	2	2	1	1	1
Air, 200 - 300° F	3	2	1	2	4	2	3	2	4	4	4	2	1	1
Air, 300 - 400° F	4	4	1	4	4	4	4	4	4	4	4	4	2	1
Air, 400 - 500° F	4	4	3	4	4	4	4	4	4	4	4	4	4	2
Alkazene	4	4	2	4	4	4	4	4	4	4	4	4	2	4
Aluminum Acetate	2	1	4	2	2	4	4	1	4	1	1	4	4	4
Aluminum Bromide	1	1	1	1	1	1	3	1	1	1	1	1	1	1
Aluminum Chloride	1	1	1	1	1	1	3	1	1	1	1	1	1	2
Aluminum Fluoride	1	1	1	1	1	X	3	1	1	1	2	1	1	2
Aluminum Nitrate	1	1	1	1	1	X	3	1	1	1	1	1	X	2
Aluminum Salts	1	1	1	1	1	1	3	1	1	1	1	1	1	1
Aluminum Sulphate	1	1	1	1	2	4	4	1	1	1	1	1	1	1
Alums-NH3 -Cr -K	1	1	4	1	1	4	X	1	1	1	1	1	4	1
Ambrex 33 (Mobil)	1	4	1	2	4	1	2	4	4	4	4	3	3	4
Ambrex 830 (Mobil)	1	3	1	2	4	1	1	3	4	4	4	2	1	2
Amines-Mixed	4	2	4	2	2	4	4	2	2	2	2	4	4	2
Ammonia and Lithium Metal in Solution	2	2	4	X	4	4	4	2	4	4	4	4	4	4
Ammonia, Gas, Cold	1	1	4	1	1	4	X	1	1	1	1	1	4	1
Ammonia, Gas, Hot	4	2	4	2	4	4	X	2	4	4	4	2	4	X
Ammonia, Liquid (Anhydrous)	2	1	4	1	4	4	4	1	4	4	4	2	4	2
Ammonium Carbonate	4	1	1	1	1	4	4	1	X	X	1	1	X	X
Ammonium Chloride, 2N	1	1	1	1	1	X	1	1	X	X	1	1	X	X
Ammonium Hydroxide, 3 Molar	1	1	3	1	2	4	4	1	2	2	2	1	1	1
Ammonium Hydroxide, Concentrated	4	1	4	1	3	4	4	1	3	3	3	1	1	1
Ammonium Nitrate, 2N	1	1	X	1	1	2	X	1	X	X	3	1	X	X
Ammonium Nitrite	1	1	X	1	1	X	X	1	1	1	1	1	X	2
Ammonium Persulfate 10%	4	1	X	1	4	4	4	1	X	1	1	X	X	X
Ammonium Persulfate Solution	4	1	X	X	4	4	4	1	X	1	1	X	X	X

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 X = Insufficient Data

FLUID NAME	MATERIAL													
	Nitrile	Ethylene Propylene	Fluorocarbon	Neoprene	SBR	Polyacrylate	Polyurethane	Butyl	Butadiene	Isoprene	Natural Rubber	Hypalon	Fluorosilicone	Silicone
Ammonium Phosphate	1	1	4	1	1	X	X	1	X	1	1	1	X	1
Ammonium Phosphate, Dibasic	1	1	X	1	1	X	X	1	X	1	1	1	X	1
Ammonium Phosphate, Mono-Basic	1	1	X	1	1	X	X	1	X	1	1	1	X	1
Ammonium Phosphate, Tribasic	1	1	X	1	1	X	X	1	X	1	1	1	X	1
Ammonium Salts	1	1	3	1	1	3	X	1	X	1	1	1	3	1
Ammonium Sulfate	1	1	4	1	2	4	X	1	1	1	1	1	X	X
Ammonium Sulfide	1	1	4	1	2	4	X	1	1	1	1	1	X	X
Amyl Acetate	4	3	4	4	4	4	4	3	4	4	4	4	4	4
Amyl Alcohol	2	1	2	2	2	4	4	1	2	2	2	2	1	4
Amyl Borate	1	4	1	1	4	X	X	4	4	4	4	1	X	X
Amyl Chloride	X	4	1	4	4	4	X	4	4	4	4	4	2	4
Amyl Chloronaphthalene	4	4	1	4	4	4	X	4	4	4	4	4	2	4
Amyl Naphthalene	4	4	1	4	4	2	4	4	4	4	4	4	1	4
An-O-366	1	4	1	2	4	1	1	4	4	4	4	2	1	4
Anderol, L- 826 (di-ester)	2	4	1	4	4	2	4	4	4	4	4	4	2	4
Anderol, L- 829 (di-ester)	2	4	1	4	4	2	4	4	4	4	4	4	2	4
Anderol, L-774 (di-ester)	2	4	1	4	4	2	4	4	4	4	4	4	2	4
Ang-25 (Di-ester Base) (TG749)	2	4	1	4	4	2	4	4	4	4	4	4	2	2
Ang-25 (Glyceral Ester)	2	1	1	2	2	4	4	2	2	2	2	2	2	2
Anhydrous Ammonia	2	1	4	1	4	4	4	1	4	4	4	4	4	2
Anhydrous Hydrazine	4	2	4	2	1	4	4	2	4	4	4	2	4	X
Anhydrous Hydrogen Fluoride	4	1	4	X	4	4	X	1	4	4	4	X	4	X
Aniline	4	2	3	4	4	4	4	2	4	4	4	4	3	4
Aniline Dyes	4	2	2	2	2	4	4	2	2	2	2	2	2	3
Aniline Hydrochloride	2	2	2	4	3	4	4	2	4	2	2	4	2	3
Aniline Oil	4	2	3	4	4	4	4	2	4	4	4	4	3	4
Animal Oil (Lard Oil)	1	2	1	2	4	1	2	2	4	4	4	2	1	2
Ansul Ether 161 or 181	3	3	4	4	4	4	2	3	4	4	4	4	3	4
Argon	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Aroclor, 1248	3	2	1	4	4	4	4	2	4	4	4	4	2	2
Aroclor, 1254	4	2	1	4	4	4	4	4	4	4	4	4	2	3
Aroclor, 1260	1	X	1	1	1	4	4	1	1	1	1	1	1	1
Aromatic Fuel -50%	2	4	1	4	4	4	4	4	4	4	4	4	2	4
Arsenic Acid	1	1	1	1	1	3	3	1	1	1	2	1	1	1
Askarel	2	4	1	4	4	4	4	4	4	4	4	4	2	4
Asphalt	2	4	1	2	4	2	2	4	4	4	4	2	2	4
Atlantic Dominion F	1	4	1	2	4	1	2	4	4	4	4	4	1	4
Atlantic Utro Gear-EP Lube.	1	4	1	2	4	1	1	4	4	4	4	4	1	4
Aure 903R (Mobil)	1	4	1	2	4	1	1	4	4	4	2	4	4	4
Automatic Transmission Fluid	1	4	1	2	4	1	2	4	4	4	4	3	X	4
Automotive Brake Fluid	3	1	4	2	1	4	4	2	X	X	X	2	4	3
Bardol B	4	4	1	4	4	4	4	4	4	4	4	4	2	4
Barium Chloride	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Barium Hydroxide	1	1	1	1	1	4	4	1	1	1	1	1	1	1
Barium Salts	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Barium Sulfide	1	1	1	1	2	4	1	1	2	1	1	1	1	1
Bayol 35	1	4	1	2	4	1	2	4	4	4	4	4	1	4
Bayol D	1	4	1	2	4	1	4	4	4	4	4	4	1	4
Beer	1	1	1	1	1	4	2	1	1	1	1	1	1	1
Beet Sugar Liquors	1	1	1	2	1	4	4	1	1	1	1	1	1	1
Benzaldehyde	4	1	4	4	4	4	4	1	4	4	4	1	4	2
Benzene	4	4	1	4	4	4	4	4	4	4	4	4	3	4
Benzenesulfonic Acid 10%	4	4	1	2	4	4	4	4	4	4	4	1	2	4
Benzochloride	4	1	1	4	4	4	X	2	4	4	4	4	1	X
Benzoic Acid	4	4	1	4	4	4	4	4	4	4	4	4	2	4
Benzophenone	X	2	1	X	4	4	4	2	4	4	X	X	1	X
Benzyl Alcohol	4	2	1	2	4	4	4	2	4	4	4	2	2	2
Benzyl Benzoate	4	4	1	4	4	4	4	2	4	4	4	4	1	4
Benzyl Chloride	4	4	1	4	4	4	4	4	4	4	4	4	1	4
Black Point 77	1	1	1	3	3	3	3	1	3	3	3	3	3	3
Blast Furnace Gas	4	4	1	4	4	4	4	4	4	4	4	4	2	1
Bleach Liquor	3	1	1	2	3	4	4	1	2	2	3	1	2	2

