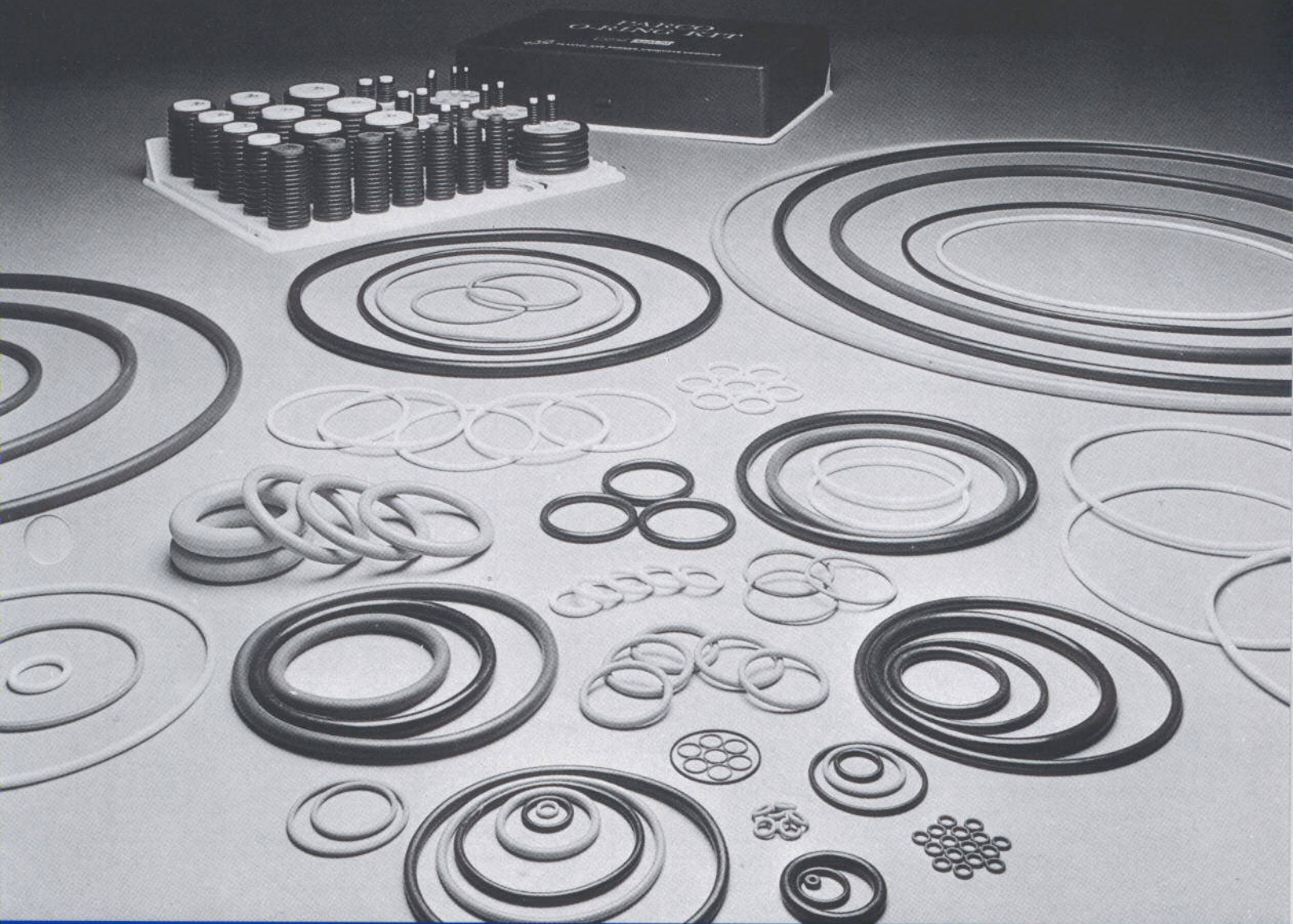


Parco



O-Ring Information

PURPOSE OF BROCHURE

This O-Ring Information brochure is designed as a quick and easy reference for proper selection of an O-ring to match your particular needs. The brochure contains information on O-ring size and installation data, O-ring compounds and their compatibility with fluids, and a chart of popular military/aerospace specifications.

YOUR PARCO DISTRIBUTOR

Your Parco Distributor is equipped to provide you with full service. He is prepared to assist you in the selection of the proper seal, but that's only the beginning. He stocks a full range of Parco sealing products and can provide a local safety stock for your specific needs. In addition, most of our distributors are equipped to provide special packaging or product identification tailored to your needs.

Depend on him. He is a local independent businessman who cares very much about helping you with your complete sealing needs.

Parco sealing products he carries include:

- O-Rings 369 standard sizes, hundreds of specials.
- O-Ring Kits The 30 most popular sizes. 380 rings in all.
- BACK-O's® Hard rubber contoured backup rings for seal pressures exceeding 1500 psi.
- T-Seals Rubber seal and nylon or teflon backup combination for long-stroke, high-pressure applications. Fits in standard O-ring groove.

Quality, delivery, technical strength, full line sealing capability. . . the things that matter most to you are our most important concerns.

O-RING SIZES

O-ring sizes are described by I.D. (inside diameter) and W (cross-section). There are 369 standard size O-rings ranging in size from .029" ID by .040" cross section to an O-ring with a 25.940" ID by .275" cross section. There are 119 standard size ID's available in the 5 popular cross-section diameters (.070, .103, .139, .210 or .275 inches). These standard size O-rings are listed on the O-ring size chart on pages 4 through 7 of this booklet. O-ring sizes are generally described by "dash number". Parco's PRP-568 "dash number" designation is equivalent to Aerospace Standard (AS) 568A or "2 dash" series designations used within the industry.

While only standard size O-rings are listed, Parco has hundreds of special size O-ring tools. It's likely we already have the O-ring size you need. If not, we are equipped to build new tooling to produce your O-ring.

O-RING INSTALLATION

Originally the nominal O-ring dimensions indicated the installation dimensions. A nominal 1"ID x 1 1/4"OD O-ring (PRP568-214), for instance, would be installed on a 1" piston groove diameter in a 1 1/4" cylinder.

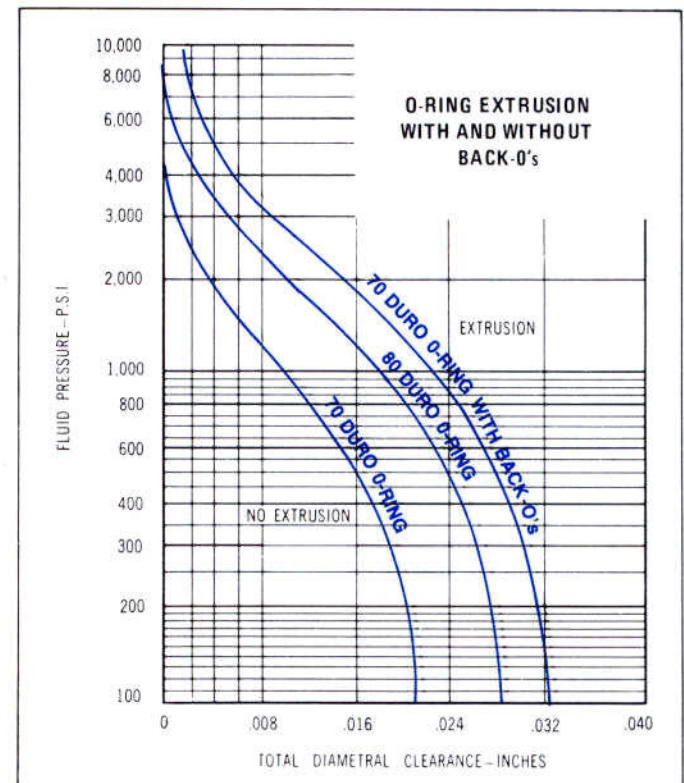
For the most effective standard installations, the Installation Data on pages 4 through 7 should be used. These dimensions allow

for the different requirements of internal and external seals as well as reciprocating, static and rotary applications.

