More from Munaco.



AS-568 Standard O-Rings Quick Reference Chart



General Applications

Munaco's O-Rings are available in a variety of materials. The below are the most common basic materials, each in a range of optional Durometer (Shore A) Hardnesses. Other materials are available upon request.

Buna-N/Nitrile: Buna N/Nitrile rubber is a copolymer of butadiene and acrylonitrile. You will find compounds that are ideally suited for oil and fuel resistant applications of all types

Ethylene-Propylene: In the Ethylene-Propylene family, you will find compounds that are used extensively for outdoor, weather resistant uses, water appliances. The first choice for low torque drive belts. Silicone: In the Silicone family, you will find compounds that are excellent as static seals in extreme temperature conditions.

Neoprene:[®] In the Neoprene family, you will find compounds which are the superior sealing materials for the refrigeration industry featuring resistance to ammonia and Freon.[®]

Temperature

Fluorocarbon: In the

Fluorocarbon family, you will find compounds that make up the preferred seals for aircraft engines, automotive fuel handling systems, and hard vacuum service.

Fluorosilicone:IntheFluorosilicone family, therearecompoundsthatareunparalleled for aerospacefuelsystems and autofuel emissioncontrol systems.

Our materials are compounded under stringent quality control for uniformity of physical properties. We can provide materials to meet or exceed Government, Military, Space Program, Automotive, F.D.A., Industrial and Commercial specifications as well.

Materials	Durometer (Shore A)	Range Dry Heat Only	Description
Buna-N/Nitrile (NBR)	40 thru 90	-40 to +257° F -40 to +125° C	Nitrile combines excellent resistance to petroleum-based oils and fuels, silicone greases, hydraulic fluids, water and alcohols, with a good balance of such desirable working properties as low compression set, high tensile strength, and high abrasion resistance.
Ethylene-Propylene (EPM/EPDM)	40 thru 90	-40 to +275° F -40 to +135° C	EPM/EPDM is also highly recommended for effective resistance to steam (to 400° F), hot water, silicone oils and greases, dilute acids and alkalies, alcohols and automotive brake fluids. Properly compounded, Ethylene Propylene can provide extended temperature range of -76°F to +350°F.
Silicone (Mq; PMq; VMq; PVMq)	25 thru 80	-85 to +400° F -65 to +230° C	Especially resistant to high, dry heat, in primarily static applications. Silicones are fungus resistant, odorless, tasteless, non-toxic elastomers, possessing high resistance to the aging effects of both sunlight and ozone attack.
Neoprene [®] (Chloroprene) (CR)	40 thru 90	-40 to +250° F -40 to +121° C	An oil-resistant substitute for Natural Rubber, Neoprene features moderate resistance to petroleum oils; good resistance to ozone, sunlight and oxygen aging; relatively low compression set; good resilience; reasonable cost; and high resistance to attack by Freon [®] and Ammonia.
Fluorocarbon (Viton [®]) (FKM)	55 thru 95	-13 to +446° F -25 to +230° C	Combining high temperature toughness with wide chemical agent compatibility, Fluorocarbon compounds feature excellent resistance to petroleum products and solvents, with good high temperature compression set characteristics.

Standard O-Rings

Simplified Reference, Easy to Order: The information you need for standard O-Ring sized is listed by ascending inside diameter (I.D.) in fractional and decimal sizes along with the Standard AS-568* Uniform Numbering System.

Choice of Materials: There are a wide variety of compounds and options of Durometer hardness to satisfy practically any service condition. Check with our sales staff for compatibility and other material needs to best suit the application. A standard O-Ring size is defined by inside diameter and width (crosssection) and is listed in both fractional and decimal dimensions with tolerances.

We highly recommend that in all cases, samples of a specific size and compound should be tested in a controlled, simulated test environment prior to use in production.

How to Determine an O-Ring Size:



Shrinkage Size Adjustment: Various O-Ring compounds exhibit different shrinkage rates during molding. The normal O-ring sizes herein shown are based upon a 70 Durometer Nitrile standard. For other O-ring materials, be sure to consult your Munaco Sales representative.

Gland Design Guidelines

O-Ring Gland Guidelines For Dynamic Seals

		Squeeze			Groo	ve Width. ±			
O-Ring Cross Section	Gland Depth	Inches	%	Diametrical Clearance Max.	No Backup Rings	One Backup Ring	Two Backup Rings	Groove Radius	Ecce- tricity Max
.040	.031/.033	.004/.012	11-28	.004	.063	-	-	.005008	.002
.050	.039/.041	.006/.014	13-26	.004	.073	-	-	.005008	.002
.060	.047/.049	.008/.016	14-25	.004	.084	-	-	.005008	.002
.070	.055/.057	.010/.018	15-25	.004	.095	.150	.208	.005015	.002
.103	.087/.090	.010/.019	10-18	.005	.145	.187	.249	.005020	.003
.139	.119/.123	.012/.024	9-17	.006	.185	.222	.301	.005030	.004
.210	.183/.188	.017/.032	8.5-15	.006	.285	.338	.428	.005050	.006
.275	.234/.240	.029/.047	10.5-17	.007	.375	.440	.579	.005060	.008