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FLUID NAME	Nitrile	Ethylene Propylene	Fluorocarbon	Neoprene	SBR	Polyacrylate	Polyurethane	Butyl	Butadiene	Isoprene	Natural Rubber	Hypalon	Fluorosilicone	Silicone
Borax	2	1	1	4	2	2	1	1	2	2	2	4	2	2
Bordeaux Mixture	2	1	1	2	2	4	4	1	2	2	2	1	2	2
Boric Acid	1	1	1	1	1	4	1	1	1	1	1	1	1	1
Boron Fluids (HEF)	2	4	1	4	4	4	4	4	4	4	4	4	2	4
Brake Fluid DOT3 (Glycol Type)	3	1	4	2	1	X	4	2	X	X	X	2	4	3
Bray GG-130	2	4	1	4	4	2	4	4	4	4	4	4	2	4
Brayco 719-R (VV-H-910)	3	1	4	2	X	4	4	2	2	2	2	2	2	2
Brayco 885 (MIL-L-6085A)	2	4	1	4	4	2	1	4	4	4	4	4	2	4
Brayco 910	2	1	4	2	2	3	3	1	1	1	1	1	4	4
Bret 710	2	1	4	2	2	3	3	1	1	1	1	1	4	4
Brom - 113	3	4	X	4	4	X	X	4	X	X	X	4	X	4
Brom - 114	2	4	2	2	4	X	X	4	4	4	4	2	X	4
Bromine	4	4	1	4	4	4	4	4	4	4	4	4	2	4
Bromine Pentafluoride	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Bromine Trifluoride	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Bromine Water	4	2	1	4	4	4	4	4	4	4	4	1	2	4
Bromobenzene	4	4	1	4	4	4	4	4	4	4	4	4	1	4
Bromochloro Trifluoroethane	4	4	1	4	4	4	4	4	4	4	4	4	2	4
Bunker Oil	1	4	1	4	4	1	2	4	4	4	4	4	1	2
Butadiene (Monomer)	4	4	1	4	4	4	4	4	4	4	4	4	1	4
Butane	1	4	1	1	3	1	1	4	4	4	4	2	3	4
Butane, 2, 2-Dimethyl	1	4	1	2	3	1	4	4	4	4	4	2	3	4
Butane, 2, 3-Dimethyl	1	4	1	2	3	1	4	4	4	4	4	2	3	4
Butanol (Butyl Alcohol)	1	2	1	1	1	4	4	2	1	1	1	1	1	2
Butter-Animal Fat	1	1	1	2	4	1	1	2	4	4	4	2	1	2
Butyl Acetyl Ricinoleate	2	1	1	2	4	X	4	1	4	4	4	2	2	X
Butyl Acrylate	4	4	4	4	4	4	X	4	4	4	4	4	4	X
Butyl Alcohol	1	2	1	1	1	4	4	2	1	1	1	1	1	2
Butyl Amine or N-Butyl Amine	3	3	4	4	4	4	4	4	4	4	4	4	4	4
Butyl Carbitol	4	1	3	3	4	4	X	1	4	4	4	2	4	4
Butyl Cellosolve	3	2	4	3	4	4	4	2	4	4	4	4	4	X
Butyl Cellosolve Adipate	4	2	2	4	4	4	4	2	4	4	4	4	2	2
Butyl Oleate	4	2	1	4	4	X	X	2	4	X	4	4	2	X
Butyl Stearate	2	4	1	4	4	X	X	4	4	4	4	4	2	X
Butylene	2	4	1	3	4	4	4	4	4	4	4	4	2	4
Butyraldehyde	4	2	4	4	4	4	4	2	4	4	4	4	4	4
Butyric Acid	4	2	2	4	4	4	X	2	4	X	X	4	X	X
Calcine Liquors	1	1	1	X	X	4	4	1	X	X	X	X	1	X
Calcium Acetate	2	1	4	2	4	4	4	1	4	1	1	2	4	4
Calcium Bisulfite	2	1	2	2	2	3	3	1	4	4	4	1	3	3
Calcium Carbonate	1	1	1	1	1	3	3	1	1	1	1	1	1	1
Calcium Chloride	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Calcium Cyanide	1	1	X	1	1	X	X	1	1	1	1	1	X	1
Calcium Hydroxide	1	1	1	1	1	4	2	1	1	1	1	1	1	1
Calcium Hypochlorite	2	1	1	2	2	4	4	1	2	2	2	1	2	2
Calcium Nitrate	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Calcium Phosphate	1	1	1	2	1	1	1	1	1	1	1	1	X	1
Calcium Salts	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Calcium Silicate	1	1	1	1	1	X	X	1	1	1	1	1	X	X
Calcium Sulfide	1	1	1	1	2	4	1	1	2	2	2	1	1	1
Calcium Sulfite	1	1	1	1	2	4	1	1	2	2	2	1	1	1
Calcium Thiosulfate	2	1	1	1	2	4	1	1	2	2	2	1	1	1
Caliche Liquors	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Cane Sugar Liquors	1	1	1	1	1	4	4	1	1	1	1	1	1	1
Caproic Aldehyde	X	2	4	X	X	4	4	2	2	2	2	X	4	2
Carbamate	3	2	1	2	4	4	4	2	4	4	4	2	1	X
Carbitol	2	2	2	2	2	4	4	2	2	2	2	2	2	2
Carbolic Acid Phenol	4	2	1	4	4	4	3	2	4	4	4	4	1	4
Carbon Bisulfide	4	4	1	4	4	3	X	4	4	4	4	4	1	4
Carbon Dioxide	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Carbon Dioxide (Explosive Decompression Use)	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Carbon Disulfide	4	4	1	4	4	3	X	4	4	4	4	4	1	4