For non-standard applications the following table may be used as a guide. "Gland Depth" which equals the depth of the groove plus the radial clearance, determines the amount of "squeeze" on the O-ring for effective sealing.

O-RING CROSS SECTION DIAMETER	GLAND DEPTH	
	RECIPROCATING SEALS	STATIC SEALS
.070	.055/.057	.050/.052
.103	.088/.090	.081/.083
.139	.121/.123	.111/.113
.210	.185/.188	.170/.173
.275	.237/.240	.226/.229

The most effective and reliable sealing is generally provided with the diametral clearance shown in the chart on page 4. When greater clearances occur, however, the graph below indicates conditions where O-ring seals may be used — depending on the fluid pressure and O-ring hardness.



If conditions fall to the right of the curve, extrusion of the O-ring into the clearance gap will occur, greatly reducing the life of the seal. As an example, with .004 diametral clearance and 2500 psi pressure, extrusion will occur with a 70 durometer O-ring, but no extrusion will occur with an 80 durometer O-ring.

The effective range of service is considerably greater when BACK-O's are used.

O-RING COMPOUNDS

While Parco manufactures O-rings in more than a dozen different elastomers, the following six elastomers account for more than 95% of all O-ring production. Elastomer groups are listed by popularity.

NITRILE (BUNA-N) — The most versatile elastomer, nitrile has

excellent resistance to most petroleum products and fuels and can be compounded over a temperature range of -65 to +300°F. Nitrile compounds have excellent resistance to compression set or cold flow, tear and abrasion. They **do not** possess good resistance to ozone, sunlight or weathering.

4200-70 Parco's most popular, general purpose nitrile compound.

2291-70 FDA nitrile for use in contact with foods.

4456-70 Excellent compatibility with stress-sensitive plastics.

FLUOROCARBON (VITON™ or FLUOREL™) — Many designers are switching from Nitrile to Fluorocarbons due to the superior combination of compression set resistance, high temperature properties and broad chemical resistance. These compounds can be used from -20 to +400°F with brief intermittent exposure to +600°F.

9009-75 Parco's most popular, general purpose fluoroelastomer compound.

SILICONE — Silicones possess excellent resistance to temperature extremes. Special silicone compounds are capable of either -175°F flexibility or heat resistance to +600°F. Generally used in static seals due to their poor tear and abrasion resistance, silicone compounds are often used for sealing medical products, electrical apparatus or for continuous service in dry air up to 400°F.

1235-70 Most popular general purpose silicone with temperature range from -80 to +400°F.

FLUOROSILICONE — Combines the good high and low temperature properties of silicone, but with much better resistance to a variety of fluids. Fluorosilicones are commonly used in aircraft fuel systems.

1903-70 Our most popular fluorosilicone with temperature or range from -80 to +350°F.

1933-70

ETHYLENE PROPYLENE (EPR, EPDM) — Excellent general purpose temperature range (-65 to +300°F) elastomer with superior resistance to water, steam, alcohols, engine coolants, sunlight and weathering. It has excellent resistance to Skydrol and other types of hydraulic fluids. Not recommended for use with petroleum oils or fuels.

5601-70 Our most popular "EPDM"; also conforms to FDA requirements except for milk and edible oils.

NEOPRENE (CHLOROPRENE) — Has the unique combination of resistance to weathering as well as resistance to petroleum lubricants over a temperature range from -65 to +300°F. Neoprene also has good resistance to flexing and tear. Commonly used for refrigerant seals.

3110-70 Most popular general purpose (-40 to +225°F) neoprene, conforms to FDA requirements except for milk and edible oils.

While the compounds listed here will meet most of your needs, many other compounds are available. Please discuss your specific needs with your Parco Distributor or Territory Manager.

FLUID COMPATABILITY This table shows Parco compounds that are suitable for use in various fluids. When more than one compound is shown they are in the order of decreasing suitability. It is often necessary to make a compromise choice when several types of fluids and/or applications will be encountered. The temperature range, elastomer type and general characteristics of each compound in the table are included in the descriptive paragraphs.

The table lists only 70 durometer compounds, but equivalent compounds of other hardnesses are also available. The two digits following the hyphen indicate the approximate hardness of Parco compounds.

FLUIDS	RECOMMENDED COMPOUNDS
ACETONE	5601-70
ACETYLENE	5601-70, 4200-70
ACID, ACETIC	5601-70
ACID, CARBONIC	4200-70
ACID, CITRIC	4200-70, 3110-70, 5601-70
ACID, FATTY	4200-70, 3110-70
ACID, HYDROCHLORIC	5601-70
ACID, NITRIC	9009-75
ACID, SULFURIC	9009-75
AIR	1235-70, 4200-70
ALCOHOL, AMYL or ISOPROPYL	5601-70, 4200-70
ALCOHOL, BUTYL (BUTANOL)	4200-70, 3110-70
ALCOHOL, DENATURED or ETHYL	4200-70, 3110-70, 5601-70
ALCOHOL, METHYL (METHANOL)	4200-70, 3110-70, 5601-70
AMMONIA, ANHYDROUS LIQUID	4200-70, 5601-70, 3110-70
AMMONIA, AQUEOUS	5601-70, 4200-70
AMMONIA GAS, COLD	4200-70, 5601-70, 3110-70
AMMONIA GAS, HOT	1235-70, 5601-70, 3110-70
ANIMAL OIL (LARD OIL)	2291-70, 5601-70
AROMATIC HYDROCARBONS	9009-75
ASPHALT	4200-70, 9009-75
ASTM #1 OIL	4200-70, 3110-70, 9009-75
ASTM #3 OIL	4200-70, 9009-75
BEER	2291-70, 3110-70
BENZENE (BENZOL)	9009-75
BLAST FURNACE GAS	1235-70, 9009-75, 4200-70
BLEACH SOLUTIONS	5601-70
BORON FUELS (HEF)	9009-75
BRAKE FLUID, AUTOMOTIVE	5709-70
CALCIUM CARBONATE	4200-70, 3110-70, 5601-70
CALCIUM CHLORIDE	4200-70, 3110-70, 5601-70
CALGON	4200-70, 5601-70
CANE SUGAR LIQUORS	4200-70, 3110-70, 5601-70
CARBON DIOXIDE	4200-70
CARBON MONOXIDE, HOT	1235-70, 4200-70
CARBON TETRACHLORIDE	9009-75
CARBONATED BEVERAGES	2291-70, 3110-70
CASTOR OIL	4200-70, 3110-70, 1235-70
CHINA WOOD (TUNG) OIL	4200-70
CHLORINE	9009-75
CHLOROX	9009-75, 5601-70, 3110-70
CHROME PLATING SOLUTIONS	9009-75, 5601-70
COAL GAS	1235-70, 9009-75, 4200-70
COAL TARS	9009-75, 4200-70
COCA COLA	2291-70
COCOANUT OIL	4200-70, 5601-70
COFFEE	2291-70, 3110-70
CORN, COTTONSEED OIL	4200-70, 1235-70, 3110-70
D. D. T.	4200-70
DEGREASING FLUID (CHLORINATED)	9009-75, 1903-70
DETERGENT SOLUTIONS	4200-70, 5601-70, 1235-70
DRILLING MUD (OIL BASE)	4200-70
DRILLING MUD (WATER BASE)	4200-70, 3110-70
FISH OIL	4200-70, 1235-70, 5601-70
FREON 11, 12, 113	4200-70, 3110-70
FREON, 13, 13B1, 114	4200-70, 3110-70, 5601-70
FREON, 22	3110-70, 5601-70
GASOLINE, AUTOMOTIVE	4200-70, 9009-75
GLYCOLS and PRESTONE	4200-70, 3110-70, 5601-70
GREASE (PETROLEUM BASE)	4200-70
HYDRAULIC FLUID (PETROLEUM)	4200-70, 9009-75
HYDROGEN GAS	5601-70, 3110-70
HYDROLUBE H-2 or U-4	4200-70
INK (PRINTERS)	4200-70
KEROSENE	4200-70, 9009-75
LINDOL	5601-70, 9009-75
L.P. GAS	4200-70
LUBRICATING OILS (MINERAL)	4200-70, 3110-70, 9009-75
METHANE	4200-70
METHYL ETHYL KETONE (MEK)	5601-70
MILK	2291-70
NAPHTHA	9009-75, 4200-70
NATURAL GAS	4200-70, 3110-70
NITROGEN	4200-70, 3110-70, 5601-70
NITROMETHANE	5601-70
OIL (CRUDE, FUEL, DIESEL)	4200-70, 9009-75
OXYGEN, GASEOUS	3110-70, 1235-70
OZONE	5601-70, 1235-70
PETROLEUM OILS	4200-70, 9009-75
PHENOL	9009-75
PROPANE	4200-70, 9009-75
PYDRAUL	9009-75, 5601-70
SEWAGE	4200-70, 3110-70, 5601-70
SHELLAC	4200-70, 3110-70, 5601-70
SILICONE OILS & GREASES	5601-70, 4200-70
SOAP SOLUTION	4200-70, 3110-70, 5601-70
SODIUM CHLORIDE	4200-70, 3110-70, 5601-70
STEAM	9009-75, 5601-70
TETRA ETHYL LEAD	9009-75
TOLUENE	9009-75
TRANSFORMER OILS	1235-70, 4200-70
TRANSMISSION FLUID, AUTOMOTIVE	4120-70, 4200-70
TURPENTINE	4200-70, 9009-75
VEGETABLE OILS	4200-70, 2068-70
WATER	2291-70, 5601-70, 4200-70
WHISKEY, WINES	2291-70
XYLENE	9009-75

