

Standard O-Rings

AS568 Simplified Reference: AS568 is the SAE Aerospace Size Standard for o-rings. The standard purpose is to specify inside diameters, cross-sections, tolerances, and size identification (dash numbers) for o-rings. Apple Rubber catalog numbers are identical to the AS568 number system. All sizes are listed by ascending inside diameter (I.D.) in fractional and decimal sizes.

How to order

Apple Rubber o-rings are specified by three characteristics: size, hardness, and material.

Size: Standards are specified by their AS568 dash number. O-Ring size is defined by inside diameter and cross-section (width) and is listed in both fractional and decimal dimensions with tolerances. The standards range in I.D.'s from .029" to 26," and cross sections (widths) from .040" to .275". Although we only include the AS568 standard sizes in this brochure, Apple Rubber has a vast inventory of non-standard and metric sizes. Visit our website at applerubber.com and use the O-Ring Size Search Tool to view our inventory.

Hardness: This is specified by a two-digit Shore A durometer number, ranging from 20 (soft) to 90 (hard), depending on the type of elastomer. Our standard durometer is 70 Shore A, except for Viton™ which is 75 Shore A. Standard durometer tolerance is ±5.

Material: Our standard range of materials is designated by a two-letter abbreviation for each elastomer. See the Materials table on the next page for designations and further discussions of materials.

PROVIDE THE FOLLOWING WHEN ORDERING

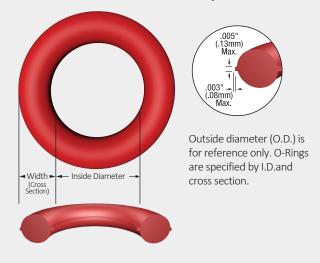
- 1 Quantity of o-rings
- 2 Size by AS568 dash number, or I.D. and C.S., if ordering a non-standard
- 3 Material by hardness and two-digit material abbreviation

EXAMPLES:

Standard O-Ring – If ordering 10,000 pieces of an AS568-110 in 70 durometer Silicone your order would read: 10,000 AS568-110 70SL

Non-Standard – If ordering 25,000 pieces with an internal diameter of .118" and a cross section of .039" 70 durometer Buna-N your order would read: $25,000.118 \text{ I.D.} \times .039 \text{ C.S.} 70BN$

Flash for standard sizes is 0.005" thickness by 0.003" extension.



TO PLACE ORDERS OR QUOTATIONS

Phone: (716) 684-6560 Fax: (716) 684-8302 E-mail: info@applerubber.com Online: applerubber.com. For complete list of o-ring seal sizes, please use the O-Ring Size Search Tool online at applerubber.com.

Seal Types and Gland Design

O-Ring Gland Design for Dynamic Seals

0-Ring		Squeeze		eeze Diametrical Groove Width. ±.005					
Cross Section	Gland Depth	Inches	%	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

	Squeeze						6							
0-Ring Cross	Gland	Depth	Radi	al > o <	Axia	al Š	Diametrical Clearance	Groo	ve Width. :	±.005	Groove	Eccen- tricity		
Section			Inches %		lushes of				Max.	No One Backup Backup		Two Backup	Radius	Max.
	Radial	Axial	Inches	76	Inches	%		Rings	Ring	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		

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.

Nitrile/Buna-N: In the Nitrile family, you will find excellent compounds for fuel and oil applications. For better ozone resistance, try Hydrogenated Nitrile (HNBR).

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 materials are compounded under stringent quality control for uniformity of physical property and meet or exceed military/aerospace, FDA/ Medical, UL, automotive, and industrial 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.
- Medical applications: make sure an Apple representative is aware if medical grade materials 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
Nitrile/Buna-N (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.

^{*}The temperatures listed are general operating range.

