

General Applications

Apple O-Rings are available in a choice of six basic materials, each in a range of optional durometer (Shore A) hardnesses. Other materials 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 and water applications. 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.*

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: In the Fluorosilicone family, you will find compounds that make up seals that are unparalleled for aerospace fuel systems and auto fuel emission control systems.

All mateials are compounded under stringent quality control for uniformity of physical property, and to meet or exceed government, military, space program, automotive, F.D.A., industrial and commercial specifications.

To Determine Material:

- 1. Determine end use: static (stationary) or dynamic (moving).
- 2. List the substance that the seal will be exposed to and check O-Ring material resistances in Chemical Compatibility Table(s) listed in the Apple Seal Design Guide.
- 3. List ALL factors of seal application and check material performance.

- A. Pressure: determines material hardness and selection.
- B. Heat/Cold: check material temperature range(s).
- C. Friction: determines material hardness and selection.
- D. Permeability: important for pneumatic and vacuum applications.
- 4. Medical applications: make sure an Apple representative is aware if medical grade materails are required.

The most commonly used durometer is 70. Although other durometers are offered, availability may be limited due to processing or shrinkage factors.

Materials	Apple Material Designation	Durometers (Shore A)	Temperature Range" (Dry Heat Only)	Description
Buna-N/Nitrile (NBR)	BN	40 thru 90	-40 to +257° F -40 to +125° C	Presently the seal industry's most widely used elastometer. Nitrile combines excellent resistance to petroleum-based oils and fuels, silicone greases, hydraulic fluids, water and alcohols. It has a good balance of such desirable working properties as low compression set, high tensile strength and high abrasion resistance.
Ethylene-Propylene (EPM/EPDM)	EP	40 thru 90	-40 to +275° F -40 to +135° C	Features good resistance to such polar solvents as ketones (MEK & Acetone). 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)	SL	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 and possess high-resistance to the aging effects of both sunlight and ozone attack.
Neoprene® (Chloroprene) (CR)	CR	40 thru 90	-40 to +250° F -40 to +121° C	An early developed, 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®) (Fluorel®) (FKM)	VT	55 thru 95	-13 to +446° F -25 to +230° C	Combines high-temperature toughness with wide chemical agent compatibility, Fluorocarbon compounds feature excellent resistance to petroleum products and solvents and good high-temperature compression set characteristics.
Fluorosilicone (Fvmq)	FS	40 thru 80	-75 to +400° F -60 to +200° C	Combines the good high and low temperature stability of Silicones with the fuel, oil and solvent resistance of fluorocarbons. FS compounds feature good compression set and resilience properties. FS compounds are suitable for exposure to air, sunlight, ozone, chlorinated and aromatic hydrocarbons.

^{*}Please check the latest standard for current version. **The temperatures listed are general operating range.

Standard O-Rings

Every Standard AS-568* Size in Stock: Listed in inches. Includes all standard I.D.'s from .029" to 26," and

standard I.D.'s from .029" to 26," and cross sections (widths) from .040" to .275". Constantly restocked to assure immediate delivery of any size in small or large quantities.

Simplified Reference Easy to Order:

All the information you need at a glance. All sizes listed by ascending inside diameter (I.D.) in fractional AND decimal sizes. Standard AS-568* Uniform Numbering System (order by a single number).

Choice of Six Materials as Standard:

Rubber compounds and options of Durometer hardness to satisfy practically any service condition. Check with our sales staff for other material needs.

Fastest Delivery on O-Rings: Most likely the size and compound you require is in our stock of over 300,000,000 O-Rings. Immediate shipments with no intermediate delays. (Remember – with Apple you can buy direct.)

*Please check the latest standard for current version.

O-Ring size is defined by inside diameter and width (cross-section) and is listed in both fractional and decimal dimensions with tolerances.

How to Order: The temperatures listed are general operating ranges for the entire family of each compound.

These will vary with specific compounds and/or length of exposure to temperature extremes. For example, silicone may still be serviceable with limited exposure to 700°F.

We highly recommend that in all cases, samples of a specific size and compound should be tested in the application before use in production.

Apple catalog numbers are identical to the AS-568* Numbering System, indicating precise I.D. and Width dimensions of O-Rings in one ordering number.