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FLUID NAME	MATERIAL	Nitrile	Ethylene Propylene	Fluorocarbon	Neoprene	SBR	Polyacrylate	Polyurethane	Butyl	Butadiene	Isoprene	Natural Rubber	Hypalon	Fluorosilicone	Silicone
Fisher Reagent	X	2	X	X	X	X	X	X	X	X	X	X	X	X	X
Fluorolube	1	1	2	1	4	X	X	1	X	X	X	1	2	1	
Formaldehyde	3	2	4	3	3	4	4	2	2	2	2	2	4	2	
Freon, 11	4	4	2	4	4	4	X	4	X	X	4	1	2	4	
Freon, 112	2	4	1	2	4	X	X	4	X	X	4	2	X	4	
Freon, 113	1	4	2	1	2	X	1	4	X	X	4	1	X	4	
Freon, 114	1	1	1	1	1	X	X	1	X	X	1	X	X	4	
Freon, 114B2	2	4	2	2	4	X	X	4	X	X	4	1	X	4	
Freon, 115, 116	1	1	2	1	1	X	X	1	X	X	1	X	X	X	
Freon, 12	2	3	3	1	1	X	1	3	4	4	2	1	3	4	
Freon, 12 and ASTM Oil #2 (50/50 Mixture)	2	4	1	3	4	X	X	4	4	4	4	2	2	4	
Freon, 12 and Suniso 4G (50/50 Mixture)	2	4	1	3	4	X	X	4	4	4	4	2	2	4	
Freon, 13	1	1	1	1	1	X	X	1	X	1	1	1	4	4	
Freon, 13B1	1	1	1	1	1	X	X	1	X	X	1	1	2	4	
Freon, 14	1	1	1	1	1	X	1	1	X	X	1	1	X	4	
Freon, 21	4	4	4	3	4	X	X	4	4	4	4	4	X	4	
Freon, 22	4	3	4	1	1	2	4	3	X	X	1	1	4	4	
Freon, 22 and ASTM Oil #2 (50/50 Mixture)	4	4	2	2	4	2	X	4	X	X	4	X	2	4	
Freon, 31	4	1	4	1	2	X	X	1	X	X	2	2	X	X	
Freon, 32	1	1	4	1	1	X	X	1	X	X	1	1	X	X	
Freon, 502	2	1	2	1	1	X	X	1	X	X	1	X	X	X	
Freon, BF	2	4	1	2	4	X	X	4	X	X	4	2	X	4	
Freon, C318	1	1	2	1	1	X	X	1	X	X	1	1	X	X	
Freon, K-142b	1	1	4	1	1	X	X	1	X	X	2	1	X	X	
Freon, K-152a	1	1	4	1	1	X	X	1	X	X	1	4	X	X	
Freon, MF	2	4	2	4	4	X	3	4	X	X	4	1	X	4	
Freon, PCA	1	4	2	1	2	X	1	4	X	X	4	1	X	4	
Freon, TF	1	4	2	1	2	X	1	4	X	X	4	1	X	4	
Fuel Oil, #6	2	4	1	4	4	1	2	4	4	4	4	4	1	1	
Fuel Oil, 1, and 2	1	4	1	2	4	1	2	4	4	4	4	3	1	4	
Fuel Oil, Acidic	1	4	1	2	4	1	2	4	4	4	4	4	1	1	
Fumaric Acid	1	2	1	2	2	4	X	4	2	1	3	2	1	2	
Fuming Sulphuric Acid (20/25% Oleum)	4	4	1	4	4	4	4	4	4	4	4	4	X	4	
Furan (Furfuran)	4	3	X	4	4	4	X	4	4	4	4	4	X	X	
Furfural	4	2	4	4	4	4	3	2	4	4	4	3	X	4	
Furfuraldehyde	4	2	4	4	4	4	X	2	4	4	4	4	X	4	
Furfuryl Alcohol	4	2	X	4	4	4	4	2	4	4	4	4	4	4	
Furyl Carbinol	4	2	X	4	4	4	4	2	4	4	4	4	4	4	
Fyrquel 150 220 300 550	4	1	1	4	4	4	4	1	4	4	4	4	2	1	
Gallic Acid	2	2	1	2	2	4	4	2	X	1	1	2	1	X	
Gasoline	1	4	1	4	4	4	2	4	4	4	4	4	1	4	
Gelatin	1	1	1	1	1	4	4	1	1	1	1	1	1	1	
Girling Brake Fluid	3	1	4	2	1	X	X	2	X	X	X	2	4	X	
Glacial Acetic Acid	2	2	4	4	2	4	4	2	2	2	2	4	4	2	
Glauber's Salt	4	2	1	2	4	4	X	2	4	2	2	2	1	X	
Glucose	1	1	1	1	1	X	4	1	1	1	1	1	1	1	
Glycerine - Glycerol	1	1	1	1	1	4	4	1	1	1	1	1	1	1	
Glycols	1	1	1	1	1	4	4	1	1	1	1	1	1	1	
Grease Petroleum Base	1	4	1	3	4	1	1	4	4	4	4	4	1	4	
Green Sulphate Liquor	2	1	1	2	2	4	4	1	2	2	2	2	2	X	
Gulf Endurance Oils	1	4	1	2	4	1	1	4	4	4	4	4	1	4	
Gulf FR Fluids (Emulsion)	1	4	1	2	4	1	1	4	4	4	4	4	1	4	
Gulf FR G-Fluids	1	1	1	1	1	4	2	1	1	1	1	1	1	1	
Gulf FR P-Fluids	4	2	2	4	4	4	4	2	4	4	4	4	2	1	
Gulf Harmony Oils	1	4	1	2	4	1	1	4	4	4	4	4	1	4	
Gulf High Temperature Grease	1	4	1	2	4	1	1	4	4	4	4	4	1	4	
Gulf Legion Oils	1	4	1	2	4	1	1	4	4	4	4	4	1	4	
Gulf Paramount Oils	1	4	1	2	4	1	2	4	4	4	4	4	1	4	
Gulf Security Oils	1	4	1	2	4	1	2	4	4	4	4	4	1	4	
Gulfcrown Grease	1	4	1	2	4	1	1	4	4	4	4	4	1	4	
HEF-2 (High Energy Fuel)	2	4	1	4	4	4	4	4	4	4	4	4	2	4	
Halothane	4	4	1	4	4	4	4	4	4	4	4	4	2	4	

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FLUID NAME	Nitrile	Ethylene Propylene	Fluorocarbon	Neoprene	SBR	Polyacrylate	Polyurethane	Butyl	Butadiene	Isoprene	Natural Rubber	Hypalon	Fluorosilicone	Silicone
Halowax Oil	4	4	1	4	4	X	X	4	4	4	4	4	1	4
Hannifin Lube A	1	4	1	1	2	1	1	4	4	4	4	1	1	2
Heavy Water	1	1	X	2	1	4	4	1	1	1	1	1	1	1
Helium	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hexyl Alcohol	1	3	1	2	1	4	4	3	1	1	1	2	2	2
HiLo MS #1	4	1	4	4	4	4	4	2	4	4	4	4	3	3
High Viscosity Lubricant, H2	1	1	1	2	1	4	4	1	2	X	X	X	2	1
High Viscosity Lubricant, U4	1	1	1	2	1	4	4	1	2	X	X	X	2	1
Houghto-Safe 1010 phosphate ester	4	1	1	4	4	4	X	1	4	4	4	4	2	3
Houghto-Safe 1055 phosphate ester	4	1	1	4	4	4	X	1	4	4	4	4	2	3
Houghto-Safe 1120 phosphate ester	4	2	1	4	4	4	4	1	4	4	4	4	2	3
Houghto-Safe 271 (Water & Glycol Base)	1	1	2	2	1	4	4	2	X	X	X	X	2	2
Houghto-Safe 416 & 500 Series	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Houghto-Safe 5040 (Water/Oil emulsion)	1	4	1	2	4	4	4	4	4	4	4	4	2	3
Houghto-Safe 620 Water/Glycol	1	1	2	2	1	4	4	2	X	X	X	X	2	2
Hydraulic Oil, Petroleum Base, Industrial	1	4	1	2	4	1	1	4	4	4	4	2	1	2
Hydrazine	2	1	4	2	2	X	4	1	X	X	1	2	4	2
Hydro-Drive MIH-10 (Petroleum Base)	1	4	1	2	4	1	2	4	4	4	4	4	1	2
Hydro-Drive MIH-50 (Petroleum Base)	1	4	1	2	4	1	2	4	4	4	4	4	1	2
Hydrobromic Acid	4	1	1	4	4	4	4	1	4	1	1	1	3	4
Hydrobromic Acid 40%	4	1	1	2	4	4	4	1	4	1	1	1	3	4
Hydrocarbons, Saturated	1	4	1	2	4	1	2	4	4	4	4	3	1	4
Hydrochloric Acid, 3 Molar to 158°F	2	1	1	2	3	3	4	1	X	X	3	1	3	4
Hydrochloric Acid, Concentrated Room Temp.	2	2	1	X	X	X	X	X	X	X	X	X	X	X
Hydrochloric Acid, Concentrated to 158°F	4	4	4	4	4	4	4	4	X	X	4	X	4	4
Hydrocyanic Acid	2	1	1	2	2	4	X	1	2	1	1	1	2	3
Hydrofluosilicic Acid	2	1	1	2	2	X	X	1	X	1	1	1	4	4
Hydrogen Gas, Cold	1	1	1	1	2	2	1	1	1	1	2	1	3	3
Hydrogen Gas, Hot	1	1	1	1	2	2	1	1	1	1	2	1	3	3
Hydrogen Peroxide	2	1	1	1	2	4	X	1	2	2	2	2	1	1
Hydrogen Peroxide 90%	4	3	1	4	4	4	X	3	4	4	4	3	2	2
Hydrogen Sulfide Dry Cold	1	1	4	1	1	4	X	1	1	1	1	1	3	3
Hydrogen Sulfide Dry Hot	4	1	4	2	4	4	X	1	4	4	4	3	3	3
Hydrogen Sulfide Wet Cold	4	1	4	1	4	4	X	1	4	4	4	2	3	3
Hydrogen Sulfide Wet Hot	4	1	4	2	4	4	X	1	4	4	4	3	3	3
Hydrolube-Water/Ethylene Glycol	1	1	1	2	1	4	4	2	X	X	X	X	2	2
Hydroquinone	3	2	2	4	4	4	X	4	4	2	2	4	2	X
Hidyne	2	1	4	2	2	4	X	2	2	2	2	X	4	4
Hyjet IV and IVA	4	1	4	4	4	4	4	2	4	4	4	4	4	4
Hypochlorous Acid	4	2	1	4	4	4	X	2	4	2	2	1	X	X
Industron FF44	1	4	1	2	4	1	2	4	4	4	4	4	1	4
Industron FF48	1	4	1	2	4	1	2	4	4	4	4	4	1	4
Industron FF53	1	4	1	2	4	1	2	4	4	4	4	4	1	4
Industron FF80	1	4	1	2	4	1	2	4	4	4	4	4	1	4
Iodine	2	2	1	4	2	X	X	2	X	4	X	2	1	X
Iodine Pentafluoride	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Iso Octane	1	4	1	2	4	1	2	4	4	4	4	1	1	4
Iso-Butyl N-Butyrate	4	1	1	4	4	4	X	1	4	4	4	4	1	X
Isobutyl Alcohol	2	1	1	1	2	4	4	1	2	1	1	1	2	1
Isododecane	1	4	1	2	4	4	X	4	4	4	4	2	1	4
Isophorone (Ketone)	4	2	4	4	4	4	4	2	4	4	4	4	4	4
Isopropanol	2	1	1	2	2	4	4	1	2	1	1	1	2	1
Isopropyl Acetate	4	2	4	4	4	4	4	2	4	4	4	4	2	4
Isopropyl Alcohol	2	1	1	2	2	4	4	1	2	1	1	1	2	1
Isopropyl Chloride	4	4	1	4	4	4	4	4	4	4	4	4	2	4
Isopropyl Ether	2	4	4	3	4	3	2	4	4	4	4	3	3	4
JP-10	3	4	1	4	4	4	3	4	X	X	4	X	1	4
JP-4 (MIL-T-5624)	1	4	1	4	4	2	2	4	4	4	4	4	2	4
JP-5 (MIL-T-5624)	1	4	1	4	4	2	2	4	4	4	4	4	2	4
JP-6 (MIL-J-25656)	1	4	1	4	4	2	2	4	4	4	4	4	2	4
JP-8 (MIL-T-83133)	1	4	1	3	4	1	1	4	X	X	4	X	2	4
JP-9 (MIL-F-81912)	3	4	1	4	4	4	3	4	X	X	4	X	2	4