AS568	Actual Dimensions		Nor	ninal Refer	ence	AS568	Actual Dii	nensions	Nor	ninal Refere	ence
No.	I.D. Tol.	W. Tol.	I.D.	O.D.	Width	No.	I.D. Tol.	W. Tol.	I.D.	O.D.	Width
-001	.029 ± .004	.040 ± .003	1/32	3/32	1/32	-050	5.239 ± .037	.070 ± .003	5 1/4	5 3/8	1/16
-001 1/2	.070 ± .004	.040 ± .003	1/16	1/8	1/32	-102	.049 ± .005	.103 ± .003	1/16	1/4	3/32
-002	.042 ± .004	.050 ± .003	3/64	9/64	3/64	-103	.081 ± .005	.103 ± .003	3/32	9/32	3/32
-003	.056 ± .004	.060 ± .003	1/16	3/16	1/16	-104	.112 ± .005	.103 ± .003	1/8	5/16	3/32
-004	.070 ± .005	.070 ± .003	5/64	13/64	1/16	-105	.143 ± .005	.103 ± .003	5/32	11/32	3/32
-005	.101 ± .005	.070 ± .003	3/32	7/32	1/16	-106	.174 ± .005	.103 ± .003	3/16	3/8	3/32
-006	.114 ± .005	.070 ± .003	1/8	1/4	1/16	-107	.206 ± .005	.103 ± .003	7/32	13/32	3/32
-007	.145 ± .005	.070 ± .003	5/32	9/32	1/16	-108	.237 ± .005	.103 ± .003	1/4	7/16	3/32
-008	.176 ± .005	.070 ± .003	3/16	5/16	1/16	-109	.299 ± .005	.103 ± .003	5/16	1/2	3/32
-009	.208 ± .005	.070 ± .003	7/32	11/32	1/16	-110	.362 ± .005	.103 ± .003	3/8	9/16	3/32
-010	.239 ± .005	.070 ± .003	1/4	3/8	1/16	-111	.424 ± .005	.103 ± .003	7/16	5/8	3/32
-011	.301 ± .005	.070 ± .003	5/16	7/16	1/16	-112	.487 ± .005	.103 ± .003	1/2	11/16	3/32
-012	.364 ± .005	.070 ± .003	3/8	1/2	1/16	-113	.549 ± .007	.103 ± .003	9/16	3/4	3/32
-013	.426 ± .005	.070 ± .003	7/16	9/16	1/16	-114	.612 ± .009	.103 ± .003	5/8	13/16	3/32
-014	.489 ± .005	.070 ± .003	1/2	5/8	1/16	-115	.674 ± .009	.103 ± .003	11/16	7/8	3/32
-015	.551 ± .007	.070 ± .003	9/16	11/16	1/16	-116	.737 ± .009	.103 ± .003	3/4	15/16	3/32
-016	.614 ± .009	.070 ± .003	5/8	3/4	1/16	-117	.799 ± .010	.103 ± .003	13/16	1	3/32
-017	.676 ± .009	.070 ± .003	11/16	13/16	1/16	-118	.862 ± .010	.103 ± .003	7/8	1 1/16	3/32
-018	.739 ± .009	.070 ± .003	3/4	7/8	1/16	-119	.924 ± .010	.103 ± .003	15/16	1 1/8	3/32
-019	.801 ± .009	.070 ± .003	13/16	15/16	1/16	-120	.987 ± .010	.103 ± .003	1	1 3/16	3/32
-020	.864 ± .009	.070 ± .003	7/8	1	1/16	-121	1.049 ± .010	.103 ± .003	1 1/16	1 1/4	3/32
-021	.926 ± .009	.070 ± .003	15/16	1 1/16	1/16	-122	1.112 ± .010	.103 ± .003	1 1/8	1 5/16	3/32
-022	.989 ± .010	.070 ± .003	1	1 1/8	1/16	-123	1.174 ± .012	.103 ± .003	1 3/16	1 3/8	3/32