O-Ring Gland Guidelines For Static Seals

				Squeeze			Groove Width. ±.005					
Gland Depth O-Ring		Radial	»O<	Axial	¢ ↑	Dia- metrical	No	One	Two	Graava	Eccen-	
Section	Radial	Axial	Inches	%	Inches	%	Max.	Ring	Ring	Rings	Radius	Max
.040	.027030	.027030	.007016	19-37	.007016	19-37	.003	.060	_	-	.005008	.002
.050	.035039	.034038	.008018	17-34	.009019	19-36	.004	.075	-	-	.005008	.002
.060	.042047	.042046	.010021	18-33	.011021	19-33	.004	.090	_	_	.005008	.002
.070	.050055	.049054	.012023	18-32	.013024	19-33	.004	.105	.150	.208	.005015	.002
.103	.080086	.075081	.014026	14-25	.019031	19-29	.005	.146	.182	.244	.005020	.003
.139	.110116	.100108	.019033	14-23	.027043	20-30	.006	.195	.217	.296	.005030	.004
.210	.170176	.155165	.029045	14-21	.040060	20-28	.006	.280	.333	.423	.005050	.006
.275	.225235	.205215	.034056	13-20	.054076	20-27	.007	.350	.435	.574	.005060	.008

8' No.	No	minal Referer	ice	Actual Dimensions		
AS-56	I.D.	0.D.	Width	I.D. Tol.	W. Tol.	
-001 -001 1/2 -002 -003 -004	1/32 1/16 3/64 1/16 5/64	3/32 1/8 9/64 3/16 13/64	1/32 1/32 3/64 1/16 1/16	$.029 \pm .004$ $.070 \pm .004$ $.042 \pm .004$ $.056 \pm .004$ $.070 \pm .005$	$\begin{array}{c} .040 \pm .003 \\ .040 \pm .003 \\ .050 \pm .003 \\ .060 \pm .003 \\ .070 \pm .003 \end{array}$	
-005 -006 -007 -008 -009	3/32 1/8 5/32 3/16 7/32	7/32 1/4 9/32 5/16 11/32	1/16 1/16 1/16 1/16 1/16	.101 ± .005 .114 ± .005 .145 ± .005 .176 ± .005 .208 ± .005	$\begin{array}{c} .070 \pm .003 \\ .070 \pm .003 \end{array}$	
-010 -011 -012 -013 -014	1/4 5/16 3/8 7/16 1/2	3/8 7/16 1/2 9/16 5/8	1/16 1/16 1/16 1/16 1/16	$\begin{array}{c} .239 \pm .005 \\ .301 \pm .005 \\ .364 \pm .005 \\ .426 \pm .005 \\ .489 \pm .005 \end{array}$	$\begin{array}{c} .070 \pm .003 \\ .070 \pm .003 \end{array}$	
-015 -016 -017 -018 -019	9/16 5/8 11/16 3/4 13/16	11/16 3/4 13/16 7/8 15/16	1/16 1/16 1/16 1/16 1/16	.551 ± .007 .614 ± .009 .676 ± .009 .739 ± .009 .801 ± .009	$\begin{array}{c} .070 \pm .003 \\ .070 \pm .003 \end{array}$	
-020 -021 -022 -023 -024	7/8 15/16 1 1 1/16 1 1/8	1 1 1/16 1 1/8 1 3/16 1 1/4	1/16 1/16 1/16 1/16 1/16	.864 ± .009 .926 ± .009 .989 ± .010 1.051 ± .010 1.114 ± .010	$\begin{array}{c} .070 \pm .003 \\ .070 \pm .003 \end{array}$	
-025 -026 -027 -028 -029	1 3/16 1 1/4 1 5/16 1 3/8 1 1/2	1 5/16 1 3/8 1 7/16 1 1/2 1 5/8	1/16 1/16 1/16 1/16 1/16	$\begin{array}{c} 1.176 \pm .011 \\ 1.239 \pm .011 \\ 1.301 \pm .011 \\ 1.364 \pm .013 \\ 1.489 \pm .013 \end{array}$	$\begin{array}{c} .070 \pm .003 \\ .070 \pm .003 \end{array}$	
-030 -031 -032 -033 -034	1 5/8 1 3/4 1 7/8 2 2 1/8	1 3/4 1 7/8 2 2 1/8 2 1/4	1/16 1/16 1/16 1/16 1/16	1.614 ± .013 1.739 ± .015 1.864 ± .015 1.989 ± .018 2.114 ± .018	$\begin{array}{c} .070 \pm .003 \\ .070 \pm .003 \\ .070 \pm .003 \\ .070 \pm .003 \\ .070 \pm .003 \end{array}$	
-035 -036 -037 -038 -039	2 1/4 2 3/8 2 1/2 2 5/8 2 3/4	2 3/8 2 1/2 2 5/8 2 3/4 2 7/8	1/16 1/16 1/16 1/16 1/16	2.239 ± .018 2.364 ± .018 2.489 ± .018 2.614 ± .020 2.739 ± .020	$\begin{array}{c} .070 \pm .003 \\ .070 \pm .003 \\ .070 \pm .003 \\ .070 \pm .003 \\ .070 \pm .003 \end{array}$	