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FLUID NAME	Nitrile	Ethylene Propylene	Fluorocarbon	Neoprene	SBR	Polyacrylate	Polyurethane	Butyl	Butadiene	Isoprene	Natural Rubber	Hypalon	Fluorosilicone	Silicone
JP-9 -11	4	4	1	4	4	4	4	4	X	X	4	X	2	4
Kel F Liquids	1	1	2	X	1	X	X	1	X	X	X	1	2	1
Kerosene (Similar to RP-1 and JP-1)	1	4	1	2	4	1	1	4	4	4	4	4	1	4
Keystone #87HX-Grease	1	4	1	4	4	1	1	4	4	4	4	4	1	4
Lacquer Solvents	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Lacquers	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Lactams-Amino Acids	4	2	4	2	4	X	X	2	4	4	4	2	4	X
Lactic Acid Cold	1	1	1	1	1	4	X	1	1	1	1	1	1	1
Lactic Acid Hot	4	4	1	4	4	4	X	4	4	4	4	3	2	2
Lactones (Cyclic Esters)	4	2	4	4	4	4	4	2	4	4	4	4	4	2
Lard Animal Fat	1	2	1	2	4	1	1	2	4	4	4	4	1	2
Lead Acetate	2	1	4	2	4	4	4	1	4	1	1	4	4	4
Lead Nitrate	1	1	X	1	1	X	X	1	1	1	1	1	1	2
Lead Sulphamate	2	1	1	1	2	4	X	1	2	2	2	1	1	2
Lehigh X1169	1	4	1	2	4	1	1	4	4	4	4	2	1	4
Lehigh X1170	1	4	1	2	4	1	1	4	4	4	4	2	1	4
Ligroin (Petroleum Ether or Benzine)	1	4	1	2	4	1	2	4	4	4	4	3	1	4
Lindol, Hydraulic Fluid (Phosphate ester type)	4	1	2	4	4	4	4	1	4	4	4	4	3	3
Linoleic Acid	2	4	2	2	4	X	X	4	4	4	4	2	X	2
Linseed Oil	1	3	1	3	4	1	2	3	4	4	4	2	1	1
Liquid Oxygen (LOX)	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Liquid Petroleum Gas (LPG)	1	4	1	2	4	3	1	4	4	4	4	4	3	3
Liquimoly	1	4	1	2	4	1	2	4	4	4	4	4	1	4
Lubricating Oils, Di-ester	2	4	1	3	4	2	X	4	4	4	4	X	2	4
Lubricating Oils, SAE 10, 20, 30, 40, 50	1	4	1	2	4	1	2	4	4	4	4	4	1	4
Lubricating Oils, petroleum base	1	4	1	2	4	1	2	4	4	4	4	4	1	4
Lye Solutions	2	1	2	2	2	4	4	1	2	2	1	1	2	2
MCS 312	4	4	1	4	4	4	X	4	4	4	4	X	1	1
MCS 352	4	1	4	4	4	4	4	2	4	4	4	4	3	3
MCS 463	4	1	4	4	4	4	4	2	4	4	4	4	3	3
MIL-A-6091	2	1	1	1	1	4	4	1	1	1	1	1	1	1
MIL-C-4339	1	4	1	4	4	1	1	4	4	4	4	4	1	3
MIL-C-7024	1	4	1	2	4	2	1	4	4	4	4	4	1	4
MIL-C-8188	2	4	2	4	4	3	4	4	4	4	4	4	2	4
MIL-E-9500	1	1	1	1	1	4	4	1	1	1	1	1	1	1
MIL-F-16884	1	4	1	3	4	1	3	4	4	4	4	3	1	4
MIL-F-17111	1	4	1	2	4	1	3	4	4	4	4	2	2	4
MIL-F-25558 (RJ-1)	1	4	1	2	4	1	1	4	4	4	4	2	1	4
MIL-F-25656	1	4	1	4	4	2	2	4	4	4	4	4	2	4
MIL-F-5566	2	1	1	2	2	4	2	1	2	1	1	1	1	1
MIL-F-81912 (JP-9)	3	4	1	4	4	4	3	4	X	X	4	X	2	4
MIL-F-82522 (RJ-4)	2	4	1	4	4	1	1	4	1	1	1	X	1	4
MIL-G-10924	1	4	1	2	4	2	1	4	4	4	4	2	1	4
MIL-G-15793	1	4	1	2	4	1	1	4	4	4	4	2	2	4
MIL-G-21568	1	1	1	1	1	1	1	1	1	1	1	1	1	4
MIL-G-25013	1	1	1	2	1	1	3	1	4	4	2	2	1	4
MIL-G-25537	1	4	1	2	4	2	1	4	4	4	4	2	1	4
MIL-G-25760	2	4	1	2	4	2	2	4	4	4	4	2	2	4
MIL-G-3278	2	4	1	4	4	1	2	4	4	4	4	4	2	4
MIL-G-3545	1	4	1	2	4	1	1	4	4	4	4	2	1	4
MIL-G-4343	2	3	1	2	1	1	1	3	1	1	1	1	1	3
MIL-G-5572	1	4	1	4	4	2	2	4	4	4	4	4	1	4
MIL-G-7118	2	4	1	2	4	3	3	4	4	4	4	2	1	4
MIL-G-7187	1	4	1	4	4	1	1	4	4	4	4	4	1	4
MIL-G-7421	2	4	1	2	4	4	2	4	4	4	4	2	2	4
MIL-G-7711	1	4	1	4	4	2	1	4	4	4	4	4	1	2
MIL-H-13910	1	1	1	1	1	2	4	1	1	1	1	1	2	4
MIL-H-19457	4	2	1	4	4	4	4	1	4	4	4	4	4	3
MIL-H-22251	2	1	X	2	2	X	X	1	X	X	X	2	X	4
MIL-H-27601	1	4	1	2	4	1	3	4	4	4	4	3	2	4
MIL-H-46170 -15°F to +400°F	1	4	1	2	4	2	2	4	4	4	4	2	1	4
MIL-H-46170 -20°F to +275°F	1	4	1	2	4	2	2	4	4	4	4	2	1	4