O-RING SIZE CHART and INSTALLATION DATA (cont.)

PRP-568 UNIVERSAL SERIES	NOMINAL SIZE			ACTUAL SIZE		RECIPROCATING SEALS				STATIC SEALS				ROTARY SEALS	
						ID SEALING		OD SEALING		ID SEALING		OD SEALING		ID SEALING	
	DASH NOS.	I.D.	O.D.	W.	I.D.	W.	A	B	A	B	A	B	A	B	A
-036	2 3/8	2 1/2	3/16	2.364 ±.018	.070 ±.003					2.475	2.375	2.500	2.400	2.496	2.366
-037	2 1/2	2 3/8	3/16	2.489 ±.018	.070 ±.003					2.600	2.500	2.625	2.525	2.621	2.491
-038	2 3/8	2 3/4	3/16	2.614 ±.020	.070 ±.003					2.725	2.625	2.750	2.650	2.746	2.616
-039	2 3/4	2 7/8	3/16	2.739 ±.020	.070 ±.003					2.850	2.750	2.875	2.775	2.871	2.741
-040	2 7/8	3	3/16	2.864 ±.020	.070 ±.003					2.975	2.875	3.000	2.900	2.996	2.866
-041	3	3 1/8	3/16	2.989 ±.024	.070 ±.003					3.100	3.000	3.125	3.025	3.121	2.991
-042	3 1/4	3 3/8	3/16	3.239 ±.024	.070 ±.003					3.350	3.250	3.375	3.275	3.371	3.241
-043	3 1/2	3 3/8	3/16	3.489 ±.024	.070 ±.003					3.600	3.500	3.625	3.525	3.621	3.491
-044	3 3/4	3 7/8	3/16	3.739 ±.027	.070 ±.003					3.850	3.750	3.875	3.775	3.871	3.741
-045	4	4 1/8	3/16	3.989 ±.027	.070 ±.003					4.100	4.000	4.125	4.025	4.121	3.991
-046	4 1/4	4 3/8	3/16	4.239 ±.030	.070 ±.003					4.350	4.250	4.375	4.275		
-047	4 1/2	4 3/8	3/16	4.489 ±.030	.070 ±.003					4.600	4.500	4.625	4.525		
-048	4 3/4	4 7/8	3/16	4.739 ±.030	.070 ±.003					4.850	4.750	4.875	4.775		
-049	5	5 1/8	3/16	4.989 ±.037	.070 ±.003					5.100	5.000	5.125	5.025		
-050	5 1/4	5 3/8	3/16	5.239 ±.037	.070 ±.003					5.350	5.250	5.375	5.275		
-102	1/16	1/4	3/32	.049 ±.005	.103 ±.003	.237	.061	.249	.073	.224	.062	.249	.087	.245	.051
-103	3/32	1/8	3/32	.081 ±.005	.103 ±.003	.269	.093	.281	.105	.256	.094	.281	.119	.277	.083
-104	1/8	3/16	3/32	.112 ±.005	.103 ±.003	.300	.124	.312	.136	.287	.125	.312	.150	.308	.114
-105	3/32	1/8	3/32	.143 ±.005	.103 ±.003	.331	.155	.343	.167	.318	.156	.343	.181	.339	.145
-106	3/16	3/8	3/32	.174 ±.005	.103 ±.003	.362	.186	.374	.198	.349	.187	.374	.212	.370	.176
-107	7/32	1/2	3/32	.206 ±.005	.103 ±.003	.394	.218	.406	.230	.381	.219	.406	.244	.402	.208
-108	1/2	5/8	3/32	.237 ±.005	.103 ±.003	.425	.249	.437	.261	.412	.250	.437	.275	.433	.239
-109	5/8	3/4	3/32	.299 ±.005	.103 ±.003	.487	.311	.499	.323	.474	.312	.499	.337	.495	.301
-110	3/8	5/8	3/32	.362 ±.005	.103 ±.003	.550	.374	.562	.386	.537	.375	.562	.400	.558	.364
-111	7/16	3/4	3/32	.424 ±.005	.103 ±.003	.612	.436	.624	.448	.599	.437	.625	.463	.620	.426
-112	1/2	7/8	3/32	.487 ±.005	.103 ±.003	.675	.499	.687	.511	.662	.500	.687	.525	.683	.489
-113	3/4	1	3/32	.549 ±.007	.103 ±.003	.737	.561	.749	.573	.724	.562	.750	.588	.745	.551
-114	7/8	1 1/8	3/32	.612 ±.009	.103 ±.003	.800	.624	.812	.636	.787	.625	.812	.650	.808	.614
-115	1 1/16	7/8	3/32	.674 ±.009	.103 ±.003	.862	.686	.874	.698	.849	.687	.875	.713	.870	.676
-116	3/4	1 1/8	3/32	.737 ±.009	.103 ±.003	.925	.749	.937	.761	.912	.750	.937	.775	.933	.739
-117	1 1/8	1	3/32	.799 ±.010	.103 ±.003					.974	.812	1.000	.838	.995	.801
-118	7/8	1 1/8	3/32	.862 ±.010	.103 ±.003					1.037	.875	1.062	.900	1.058	.864
-119	1 1/8	1 1/8	3/32	.924 ±.010	.103 ±.003					1.099	.937	1.125	.963	1.120	.926
-120	1	1 1/4	3/32	.987 ±.010	.103 ±.003					1.162	1.000	1.187	1.025	1.183	.989
-121	1 1/8	1 1/4	3/32	1.049 ±.010	.103 ±.003					1.224	1.062	1.250	1.088	1.245	1.051
-122	1 1/8	1 3/8	3/32	1.112 ±.010	.103 ±.003					1.287	1.125	1.312	1.150	1.308	1.114
-123	1 3/8	1 3/8	3/32	1.174 ±.012	.103 ±.003					1.349	1.187	1.375	1.213	1.370	1.176
-124	1 1/4	1 3/8	3/32	1.237 ±.012	.103 ±.003					1.412	1.250	1.437	1.275	1.433	1.239
-125	1 3/8	1 1/2	3/32	1.299 ±.012	.103 ±.003					1.474	1.312	1.500	1.338	1.495	1.301
-126	1 3/8	1 3/8	3/32	1.362 ±.012	.103 ±.003					1.537	1.375	1.562	1.400	1.558	1.364
-127	1 3/8	1 3/8	3/32	1.424 ±.012	.103 ±.003					1.599	1.437	1.625	1.463	1.620	1.426
-128	1 1/2	1 11/16	3/32	1.487 ±.012	.103 ±.003					1.662	1.500	1.687	1.525	1.683	1.489
-129	1 3/4	1 3/4	3/32	1.549 ±.015	.103 ±.003					1.724	1.562	1.750	1.588	1.745	1.551
-130	1 3/4	1 3/4	3/32	1.612 ±.015	.103 ±.003					1.787	1.625	1.812	1.650	1.808	1.614
-131	1 11/16	1 7/8	3/32	1.674 ±.015	.103 ±.003					1.849	1.687	1.875	1.713	1.870	1.676
-132	1 3/4	1 3/4	3/32	1.737 ±.015	.103 ±.003					1.912	1.750	1.937	1.775	1.933	1.739
-133	1 3/4	2	3/32	1.799 ±.015	.103 ±.003					1.974	1.812	2.000	1.838	1.995	1.801
-134	1 7/8	2 1/8	3/32	1.862 ±.015	.103 ±.003					2.037	1.875	2.062	1.900	2.058	1.864
-135	1 3/4	2 1/8	3/32	1.925 ±.017	.103 ±.003					2.099	1.937	2.125	1.963	2.121	1.927
-136	2	2 3/8	3/32	1.987 ±.017	.103 ±.003					2.162	2.000	2.187	2.025	2.183	1.989
-137	2 1/8	2 1/4	3/32	2.050 ±.017	.103 ±.003					2.224	2.062	2.250	2.088	2.246	2.052
-138	2 1/8	2 3/8	3/32	2.112 ±.017	.103 ±.003					2.287	2.125	2.312	2.150	2.308	2.114
-139	2 3/8	2 3/8	3/32	2.175 ±.017	.103 ±.003					2.349	2.187	2.375	2.213	2.371	2.177
-140	2 1/4	2 3/8	3/32	2.237 ±.017	.103 ±.003					2.412	2.250	2.437	2.275	2.433	2.239
-141	2 3/8	2 1/2	3/32	2.300 ±.020	.103 ±.003					2.474	2.312	2.500	2.338	2.496	2.302
-142	2 3/8	2 3/8	3/32	2.362 ±.020	.103 ±.003					2.537	2.375	2.562	2.400	2.558	2.364
-143	2 3/8	2 3/8	3/32	2.425 ±.020	.103 ±.003					2.599	2.437	2.625	2.463	2.621	2.427
-144	2 1/2	2 11/16	3/32	2.487 ±.020	.103 ±.003					2.662	2.500	2.687	2.525	2.683	2.489
-145	2 3/8	2 3/4	3/32	2.550 ±.020	.103 ±.003					2.724	2.562	2.750	2.588	2.746	2.552
-146	2 3/8	2 3/4	3/32	2.612 ±.020	.103 ±.003					2.787	2.625	2.812	2.650	2.808	2.614
-147	2 11/16	2 7/8	3/32	2.675 ±.022	.103 ±.003					2.849	2.687	2.875	2.713	2.871	2.677
-148	2 3/4	2 3/4	3/32	2.737 ±.022	.103 ±.003					2.912	2.750	2.937	2.775	2.933	2.739
-149	2 3/4	3	3/32	2.800 ±.022	.103 ±.003					2.974	2.812	3.000	2.838	2.996	2.802
-150	2 7/8	3 1/8	3/32	2.862 ±.022	.103 ±.003					3.037	2.875	3.062	2.900	3.058	2.864
-151	3	3 3/8	3/32	2.925 ±.024	.103 ±.003					3.100	3.000	3.125	3.025	3.121	2.989
-152	3 1/4	3 3/8	3/32	3.237 ±.024	.103 ±.003					3.412	3.250	3.437	3.275	3.433	3.239
-153	3 1/2	3 11/16	3/32	3.487 ±.024	.103 ±.003					3.662	3.500	3.687	3.525	3.683	3.489
-154	3 3/4	3 3/4	3/32	3.737 ±.028	.103 ±.003					3.912	3.750	3.937	3.775	3.933	3.739
-155	4	4 3/8	3/32	3.987 ±.028	.103 ±.003					4.162	4.000	4.187	4.025	4.183	3.989
-156	4 1/4	4 3/8	3/32	4.237 ±.030	.103 ±.003					4.412	4.250	4.437	4.275	4.433	4.239
-157	4 1/2	4 11/16	3/32	4.487 ±.030	.103 ±.003					4.662	4.500	4.687	4.525	4.683	4.489
-158	4 3/4	4 3/8	3/32	4.737 ±.030	.103 ±.003					4.912	4.750	4.937	4.775	4.933	4.739
-159	5	5 1/8	3/32	4.987 ±.035	.103 ±.003					5.162	5.000	5.187	5.025	5.183	4.989
-160	5 1/4	5 3/8	3/32	5.237 ±.035	.103 ±.003					5.412	5.250	5.437	5.275	5.433	5.239
-161	5 1/2	5 11/16	3/32	5.487 ±.035	.103 ±.003					5.662	5.500	5.687	5.525	5.683	5.489
-162	5 3/4	5 3/8	3/32	5.737 ±.035	.103 ±.003					5.912	5.750	5.937	5.775	5.933	5.739
-163	6	6 3/8	3/32	5.987 ±.035	.103 ±.003					6.162	6.000	6.187	6.025	6.183	5.989
-164	6 1/4	6 3/8	3/32	6.237 ±.040	.103 ±.003					6.412	6.250	6.437	6.275		
-165	6 1/2	6 11/16	3/32	6.487 ±.040	.103 ±.003					6.662	6.500	6.687	6.525		
-166	6 3/4	6 3/8	3/32	6.737 ±.040	.103 ±.003					6.912	6.750	6.937	6.775		
-167	7	7 3/8	3/32	6.987 ±.040	.103 ±.003					7.162	7.000	7.187	7.025		
-168	7 1/4	7 1/8	3/32	7.237 ±.045	.103 ±.003					7.412	7.250	7.437	7.275		
-169	7 1/2	7 11/16	3/32	7.487 ±.045	.103 ±.003					7.662	7.500	7.687	7.525		
-170	7 3/4	7 3/8	3/32	7.737 ±.045	.103 ±.003					7.912	7.750				

O-RING SIZE CHART and INSTALLATION DATA (cont.)