-040 -041 -042 -043 -044	2 7/8 3 3 1/4 3 1/2 3 3/4	3 3 1/8 3 3/8 3 5/8 3 7/8	1/16 1/16 1/16 1/16 1/16	$\begin{array}{c} 2.864 \pm .020 \\ 2.989 \pm .024 \\ 3.239 \pm .024 \\ 3.489 \pm .024 \\ 3.739 \pm .027 \end{array}$	$\begin{array}{c} .070 \pm .003 \\ .070 \pm .003 \\ .070 \pm .003 \\ .070 \pm .003 \\ .070 \pm .003 \end{array}$	
-045 -046 -047 -048 -049	4 4 1/4 4 1/2 4 3/4 5	4 1/8 4 3/8 4 5/8 4 7/8 5 1/8	1/16 1/16 1/16 1/16 1/16	3.989 ± .027 4.239 ± .030 4.489 ± .030 4.739 ± .030 4.989 ± .037	$\begin{array}{c} .070 \pm .003 \\ .070 \pm .003 \end{array}$	
-050 -102 -103 -104 -105	5 1/4 1/16 3/32 1/8 5/32	5 3/8 1/4 9/32 5/16 11/32	1/16 3/32 3/32 3/32 3/32 3/32	$5.239 \pm .037 \\ .049 \pm .005 \\ .081 \pm .005 \\ .112 \pm .005 \\ .143 \pm .005 \\ .143 \pm .005 \\$	$\begin{array}{c} .070 \pm .003 \\ .103 \pm .003 \end{array}$	
-106 -107 -108 -109 -110	3/16 7/32 1/4 5/16 3/8	3/8 13/32 7/16 1/2 9/16	3/32 3/32 3/32 3/32 3/32 3/32	$.174 \pm .005$ $.206 \pm .005$ $.237 \pm .005$ $.299 \pm .005$ $.362 \pm .005$	$\begin{array}{c} .103 \pm .003 \\ .103 \pm .003 \end{array}$	
-111 -112 -113 -114 -115	7/16 1/2 9/16 5/8 11/16	5/8 11/16 3/4 13/16 7/8	3/32 3/32 3/32 3/32 3/32 3/32	$\begin{array}{c} .424 \pm .005 \\ .487 \pm .005 \\ .549 \pm .007 \\ .612 \pm .009 \\ .674 \pm .009 \end{array}$	$\begin{array}{c} .103 \pm .003 \\ .103 \pm .003 \\ .103 \pm .003 \\ .103 \pm .003 \\ .103 \pm .003 \end{array}$	
-116 -117 -118 -119 -120	3/4 13/16 7/8 15/16 1	15/16 1 1 1/16 1 1/8 1 3/16	3/32 3/32 3/32 3/32 3/32	.737 ± .009 .799 ± .010 .862 ± .010 .924 ± .010 .987 ± .010	$\begin{array}{c} .103 \pm .003 \\ .103 \pm .003 \\ .103 \pm .003 \\ .103 \pm .003 \\ .103 \pm .003 \end{array}$	
-121 -122 -123 -124 -125	1 1/16 1 1/8 1 3/16 1 1/4 1 5/16	1 1/4 1 5/16 1 3/8 1 7/16 1 1/2	3/32 3/32 3/32 3/32 3/32 3/32	1.049 ± .010 1.112 ± .010 1.174 ± .012 1.237 ± .012 1.299 ± .012	$\begin{array}{c} .103 \pm .003 \\ .103 \pm .003 \\ .103 \pm .003 \\ .103 \pm .003 \\ .103 \pm .003 \end{array}$	
-126 -127 -128 -129 -130	1 3/8 1 7/16 1 1/2 1 9/16 1 5/8	1 9/16 1 5/8 1 11/16 1 3/4 1 13/16	3/32 3/32 3/32 3/32 3/32 3/32	1.362 ± .012 1.424 ± .012 1.487 ± .012 1.549 ± .015 1.612 ± .015	$\begin{array}{c} .103 \pm .003 \\ .103 \pm .003 \end{array}$	
-131 -132 -133 -134 -135	1 11/16 1 3/4 1 13/16 1 7/8 1 15/16	1 7/8 1 15/16 2 2 1/16 2 1/8	3/32 3/32 3/32 3/32 3/32 3/32	1.674 ± .015 1.737 ± .015 1.799 ± .015 1.862 ± .015 1.925 ± .017	$\begin{array}{c} .103 \pm .003 \\ .103 \pm .003 \end{array}$	
-136 -137 -138 -139 -140	2 2 1/16 2 1/8 2 3/16 2 1/4	2 3/16 2 1/4 2 5/16 2 3/8 2 7/16	3/32 3/32 3/32 3/32 3/32 3/32	1.987 ± .017 2.050 ± .017 2.112 ± .017 2.175 ± .017 2.237 ± .017	$\begin{array}{c} .103 \pm .003 \\ .103 \pm .003 \end{array}$	
-141 -142 -143 -144 -145	2 5/16 2 3/8 2 7/16 2 1/2 2 9/16	2 1/2 2 9/16 2 5/8 2 11/16 2 3/4	3/32 3/32 3/32 3/32 3/32 3/32	$2.300 \pm .020$ $2.362 \pm .020$ $2.425 \pm .020$ $2.487 \pm .020$ $2.550 \pm .020$	$.103 \pm .003$ $.103 \pm .003$ $.103 \pm .003$ $.103 \pm .003$ $.103 \pm .003$	