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Methyl Cellosolve	3	2	4	3	4	4	4	2	4	4	4	2	4	4
Methyl Cellulose	2	2	4	2	2	4	2	2	2	2	2	2	4	2
Methyl Chloride	4	3	1	4	4	4	4	3	4	4	4	4	2	4
Methyl Chloroformate	4	4	1	4	4	4	4	4	4	4	4	4	2	4
Methyl Ether	1	4	1	3	4	4	X	4	1	1	4	4	1	1
Methyl Ethyl Ketone (MEK)	4	1	4	4	4	4	4	1	4	4	4	4	4	4
Methyl Ethyl Ketone Peroxide	4	4	4	4	4	4	4	4	4	4	4	4	4	2
Methyl Formate	4	2	X	2	4	X	X	2	4	4	4	2	X	X
Methyl Isobutyl Ketone (MIBK)	4	3	4	4	4	4	4	3	4	4	4	4	4	4
Methyl Isopropyl Ketone	4	2	4	4	4	4	4	2	4	4	4	4	4	4
Methyl Mercaptan	X	1	X	X	X	X	X	1	X	X	X	X	X	X
Methyl Methacrylate	4	4	4	4	4	4	X	4	4	4	4	4	4	4
Methyl Oleate	4	2	1	4	4	X	X	2	4	X	4	4	2	X
Methyl Salicylate	4	2	X	4	3	X	X	2	X	X	3	4	X	X
Methylacrylic Acid	4	2	3	2	4	4	4	2	4	4	4	4	4	4
Methylcyclopentane	4	4	1	4	4	4	4	4	4	4	4	4	2	4
Methylene Chloride	4	4	2	4	4	4	4	4	4	4	4	4	2	4
Milk	1	1	1	1	1	4	4	1	1	1	1	1	1	1
Mineral Oils	1	3	1	2	4	1	1	3	4	4	4	2	1	2
Mobil SHC 500 Series	3	4	1	2	X	1	2	4	X	X	X	2	2	2
Mobil SHC 600 Series	3	4	1	2	4	1	1	4	X	X	X	2	2	3
Mobilgear 600 Series	3	3	1	1	4	1	2	3	3	4	4	2	1	1
Mobilgear SHC ISO Series	3	3	1	2	4	1	2	3	3	4	4	2	1	1
Mobilgrease HP	2	4	1	2	4	1	1	4	X	4	4	3	1	2
Mobilgrease HTS	2	4	1	2	4	1	1	4	X	4	4	3	1	2
Mobilgrease SM	2	4	1	2	4	1	1	4	X	4	4	3	1	2
Mobilith AW Series	2	4	1	2	4	1	1	4	X	4	4	3	1	2
Mobilith SHC Series	2	4	1	3	4	1	1	4	X	4	4	3	1	2
Mobilmistube Series	3	3	1	1	4	1	2	3	3	4	4	2	1	1
Mono Bromobenzene	4	4	1	4	4	4	4	4	4	4	4	4	2	4
Mono Ethanolamine	4	2	4	4	2	4	4	2	2	2	2	4	4	2
Monochlorobenzene	4	4	1	4	4	4	4	4	4	4	4	4	2	4
Monoitrotoluene & Dinitrotoluene (40/60 Mixture)	4	4	3	4	4	4	4	4	4	4	4	4	3	4
Monomethyl Hydrazine	2	1	X	2	2	X	X	1	X	X	X	2	X	4
Monomethylaniline	4	2	2	4	4	4	4	2	4	4	4	4	X	X
Monovinyl Acetylene	1	1	1	2	2	X	X	1	2	2	2	2	X	2
Mopar Brake Fluid	3	1	4	2	1	X	X	2	X	X	X	2	4	3
N-Butyl Acetate	4	2	4	4	4	4	4	2	4	4	4	4	4	4
N-Butyl Benzoate	4	1	1	4	2	4	X	1	4	4	4	4	1	X
N-Butyl Butyrate	4	1	1	4	4	4	X	1	4	4	4	4	1	X
N-Butyl Ether	3	3	4	4	4	4	3	3	4	4	4	4	3	4
N-Heptane	1	4	1	2	4	1	2	4	4	4	4	2	3	4
N-Hexaldehyde	4	1	4	1	4	X	2	2	4	4	4	3	4	2
N-Hexane	1	4	1	2	4	1	2	4	4	4	4	2	3	4
N-Hexane-1	2	4	1	2	4	1	2	4	4	4	4	2	4	4
N-Methyl-2-Pyrrolidone	X	2	X	X	X	X	X	X	X	X	X	X	X	X
N-Octane	1	4	1	4	4	4	4	4	4	4	4	4	2	4
N-Pentane	1	4	1	1	3	1	4	4	4	4	4	2	3	4
N-Propyl Acetate	4	1	4	4	4	4	4	1	4	4	4	4	4	4
Naphthalene	4	4	1	4	4	X	2	4	4	4	4	4	1	4
Naphthenic Acid	2	4	1	4	4	X	X	4	4	4	4	4	1	4
Naptha	2	4	1	4	4	2	2	4	4	4	4	4	2	4
Natural Gas	1	4	1	1	2	2	2	4	2	2	2	1	3	4
Neatsfoot Oil	1	2	1	4	4	1	1	2	4	4	4	4	1	2
Neon	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Neville Acid	4	2	1	4	4	4	X	2	4	4	4	4	2	4
Nickel Acetate	2	1	4	2	4	4	4	1	4	1	1	4	4	4
Nickel Chloride	1	1	1	2	1	3	3	1	1	1	1	1	1	1
Nickel Salts	1	1	1	2	1	3	3	1	1	1	1	1	1	1
Nickel Sulfate	1	1	1	1	2	4	3	1	2	2	2	1	1	1
Niter Cake	1	1	1	1	1	4	1	1	1	1	1	1	1	1
Nitric Acid 3 Molar to 158°F	4	2	3	4	3	4	4	2	X	X	X	2	4	4

# FLUID COMPATIBILITY CHART

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FLUID NAME	Nitrile	Ethylene Propylene	Fluorocarbon	Neoprene	SBR	Polyacrylate	Polyurethane	Butyl	Butadiene	Isoprene	Natural Rubber	Hypalon	Fluorosilicone	Silicone
Nitric Acid Concentrated Room Temp.	X	4	2	X	X	X	X	X	X	X	X	X	X	X
Nitric Acid Concentrated to 158°F	4	4	4	4	4	4	4	4	X	X	4	X	4	4
Nitrobenzene	4	1	2	4	4	4	4	1	4	4	4	4	4	4
Nitroethane	4	2	4	2	2	4	4	2	2	2	2	2	4	4
Nitrogen	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Nitrogen Tetroxide (N2O4)	4	4	4	4	4	4	4	2	4	4	4	4	4	4
Nitromethane	4	2	4	3	3	4	4	2	2	2	2	2	4	4
Nitropropane	4	2	4	4	4	4	4	2	4	4	4	4	4	4
Nitrous Oxide	1	1	1	X	X	X	X	X	X	X	X	X	X	1
Noryl GE Phenolic	1	1	X	X	X	X	X	X	X	X	X	X	X	X
Nyvac FR200 Mobil	1	1	1	2	4	X	X	4	4	X	4	3	X	X
O-Chloronaphthalene	4	4	1	4	4	4	4	4	4	4	4	4	2	4
O-Chlorophenol	4	4	1	4	4	4	4	4	4	4	4	4	2	4
O-Dichlorobenzene	4	4	1	4	4	4	4	4	4	4	4	4	2	4
OS 45 Type III (OS45)	2	4	1	1	4	X	4	4	4	4	4	2	2	4
OS 45 Type IV (OS45-1)	2	4	1	1	4	X	4	4	4	4	4	2	2	4
OS 70	2	4	1	1	4	X	4	4	4	4	4	2	2	4
Octachloro Toluene	4	4	1	4	4	4	4	4	4	4	4	4	2	4
Octadecane	1	4	1	2	4	2	1	4	4	4	4	2	1	4
Octyl Alcohol	2	3	1	2	2	4	4	2	2	2	2	2	2	2
Oleic Acid	3	4	2	4	4	4	2	4	4	4	4	4	X	4
Oleum (Fuming Sulfuric Acid)	4	4	1	4	4	4	4	4	4	4	4	4	X	4
Oleum Spirits	2	4	1	3	4	X	3	4	4	4	4	2	2	4
Olive Oil	1	2	1	2	4	1	1	2	4	4	4	2	1	3
Oronite 8200	2	4	1	1	4	X	1	4	4	4	4	4	1	4
Oronite 8515	2	4	1	1	4	X	1	4	4	4	4	4	1	4
Ortho-Dichlorobenzene	4	4	1	4	4	4	4	4	4	4	4	4	2	4
Orthochloro Ethyl Benzene	4	4	1	4	4	4	4	4	4	4	4	4	2	4
Oxalic Acid	2	1	1	2	2	X	X	1	2	2	2	2	1	2
Oxygen, 200-400°F (Evaluate for specific applications)	4	4	2	4	4	4	4	4	4	4	4	4	4	1
Oxygen, Cold (Evaluate for specific applications)	2	1	1	1	2	2	1	1	2	2	2	1	1	1
Ozone	4	1	1	2	4	2	1	2	4	4	4	1	1	1
P-Cymene	4	4	1	4	4	4	4	4	4	4	4	4	2	4
P-Dichlorobenzene	4	4	1	4	4	4	4	4	4	4	4	4	2	4
P-Tertiary Butyl Catechol	4	2	1	2	2	4	4	2	2	4	4	2	1	X
PRL-High Temp. Hydr. Oil	2	4	1	2	4	1	2	4	4	4	4	4	1	2
Paint Thinner, Duco	4	4	2	4	4	4	4	4	4	4	4	4	2	4
Palmitic Acid	1	2	1	2	2	X	1	2	2	2	2	3	1	4
Par-al-Ketone	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Para-dichlorobenzene	4	4	1	4	4	4	4	4	4	4	4	4	2	4
Parker O Lube	1	4	1	1	2	1	1	4	4	4	4	1	1	2
Peanut Oil	1	3	1	3	4	1	2	3	4	4	4	2	1	1
Pentane, 2 Methyl	1	4	1	2	4	1	4	4	4	4	4	2	3	4
Pentane, 2-4 dimethyl	1	4	1	2	4	1	4	4	4	4	4	2	3	4
Pentane, 3-Methyl	1	4	1	2	4	1	4	4	4	4	4	2	3	4
Perchloric Acid - 2N	4	2	1	2	4	4	4	2	4	4	4	2	1	4
Perchloroethylene	2	4	1	4	4	4	4	4	4	4	4	4	2	4
Petrolatum	1	4	1	2	4	1	1	4	4	4	4	2	1	4
Petroleum Oil, Above 250°F	4	4	2	4	4	4	4	4	4	4	4	4	4	4
Petroleum Oil, Below 250°F	1	4	1	2	4	2	2	4	4	4	4	2	2	2
Petroleum Oil, Crude	1	4	1	2	4	1	1	4	4	4	4	2	1	4
Phenol	4	4	1	4	4	4	4	4	4	4	4	4	2	4
Phenol, 70%/30% H <sub>2</sub> O	4	4	1	4	4	4	4	4	4	4	4	4	2	4
Phenol, 85%/15% H <sub>2</sub> O	4	4	1	4	4	4	4	4	4	4	4	4	2	4
Phenyl Ethyl Ether	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Phenylbenzene	4	4	1	4	4	4	4	4	4	4	4	4	2	4
Phenylhydrazine	4	2	1	4	2	4	X	4	2	1	1	4	X	X
Phorone	4	3	4	4	4	4	4	3	4	4	4	4	4	4
Phosphoric Acid 3 Molar to 158°F	1	1	1	2	2	3	4	1	X	X	X	1	2	2
Phosphoric Acid Concentrated Room Temp	2	1	1	2	1	2	4	1	X	X	X	1	3	3
Phosphoric Acid Concentrated to 158°F	4	1	1	3	2	3	4	1	X	X	X	1	3	4
Phosphorous Trichloride	4	1	1	4	4	X	X	1	X	X	4	4	1	X