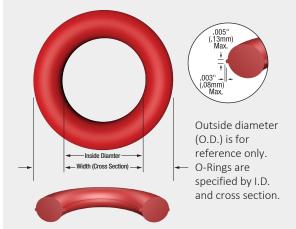
How to Determine O-Ring Size*

For Sequence in Ordering:

- 1 Size (catalog number)
- 2 Durometer and material
- **3** Quantity

Example:

110 – 70SLR – 10,000 (size – durometer, material and color – quantity)



* 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 Apple representative.

Seal Types and Gland Design

O-Ring Gland Design for Dynamic Seals

O Ding		Squeeze		Diametrical	Groove Width. ±.005				
O-Ring Cross Section	Gland Depth	Inches	%	Diametrical Clearance Max.	No Backup Rings	One Backup Ring	Two Backup Rings	Groove Radius	Eccentricity 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 Design for Static Seals

	O-Ring Gland Cross Depth		Squeeze					Groove Width. ±.005			Groove	Eccen- tricity
0-Ring Cross			Radial >O< Axial C		ial Ž Diametrical Clearance							
Section				~/		~	Max.	No	One	Two	Radius	Max.
	Radial	Axial	Inches	%	Inches	%		Backup Rings	Backup Ring	Backup Rings		
.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

01 1/2 02 03 04	I.D.	0.D.	Width	I.D. Tol.	
-001 -001 1/2 -002 -003 -004 -005	1/32			1.0. 101.	W. Tol.
-002 -003 -004		3/32	1/32	.029 ± .004	.040 ± .003
-003 -004	1/16	1/8	1/32	.070 ± .004	.040 ± .003
-004	3/64 1/16	9/64 3/16	3/64 1/16	.042 ± .004 .056 ± .004	.050 ± .003 .060 ± .003
	5/64	13/64	1/16	.070 ± .005	.000 ± .003
	3/32	7/32	1/16	.101 ± .005	.070 ± .003
-006	1/8	1/4	1/16	.114 ± .005	.070 ± .003
-007	5/32	9/32	1/16	.145 ± .005	.070 ± .003
-008	3/16	5/16	1/16	.176 ± .005	.070 ± .003
-009	7/32	11/32	1/16	.208 ± .005	.070 ± .003
-010	1/4	3/8	1/16	.239 ± .005	.070 ± .003
-011	5/16	7/16	1/16	.301 ± .005	.070 ± .003
-012	3/8	1/2	1/16	.364 ± .005	.070 ± .003
-013	7/16	9/16	1/16	.426 ± .005	.070 ± .003
-014	1/2	5/8	1/16	.489 ± .005	.070 ± .003
-015	9/16	11/16	1/16	.551 ± .007	.070 ± .003
-016	5/8	3/4	1/16	.614 ± .009	.070 ± .003
-017	11/16	13/16	1/16	.676 ± .009	.070 ± .003
-018	3/4	7/8	1/16	.739 ± .009	.070 ± .003
-019	13/16	15/16	1/16	.801 ± .009	.070 ± .003
-020	7/8	1	1/16	.864 ± .009	.070 ± .003
-021	15/16	1 1/16	1/16	.926 ± .009	.070 ± .003
-022	1	1 1/8	1/16	.989 ± .010	.070 ± .003
-023	1 1/16	1 3/16	1/16	1.051 ± .010	.070 ± .003
-024	1 1/8	1 1/4	1/16	1.114 ± .010	.070 ± .003
-025	1 3/16	1 5/16	1/16	1.176 ± .011	.070 ± .003
-026	1 1/4	1 3/8	1/16	1.239 ± .011	.070 ± .003
-027	1 5/16	1 7/16	1/16	1.301 ± .011	.070 ± .003
-028	1 3/8	1 1/2	1/16	1.364 ± .013	.070 ± .003
-029	1 1/2	1 5/8	1/16	1.489 ± .013	.070 ± .003
-030	1 5/8	1 3/4	1/16	1.614 ± .013	.070 ± .003
-031	1 3/4	1 7/8	1/16	1.739 ± .015	.070 ± .003
-032	1 7/8	2	1/16	1.864 ± .015	.070 ± .003
-033	2	2 1/8	1/16	1.989 ± .018	.070 ± .003
-034 -035	2 1/8	2 1/4	1/16 1/16	2.114 ± .018	.070 ± .003
-036	2 1/4 2 3/8	2 3/8 2 1/2	1/16	2.239 ± .018 2.364 ± .018	.070 ± .003 .070 ± .003