68' Nc	NO	minal Referen	ce	Actual Dimensions		
AS-5	I.D.	0.D.	Width	I.D. Tol.	W. Tol.	
-146 -147 -148 -149 -150	2 5/8 2 11/16 2 3/4 2 13/16 2 7/8	2 13/16 2 7/8 2 15/16 3 3 1/16	3/32 3/32 3/32 3/32 3/32	$\begin{array}{c} 2.612 \pm .020 \\ 2.675 \pm .022 \\ 2.737 \pm .022 \\ 2.800 \pm .022 \\ 2.862 \pm .022 \end{array}$	$\begin{array}{c} .103 \pm .003 \\ .103 \pm .003 \\ .103 \pm .003 \\ .103 \pm .003 \\ .103 \pm .003 \end{array}$	
-151 -152 -153 -154 -155	3 3 1/4 3 1/2 3 3/4 4	3 3/16 3 7/16 3 11/16 3 15/16 4 3/16	3/32 3/32 3/32 3/32 3/32 3/32	$\begin{array}{c} 2.987 \pm .024 \\ 3.237 \pm .024 \\ 3.487 \pm .024 \\ 3.737 \pm .028 \\ 3.987 \pm .028 \end{array}$	$.103 \pm .003$ $.103 \pm .003$ $.103 \pm .003$ $.103 \pm .003$ $.103 \pm .003$ $.103 \pm .003$	
-156 -157 -158 -159 -160	4 1/4 4 1/2 4 3/4 5 5 1/4	4 7/16 4 11/16 4 15/16 5 3/16 5 7/16	3/32 3/32 3/32 3/32 3/32	$4.237 \pm .030$ $4.487 \pm .030$ $4.737 \pm .030$ $4.987 \pm .035$ $5.237 \pm .035$	$103 \pm .003$ $103 \pm .003$ $103 \pm .003$ $103 \pm .003$ $103 \pm .003$ $103 \pm .003$	
-161 -162 -163 -164 -165	5 1/2 5 3/4 6 6 1/4 6 1/2	5 11/16 5 15/16 6 3/16 6 7/16 6 11/16	3/32 3/32 3/32 3/32 3/32 3/32	$5.487 \pm .035$ $5.737 \pm .035$ $5.987 \pm .035$ $6.237 \pm .040$ $6.487 \pm .040$	$.103 \pm .003$ $.103 \pm .003$ $.103 \pm .003$ $.103 \pm .003$ $.103 \pm .003$	
-166	6 3/4	6 15/16	3/32	$6.737 \pm .040$	$.103 \pm .003$	
-167	7	7 3/16	3/32	$6.987 \pm .040$	$.103 \pm .003$	
-168	7 1/4	7 7/16	3/32	$7.237 \pm .045$	$.103 \pm .003$	
-169	7 1/2	7 11/16	3/32	$7.487 \pm .045$	$.103 \pm .003$	
-170	7 3/4	7 15/16	3/32	$7.737 \pm .045$	$.103 \pm .003$	
-171 -172 -173 -174 -175	8 8 1/4 8 1/2 8 3/4 9	8 3/16 8 7/16 8 11/16 8 15/16 9 3/16	3/32 3/32 3/32 3/32 3/32 3/32	7.987 ± .045 8.237 ± .050 8.487 ± .050 8.737 ± .050 8.987 ± .050	$.103 \pm .003$ $.103 \pm .003$ $.103 \pm .003$ $.103 \pm .003$ $.103 \pm .003$ $.103 \pm .003$	
-176	9 1/4	9 7/16	3/32	9.237 ± .055	.103 ± .003	
-177	9 1/2	9 11/16	3/32	9.487 ± .055	.103 ± .003	
-178	9 3/4	9 15/16	3/32	9.737 ± .055	.103 ± .003	
-201	3/16	7/16	1/8	.171 ± .005	.139 ± .004	
-202	1/4	1/2	1/8	.234 ± .005	.139 ± .004	
-203	5/16	9/16	1/8	.296 ± .005	.139 ± .004	
-204	3/8	5/8	1/8	.359 ± .005	.139 ± .004	
-205	7/16	11/16	1/8	.421 ± .005	.139 ± .004	
-206	1/2	3/4	1/8	.484 ± .005	.139 ± .004	
-207	9/16	13/16	1/8	.546 ± .007	.139 ± .004	
-208	5/8	7/8	1/8	.609 ± .009	.139 ± .004	
-209	11/16	15/16	1/8	.671 ± .009	.139 ± .004	
-210	3/4	1	1/8	.734 ± .010	.139 ± .004	
-211	13/16	1 1/16	1/8	.796 ± .010	.139 ± .004	
-212	7/8	1 1/8	1/8	.859 ± .010	.139 ± .004	
-213	15/16	1 3/16	1/8	.921 ± .010	.139 ± .004	
-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 \pm .020 2.359 \pm .020 2.484 \pm .020 2.609 \pm .020 2.734 \pm .024 $.139 ± .004	
-229	2 3/8	2 5/8	1/8		.139 ± .004	
-230	2 1/2	2 3/4	1/8		.139 ± .004	
-231	2 5/8	2 7/8	1/8		.139 ± .004	
-232	2 3/4	3	1/8		.139 ± .004	
-233	2 7/8	3 1/8	1/8	$\begin{array}{c} 2.859 \pm .024 \\ 2.984 \pm .024 \\ 3.109 \pm .024 \\ 3.234 \pm .024 \\ 3.359 \pm .024 \end{array}$.139 ± .004	
-234	3	3 1/4	1/8		.139 ± .004	
-235	3 1/8	3 3/8	1/8		.139 ± .004	
-236	3 1/4	3 1/2	1/8		.139 ± .004	
-237	3 3/8	3 5/8	1/8		.139 ± .004	
-238	3 1/2	3 3/4	1/8	$3.484 \pm .024$.139 ± .004	
-239	3 5/8	3 7/8	1/8	$3.609 \pm .028$.139 ± .004	
-240	3 3/4	4	1/8	$3.734 \pm .028$.139 ± .004	
-241	3 7/8	4 1/8	1/8	$3.859 \pm .028$.139 ± .004	
-242	4	4 1/4	1/8	$3.984 \pm .028$.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	$\begin{array}{c} 5.359 \pm .035 \\ 5.484 \pm .035 \\ 5.609 \pm .035 \\ 5.734 \pm .035 \\ 5.859 \pm .035 \end{array}$.139 ± .004	
-254	5 1/2	5 3/4	1/8		.139 ± .004	
-255	5 5/8	5 7/8	1/8		.139 ± .004	
-256	5 3/4	6	1/8		.139 ± .004	
-257	5 7/8	6 1/8	1/8		.139 ± .004	
-258 -259 -260 -261 -262	6 6 1/4 6 1/2 6 3/4 7	6 1/4 6 1/2 6 3/4 7 7 1/4	1/8 1/8 1/8 1/8 1/8	$5.984 \pm .035 \\ 6.234 \pm .040 \\ 6.484 \pm .040 \\ 6.734 \pm .040 \\ 6.984 \pm .040 \\ $	$.139 \pm .004$ $.139 \pm .004$ $.139 \pm .004$ $.139 \pm .004$ $.139 \pm .004$ $.139 \pm .004$	

