AS-568B Standard O-Rings Quick Reference Chart



General Applications

Apple O-Rings are available in a choice of seven basic materials (1) each in a range of optional Durometer (Shore A) Hardnesses. Other materials available upon request.

Buna-N: In the Buna-N family, you will find compounds which are ideally suited for oil 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 which are excellent as static seals in extreme temperature conditions.

Cast Polyurethane: In the Cast Polyurethane family, you will find compounds which are used predominantly in high hydraulic pressure applications and situations where highly stressed parts are subject to wear.

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 which 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 which make-up seals that are unparalleled for aerospace fuel systems and auto fuel emission control systems. All materials are compounded under stringent quality control for uniformity of physical properties, and to meet or exceed Government, Military, Space Program, Automotive, F.D.A., Industrial and Commercial specifications.

To Determine Material:

- Determine end use: static (stationary) or dynamic (moving).
- 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.
- 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.
- Economy: see General Properties chart located in the Apple Seal Design Guide for most economical choice when several materials will do.

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	Description
Buna-N (Nitrile) (NBR)	BN	40 thru 90	-40 to +250° F (-40 to +121° C) Dry Heat Only	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, with 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	-60 to +300° F (-51 to +150° C) Dry Heat Only	Featuring 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.
Silicone (MQ; PMQ; VMQ; PVMQ)	SL	25 thru 80	-75 to +450° F (-59.5 to +232° C) Dry Heat Only	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.
Cast Polyurethane	СР	70 & 90	-60 to +225° F (-51 to +107° C) Dry Heat Only	Outstanding in abrasion resistance, tensile strength, and low friction qualities. Cast Polyurethane compounds feature excellent resistance to mineral-based oils and petroleum products, aliphatic solvents, alcohols and ether.
Neoprene® (Chloroprene) (CR)	CR	40 thru 90	-45 to +250° F (-43 to +107° C) Dry Heat Only	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	50 thru 95	-20 to +400° F (-29 to +204°C) Dry Heat Only	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.
Fluorosilicone (FVMQ)	FS	50 thru 80	-75 to +400° F (-59.5 to +204° C) Dry Heat Only	Combining 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.

Every Standard AS-568B Size in Stock:

Listed in inches. Includes all standard I.D.'s from 1/32" to 26," 0.D.'s from 3/32" to 26 1/2" and Cross Sections (widths) from 1/32" to 1/4." 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-568B Uniform Numbering System (Order by a single number).

Choice of Seven 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.)

Standard O-Rings

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, silicon 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-568B Numbering System, indicating precise I.D., O.D. and Width dimensions of O-Rings in one ordering number.

Seal Types & Gland Design

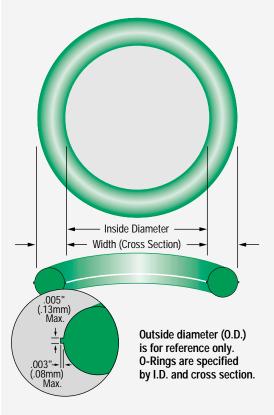
How to Determine O-Ring Size*

For sequence in ordering: 1. Size (catalog number) 2. Durometer and Material 3. Quantity

Example:

110 – 70SL – 10,000 (size) (durometer and material)(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.



Eccentricity Max.

.002

.004

.008

Gland Depth			So	queeze		al Clearance	Groove Width $\pm .005$			Groove Width ±.005		dius	
		Radial Axial		x.	No Backup	One Backup	Two Backup	Groove Radius					
Radial	Axial	Inches	%	Inches	%	Dia	Rings	Ring	Rings	Gre	1		
.049055	.045050	.012014	18-19	.017028	25.5-38.5	.004	.095	.150	.208	.005015			
.080086	.072080	.014026	13.5-25	.020034	20-32	.005	.140	.182	.244	.005020			
.112118	.100110	.017031	12.5-29	.025043	18.5-30	.006	.180	.217	.296	.005030			
.176184	.165175	.021039	10-18	.030050	14.5-23	.006	.280	.333	.423	.005050			
.225235	.220230	.034056	12.5-20	.039061	14.5-21.5	.007	.370	.435	.574	.005060	.(

O-Ring Gland Design For Dynamic Seals

ion	th	Squee	ze	al Cleara	Groove Width ± .005			dius	iy Max.
0-Ring Cross Section	Gland Depth	Inches	%	Diametrical Cleara Max.	No Backup Rings	One Backup Ring	Two Backup Rings	Groove Radius	Eccentricity Max.
.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	.005/.060	.008