-030	2 1/2	2 5/8	1/16	2.489 ± .018	.070 ± .003
-037	2 5/8	2 3/4	1/16	2.614 ± .020	.070 ± .003
-039	2 3/4	2 7/8	1/16	2.739 ± .020	.070 ± .003
-040	2 7/8	3	1/16	2.864 ± .020	.070 ± .003
-041	3	3 1/8	1/16	2.989 ± .024	.070 ± .003
-042	3 1/4	3 3/8	1/16	3.239 ± .024	.070 ± .003
-043	3 1/2	3 5/8	1/16	3.489 ± .024	.070 ± .003
-044	3 3/4	3 7/8	1/16	3.739 ± .027	.070 ± .003
-045	4	4 1/8	1/16	3.989 ± .027	.070 ± .003
-046	4 1/4	4 3/8	1/16	4.239 ± .030	.070 ± .003
-047	4 1/2	4 5/8	1/16	4.489 ± .030	.070 ± .003
-048	4 3/4	4 7/8	1/16	4.739 ± .030	.070 ± .003
-049	5	5 1/8	1/16	4.989 ± .037	.070 ± .003
-050	5 1/4	5 3/8	1/16	5.239 ± .037	.070 ± .003
-102	1/16	1/4	3/32	.049 ± .005	.103 ± .003
-103	3/32	9/32	3/32	.081 ± .005	.103 ± .003
-104	1/8	5/16	3/32	.112 ± .005	.103 ± .003
-105	5/32	11/32	3/32	.143 ± .005	.103 ± .003
-106	3/16	3/8	3/32	.174 ± .005	.103 ± .003
-107	7/32	13/32	3/32	.206 ± .005	.103 ± .003
-108	1/4	7/16	3/32	.237 ± .005	.103 ± .003
-109	5/16	1/2	3/32	.299 ± .005	.103 ± .003
-110	3/8	9/16	3/32	.362 ± .005	.103 ± .003 .103 ± .003
-111 -112	7/16 1/2	5/8 11/16	3/32 3/32	.424 ± .005 .487 ± .005	.103 ± .003
-112	9/16	3/4	3/32	.549 ± .007	.103 ± .003
-113	5/8	13/16	3/32	.612 ± .009	.103 ± .003
-115	11/16	7/8	3/32	.674 ± .009	.103 ± .003
-116	3/4	15/16	3/32	.737 ± .009	.103 ± .003
-117	13/16	1 1/16	3/32	.799 ± .010	.103 ± .003
-118	7/8	1 1/16	3/32	.862 ± .010	.103 ± .003
-119	15/16	1 1/8	3/32	.924 ± .010	.103 ± .003
-120	1 1/16	1 3/16	3/32	.987 ± .010	.103 ± .003
-121 -122	1 1/16 1 1/8	1 1/4 1 5/16	3/32 3/32	1.049 ± .010 1.112 ± .010	.103 ± .003 .103 ± .003
-122	1 3/16	1 3/16	3/32	1.112 ± .010 1.174 ± .012	.103 ± .003
-124	1 1/4	1 7/16	3/32	1.237 ± .012	.103 ± .003
-125	1 5/16	1 1/2	3/32	1.299 ± .012	.103 ± .003
-126	1 3/8	1 9/16	3/32	1.362 ± .012	.103 ± .003
-127	1 7/16	1 5/8	3/32	1.424 ± .012	.103 ± .003
-128	1 1/2	1 11/16	3/32	1.487 ± .012	.103 ± .003
-129	1 9/16	1 3/4	3/32	1.549 ± .015	.103 ± .003
-130	1 5/8	1 13/16	3/32	1.612 ± .015	.103 ± .003
-131	1 11/16	1 7/8	3/32	1.674 ± .015	.103 ± .003
-132	1 3/4	1 15/16	3/32	1.737 ± .015	.103 ± .003
-133	1 13/16	2	3/32	1.799 ± .015	.103 ± .003
-134	1 7/8	2 1/16	3/32	1.862 ± .015	.103 ± .003
-135	1 15/16	2 1/8	3/32	1.925 ± .017	.103 ± .003
-136	2	2 3/16	3/32	1.987 ± .017	.103 ± .003
-137	2 1/16	2 1/4	3/32	2.050 ± .017	.103 ± .003
-138	2 1/8	2 5/16	3/32	2.112 ± .017	.103 ± .003
-139	2 3/16	2 3/8	3/32	2.175 ± .017	.103 ± .003
	2 1/4	2 7/16	3/32	2.237 ± .017	.103 ± .003
-140	2 5/16	2 1/2	3/32	2.300 ± .020	.103 ± .003
-140 -141					
-140 -141 -142	2 3/8	2 9/16	3/32	2.362 ± .020	.103 ± .003
-140 -141		2 9/16 2 5/8	3/32 3/32 3/32	2.362 ± .020 2.425 ± .020	.103 ± .003 .103 ± .003

^{*}Please check the latest standard for current version.