*Note: The current revision of the Standard is "C" but it changes periodically.

68' No.	No	minal Referen	ce	Actual Dimensions		
AS-5	I.D.	0.D.	Width	I.D. Tol.	W. Tol.	
-263 -264 -265 -266 -267	7 1/4 7 1/2 7 3/4 8 8 1/4	7 1/2 7 3/4 8 8 1/4 8 1/2	1/8 1/8 1/8 1/8 1/8	$7.234 \pm .0457.484 \pm .0457.734 \pm .0457.984 \pm .0458.234 \pm .050$	$\begin{array}{c} .139 \pm .004 \\ .139 \pm .004 \end{array}$	
-268 -269 -270 -271 -272	8 1/2 8 3/4 9 9 1/4 9 1/2	8 3/4 9 9 1/4 9 1/2 9 3/4	1/8 1/8 1/8 1/8 1/8	$\begin{array}{c} 8.484 \pm .050 \\ 8.734 \pm .050 \\ 8.984 \pm .050 \\ 9.234 \pm .055 \\ 9.484 \pm .055 \end{array}$.139 ± .004 .139 ± .004 .139 ± .004 .139 ± .004 .139 ± .004	
-273 -274 -275 -276 -277	9 3/4 10 10 1/2 11 11 1/2	10 10 1/4 10 3/4 11 1/4 11 3/4	1/8 1/8 1/8 1/8 1/8	9.734 ± .055 9.984 ± .055 10.484 ± .055 10.984 ± .065 11.484 ± .065	.139 ± .004 .139 ± .004 .139 ± .004 .139 ± .004 .139 ± .004	
-278 -279 -280 -281 -282	12 13 14 15 16	12 1/4 13 1/4 14 1/4 15 1/4 16 1/4	1/8 1/8 1/8 1/8 1/8	11.984 ± .065 12.984 ± .065 13.984 ± .065 14.984 ± .065 15.955 ± .075	.139 ± .004 .139 ± .004 .139 ± .004 .139 ± .004 .139 ± .004	
-283 -284 -309 -310 -311	17 18 7/16 1/2 9/16	17 1/4 18 1/4 13/16 7/8 15/16	1/8 1/8 3/16 3/16 3/16	$\begin{array}{c} 16.955 \pm .080 \\ 17.955 \pm .085 \\ .412 \pm .005 \\ .475 \pm .005 \\ .537 \pm .007 \end{array}$.139 ± .004 .139 ± .004 .210 ± .005 .210 ± .005 .210 ± .005	
-312 -313 -314 -315 -316	5/8 11/16 3/4 13/16 7/8	1 1 1/16 1 1/8 1 3/16 1 1/4	3/16 3/16 3/16 3/16 3/16	.600 ± .009 .662 ± .009 .725 ± .010 .787 ± .010 .850 ± .010	$\begin{array}{c} .210 \pm .005 \\ .210 \pm .005 \end{array}$	
-317 -318 -319 -320 -321	15/16 1 1 1/16 1 1/8 1 3/16	1 5/16 1 3/8 1 7/16 1 1/2 1 9/16	3/16 3/16 3/16 3/16 3/16	.912 ± .010 .975 ± .010 1.037 ± .010 1.100 ± .012 1.162 ± .012	$\begin{array}{c} .210 \pm .005 \\ .210 \pm .005 \end{array}$	
-322 -323 -324 -325 -326	1 1/4 1 5/16 1 3/8 1 1/2 1 5/8	1 5/8 1 11/16 1 3/4 1 7/8 2	3/16 3/16 3/16 3/16 3/16	$\begin{array}{c} 1.225 \pm .012 \\ 1.287 \pm .012 \\ 1.350 \pm .012 \\ 1.475 \pm .015 \\ 1.600 \pm .015 \end{array}$	$\begin{array}{c} .210 \pm .005 \\ .210 \pm .005 \end{array}$	
-327 -328 -329 -330 -331	1 3/4 1 7/8 2 2 1/8 2 1/4	2 1/8 2 1/4 2 3/8 2 1/2 2 5/8	3/16 3/16 3/16 3/16 3/16	$\begin{array}{c} 1.725 \pm .015 \\ 1.850 \pm .015 \\ 1.975 \pm .018 \\ 2.100 \pm .018 \\ 2.225 \pm .018 \end{array}$	$\begin{array}{c} .210 \pm .005 \\ .210 \pm .005 \end{array}$	
-332 -333 -334 -335 -336	2 3/8 2 1/2 2 5/8 2 3/4 2 7/8	2 3/4 2 7/8 3 3 1/8 3 1/4	3/16 3/16 3/16 3/16 3/16	$\begin{array}{c} 2.350 \pm .018 \\ 2.475 \pm .020 \\ 2.600 \pm .020 \\ 2.725 \pm .020 \\ 2.850 \pm .020 \end{array}$	$\begin{array}{c} .210 \pm .005 \\ .210 \pm .005 \end{array}$	