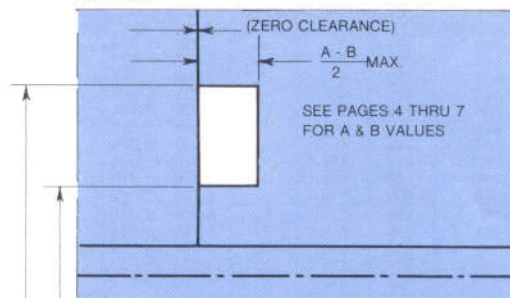
PRP-568 UNIVERSAL SERIES	NOMINAL SIZE			ACTUAL SIZE		RECIPROCATING SEALS				STATIC SEALS				ROTARY SEALS	
						ID SEALING		OD SEALING		ID SEALING		OD SEALING		ID SEALING	
	DASH NOS.	I.D.	O.D.	W.	I.D.	W.	A	B	A	B	A	B	A	B	A
-210	3/4	1	1/8	.734 ±.010	.139 ±.004	.990	.748	1.000	.758	.972	.750	1.000	.778	1.002	.736
-211	7/8	1 1/8	1/8	.796 ±.010	.139 ±.004	1.052	.810	1.062	.820	1.034	.812	1.062	.840	1.064	.798
-212	1 1/8	1 3/8	1/8	.859 ±.010	.139 ±.004	1.115	.873	1.125	.883	1.097	.875	1.125	.903	1.127	.861
-213	1 3/8	1 5/8	1/8	.921 ±.010	.139 ±.004	1.177	.935	1.187	.945	1.159	.937	1.187	.965	1.189	.923
-214	1 5/8	1 7/8	1/8	.984 ±.010	.139 ±.004	1.240	.998	1.250	1.008	1.222	1.000	1.250	1.028	1.252	.986
-215	1 7/8	2	1/8	1.046 ±.010	.139 ±.004	1.302	1.060	1.312	1.070	1.284	1.062	1.312	1.090	1.314	1.048
-216	2	2 1/8	1/8	1.109 ±.012	.139 ±.004	1.365	1.123	1.375	1.133	1.347	1.125	1.375	1.153	1.377	1.111
-217	2 1/8	2 3/8	1/8	1.171 ±.012	.139 ±.004	1.427	1.185	1.437	1.195	1.409	1.187	1.437	1.215	1.439	1.173
-218	2 3/8	2 5/8	1/8	1.234 ±.012	.139 ±.004	1.490	1.248	1.500	1.258	1.472	1.250	1.500	1.278	1.502	1.236
-219	2 5/8	2 7/8	1/8	1.296 ±.012	.139 ±.004	1.552	1.310	1.562	1.320	1.534	1.312	1.562	1.340	1.564	1.298
-220	2 7/8	3	1/8	1.359 ±.012	.139 ±.004	1.615	1.373	1.625	1.383	1.597	1.375	1.625	1.403	1.627	1.361
-221	3	3 1/8	1/8	1.421 ±.012	.139 ±.004	1.677	1.435	1.687	1.445	1.659	1.437	1.687	1.465	1.689	1.423
-222	3 1/8	3 3/8	1/8	1.484 ±.015	.139 ±.004	1.740	1.498	1.750	1.508	1.722	1.500	1.750	1.528	1.752	1.486
-223	3 3/8	3 5/8	1/8	1.609 ±.015	.139 ±.004					1.847	1.625	1.875	1.653	1.877	1.611
-224	3 5/8	3 7/8	1/8	1.734 ±.015	.139 ±.004					1.972	1.750	2.000	1.778	2.002	1.736
-225	3 7/8	4	1/8	1.859 ±.018	.139 ±.004					2.097	1.875	2.125	1.903	2.127	1.861
-226	4	4 1/8	1/8	1.984 ±.018	.139 ±.004					2.222	2.000	2.250	2.028	2.252	1.986
-227	4 1/8	4 3/8	1/8	2.109 ±.018	.139 ±.004					2.347	2.125	2.375	2.153	2.377	2.111
-228	4 3/8	4 5/8	1/8	2.234 ±.020	.139 ±.004					2.472	2.250	2.500	2.278	2.502	2.236
-229	4 5/8	4 7/8	1/8	2.359 ±.020	.139 ±.004					2.597	2.375	2.625	2.403	2.627	2.361
-230	4 7/8	5	1/8	2.484 ±.020	.139 ±.004					2.722	2.500	2.750	2.528	2.752	2.486
-231	5	5 1/8	1/8	2.609 ±.020	.139 ±.004					2.847	2.625	2.875	2.653	2.877	2.611
-232	5 1/8	5 3/8	1/8	2.734 ±.024	.139 ±.004					2.972	2.750	3.000	2.778	3.002	2.736
-233	5 3/8	5 5/8	1/8	2.859 ±.024	.139 ±.004					3.097	2.875	3.125	2.903	3.127	2.861
-234	5 5/8	5 7/8	1/8	2.984 ±.024	.139 ±.004					3.222	3.000	3.250	3.028	3.252	2.986
-235	5 7/8	6	1/8	3.109 ±.024	.139 ±.004					3.347	3.125	3.375	3.153	3.377	3.111
-236	6	6 1/8	1/8	3.234 ±.024	.139 ±.004					3.472	3.250	3.500	3.278	3.502	3.236
-237	6 1/8	6 3/8	1/8	3.359 ±.024	.139 ±.004					3.597	3.375	3.625	3.403	3.627	3.361
-238	6 3/8	6 5/8	1/8	3.484 ±.024	.139 ±.004					3.722	3.500	3.750	3.528	3.752	3.486
-239	6 5/8	6 7/8	1/8	3.609 ±.028	.139 ±.004					3.847	3.625	3.875	3.653	3.877	3.611
-240	6 7/8	7	1/8	3.734 ±.028	.139 ±.004					3.972	3.750	4.000	3.778	4.002	3.736
-241	7	7 1/8	1/8	3.859 ±.028	.139 ±.004					4.097	3.875	4.125	3.903	4.127	3.861
-242	7 1/8	7 3/8	1/8	3.984 ±.028	.139 ±.004					4.222	4.000	4.250	4.028	4.252	3.986
-243	7 3/8	7 5/8	1/8	4.109 ±.028	.139 ±.004					4.347	4.125	4.375	4.153	4.377	4.111
-244	7 5/8	7 7/8	1/8	4.234 ±.030	.139 ±.004					4.472	4.250	4.500	4.278	4.502	4.236
-245	7 7/8	8	1/8	4.359 ±.030	.139 ±.004					4.597	4.375	4.625	4.403	4.627	4.361
-246	8	8 1/8	1/8	4.484 ±.030	.139 ±.004					4.722	4.500	4.750	4.428	4.752	4.486
-247	8 1/8	8 3/8	1/8	4.609 ±.030	.139 ±.004					4.847	4.625	4.875	4.653	4.877	4.611
-248	8 3/8	8 5/8	1/8	4.734 ±.030	.139 ±.004					4.972	4.750	5.000	4.778	5.002	4.736