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FLUID NAME	Nitrile	Ethylene Propylene	Fluorocarbon	Neoprene	SBR	Polyacrylate	Polyurethane	Butyl	Butadiene	Isoprene	Natural Rubber	Hypalon	Fluorosilicone	Silicone
Pickling Solution	4	3	2	4	4	4	4	3	4	4	4	2	4	4
Picric Acid H <sub>2</sub> O Solution	1	1	1	1	2	X	X	1	2	2	1	1	2	X
Picric Acid Molten	2	2	1	2	2	X	X	2	4	2	2	2	2	4
Pine Oil	1	4	1	4	4	X	X	4	4	4	4	4	1	4
Pinene	2	4	1	3	4	4	2	4	4	4	4	4	1	4
Piperidine	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Plating Solutions Chrome	4	2	1	4	4	4	4	2	4	4	4	4	2	2
Plating Solutions Others	1	1	1	4	4	X	X	1	X	X	4	1	X	4
Pneumatic Service	1	1	1	1	4	4	1	1	4	4	4	1	4	4
Polyvinyl Acetate Emulsion	X	1	X	2	4	X	X	1	X	X	2	2	X	X
Potassium Acetate	2	1	4	2	4	4	4	1	4	1	1	1	4	4
Potassium Chloride	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Potassium Cupro Cyanide	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Potassium Cyanide	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Potassium Dichromate	1	1	1	1	1	1	2	1	1	1	1	1	1	1
Potassium Hydroxide 50%	2	1	4	2	2	4	4	1	2	2	2	1	3	3
Potassium Nitrate	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Potassium Salts	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Potassium Sulfite	1	1	1	1	2	4	1	1	1	2	2	2	1	1
Potassium Sulphate	1	1	1	1	2	4	1	1	1	2	2	2	1	1
Prestone Antifreeze	1	1	1	1	1	4	4	1	1	1	1	1	1	1
Producer Gas	1	4	1	2	4	2	1	4	4	4	4	2	2	2
Propane	1	4	1	2	4	1	3	4	4	4	4	2	2	4
Propyl Acetate	4	2	4	4	4	4	4	2	4	4	4	4	4	4
Propyl Alcohol	1	1	1	1	1	4	4	1	1	1	1	1	1	1
Propyl Nitrate	4	2	4	4	4	4	X	2	4	4	4	4	4	4
Propylene	3	4	1	4	4	4	4	4	4	4	4	4	3	4
Propylene Oxide	4	2	4	4	4	4	4	2	4	4	4	4	4	4
Pydraul, 10E	4	1	4	4	4	4	4	1	4	4	4	4	4	1
Pydraul, 115E	4	1	1	4	4	4	4	1	4	4	4	4	3	4
Pydraul, 230C, 312C, 540C, A200	4	4	1	4	4	4	4	4	4	4	4	4	4	4
Pydraul, 29ELT 30E, 50E, 65E	4	1	1	4	4	4	4	1	4	4	4	4	1	1
Pyranol Transformer Oil	1	4	1	2	4	1	2	4	4	4	4	2	1	4
Pyridine Oil	4	2	4	4	4	4	X	2	4	4	4	4	4	4
Pyrogard 53, Mobil Phosphate Ester	4	1	1	4	4	4	4	1	4	4	4	4	4	4
Pyrogard D, Mobil Water-in-Oil Emulsion	1	4	4	2	4	X	1	4	4	4	4	1	2	3
Pyroligneous Acid	4	2	4	2	4	4	4	2	4	4	4	2	4	X
Pyrolube	4	2	1	4	4	4	4	2	4	4	4	4	2	2
Pyrrrole	4	4	4	4	2	4	X	4	2	2	2	2	4	2
RJ-1 (MIL-F-25558)	1	4	1	2	4	1	1	4	4	4	4	2	1	4
RJ-4 (MIL-F-82522)	2	4	1	4	4	2	2	4	X	X	4	X	1	4
RP-1 (MIL-R-25576)	1	4	1	2	4	1	1	4	4	4	4	2	1	4
Radiation (GAMMA, 1.0 E+07 RADS)	3	2	4	X	X	X	4	4	X	X	4	X	4	2
Rapeseed Oil	2	1	1	2	4	2	2	1	4	4	4	2	1	4
Red Line 100 Oil	1	4	1	2	4	1	1	4	4	4	4	2	1	4
Red Oil (MIL-H-5606)	1	4	1	2	4	1	1	4	4	4	4	2	1	4
SF 1154 GE Silicone Fluid	2	1	1	1	1	1	2	1	X	1	1	1	1	4
SF1147 GE Silicone Fluid	2	3	1	X	X	X	X	3	X	X	X	X	X	4
SF96 GE Silicone Fluid	2	1	1	1	1	1	2	1	1	1	1	1	1	4
SR-10 Fuel	1	4	1	4	4	2	2	4	4	4	4	4	1	4
SR-6 Fuel	2	4	1	4	4	2	2	4	4	4	4	4	1	4
Sal Ammoniac	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Salicylic Acid	2	1	1	X	2	X	X	1	2	1	1	X	1	X
Santo Safe 300	4	3	1	4	4	4	X	3	4	4	4	X	1	1
Sea (Salt) Water	1	1	1	2	1	4	2	1	1	1	1	1	1	1
Sewage	1	1	1	2	1	4	4	1	1	1	1	1	1	1
Shell 3XF Mine Fluid (Fire resist hydr.)	1	4	1	2	4	4	4	4	4	4	4	2	1	X
Shell Alvania Grease #2	1	4	1	2	4	1	1	4	4	4	4	4	1	2
Shell Carnea 19 and 29	1	4	1	4	4	1	2	4	4	4	4	4	1	X
Shell Diala	1	4	1	2	4	1	2	4	4	4	4	4	1	4
Shell Iruis 905	1	4	1	2	4	1	1	4	4	4	4	4	1	4
Shell Lo Hydrax 27 and 29	1	4	1	2	4	1	2	4	4	4	4	4	1	4