AS-568*	Nor	ninal Refere	nce	Actual Di	Actual Dimensions			
No.	I.D.	0.D.	Width	I.D. Tol.	W. Tol.			
-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 9 1 /4	8 1/4	1/8	7.984 ± .045	.139 ± .004			
-267 -268	8 1/4 8 1/2	8 1/2 8 3/4	1/8 1/8	8.234 ± .050 8.484 ± .050	.139 ± .004 .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 -274	9 3/4 10	10 10 1/4	1/8 1/8	9.734 ± .055 9.984 ± .055	.139 ± .004 .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 -280	13 14	13 1/4 14 1/4	1/8 1/8	12.984 ± .065 13.984 ± .065	.139 ± .004 .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 -310	7/16 1/2	13/16 7/8	3/16 3/16	.412 ± .005 .475 ± .005	.210 ± .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	1 1/16	3/16	.662 ± .009	.210 ± .005			
-314 -315	3/4 13/16	1 1/8 1 3/16	3/16 3/16	.725 ± .010 .787 ± .010	.210 ± .005 .210 ± .005			
-315	7/8	1 3/16	3/16	.787 ± .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 -320	1 1/16 1 1/8	1 7/16 1 1/2	3/16 3/16	1.037 ± .010 1.100 ± .012	.210 ± .005 .210 ± .005			
-320	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 -326	1 1/2 1 5/8	1 7/8 2	3/16 3/16	1.475 ± .015 1.600 ± .015	.210 ± .005 .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 -331	2 1/8 2 1/4	2 1/2 2 5/8	3/16 3/16	2.100 ± .018 2.225 ± .018	.210 ± .005 .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 -336	2 3/4 2 7/8	3 1/8 3 1/4	3/16 3/16	2.725 ± .020 2.850 ± .020	.210 ± .005 .210 ± .005			
-337	3	3 3/8	3/16	2.975 ± .024	.210 ± .005			
-338	3 1/8	3 1/2	3/16	3.100 ± .024	.210 ± .005			
-339	3 1/4	3 5/8	3/16	3.225 ± .024	.210 ± .005			
-340 -341	3 3/8 3 1/2	3 3/4 3 7/8	3/16 3/16	3.350 ± .024 3.475 ± .024	.210 ± .005 .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 -346	4 4 1/8	4 3/8 4 1/2	3/16 3/16	3.975 ± .028 4.100 ± .028	.210 ± .005 .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 -350	4 1/2	4 7/8 5	3/16 3/16	4.475 ± .030	.210 ± .005 .210 ± .005			
-350 -351	4 5/8 4 3/4	5 5 1/8	3/16	4.600 ± .030 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 -355	5 1/8 5 1/4	5 1/2 5 5/8	3/16	5.100 ± .037	.210 ± .005			
-355 -356	5 1/4 5 3/8	5 5/8 5 3/4	3/16 3/16	5.225 ± .037 5.350 ± .037	.210 ± .005 .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 -360	5 3/4 5 7/8	6 1/8	3/16 3/16	5.725 ± .037	.210 ± .005			
-360 -361	5 7/8 6	6 1/4 6 3/8	3/16 3/16	5.850 ± .037 5.975 ± .037	.210 ± .005 .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 -366	7 7 1/4	7 3/8 7 5/8	3/16 3/16	6.975 ± .040 7.225 ± .045	.210 ± .005 .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 -370	8 9 1 /4	8 3/8	3/16 3/16	7.975 ± .045	.210 ± .005			
-370 -371	8 1/4 8 1/2	8 5/8 8 7/8	3/16 3/16	8.225 ± .050 8.475 ± .050	.210 ± .005 .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 -375	9 1/4	9 5/8	3/16 3/16	9.225 ± .055	.210 ± .005			
-375 -376	9 1/2 9 3/4	9 7/8 10 1/8	3/16 3/16	9.475 ± .055 9.725 ± .055	.210 ± .005 .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 -380	11 11 1/2	11 3/8 11 7/8	3/16 3/16	10.975 ± .060 11.475 ± .065	.210 ± .005 .210 ± .005			
-380 -381	11 1/2	11 7/8	3/16 3/16	11.475 ± .065 11.975 ± .065	.210 ± .005			
*Please check					•			