-249	8 5/8	8 7/8	1/8	4.859 ±.035	.139 ±.004					5.097	4.875	5.125	4.903	5.127	4.861
-250	8 7/8	9	1/8	4.984 ±.035	.139 ±.004					5.222	5.000	5.250	5.028	5.252	4.986
-251	9	9 1/8	1/8	5.109 ±.035	.139 ±.004					5.347	5.125	5.375	5.153	5.377	5.111
-252	9 1/8	9 3/8	1/8	5.234 ±.035	.139 ±.004					5.472	5.250	5.500	5.278	5.502	5.236
-253	9 3/8	9 5/8	1/8	5.359 ±.035	.139 ±.004					5.597	5.375	5.625	5.403	5.627	5.361
-254	9 5/8	9 7/8	1/8	5.484 ±.035	.139 ±.004					5.722	5.500	5.750	5.528	5.752	5.486
-255	9 7/8	10	1/8	5.609 ±.035	.139 ±.004					5.847	5.625	5.875	5.653	5.877	5.611
-256	10	10 1/8	1/8	5.734 ±.035	.139 ±.004					5.972	5.750	6.000	5.778	6.002	5.736
-257	10 1/8	10 3/8	1/8	5.859 ±.035	.139 ±.004					6.097	5.875	6.125	5.903	6.127	5.861
-258	10 3/8	10 5/8	1/8	5.984 ±.035	.139 ±.004					6.222	6.000	6.250	6.028	6.252	5.986
-259	10 5/8	10 7/8	1/8	6.234 ±.040	.139 ±.004					6.472	6.250	6.500	6.278	6.502	6.236
-260	10 7/8	11	1/8	6.484 ±.040	.139 ±.004					6.722	6.500	6.750	6.528	6.752	6.486
-261	11	11 1/8	1/8	6.734 ±.040	.139 ±.004					6.972	6.750	7.000	6.778	7.002	6.736
-262	11 1/8	11 3/8	1/8	6.984 ±.040	.139 ±.004					7.222	7.000	7.250	7.028	7.252	6.986
-263	11 3/8	11 5/8	1/8	7.234 ±.045	.139 ±.004					7.472	7.250	7.500	7.278	7.502	7.236
-264	11 5/8	11 7/8	1/8	7.484 ±.045	.139 ±.004					7.722	7.500	7.750	7.528	7.752	7.486
-265	11 7/8	12	1/8	7.734 ±.045	.139 ±.004					7.972	7.750	8.000	7.778	8.002	7.736
-266	12	12 1/8	1/8	7.984 ±.045	.139 ±.004					8.222	8.000	8.250	8.028	8.252	7.986
-267	12 1/8	12 3/8	1/8	8.234 ±.050	.139 ±.004					8.472	8.250	8.500	8.278	8.502	8.236
-268	12 3/8	12 5/8	1/8	8.484 ±.050	.139 ±.004					8.722	8.500	8.750	8.528	8.752	8.486
-269	12 5/8	12 7/8	1/8	8.734 ±.050	.139 ±.004					8.972	8.750	9.000	8.778	9.002	8.736
-270	12 7/8	13	1/8	8.984 ±.050	.139 ±.004					9.222	9.000	9.250	9.028	9.252	8.986
-271	13	13 1/8	1/8	9.234 ±.055	.139 ±.004					9.472	9.250	9.500	9.278	9.502	9.236
-272	13 1/8	13 3/8	1/8	9.484 ±.055	.139 ±.004					9.722	9.500	9.750	9.528	9.752	9.486
-273	13 3/8	13 5/8	1/8	9.734 ±.055	.139 ±.004					9.972	9.750	10.000	9.778	10.002	9.736
-274	13 5/8	13 7/8	1/8	9.984 ±.055	.139 ±.004					10.222	10.000	10.250	10.028	10.252	9.986
-275	13 7/8	14	1/8	10.484 ±.055	.139 ±.004					10.722	10.500	10.750	10.528	10.752	10.486
-276	14	14 1/8	1/8	10.984 ±.065	.139 ±.004					11.222	11.000	11.250	11.028	11.252	10.986
-277	14 1/8	14 3/8	1/8	11.484 ±.065	.139 ±.004					11.722	11.500	11.750	11.528	11.752	11.486
-278	14 3/8	14 5/8	1/8	11.984 ±.065	.139 ±.004					12.222	12.000	12.250	12.028	12.252	11.986
-279	14 5/8	14 7/8	1/8	12.484 ±.065	.139 ±.004					13.222	13.000	13.250	13.028	13.252	12.986
-280	14 7/8	15	1/8	13.984 ±.065	.139 ±.004					14.222	14.000	14.250	14.028	14.252	13.986
-281	15	15 1/8	1/8	14.984 ±.065	.139 ±.004					15.222	15.000	15.250	15.028	15.252	14.986
-282	15 1/8	15 3/8	1/8	15.955 ±.075	.139 ±.004					16.222	16.000	16.250	16.028	16.252	15.986
-283	15 3/8	15 5/8	1/8	16.955 ±.080	.139 ±.004					17.222	17.000	17.250	17.028	17.252	16.986
-284	15 5/8	15 7/8	1/8	17.955 ±.085	.139 ±.004					18.222	18.000	18.250	18.028	18.252	17.986
-309	7/16	1 1/16	3/16	.412 ±.005	.210 ±.005	.805	.435	.812	.442	.777	.437	.812	.472		
-310	1/2	7/8	3/16	.475 ±.005	.210 ±.005	.868	.498	.875	.505	.840	.500	.875	.535		
-311	5/8	1 1/8	3/16	.537 ±.007	.210 ±.005	.930	.560	.937	.567	.902	.562	.937	.597		
-312	3/4	1 3/8	3/16	.600 ±.009	.210 ±.005	.993	.623	1.000	.630	.965	.625	1.000	.660		
-313	7/8	1 5/8	3/16	.662 ±.009	.210 ±.005	1.055	.685	1.062	.692	1.027	.687	1.062	.722		
-314	1	1 7/8	3/16	.725 ±.010	.210 ±.005	1.118	.748	1.125	.755	1.090	.750	1.125	.785		
-315	1 1/8														