O-Ring Gland Design For Static Seals

0-Ring Cross Section

.070

.103 .139

.210 .275

AS-568B No.	No	minal Referer	nce	Actual Dimensions		
AS-5(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	$\begin{array}{c} .029 \pm .004 \\ .070 \pm .004 \\ .042 \pm .004 \\ .056 \pm .004 \\ .070 \pm .005 \end{array}$	$\begin{array}{c} .040 \pm .003 \\ .040 \pm .003 \\ .050 \pm .003 \\ .060 \pm .003 \\ .070 \pm .003 \end{array}$	
-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	$\begin{array}{c} .101 \pm .005 \\ .114 \pm .005 \\ .145 \pm .005 \\ .176 \pm .005 \\ .208 \pm .005 \end{array}$	$\begin{array}{c} .070 \pm .003 \\ .070 \pm .003 \end{array}$	
-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	$\begin{array}{c} .551 \pm .007 \\ .614 \pm .009 \\ .676 \pm .009 \\ .739 \pm .009 \\ .801 \pm .009 \end{array}$	$\begin{array}{c} .070 \pm .003 \\ .070 \pm .003 \end{array}$	
-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	$\begin{array}{c} .864 \pm .009 \\ .926 \pm .009 \\ .989 \pm .010 \\ 1.051 \pm .010 \\ 1.114 \pm .010 \end{array}$	$\begin{array}{c} .070 \pm .003 \\ .070 \pm .003 \end{array}$	
-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	$\begin{array}{c} .070 \pm .003 \\ .070 \pm .003 \end{array}$	
-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	$\begin{array}{c} 2.239 \pm .018 \\ 2.364 \pm .018 \\ 2.489 \pm .018 \\ 2.614 \pm .020 \\ 2.739 \pm .020 \end{array}$	$\begin{array}{c} .070 \pm .003 \\ .070 \pm .003 \end{array}$	
-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 1/16	$\begin{array}{c} 2.864 \pm .020 \\ 2.989 \pm .024 \\ 3.239 \pm .024 \\ 3.489 \pm .024 \\ 3.739 \pm .027 \end{array}$	$\begin{array}{c} .070 \pm .003 \\ .070 \pm .003 \end{array}$	
-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	$\begin{array}{c} 3.989 \pm .027 \\ 4.239 \pm .030 \\ 4.489 \pm .030 \\ 4.739 \pm .030 \\ 4.989 \pm .037 \end{array}$	$\begin{array}{c} .070 \pm .003 \\ .070 \pm .003 \end{array}$	
-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	$\begin{array}{c} 5.239 \pm .037 \\ .049 \pm .005 \\ .081 \pm .005 \\ .112 \pm .005 \\ .143 \pm .005 \end{array}$	$\begin{array}{c} .070 \pm .003 \\ .103 \pm .003 \end{array}$	
-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	$.424 \pm .005$ $.487 \pm .005$ $.549 \pm .005$ $.612 \pm .009$ $.674 \pm .009$	$\begin{array}{c} .103 \pm .003 \\ .103 \pm .003 \end{array}$	
-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 3/32	$.737 \pm .009$ $.799 \pm .010$ $.862 \pm .010$ $.924 \pm .010$ $.987 \pm .010$	$\begin{array}{c} .103 \pm .003 \\ .103 \pm .003 \end{array}$	
-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	$\begin{array}{c} .103 \pm .003 \\ .103 \pm .003 \end{array}$	
-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	$\begin{array}{c} 1.362 \pm .012 \\ 1.424 \pm .012 \\ 1.487 \pm .012 \\ 1.549 \pm .015 \\ 1.612 \pm .015 \end{array}$	$\begin{array}{c} .103 \pm .003 \\ .103 \pm .003 \end{array}$	
-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	$\begin{array}{c} 1.987 \pm .017 \\ 2.050 \pm .017 \\ 2.112 \pm .017 \\ 2.175 \pm .017 \\ 2.237 \pm .017 \end{array}$	$\begin{array}{c} .103 \pm .003 \\ .103 \pm .003 \end{array}$	
-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	$\begin{array}{c} 2.300 \pm .020 \\ 2.362 \pm .020 \\ 2.425 \pm .020 \\ 2.487 \pm .020 \\ 2.550 \pm .020 \end{array}$	$\begin{array}{c} .103 \pm .003 \\ .103 \pm .003 \end{array}$	