-337 -338 -339 -340 -341	3 3 1/8 3 1/4 3 3/8 3 1/2	3 3/8 3 1/2 3 5/8 3 3/4 3 7/8	3/16 3/16 3/16 3/16 3/16	$\begin{array}{c} 2.975 \pm .024 \\ 3.100 \pm .024 \\ 3.225 \pm .024 \\ 3.350 \pm .024 \\ 3.475 \pm .024 \end{array}$	$\begin{array}{c} .210 \pm .005 \\ .210 \pm .005 \end{array}$	
-342 -343 -344 -345 -346	3 5/8 3 3/4 3 7/8 4 4 1/8	4 4 1/8 4 1/4 4 3/8 4 1/2	3/16 3/16 3/16 3/16 3/16	3.600 ± .028 3.725 ± .028 3.850 ± .028 3.975 ± .028 4.100 ± .028	$\begin{array}{c} .210 \pm .005 \\ .210 \pm .005 \end{array}$	
-347 -348 -349 -350 -351	4 1/4 4 3/8 4 1/2 4 5/8 4 3/4	4 5/8 4 3/4 4 7/8 5 5 1/8	3/16 3/16 3/16 3/16 3/16	$\begin{array}{c} 4.225 \pm .030 \\ 4.350 \pm .030 \\ 4.475 \pm .030 \\ 4.600 \pm .030 \\ 4.725 \pm .030 \end{array}$	$\begin{array}{c} .210 \pm .005 \\ .210 \pm .005 \end{array}$	
-352 -353 -354 -355 -356	4 7/8 5 5 1/8 5 1/4 5 3/8	5 1/4 5 3/8 5 1/2 5 5/8 5 3/4	3/16 3/16 3/16 3/16 3/16	$\begin{array}{c} 4.850 \pm .030 \\ 4.975 \pm .037 \\ 5.100 \pm .037 \\ 5.225 \pm .037 \\ 5.350 \pm .037 \end{array}$	$\begin{array}{c} .210 \pm .005 \\ .210 \pm .005 \end{array}$	
-357 -358 -359 -360 -361	5 1/2 5 5/8 5 3/4 5 7/8 6	5 7/8 6 6 1/8 6 1/4 6 3/8	3/16 3/16 3/16 3/16 3/16	$\begin{array}{c} 5.475 \pm .037 \\ 5.600 \pm .037 \\ 5.725 \pm .037 \\ 5.850 \pm .037 \\ 5.975 \pm .037 \end{array}$	$\begin{array}{c} .210 \pm .005 \\ .210 \pm .005 \end{array}$	
-362 -363 -364 -365 -366	6 1/4 6 1/2 6 3/4 7 7 1/4	6 5/8 6 7/8 7 1/8 7 3/8 7 5/8	3/16 3/16 3/16 3/16 3/16	$\begin{array}{c} 6.225 \pm .040 \\ 6.475 \pm .040 \\ 6.725 \pm .040 \\ 6.975 \pm .040 \\ 7.225 \pm .045 \end{array}$	$\begin{array}{c} .210 \pm .005 \\ .210 \pm .005 \end{array}$	
-367 -368 -369 -370 -371	7 1/2 7 3/4 8 8 1/4 8 1/2	7 7/8 8 1/8 8 3/8 8 5/8 8 7/8	3/16 3/16 3/16 3/16 3/16	$\begin{array}{c} 7.475 \pm .045 \\ 7.725 \pm .045 \\ 7.975 \pm .045 \\ 8.225 \pm .050 \\ 8.475 \pm .050 \end{array}$.210 ± .005 .210 ± .005 .210 ± .005 .210 ± .005 .210 ± .005	
-372 -373 -374 -375 -376	8 3/4 9 9 1/4 9 1/2 9 3/4	9 1/8 9 3/8 9 5/8 9 7/8 10 1/8	3/16 3/16 3/16 3/16 3/16	$\begin{array}{c} 8.725 \pm .050 \\ 8.975 \pm .050 \\ 9.225 \pm .055 \\ 9.475 \pm .055 \\ 9.725 \pm .055 \end{array}$.210 ± .005 .210 ± .005 .210 ± .005 .210 ± .005 .210 ± .005	
-377 -378 -379 -380 -381	10 10 1/2 11 11 1/2 12	10 3/8 10 7/8 11 3/8 11 7/8 12 3/8	3/16 3/16 3/16 3/16 3/16	$9.975 \pm .055$ 10.475 ± .060 10.975 ± .060 11.475 ± .065 11.975 ± .065	$\begin{array}{c} .210 \pm .005 \\ .210 \pm .005 \end{array}$	