PRP-568 UNIVERSAL SERIES	NOMINAL SIZE			ACTUAL SIZE			RECIPROCATING SEALS				STATIC SEALS				ROTARY SEALS	
							ID SEALING		OD SEALING		ID SEALING		OD SEALING		ID SEALING	
	DASH NOS.	I.D.	O.D.	W.	I.D.	W.	A	B	A	B	A	B	A	B	A	B
-340	3 3/8	3 3/4	3/16	3.350 ±.024	.210 ±.005	3.743	3.373	3.750	3.380	3.715	3.375	3.750	3.410			
-341	3 1/2	3 7/8	3/16	3.475 ±.024	.210 ±.005	3.868	3.498	3.875	3.505	3.840	3.500	3.875	3.535			
-342	3 5/8	4	3/16	3.600 ±.028	.210 ±.005	3.993	3.623	4.000	3.630	3.965	3.625	4.000	3.660			
-343	3 3/4	4 1/8	3/16	3.725 ±.028	.210 ±.005	4.118	3.748	4.125	3.755	4.090	3.750	4.125	3.785			
-344	3 7/8	4 1/4	3/16	3.850 ±.028	.210 ±.005	4.243	3.873	4.250	3.880	4.215	3.875	4.250	3.910			
-345	4	4 3/8	3/16	3.975 ±.028	.210 ±.005	4.368	3.998	4.375	4.005	4.340	4.000	4.375	4.035			
-346	4 1/8	4 1/2	3/16	4.100 ±.028	.210 ±.005	4.493	4.123	4.500	4.130	4.465	4.125	4.500	4.160			
-347	4 1/4	4 5/8	3/16	4.225 ±.030	.210 ±.005	4.618	4.248	4.625	4.255	4.590	4.250	4.625	4.285			
-348	4 3/8	4 3/4	3/16	4.350 ±.030	.210 ±.005	4.743	4.373	4.750	4.380	4.715	4.375	4.750	4.410			
-349	4 1/2	4 7/8	3/16	4.475 ±.030	.210 ±.005	4.868	4.498	4.875	4.505	4.840	4.500	4.875	4.535			
-350	4 5/8	5	3/16	4.600 ±.030	.210 ±.005					4.965	4.625	5.000	4.660			
-351	4 3/4	5 1/8	3/16	4.725 ±.030	.210 ±.005					5.090	4.750	5.125	4.785			
-352	4 7/8	5 1/4	3/16	4.850 ±.030	.210 ±.005					5.215	4.875	5.250	4.910			
-353	5	5 3/8	3/16	4.975 ±.037	.210 ±.005					5.340	5.000	5.375	5.035			
-354	5 1/8	5 1/2	3/16	5.100 ±.037	.210 ±.005					5.465	5.125	5.500	5.160			
-355	5 1/4	5 5/8	3/16	5.225 ±.037	.210 ±.005					5.590	5.250	5.625	5.285			
-356	5 3/8	5 3/4	3/16	5.350 ±.037	.210 ±.005					5.715	5.375	5.750	5.410			
-357	5 1/2	5 7/8	3/16	5.475 ±.037	.210 ±.005					5.840	5.500	5.875	5.535			
-358	5 5/8	6	3/16	5.600 ±.037	.210 ±.005					5.965	5.625	6.000	5.660			
-359	5 3/4	6 1/8	3/16	5.725 ±.037	.210 ±.005					6.090	5.750	6.125	5.785			
-360	5 7/8	6 1/4	3/16	5.850 ±.037	.210 ±.005					6.215	5.875	6.250	5.910			
-361	6	6 3/8	3/16	5.975 ±.037	.210 ±.005					6.340	6.000	6.375	6.035			
-362	6 1/4	6 5/8	3/16	6.225 ±.040	.210 ±.005					6.590	6.250	6.625	6.285			
-363	6 1/2	6 7/8	3/16	6.475 ±.040	.210 ±.005					6.840	6.500	6.875	6.535			
-364	6 3/4	7 1/8	3/16	6.725 ±.040	.210 ±.005					7.090	6.750	7.125	6.785			
-365	7	7 3/8	3/16	6.975 ±.040	.210 ±.005					7.340	7.000	7.375	7.035			
-366	7 1/4	7 7/8	3/16	7.225 ±.045	.210 ±.005					7.590	7.250	7.625	7.285			
-367	7 1/2	7 7/8	3/16	7.475 ±.045	.210 ±.005					7.840	7.500	7.875	7.535			
-368	7 3/4	8 1/8	3/16	7.725 ±.045	.210 ±.005					8.090	7.750	8.125	7.785			
-369	8	8 3/8	3/16	7.975 ±.045	.210 ±.005					8.340	8.000	8.375	8.035			
-370	8 1/4	8 5/8	3/16	8.225 ±.050	.210 ±.005					8.590	8.250	8.625	8.285			
-371	8 1/2	8 7/8	3/16	8.475 ±.050	.210 ±.005					8.840	8.500	8.875	8.535			
-372	8 3/4	9 1/8	3/16	8.725 ±.050	.210 ±.005					9.090	8.750	9.125	8.785			
-373	9	9 3/8	3/16	8.975 ±.050	.210 ±.005					9.340	9.000	9.375	9.035			
-374	9 1/4	9 5/8	3/16	9.225 ±.055	.210 ±.005					9.590	9.250	9.625	9.285			
-375	9 1/2	9 7/8	3/16	9.475 ±.055	.210 ±.005					9.840	9.500	9.875	9.535			
-376	9 3/4	10 1/8	3/16	9.725 ±.055	.210 ±.005					10.090	9.750	10.125	9.785			
-377	10	10 3/8	3/16	9.975 ±.055	.210 ±.005					10.340	10.000	10.375	10.035			
-378	10 1/2	10 7/8	3/16	10.475 ±.060	.210 ±.005					10.840	10.500	10.875	10.535			
-379	11	11 3/8	3/16	10.975 ±.060	.210 ±.005					11.340	11.000	11.375	11.035			
-380	11 1/2	11 7/8	3/16	11.475 ±.065	.210 ±.005					11.840	11.500	11.875	11.535			
-381	12	12 3/8	3/16	11.975 ±.065	.210 ±.005					12.340	12.000	12.375	12.035			
-382	13	13 3/8	3/16	12.975 ±.065	.210 ±.005					13.340	13.000	13.375	13.035			
-383	14	14 3/8	3/16	13.975 ±.070	.210 ±.005					14.340	14.000	14.375	14.035			
-384	15	15 3/8	3/16	14.975 ±.070	.210 ±.005					15.340	15.000	15.375	15.035			
-385	16	16 3/8	3/16	15.955 ±.075	.210 ±.005					16.340	16.000	16.375	16.035			
-386	17	17 3/8	3/16	16.955 ±.075	.210 ±.005					17.340	17.000	17.375	17.035			
-387	18	18 3/8	3/16	17.955 ±.085	.210 ±.005					18.340	18.000	18.375	18.035			
-388	19	19 3/8	3/16	18.955 ±.090	.210 ±.005					19.340	19.000	19.375	19.035			
-389	20	20 3/8	3/16	19.955 ±.095	.210 ±.005					20.340	20.000	20.375	20.035			
-390	21	21 3/8	3/16	20.955 ±.095	.210 ±.005					21.340	21.000	21.375	21.035			
-391	22	22 3/8	3/16	21.955 ±.100	.210 ±.005					22.340	22.000	22.375	22.035			
-392	23	23 3/8	3/16	22.940 ±.105	.210 ±.005					23.340	23.000	23.375	23.035			
-393	24	24 3/8	3/16	23.940 ±.110	.210 ±.005					24.340	24.000	24.375	24.035			
-394	25	25 3/8	3/16	24.940 ±.115	.210 ±.005					25.340	25.000	25.375	25.035			
-395	26	26 3/8	3/16	25.940 ±.120	.210 ±.005					26.340	26.000	26.375	26.035			
-425	4 1/2	5	1/4	4.475 ±.033	.275 ±.006	4.971	4.497	5.002	4.528	4.952	4.500	5.000	4.548			
-426	4 5/8	5 1/8	1/4	4.600 ±.033	.275 ±.006	5.096	4.622	5.127	4.653	5.077	4.625	5.125	4.673			
-427	4 3/4	5 1/4	1/4	4.725 ±.033	.275 ±.006	5.221	4.747	5.252	4.778	5.202	4.750	5.250	4.798			
-428	4 7/8	5 3/8	1/4	4.850 ±.033	.275 ±.006	5.346	4.872	5.377	4.903	5.327	4.875	5.373	4.923			
-429	5	5 1/2	1/4	4.975 ±.037	.275 ±.006	5.471	4.997	5.502	5.028	5.452	5.000	5.500	5.048			
-430	5 1/8	5 5/8	1/4	5.100 ±.037	.275 ±.006	5.596	5.122	5.627	5.153	5.577	5.125	5.625	5.173			
-431	5 1/4	5 3/4	1/4	5.225 ±.037	.275 ±.006	5.721	5.247	5.752	5.278	5.702	5.250	5.750	5.298			
-432	5 3/8	5 7/8	1/4	5.350 ±.037	.275 ±.006	5.846	5.372	5.877	5.403	5.827	5.375	5.875	5.423			
-433	5 1/2	6	1/4	5.475 ±.037	.275 ±.006	5.971	5.497	6.002	5.528	5.952	5.500	6.000	5.548			
-434	5 5/8	6 1/8	1/4	5.600 ±.037	.275 ±.006	6.096	5.622	6.127	5.653	6.077	5.625	6.125	5.673			
-435	5 3/4	6 1/4	1/4	5.725 ±.037	.275 ±.006	6.221	5.747	6.252	5.778	6.202	5.750	6.250	5.798			
-436	5 7/8	6 3/8	1/4	5.850 ±.037	.275 ±.006	6.346	5.872	6.377	5.903	6.327	5.875	6.375	5.923			
-437	6	6 1/2	1/4	5.975 ±.037	.275 ±.006	6.471	5.997	6.502	6.028	6.452	6.000	6.500	6.048			
-438	6 1/4	6 3/4	1/4	6.225 ±.040	.275 ±.006	6.721	6.247	6.752	6.278	6.702	6.250	6.750	6.298			
-439	6 1/2	7	1/4	6.475 ±.040	.275 ±.006	6.971	6.497	7.002	6.528	6.952	6.500	7.000	6.548			
-440	6 3/4	7 1/4	1/4	6.725 ±.040	.275 ±.006	7.221	6.747	7.252	6.778	7.202	6.750	7.250	6.798			
-441	7	7 1/2	1/4	6.975 ±.040	.275 ±.006	7.471	6.997	7.502	7.028	7.452	7.000	7.500	7.048			
-442	7 1/4	7 3/4	1/4	7.225 ±.045	.275 ±.006	7.721	7.247	7.752	7.278	7.702	7.250	7.750	7.298			
-443	7 1/2	8	1/4	7.475 ±.045	.275 ±.006	7.971	7.497	8.002	7.528	7.952	7.500	8.000	7.548			
-444	7 3/4	8 1/4	1/4	7.725 ±.045	.275 ±.006	8.221	7.747	8.252	7.778	8.202	7.750	8.250	7.798			
-445	8	8 1/2	1/4	7.975 ±.045	.275 ±.006	8.471	7.997	8.502	8.028	8.452	8.000	8.500	8.048			
-446	8 1/2	9	1/4	8.475 ±.055	.275 ±.006	8.971	8.497	9.002	8.528	8.952	8.500	9.000	8.548			
-447	9	9 1/2	1/4	8.975 ±.055	.275 ±.006	9.471	8.997	9.502	9.028	9.452	9.000	9.500	9.048			
-448	9 1/2	10	1/4	9.475 ±.055	.275 ±.006	9.971	9.497	10.002	9.528	9.952	9.500	10.000	9.548			
-449	10	10 1/2	1/4	9.975 ±.055	.275 ±.006	10.471	9.997	10.502	10.028	10.452	10.000	10.500	10.048			
-450	10 1/2	11	1/4	10.475 ±.060	.275 ±.006	10.971	10.497	11.002	10.528	10.952	10.500	11.000	10.548			
-451	11	11 1/2	1/4	10.975 ±.060	.275 ±.006	11.471	10.997	11.502	11.028	11.452	11.000	11.500	11.048			
-452	11 1/2	12	1/4	11.475 ±.060	.275 ±.006											