AS-568B No.	No	minal Referer	nce	Actual Dimensions			
4S-5(I.D.	0.D.	Width	I.D. Tol.	W. Tol.		
-146	2 5/8	2 13/16	3/32	2.612 ± .020	.103 ± .003		
-147 -148	2 11/16 2 3/4	2 7/8 2 15/16	3/32 3/32	2.675 ± .022 2.737 ± .022	.103 ± .003 .103 ± .003		
-149 -150	2 13/16 2 7/8	3 3 1/16	3/32 3/32	2.800 ± .022 2.862 ± .022	.103 ± .003 .103 ± .003		
-151	3	3 3/16	3/32	2.987 ± .022	.103 ± .003		
-152 -153	3 1/4 3 1/2	3 7/16 3 11/16	3/32 3/32	3.237 ± .024 3.487 ± .024	.103 ± .003 .103 ± .003		
-154 -155	3 3/4 4	3 15/16 4 3/16	3/32 3/32	3.737 ± .028 3.987 ± .028	.103 ± .003 .103 ± .003		
-155	4 1/4	4 3/16	3/32	3.987 ± .028 4.237 ± .030	.103 ± .003		
-157 -158	4 1/2 4 3/4	4 11/16 4 15/16	3/32 3/32	4.487 ± .030 4.737 + .030	.103 ± .003 .103 ± .003		
-150 -159 -160	5 5 51/4	5 3/16 5 7/16	3/32	4.987 ± .035	.103 ± .003		
-161	5 1/4	5 11/16	3/32	5.237 ± .035 5.487 ± .035	.103 ± .003 .103 ± .003		
-162 -163	5 3/4	5 15/16 6 3/16	3/32 3/32	5.737 ± .035 5.987 ± .035	.103 ± .003 .103 ± .003		
-164	6 1/4	6 7/16	3/32	6.237 ± .040	.103 ± .003		
-165 -166	6 1/2 6 3/4	6 11/16 6 15/16	3/32 3/32	6.487 ± .040 6.737 ± .040	.103 ± .003 .103 ± .003		
-167 -168	7 7 7 1/4	7 3/16 7 7/16	3/32 3/32	6.987 ± .040 7.237 ± .045	.103 ± .003 .103 ± .003 .103 ± .003		
-169	7 1/2	7 11/16	3/32	7.487 ± .045	.103 ± .003		
-170 -171	7 3/4	7 15/16 8 3/16	3/32	7.737 ± .045 7.987 ± .045	.103 ± .003 .103 ± .003		
-172 -173	8 1/4 8 1/2	8 7/16 8 11/16	3/32 3/32	8.237 ± .050	.103 ± .003 .103 ± .003		
-174	8 3/4	8 15/16	3/32	8.487 ± .050 8.737 ± .050	.103 ± .003		
-175 -176	9 9 1/4	9 3/16 9 7/16	3/32 3/32	8.987 ± .050 9.237 ± .055	.103 ± .003 .103 ± .003		
-177	9 1/2	9 11/16	3/32	9.487 ± .055	.103 ± .003		
-178 -201	9 3/4 3/16	9 15/16 7/16	3/32 1/8	9.737 ± .055 .171 ± .005	.103 ± .003 .139 ± .004		
-202 -203	1/4 5/16	1/2 9/16	1/8	.234 ± .005 .296 ± .005	.139 ± .004 .139 ± .004		
-204	3/8	5/8	1/8	.359 ± .005	.139 ± .004		
-205 -206	7/16	11/16 3/4	1/8 1/8	.421 ± .005 .484 ± .005	.139 ± .004 .139 ± .004		
-207 -208	9/16 5/8	13/16 7/8	1/8	.546 ± .007 .609 ± .009	.139 ± .004 .139 ± .004		
-209	11/16	15/16	1/8	.671 ± .009	.139 ± .004		
-210 -211	3/4 13/16	1 1 1/16	1/8 1/8	.734 ± .010 .796 ± .010	.139 ± .004 .139 ± .004		
-212 -213	7/8	1 1/8	1/8	.859 ± .010 .921 ± .010	.139 ± .004 .139 ± .004		
-213 -214 -215	1	1 1/4	1/8	.984 ± .010	.139 ± .004		
-216	1 1/16 1 1/8	1 3/8	1/8 1/8	1.046 ± .010 1.109 ± .012	.139 ± .004 .139 ± .004		
-217 -218	1 3/16 1 1/4	1 7/16	1/8	1.171 ± .012 1.234 ± .012	.139 ± .004 .139 ± .004		
-219 -220	1 5/16 1 3/8	1 9/16 1 5/8	1/8 1/8	1.296 ± .012 1.359 ± .012	.139 ± .004 .139 ± .004 .139 ± .004		
-221	1 7/16	1 11/16	1/8	1.421 ± .012	.139 ± .004		
-222 -223	1 1/2 1 5/8	1 3/4 1 7/8	1/8 1/8	1.484 ± .015 1.609 ± .015	.139 ± .004 .139 ± .004		
-224 -225	1 3/4 1 7/8	2 2 1/8	1/8 1/8	1.734 ± .015 1.859 ± .018	.139 ± .004 .139 ± .004		
-226	2	2 1/4	1/8	1.984 ± .018	.139 ± .004		
-227 -228	2 1/8 2 1/4	2 3/8 2 1/2	1/8	2.109 ± .018 2.234 ± .020	.139 ± .004 .139 ± .004		
-229	2 3/8 2 1/2	2 5/8	1/8	2.359 ± .020 2.484 ± .020	.139 ± .004 .139 ± .004 .139 ± .004		
-230 -231	2 5/8	2 3/4 2 7/8	1/8 1/8	2.609 ± .020	.139 ± .004		
-232 -233	2 3/4 2 7/8	3 3 1/8	1/8 1/8	2.734 ± .024 2.859 ± .024	.139 ± .004 .139 ± .004		
-234 -235	3 3 1/8	3 1/4 3 3/8	1/8 1/8	2.984 ± .024 3.109 ± .024	.139 ± .004 .139 ± .004		
-236 -237	3 1/4 3 3/8	3 1/2 3 5/8	1/8 1/8	3.234 ± .024	.139 ± .004 .139 ± .004 .139 ± .004		
-237	3 1/2	3 3/4	1/8	3.359 ± .024 3.484 ± .024	.139 ± .004		
-239 -240	3 5/8 3 3/4	3 7/8 4	1/8 1/8	3.609 ± .028 3.734 ± .028	.139 ± .004 .139 ± .004		
-241 -242	3 7/8	4 1/8 4 1/4	1/8 1/8	3.859 ± .028 3.984 ± .028	.139 ± .004 .139 ± .004		
-243	4 1/8	4 3/8	1/8	4.109 ± .028	.139 ± .004		
-244 -245	4 1/4 4 3/8	4 1/2 4 5/8	1/8 1/8	4.234 ± .030 4.359 ± .030	.139 ± .004 .139 ± .004		
-246 -247	4 1/2 4 5/8	4 3/4 4 7/8	1/8 1/8	4.484 ± .030 4.609 ± .030	.139 ± .004 .139 ± .004		
-247	4 3/8	5	1/8	4.009 ± .030 4.734 ± .030	.139 ± .004		
-249 -250	4 7/8	5 1/8 5 1/4	1/8 1/8	4.859 ± .035 4.984 ± .035	.139 ± .004 .139 ± .004		
-251 -252	5 1/8 5 1/4	5 3/8 5 1/2	1/8 1/8	5.109 ± .035 5.234 ± .035	.139 ± .004 .139 ± .004		
-253	5 3/8	5 5/8	1/8	5.359 ± .035	.139 ± .004		
-254 -255	5 1/2 5 5/8	5 3/4 5 7/8	1/8 1/8	5.484 ± .035 5.609 ± .035	.139 ± .004 .139 ± .004		
-256 -257	5 3/4 5 7/8	6 6 1/8	1/8 1/8	5.734 ± .035 5.859 ± .035	.139 ± .004 .139 ± .004 .139 ± .004		
-258	6	6 1/4	1/8	5.984 ± .035	.139 ± .004		
-259 -260	6 1/4 6 1/2	6 1/2 6 3/4	1/8 1/8	6.234 ± .040 6.484 ± .040	.139 ± .004 .139 ± .004		
-261 -262	6 3/4 7	7 7 7 1/4	1/8 1/8	6.734 ± .040 6.984 ± .040	.139 ± .004 .139 ± .004		
	· ·	7.0-1		0.704 ± .040			