	68' No.	No	minal Referen	ce	Actual Dimensions		
	AS-5	I.D.	0.D.	Width	I.D. Tol.	W. Tol.	
	-382 -383 -384 -385 -386	13 14 15 16 17	13 3/8 14 3/8 15 3/8 16 3/8 17 3/8	3/16 3/16 3/16 3/16 3/16	$\begin{array}{c} 12.975 \pm .065 \\ 13.975 \pm .070 \\ 14.975 \pm .070 \\ 15.955 \pm .075 \\ 16.955 \pm .080 \end{array}$	$\begin{array}{c} .210 \pm .005 \\ .210 \pm .005 \end{array}$	
	-387 -388 -389 -390 -391	18 19 20 21 22	18 3/8 19 3/8 20 3/8 21 3/8 22 3/8	3/16 3/16 3/16 3/16 3/16	17.955 ± .085 18.955 ± .090 19.955 ± .095 20.955 ± .095 21.955 ± .100	.210 ± .005 .210 ± .005 .210 ± .005 .210 ± .005 .210 ± .005	
	-392 -393 -394 -395 -425	23 24 25 26 4 1/2	23 3/8 24 3/8 25 3/8 26 3/8 5	3/16 3/16 3/16 3/16 1/4	22.940 ± .105 23.940 ± .110 24.940 ± .115 25.940 ± .120 4.475 ± .033	$\begin{array}{c} .210 \pm .005 \\ .275 \pm .006 \end{array}$	
	-426 -427 -428 -429 -430	4 5/8 4 3/4 4 7/8 5 5 1/8	5 1/8 5 1/4 5 3/8 5 1/2 5 5/8	1/4 1/4 1/4 1/4 1/4	$\begin{array}{c} 4.600 \pm .033 \\ 4.725 \pm .033 \\ 4.850 \pm .033 \\ 4.975 \pm .037 \\ 5.100 \pm .037 \end{array}$	$\begin{array}{c} .275 \pm .006 \\ .275 \pm .006 \end{array}$	
	-431 -432 -433 -434 -435	5 1/4 5 3/8 5 1/2 5 5/8 5 3/4	5 3/4 5 7/8 6 6 1/8 6 1/4	1/4 1/4 1/4 1/4 1/4	$5.225 \pm .037$ $5.350 \pm .037$ $5.475 \pm .037$ $5.600 \pm .037$ $5.725 \pm .037$	$\begin{array}{c} .275 \pm .006 \\ .275 \pm .006 \end{array}$	
	-436 -437 -438 -439 -440	5 7/8 6 6 1/4 6 1/2 6 3/4	6 3/8 6 1/2 6 3/4 7 7 1/4	1/4 1/4 1/4 1/4 1/4	$\begin{array}{c} 5.850 \pm .037 \\ 5.975 \pm .037 \\ 6.225 \pm .040 \\ 6.475 \pm .040 \\ 6.725 \pm .040 \end{array}$	$\begin{array}{c} .275 \pm .006 \\ .275 \pm .006 \end{array}$	
	-441 -442 -443 -444 -445	7 7 1/4 7 1/2 7 3/4 8	7 1/2 7 3/4 8 8 1/4 8 1/2	1/4 1/4 1/4 1/4 1/4	$\begin{array}{c} 6.975 \pm .040 \\ 7.225 \pm .045 \\ 7.475 \pm .045 \\ 7.725 \pm .045 \\ 7.975 \pm .045 \end{array}$	$\begin{array}{c} .275 \pm .006 \\ .275 \pm .006 \end{array}$	
	-446 -447 -448 -449 -450	8 1/2 9 9 1/2 10 10 1/2	9 9 1/2 10 10 1/2 11	1/4 1/4 1/4 1/4 1/4	8.475 ± .055 8.975 ± .055 9.475 ± .055 9.975 ± .055 10.475 ± .060	$\begin{array}{c} .275 \pm .006 \\ .275 \pm .006 \end{array}$	
	-451 -452 -453 -454 -455	11 11 1/2 12 12 1/2 13	11 1/2 12 12 1/2 13 13 1/2	1/4 1/4 1/4 1/4 1/4	10.975 ± .060 11.475 ± .060 11.975 ± .060 12.475 ± .060 12.975 ± .060	$.275 \pm .006$ $.275 \pm .006$ $.275 \pm .006$ $.275 \pm .006$ $.275 \pm .006$	