AS-568*	Nor	minal Refere	nce	Actual Dir	mensions
No.	I.D.	0.D.	Width	I.D. Tol.	W. Tol.
-382	13	13 3/8	3/16	12.975 ± .065	.210 ± .005
-383 -384	14 15	14 3/8 15 3/8	3/16 3/16	13.975 ± .070 14.975 ± .070	.210 ± .005
-364 -385	16	15 3/8	3/16	15.955 ± .075	.210 ± .005 .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 .210 ± .005
-390 -391	21 22	21 3/8 22 3/8	3/16 3/16	20.955 ± .095 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 -425	26 4 1/2	26 3/8 5	3/16 1/4	25.940 ± .120 4.475 ± .033	.210 ± .005 .275 ± .006
-426	4 5/8	5 1/8	1/4	4.600 ± .033	.275 ± .006
-427	4 3/4	5 1/4	1/4	4.725 ± .033	.275 ± .006
-428	4 7/8	5 3/8	1/4	4.850 ± .033	.275 ± .006
-429 -430	5 5 1/8	5 1/2 5 5/8	1/4 1/4	4.975 ± .037 5.100 ± .037	.275 ± .006 .275 ± .006
-430	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 -435	5 5/8 5 3/4	6 1/8 6 1/4	1/4 1/4	5.600 ± .037 5.725 ± .037	.275 ± .006 .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 -440	6 1/2 6 3/4	7 7 1/4	1/4 1/4	6.475 ± .040 6.725 ± .040	.275 ± .006 .275 ± .006
-441	7	7 1/4	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 -445	7 3/4 8	8 1/4 8 1/2	1/4 1/4	7.725 ± .045 7.975 ± .045	.275 ± .006 .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 -449	9 1/2 10	10 10 1/2	1/4 1/4	9.475 ± .055 9.975 ± .055	.275 ± .006 .275 ± .006
-449 -450	10 1/2	10 1/2	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 -454	12 12 1/2	12 1/2 13	1/4 1/4	11.975 ± .060 12.475 ± .060	.275 ± .006 .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 -458	14	14 1/2 15	1/4	13.975 ± .070	.275 ± .006
-456 -459	14 1/4 15	15 1/2	1/4 1/4	14.475 ± .070 14.975 ± .070	.275 ± .006 .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 -463	16 1/2 17	17 17 1/2	1/4 1/4	16.455 ± .075 16.955 ± .080	.275 ± .006 .275 ± .006
-464	17 1/2	17 1/2	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 -468	19 19 1/2	19 1/2 20	1/4 1/4	18.955 ± .090 19.455 ± .090	.275 ± .006 .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
-471 472	22	22 1/2	1/4	21.955 ± .100	.275 ± .006
-472 -473	23 24	23 1/2 24 1/2	1/4 1/4	22.940 ± .105 23.940 ± .110	.275 ± .006 .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

Standard O-Ring Boss Gaskets for Straight Thread Tube Fittings

AS-568*	Tube Size (O.D.)	Actual Dimensions			
No.	Fractional	I.D. Tol.	W. Tol.		
-901 -902 -903 -904	3/32 1/8 3/16 1/4	.185 ±.005 .239 ±.005 .301 ±.005 .351 ±.005	.056 ±.003 .064 ±.003 .064 ±.003 .072 ±.003		
-905 -906 -907 -908 -909	5/16 3/8 7/16 1/2 9/16 5/8	.414 ±.005 .468 ±.005 .530 ±.007 .644 ±.009 .706 ±.009	.072 ±.003 .078 ±.003 .082 ±.003 .087 ±.003 .097 ±.003		
-910 -911 -912 -913 -914 -916	11/16 3/4 13/16 7/8 1	.755 ±.009 .863 ±.009 .924 ±.009 .986 ±.010 1.047 ±.010 1.171 ±.010	.097 ±.003 .116 ±.004 .116 ±.004 .116 ±.004 .116 ±.004		
-918 -920 -924 -928 -932	1 1/8 1 1/4 1 1/2 1 3/4 2	1.355 ±.012 1.475 ±.014 1.720 ±.014 2.090 ±.018 2.337 ±.018	.116 ±.004 .118 ±.004 .118 ±.004 .118 ±.004 .118 ±.004		

^{*}Please check the latest standard for current version.

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