AS-568B No.	No	minal Referer	nce	Actual Dimensions			
4S-56	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 1/8	$\begin{array}{c} 7.234 \pm .045 \\ 7.484 \pm .045 \\ 7.734 \pm .045 \\ 7.984 \pm .045 \\ 8.234 \pm .050 \end{array}$.139 ± .004 .139 ± .004 .139 ± .004 .139 ± .004 .139 ± .004 .139 ± .004		
-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 1/8	$\begin{array}{c} 8.484 \pm .050 \\ 8.734 \pm .050 \\ 8.984 \pm .050 \\ 9.234 \pm .055 \\ 9.484 \pm .055 \end{array}$	$\begin{array}{c} .139 \pm .004 \\ .139 \pm .004 \end{array}$		
-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 1/8	$9.734 \pm .055$ $9.984 \pm .055$ $10.484 \pm .055$ $10.984 \pm .065$ $11.484 \pm .065$	$\begin{array}{c} .139 \pm .004 \\ .139 \pm .004 \end{array}$		
-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 1/8	11.984 ± .065 12.984 ± .065 13.984 ± .065 14.984 ± .065 15.955 ± .075	$\begin{array}{c} .139 \pm .004 \\ .139 \pm .004 \end{array}$		
-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	16.955 ± .080 17.955 ± .085 .412 ± .005 .475 ± .005 .537 ± .007	$\begin{array}{c} .139 \pm .004 \\ .139 \pm .004 \\ .210 \pm .005 \\ .210 \pm .005 \\ .210 \pm .005 \\ .210 \pm .005 \end{array}$		
-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 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	1.225 ± .012 1.287 ± .012 1.350 ± .012 1.475 ± .015 1.600 ± .015	$\begin{array}{c} .210 \pm .005 \\ .210 \pm .005 \end{array}$		
-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 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 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 3/16	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	$\begin{array}{c} 4.225 \pm .030 \\ 4.350 \pm .030 \\ 4.475 \pm .030 \\ 4.600 \pm .030 \\ 4.725 \pm .030 \end{array}$	$.210 \pm .005$ $.210 \pm .005$ $.210 \pm .005$ $.210 \pm .005$ $.210 \pm .005$ $.210 \pm .005$		
-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 3/16	$\begin{array}{r} 4.850 \pm .030 \\ 4.975 \pm .037 \\ 5.100 \pm .037 \\ 5.225 \pm .037 \\ 5.350 \pm .037 \end{array}$	$\begin{array}{c} .210 \pm .005 \\ .210 \pm .005 \end{array}$		
-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	$\begin{array}{c} 6.225 \pm .040 \\ 6.475 \pm .040 \\ 6.725 \pm .040 \\ 6.975 \pm .040 \\ 7.225 \pm .045 \end{array}$.210 ± .005 .210 ± .005 .210 ± .005 .210 ± .005 .210 ± .005 .210 ± .005		
-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	$\begin{array}{c} 8.725 \pm .050 \\ 8.975 \pm .050 \\ 9.225 \pm .055 \\ 9.475 \pm .055 \\ 9.725 \pm .055 \end{array}$	$\begin{array}{c} .210 \pm .005 \\ .210 \pm .005 \end{array}$		
-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	$\begin{array}{c} 9.975 \pm .055 \\ 10.475 \pm .060 \\ 10.975 \pm .060 \\ 11.475 \pm .065 \\ 11.975 \pm .065 \end{array}$	$\begin{array}{c} .210 \pm .005 \\ .210 \pm .005 \end{array}$		