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FLUID NAME	Nitrile	Ethylene Propylene	Fluorocarbon	Neoprene	SBR	Polyacrylate	Polyurethane	Butyl	Butadiene	Isoprene	Natural Rubber	Hypalon	Fluorosilicone	Silicone
Shell Macome 72	1	4	1	2	4	1	2	4	4	4	4	4	1	4
Shell Tellus #32 Pet. Base	1	4	1	2	4	1	1	4	4	4	4	4	1	4
Shell Tellus #68	1	4	1	2	4	1	1	4	4	4	4	4	1	4
Shell UMF (5% Aromatic)	1	4	1	2	4	1	1	4	4	4	4	4	1	4
Silicate Esters	2	4	1	1	4	X	1	4	4	4	4	X	1	4
Silicone Greases	1	1	1	1	1	1	1	1	1	1	1	1	2	3
Silicone Oils	1	1	1	1	1	1	1	1	1	1	1	1	3	3
Silver Nitrate	2	1	1	1	1	1	1	1	1	1	1	1	1	1
Sinclair Opaline CX-EP Lube	1	4	1	2	4	1	1	4	4	4	4	2	1	4
Skelly, Solvent B, C, E	1	4	1	4	4	X	X	4	4	4	4	4	1	X
Skydrol 500 B4	4	1	4	4	4	4	4	2	4	4	4	4	3	3
Skydrol LD-4	4	1	4	4	4	4	4	2	4	4	4	4	3	3
Soap Solutions	1	1	1	2	2	4	4	1	1	1	2	1	1	1
Socony Mobile Type A	1	4	1	2	4	1	2	4	4	4	4	4	2	4
Socony Vacuum AMV AC781 (grease)	1	4	1	2	4	1	2	4	4	4	4	4	2	4
Socony Vacuum PD959B	1	4	1	2	4	1	1	4	4	4	4	2	1	4
Soda Ash	1	1	1	1	1	X	X	1	1	1	1	1	1	1
Sodium Acetate	2	1	4	2	4	3	3	1	4	1	1	1	4	4
Sodium Bicarbonate (Baking Soda)	1	1	1	1	1	X	X	1	1	1	1	1	1	1
Sodium Bisulfate or Bisulfite	1	1	1	1	2	4	X	1	2	2	1	1	1	1
Sodium Borate	1	1	1	1	1	X	X	1	1	1	1	1	1	1
Sodium Carbonate (Soda Ash)	1	1	1	1	1	X	X	1	1	1	1	1	1	1
Sodium Chloride	1	1	1	1	1	X	1	1	1	1	1	1	X	1
Sodium Cyanide	1	1	X	1	1	X	X	1	1	1	1	1	X	1
Sodium Hydroxide, 3 Molar	2	1	2	2	2	4	2	1	1	1	1	1	2	1
Sodium Hypochlorite	2	1	1	2	2	4	4	1	2	2	2	1	2	2
Sodium Metaphosphate	1	1	1	2	1	X	X	1	1	1	1	2	1	X
Sodium Nitrate	2	1	X	2	2	X	X	1	1	1	2	1	X	4
Sodium Perborate	2	1	1	2	2	X	X	1	2	2	2	2	1	2
Sodium Peroxide	2	1	1	2	2	4	4	1	2	2	2	2	1	4
Sodium Phosphate (Dibasic)	1	1	1	2	1	1	1	1	1	1	1	1	X	4
Sodium Phosphate (Mono)	1	1	1	2	1	1	1	1	1	1	1	1	X	4
Sodium Phosphate (Tribasic)	1	1	1	2	1	1	1	1	1	1	1	1	X	1
Sodium Salts	1	1	1	2	1	1	1	1	1	1	1	1	1	1
Sodium Silicate	1	1	1	1	1	X	X	1	1	1	1	1	X	X
Sodium Sulphate	1	1	1	1	2	4	1	1	2	2	2	1	1	1
Sodium Sulphide and Sulfite	1	1	1	1	2	4	1	1	2	2	2	1	1	1
Sodium Thiosulfate	2	1	1	1	2	4	1	1	2	2	2	1	1	1
Sour Crude Oil	3	4	1	4	4	4	4	4	4	4	4	X	4	4
Sour Natural Gas	3	4	1	4	4	4	4	4	4	4	4	X	4	4
Sovasol No. 1, 2, and 3	1	4	1	2	4	2	2	4	4	4	4	2	1	4
Sovasol No. 73 and 74	2	4	1	2	4	2	2	4	4	4	4	2	1	4
Soybean Oil	1	3	1	3	4	1	X	3	4	4	4	3	1	1
Spry	1	2	1	2	4	1	1	2	4	4	4	4	1	1
Standard Oil Mobilube GX90-EP Lube	1	4	1	2	4	1	1	4	4	4	4	2	1	4
Stannic Chloride	1	1	1	4	1	X	X	1	1	1	1	4	1	2
Stannic Chloride, 50%	1	1	1	4	1	X	X	1	1	1	1	4	1	2
Stannous Chloride (15%)	1	1	1	1	1	X	X	1	1	1	1	1	1	2
Stauffer 7700	2	4	1	4	4	2	X	4	4	4	4	4	2	4
Steam Below 400°F	4	1	4	4	4	4	4	2	4	4	4	4	4	3
Steam, 400°-500°F	4	3	4	4	4	4	4	4	4	4	4	4	4	4
Steam, Above 500°F														
Stearic Acid	2	2	X	2	2	X	X	2	2	2	2	2	X	2
Stoddard Solvent	1	4	1	2	4	1	1	4	4	4	4	4	1	4
Styrene (Monomer)	4	4	2	4	4	4	X	4	4	4	4	4	3	4
Sucrose Solutions	1	1	1	2	1	4	4	1	1	1	1	2	1	1
Sulfur	4	1	1	1	4	4	X	1	4	4	4	X	1	X
Sulfur Chloride	4	4	1	4	4	4	X	4	4	4	4	4	1	3
Sulfur Dioxide, Dry	4	1	4	4	2	4	X	2	2	2	2	4	2	2
Sulfur Dioxide, Liquidified under pressure	4	1	4	4	4	4	X	2	4	4	4	4	2	2
Sulfur Dioxide, Wet	4	1	4	2	4	4	X	1	4	4	4	3	2	2
Sulfur Liquors	2	2	1	2	2	4	X	2	2	2	2	2	2	4

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Sulfur Molten	4	3	1	3	4	4	4	3	4	4	4	4	3	3
Sulfur Trioxide Dry	4	2	1	4	3	4	X	2	2	2	2	4	2	2
Sulfuric Acid, 3 Molar to 158°F	2	1	1	2	3	2	4	1	X	X	X	1	1	1
Sulfuric Acid, Concentrated Room Temp	X	3	1	X	X	X	3	X	X	X	X	X	X	X
Sulfuric Acid, Concentrated to 158°F	4	4	1	4	4	4	4	4	X	X	X	X	4	4
Sulfurous Acid	2	2	1	2	2	4	3	2	2	2	2	1	X	4
Sunoco #3661	1	4	1	2	4	1	1	4	4	4	4	2	1	4
Sunoco All purpose grease	1	4	1	2	4	1	1	4	4	4	4	2	1	4
Sunoco SAE 10	1	4	1	2	4	1	1	4	4	4	4	2	1	4
Sunsafe (Fire resist. hydr. fluid)	1	4	1	2	4	4	4	4	4	4	4	2	1	X
Super Shell Gas	1	4	1	2	4	2	2	4	4	4	4	4	2	4
Swan Finch EP Lube	1	4	1	4	4	1	1	4	4	4	4	4	1	4
Swan Finch Hypoid-90	1	4	1	2	4	1	1	4	4	4	4	4	1	4
Tannic Acid (10%)	1	1	1	1	2	4	X	1	1	1	1	1	1	2
Tar, bituminous	2	4	1	3	4	4	X	4	4	2	3	4	1	2
Tartaric Acid	1	2	1	2	4	X	1	2	2	1	3	1	1	1
Terpineol	2	3	1	4	4	X	2	3	4	4	4	4	1	X
Tertiary Butyl Alcohol	2	2	1	2	2	4	4	2	2	2	2	2	2	2
Tertiary Butyl Mercaptan	4	4	1	4	4	4	4	4	4	4	4	4	X	4
Tetrabromoethane	4	4	1	4	4	4	X	4	4	4	4	4	2	4
Tetrabutyl Titanate	2	1	1	2	2	X	X	2	2	2	2	4	4	4
Tetrachloroethylene	4	4	1	4	4	4	4	4	4	4	4	4	2	4
Tetrachoroethane	4	4	1	4	4	4	4	4	4	4	4	4	2	X
Tetraethyl Lead	2	4	1	2	4	X	X	4	4	4	4	4	2	X
Tetraethyl Lead Blend	2	4	1	4	4	X	X	4	4	4	4	4	2	X
Tetrahydrofuran	4	2	4	4	4	4	3	2	4	4	4	4	4	4
Tetralin	4	4	1	4	4	X	X	4	4	4	4	4	1	4
Texaco 3450 Gear Oil	1	4	1	4	4	1	1	4	4	4	4	4	1	4
Texaco Capella A and AA	1	4	1	2	4	1	2	4	4	4	4	4	1	4
Texaco Meropa 220 (No Lead)	1	4	1	2	4	1	2	4	4	4	4	4	1	4
Texaco Regal B	1	4	1	4	4	1	1	4	4	4	4	4	1	4
Texaco Uni-Temp Grease	1	4	1	2	4	1	1	4	4	4	4	4	1	2
Texamatic A 1581 Fluid	1	4	1	2	4	1	2	4	4	4	4	4	2	4
Texamatic A 3401 Fluid	1	4	1	2	4	1	2	4	4	4	4	4	2	4
Texamatic A 3525 Fluid	1	4	1	2	4	1	2	4	4	4	4	4	2	4
Texamatic A 3528 Fluid	1	4	1	2	4	1	2	4	4	4	4	4	2	4
Texamatic A Transmission Oil	1	4	1	2	4	1	2	4	4	4	4	4	2	4
Texas 1500 Oil	1	4	1	2	4	1	1	4	4	4	4	4	1	2
Therminol 44	4	4	1	4	X	4	X	4	X	X	X	X	X	4
Therminol 55	2	4	1	4	X	2	X	4	X	X	X	X	X	4
Therminol VP-1, 60, 65	4	4	1	4	X	4	X	4	X	X	X	X	X	2
Thiokol TP-90B	4	1	1	2	4	X	X	1	X	X	X	2	2	X
Thiokol TP-95	4	1	1	2	4	X	X	1	X	X	X	2	2	X
Tidewater Multigear, 140 EP Lube	1	4	1	2	4	1	1	4	4	4	4	2	1	4
Tidewater Oil-Beedol	1	4	1	2	4	1	1	4	4	4	4	4	1	2
Titanium Tetrachloride	2	4	1	4	4	4	4	4	4	4	4	4	2	4
Toluene	4	4	1	4	4	4	4	4	4	4	4	4	2	4
Toluene Diisocyanate	4	2	4	4	4	4	X	2	4	4	4	4	4	4
Transformer Oil	1	4	1	2	4	2	1	4	4	4	4	4	1	2
Transmission Fluid Type A	1	4	1	2	4	1	1	4	4	4	4	2	1	2
Triacetin	2	1	4	2	3	4	4	1	2	2	2	2	4	X
Triaryl Phosphate	4	1	1	4	4	4	4	1	4	4	4	4	2	3
Tributoxyethyl Phosphate	4	1	1	4	2	4	4	1	2	4	2	4	2	X
Tributyl Mercaptan	4	4	1	4	4	4	X	4	4	4	4	4	3	4
Tributyl Phosphate	4	1	4	4	4	4	4	2	4	2	2	4	4	4
Trichloroacetic Acid	2	2	3	4	2	4	4	2	2	2	2	4	4	X
Trichloroethane	4	4	1	4	4	4	4	4	4	4	4	4	2	4
Trichloroethylene	3	4	1	4	4	4	4	4	4	4	4	4	2	4
Tricresyl Phosphate	4	1	2	3	2	4	4	1	4	4	4	4	2	3
Triethanol Amine	3	2	4	2	2	4	4	2	2	2	2	2	4	X
Trifluoroethane	4	4	1	4	4	4	4	4	4	4	4	4	2	4
Trinitrotoluene	4	4	2	2	4	4	X	4	4	4	4	2	2	X