	-456 -457 -458 -459 -460	13 1/2 14 14 1/4 15 15 1/2	14 14 1/2 15 15 1/2 16	1/4 1/4 1/4 1/4 1/4	13.475 ± .070 13.975 ± .070 14.475 ± .070 14.975 ± .070 15.475 ± .070	$.275 \pm .006$ $.275 \pm .006$ $.275 \pm .006$ $.275 \pm .006$ $.275 \pm .006$	
	-461 -462 -463 -464 -465	16 16 1/2 17 17 1/2 18	16 1/2 17 17 1/2 18 18 1/2	1/4 1/4 1/4 1/4 1/4	$\begin{array}{c} 15.955 \pm .075 \\ 16.455 \pm .075 \\ 16.955 \pm .080 \\ 17.455 \pm .085 \\ 17.955 \pm .085 \end{array}$	$\begin{array}{c} .275 \pm .006 \\ .275 \pm .006 \end{array}$	
	-466 -467 -468 -469 -470	18 1/2 19 19 1/2 20 21	19 19 1/2 20 20 1/2 21 1/2	1/4 1/4 1/4 1/4 1/4	18.455 ± .085 18.955 ± .090 19.455 ± .090 19.955 ± .090 20.955 ± .090	$\begin{array}{c} .275 \pm .006 \\ .275 \pm .006 \end{array}$	
	-471 -472 -473 -474 -475	22 23 24 25 26	22 1/2 23 1/2 24 1/2 25 1/2 26 1/2	1/4 1/4 1/4 1/4 1/4	21.955 ± .100 22.940 ± .105 23.940 ± .110 24.940 ± .115 25.940 ± .120	$.275 \pm .006$ $.275 \pm .006$ $.275 \pm .006$ $.275 \pm .006$ $.275 \pm .006$ $.275 \pm .006$	

Standard O-Ring Boss Gaskets For Straight Thread Tube Fittings

568' No.	Tube Size (O.D.)	Actual Dimensions			
AS-	Fractional	I.D. Tol.	W. Tol.		
-901	3/32	$.185 \pm .005$.056 ±.003		
-902	1/8	$.239 \pm .005$.064 ±.003		
-903	3/16	$.301 \pm .005$.064 ±.003		
-904	1/4	$.351 \pm .005$.072 ±.003		
-905	5/16	$.414 \pm .005$.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		

*Note: The current revision of the Standard is "C" but it changes periodically.



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- Diaphragm Rubber
- Compressed Fiber
- Cork, Cork & Rubber
- EPDM
- FDA Approved Compounds
- Felt

Extrusions

- Materials Include Buna-N, EPDM, Gum Rubber, Neoprene, Silicone, Urethane, & Viton®
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- Custom Profiles

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- Complete Line of Flexitallic Gaskets Including Semi-Metallic Spiral Wounds, MRG, Flexpro, HOT,
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- Change Gasket
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- Flexible Graphite
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 - Petroleum, Plastic, Steam, Suction, Washdown, & Water Applications
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