AS-568B No.	No	minal Referer	ice	Actual Dimensions		
AS-56	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 3/16	$\begin{array}{r} 17.955 \pm .085 \\ 18.955 \pm .090 \\ 19.955 \pm .095 \\ 20.955 \pm .095 \\ 21.955 \pm .095 \\ 21.955 \pm .100 \end{array}$	$\begin{array}{c} .210 \pm .005 \\ .210 \pm .005 \end{array}$	
-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	$\begin{array}{c} 22.940 \pm .105 \\ 23.940 \pm .110 \\ 24.940 \pm .115 \\ 25.940 \pm .120 \\ 4.475 \pm .033 \end{array}$	$\begin{array}{c} .210 \pm .005 \\ .275 \pm .006 \end{array}$	
-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	$\begin{array}{c} 5.225 \pm .037 \\ 5.350 \pm .037 \\ 5.475 \pm .037 \\ 5.600 \pm .037 \\ 5.725 \pm .037 \end{array}$	$\begin{array}{c} .275 \pm .006 \\ .275 \pm .006 \end{array}$	
-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	$\begin{array}{c} 8.475 \pm .055 \\ 8.975 \pm .055 \\ 9.475 \pm .055 \\ 9.975 \pm .055 \\ 10.475 \pm .060 \end{array}$	$\begin{array}{c} .275 \pm .006 \\ .275 \pm .006 \end{array}$	
-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	$\begin{array}{c} 10.975 \pm .060 \\ 11.475 \pm .060 \\ 11.975 \pm .060 \\ 12.475 \pm .060 \\ 12.975 \pm .060 \end{array}$	$\begin{array}{c} .275 \pm .006 \\ .275 \pm .006 \end{array}$	
-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	$\begin{array}{r} 13.475 \pm .070 \\ 13.975 \pm .070 \\ 14.475 \pm .070 \\ 14.975 \pm .070 \\ 15.475 \pm .070 \end{array}$	$\begin{array}{r} .275 \pm .006 \\ .275 \pm .006 \end{array}$	
-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	$\begin{array}{c} 18.455 \pm .085 \\ 18.955 \pm .090 \\ 19.455 \pm .090 \\ 19.955 \pm .090 \\ 20.955 \pm .090 \end{array}$	$\begin{array}{c} .275 \pm .006 \\ .275 \pm .006 \end{array}$	
-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	$\begin{array}{c} 21.955 \pm .100 \\ 22.940 \pm .105 \\ 23.940 \pm .110 \\ 24.940 \pm .115 \\ 25.940 \pm .120 \end{array}$	$\begin{array}{c} .275 \pm .006 \\ .275 \pm .006 \\ .275 \pm .006 \\ .275 \pm .006 \\ .275 \pm .006 \end{array}$	
Standard	0-Ring B	oss Gask	ets For St	traight		