# FLUID COMPATIBILITY CHART

**COMPATIBILITY RATING:**

- 1 = Satisfactory
- 2 = Fair (Usually OK for Static Seal)
- 3 = Doubtful (Sometimes OK for Static Seal)
- 4 = Unsatisfactory
- X = Insufficient Data

FLUID NAME	Nitrile	Ethylene Propylene	Fluorocarbon	Neoprene	SBR	Polyacrylate	Polyurethane	Butyl	Butadiene	Isoprene	Natural Rubber	Hypalon	Fluorosilicone	Silicone
Trioctyl Phosphate	4	1	2	4	4	4	4	1	4	4	4	4	2	3
Tripoly Phosphate	4	1	2	3	4	4	4	1	4	4	4	4	1	3
Tung Oil (China Wood Oil)	1	4	1	2	4	X	3	3	4	4	4	3	2	4
Turbine Oil	1	4	1	4	4	1	1	4	4	4	4	4	1	4
Turbine Oil #15 (MIL-L-7808A)	2	4	1	4	4	2	4	4	4	4	4	4	2	4
Turbo Oil #35	1	4	1	2	4	1	1	4	4	4	4	4	1	4
Turpentine	1	4	1	4	4	2	4	4	4	4	4	4	2	4
Type I Fuel (MIL-S-3136)(ASTM Ref. Fuel A)	1	4	1	2	4	1	1	4	4	4	4	2	1	4
Type II Fuel MIL-S-3136	2	4	1	4	4	3	2	4	4	4	4	4	2	4
Type III Fuel MIL-S-3136 (ASTM Ref. Fuel B)	2	4	1	4	4	3	2	4	4	4	4	4	2	4
Ucon Hydrolube J-4	1	1	1	2	1	4	4	1	2	X	X	X	2	1
Ucon Lubricant 50-HB-100	1	1	1	1	1	X	X	1	1	1	1	1	1	1
Ucon Lubricant 50-HB-260	1	1	1	1	1	X	X	1	1	1	1	1	1	1
Ucon Lubricant 50-HB-5100	1	1	1	1	1	X	X	1	1	1	1	1	1	1
Ucon Lubricant 50-HB-660	1	1	1	1	1	X	X	1	1	1	1	1	1	1
Ucon Lubricant 50-HB55	1	1	1	1	1	X	X	1	1	1	1	1	1	1
Ucon Lubricant LB-1145	1	1	1	1	1	X	X	1	1	1	1	1	1	1
Ucon Lubricant LB-135	1	1	1	1	1	X	X	1	1	1	1	1	1	1
Ucon Lubricant LB-285	1	1	1	1	1	X	X	1	1	1	1	1	1	1
Ucon Lubricant LB-300X	1	1	1	1	1	X	X	1	1	1	1	1	1	1
Ucon Lubricant LB-625	1	1	1	1	1	X	X	1	1	1	1	1	1	1
Ucon Lubricant LB-65	1	1	1	1	2	X	X	1	2	2	2	2	1	1
Ucon Oil Heat Transfer Fluid 500(Polyalkalene Glycol)	1	1	1	1	1	X	X	1	1	1	1	1	1	1
Ucon Oil LB-385	1	1	1	1	1	X	X	1	1	1	1	1	1	1
Ucon Oil LB-400X	1	1	1	1	1	X	X	1	1	1	1	1	1	1
Univis 40 (Hydr. Fluid)	1	4	1	2	4	1	1	4	4	4	4	2	1	4
Univolt #35 (Mineral Oil)	1	4	1	2	4	1	1	4	4	4	4	4	1	4
Unsymmetrical Dimethyl Hydrazine (UDMH)	2	1	4	2	2	X	X	1	1	1	1	1	4	4
Uranium Hexachloride	X	X	1	X	X	X	X	X	X	X	X	X	X	X
VV-H-910	3	1	1	2	1	2	4	2	2	2	2	2	2	2
Varnish	2	4	1	4	4	4	3	4	4	4	4	4	2	4
Vegetable Oil	1	3	1	3	4	1	X	3	4	4	4	X	1	1
Versilube F-50	1	1	1	1	1	1	1	1	1	1	1	1	1	3
Vinegar	2	2	3	2	2	4	4	2	2	2	2	X	3	3
Vinyl Chloride	X	4	X	X	X	X	X	X	X	X	X	X	X	X
Wagner 21B Brake Fluid	3	1	4	2	1	X	X	2	X	X	2	2	4	3
Water	1	1	2	2	1	4	4	1	1	1	1	1	1	1
Wemco C	1	4	1	2	4	1	1	4	4	4	4	4	1	4
Whiskey and Wines	1	1	1	1	1	4	4	1	1	1	1	1	1	1
White Oil	1	4	1	2	4	1	1	4	4	4	4	4	1	4
White Pine Oil	2	4	1	4	4	X	X	4	4	4	4	4	1	4
Wolmar Salt	1	1	1	2	1	2	1	1	1	1	1	1	1	1
Wood Alcohol	1	1	4	1	1	4	4	1	1	1	1	1	1	1
Wood Oil	1	4	1	2	4	1	3	3	4	4	4	3	2	4
Xenon	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Xylene	4	4	1	4	4	4	4	4	4	4	4	4	1	4
Xylidenes-Mixed-Aromatic Amines	3	4	4	4	4	4	4	4	4	4	4	4	4	4
Xylol	4	4	1	4	4	4	4	4	4	4	4	4	1	4
Zeolites	1	1	1	1	1	X	X	1	1	1	1	1	1	X
Zinc Acetate	2	1	4	2	4	4	4	1	4	1	1	4	4	4
Zinc Chloride	1	1	1	1	1	4	X	1	1	1	1	1	1	X
Zinc Salts	1	1	1	1	1	4	1	1	1	1	1	1	1	1
Zinc Sulfate	1	1	1	1	2	4	X	1	2	2	2	1	1	1