PRP-568 UNIVERSAL SERIES DASH NOS.	TUBE SIZE (O.D.) INCHES	ACTUAL SIZE	
		I.D.	W.
-901	3/32	.185 ± .005	.056 ± .003
-902	1/8	.239 ± .005	.064 ± .003
-903	3/16	.301 ± .005	.064 ± .003
-904	1/4	.351 ± .005	.072 ± .003
-905	5/16	.414 ± .005	.072 ± .003
-906	3/8	.468 ± .005	.078 ± .003
-907	7/16	.530 ± .007	.082 ± .003
-908	1/2	.644 ± .009	.087 ± .003
-909	9/16	.706 ± .009	.097 ± .003
-910	5/8	.755 ± .009	.097 ± .003
-911	11/16	.863 ± .009	.116 ± .004
-912	3/4	.924 ± .009	.116 ± .004
-913	13/16	.986 ± .010	.116 ± .004
-914	7/8	1.047 ± .010	.116 ± .004
-916	1	1.171 ± .010	.116 ± .004
-918	1-1/8	1.355 ± .012	.116 ± .004
-920	1-1/4	1.475 ± .014	.118 ± .004
-924	1-1/2	1.720 ± .014	.118 ± .004
-928	1-3/4	2.090 ± .018	.118 ± .004
-932	2	2.337 ± .018	.118 ± .004