Standard O-Ring Boss Gaskets For Straight Thread Tube Fittings

AS-568B No.	Tube Size (0.D.)	Actual Dimensions		
AS	Fractional	I.D. Tol.	W. Tol.	
-901	3/32	$\begin{array}{c} .185 \pm .005 \\ .239 \pm .005 \\ .301 \pm .005 \\ .351 \pm .005 \\ .414 \pm .005 \end{array}$.056 ±.003	
-902	1/8		.064 ±.003	
-903	3/16		.064 ±.003	
-904	1/4		.072 ±.003	
-905	5/16		.072 ±.003	
-906	3/8	.468 ±.005	.078 ±.003	
-907	7/16	.530 ±.005	.082 ±.003	
-908	1/2	.644 ±.009	.087 ±.003	
-909	9/16	.706 ±.009	.097 ±.003	
-910	5/8	.755 ±.009	.097 ±.003	
-911	11/16	.863 ±.009	.116 ±.004	
-912	3/4	.924 ±.009	.116 ±.004	
-913	13/16	.986 ±.010	.116 ±.004	
-914	7/8	1.047 ±.010	.116 ±.004	
-916	1	1.171 ±.010	.116 ±.004	
-918 -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 .118 ±.004	



Apple is the One Source for All Your Sealing Needs.

Apple Rubber Products stocks every AS-568B and most common metric sizes, plus a wide variety of non-standard, mil spec and government standard O-rings. Standard sizes include I.D.'s from 1/32" to 26," O.D.'s from 3/32" to 26 1/2," and cross sections from 1/32" to 1/4."

Apple offers the widest range of sizes in the industry, from our exclusive MicrOrings,[™] available as small as .008" I.D. We also have a large tooling inventory to eliminate production delays and save you tooling costs. In addition, Apple can custom-engineer O-rings and seals for prototypes or full production runs.

To top it off, 93% of our orders are shipped within 24 hours. When you call Apple, you deal direct with the manufacturer. Our experienced staff provides complete and comprehensive service to help you get the correct O-ring for your application.

For more information or to order call toll-free: 1-800-828-7745

Or write: Apple Rubber Products 310 Erie Street Lancaster, New York 14086 Tel: (716) 684-6560 • FAX: (716) 684-8302 email: info@applerubber.com www.applerubber.com

The Full Line of Quality Apple Rubber Products

Products:

- O-Rings Standards, Metrics, MicrOrings[™] MacrOrings[™]
- LIM (Liquid Injection Molding)
- Composite Seals
 (Rubber Bonded to Plastic or Metal)
- Custom Molded Seals
- Custom Molded Shapes
- FilterSeal[™]
- Extrusions
- Military Specs
- Standard and Exotic Materials
- Services:
- Design Capabilities
- Prototyping and Production Runs
- Full quality control laboratory