FACE SEALS

This design for static face seals is based on MIL-G-5514F criteria. The cap or cover plate should be as rigid as possible to prevent breathing, which would introduce an extrusion gap at the joint. The important feature in face seal design is to provide squeeze on the groove section and prevent any possible radial movement of the O-Ring under pressure applications.



When pressure is inward:
Diameter = Nominal O-Ring ID, plus 1% up to .060 max, minus nothing.

When pressure is outward:
Diameter = Nominal O-Ring OD, plus nothing, minus 1% up to .060 max.

POPULAR MILITARY/AEROSPACE SPECIFICATIONS

Parco compounds are approved to nearly every industry-wide specification for elastomeric seals. Those specifications include military, aerospace, ASTM, SAE, automotive, petroleum industry and commercial. The most widely used specifications are the AN, M, MS, and NAS. This reference table is arranged by drawing number.

Drawing Number	Specification ⁽¹⁾	Fluid	Recommended Temp. Range °F.		Elastomer	Parco Compound	Comments
			Min.	Max.			
AS 3569	AMS 7270	Aircraft fuels	-67	+302	Nitrile	4456-70	Formerly AN123951 - AN123040.
AS 3570	AMS 7274	Petroleum-based aircraft lubricating oil	-67	+302	Nitrile	0259-70	Formerly AN123851 - AN123950.
AS 3578	AMS 7271	Aircraft fuels	-58	+257	Nitrile	4465-65	Formerly MS9020 and MS9021.
AS 3582	AMS 3304	Dry heat and petroleum-based lube oils	-85	+400	Silicone	1235-70	Not recommended for high-pressure dynamic applications.
AS 9385 AS 9386	AMS 7267	Dry heat and petroleum-based lube oils	-85	+500	Silicone	1373-75	This drawing covers tube fitting sizes only. This drawing covers all sizes except the tube fitting sizes.
M 25988/1	MIL-R-25988 Class 1, Grade 70(2)	Aircraft fuels and lubricants	-70	+392	Fluorosilicone	1903-70 or 1993-70	Blue color as required by MIL spec. Not recommended for high-pressure dynamic applications.
M 25988/2	MIL-R-25988 Class 3, Grade 75(2)	Aircraft fuels and lubricants	-70	+437	Fluorosilicone	1904-75	Blue color as required by MIL spec. Higher modulus and temperature resistance than 1903-70.
M 25988/3	MIL-R-25988 Class 1, Grade 60(2)	Aircraft fuels and lubricants	-70	+392	Fluorosilicone	1902-60	Blue color as required by MIL spec. Lower durometer than 1903-70. For low-pressure applications.
M 25988/4	MIL-R-25988 Class 1, Grade 80(2)	Aircraft fuels and lubricants	-70	+392	Fluorosilicone	1905-80	Blue color as required by MIL spec. Higher durometer than 1903-70.
M 83248/1	MIL-R-83248 Class 1(2)	Aircraft fuels and lubricants	-20	+400	Fluorocarbon	9009-75	Excellent resistance to compression set.
M 83248/2	MIL-R-83248 Class 2(2)	Aircraft fuels and lubricants	-20	+400	Fluorocarbon	9009-90	Higher durometer than 9009-75.
M 83461/1A	MIL-P-83461(2)	MIL-H-5606	-65	+275	Nitrile	4367-70	Better dynamic performance and longer service life at 257°F than 4067-70.
MS 28775	MIL-P-25732(2)	MIL-H-5606	-65	+275	Nitrile	4067-70	MIL-H-5606 is a petroleum-based hydraulic fluid used in military aircraft. Inactive for new designs. See M 83461/1A.
MS 28900	AMS 3209	Ozone	-40	+212	Neoprene	3110-70	For weather resistant seals. (Nonstandard sizes.)
MS 29512 MS 29513	MIL-P-5315(2)	Aircraft fuels	-65	+158	Nitrile	0457-60	This drawing covers tube fitting sizes only. This drawing covers all sizes except the tube fitting sizes.
MS 29561	MIL-R-7362, Type I	Synthetic diester jet engine lubricants (MIL-L-7808)	-65	+257	Nitrile	4043-70	This drawing covers all sizes except the tube fitting sizes.
NAS 617	MIL-R-7362, Type I	Synthetic diester jet engine lubricants (MIL-L-7808)	-65	+257	Nitrile	4043-70	This drawing covers all sizes except the tube fitting sizes.

Abbreviations used above: AMS - Aerospace Material Specification, AN - Army/Navy, AS - Aerospace Standard, ASTM - American Society for Testing and Materials, M - Military, MS - Military Standard, NAS - National Aerospace Standard, SAE - Society of Automotive Engineers.

(1) All the specifications above are for both static and dynamic applications, except AMS 3209 which is for static only.

(2) Inactive for new design.



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