-023	1.051 ± .010	.070 ± .003	1 1/16	1 3/16	1/16	-124	1.237 ± .012	.103 ± .003	1 1/4	1 7/16	3/32
-024	1.114 ± .010	.070 ± .003	1 1/8	1 1/4	1/16	-125	1.299 ± .012	.103 ± .003	1 5/16	1 1/2	3/32
-025	1.176 ± .011	.070 ± .003	1 3/16	1 5/16	1/16	-126	1.362 ± .012	.103 ± .003	1 3/8	1 9/16	3/32
-026	1.239 ± .011	.070 ± .003	1 1/4	1 3/8	1/16	-127	1.424 ± .012	.103 ± .003	1 7/16	1 5/8	3/32
-027	1.301 ± .011	$.070 \pm .003$	1 5/16	1 7/16	1/16	-128	1.487 ± .012	.103 ± .003	1 1/2	1 11/16	3/32
-028	1.364 ± .013	.070 ± .003	1 3/8	1 1/2	1/16	-129	1.549 ± .015	.103 ± .003	1 9/16	1 3/4	3/32
-029	1.489 ± .013	.070 ± .003	1 1/2	1 5/8	1/16	-130	1.612 ± .015	.103 ± .003	1 5/8	1 13/16	3/32
-030	1.614 ± .013	$.070 \pm .003$	1 5/8	1 3/4	1/16	-131	1.674 ± .015	.103 ± .003	1 11/16	1 7/8	3/32
-031	1.739 ± .015	$.070 \pm .003$	1 3/4	1 7/8	1/16	-132	1.737 ± .015	.103 ± .003	1 3/4	1 15/16	3/32
-032	1.864 ± .015	$.070 \pm .003$	1 7/8	2	1/16	-133	1.799 ± .015	.103 ± .003	1 13/16	2	3/32
-033	1.989 ± .018	$.070 \pm .003$	2	2 1/8	1/16	-134	1.862 ± .015	.103 ± .003	1 7/8	2 1/16	3/32
-034	2.114 ± .018	$.070 \pm .003$	2 1/8	2 1/4	1/16	-135	1.925 ± .017	.103 ± .003	1 15/16	2 1/8	3/32
-035	2.239 ± .018	$.070 \pm .003$	2 1/4	2 3/8	1/16	-136	1.987 ± .017	.103 ± .003	2	2 3/16	3/32
-036	2.364 ± .018	$.070 \pm .003$	2 3/8	2 1/2	1/16	-137	2.050 ± .017	.103 ± .003	2 1/16	2 1/4	3/32
-037	2.489 ± .018	$.070 \pm .003$	2 1/2	2 5/8	1/16	-138	2.112 ± .017	.103 ± .003	2 1/8	2 5/16	3/32
-038	2.614 ± .020	$.070 \pm .003$	2 5/8	2 3/4	1/16	-139	2.175 ± .017	.103 ± .003	2 3/16	2 3/8	3/32
-039	2.739 ± .020	$.070 \pm .003$	2 3/4	2 7/8	1/16	-140	2.237 ± .017	.103 ± .003	2 1/4	2 7/16	3/32
-040	2.864 ± .020	$.070 \pm .003$	2 7/8	3	1/16	-141	2.300 ± .020	.103 ± .003	2 5/16	2 1/2	3/32
-041	2.989 ± .024	$.070 \pm .003$	3	3 1/8	1/16	-142	2.362 ± .020	.103 ± .003	2 3/8	2 9/16	3/32
-042	3.239 ± .024	$.070 \pm .003$	3 1/4	3 3/8	1/16	-143	2.425 ± .020	.103 ± .003	2 7/16	2 5/8	3/32
-043	3.489 ± .024	$.070 \pm .003$	3 1/2	3 5/8	1/16	-144	2.487 ± .020	.103 ± .003	2 1/2	2 11/16	3/32
-044	3.739 ± .027	$.070 \pm .003$	3 3/4	3 7/8	1/16	-145	2.550 ± .020	.103 ± .003	2 9/16	2 3/4	3/32
-045	3.989 ± .027	.070 ± .003	4	4 1/8	1/16	-146	2.612 ± .020	.103 ± .003	2 5/8	2 13/16	3/32
-046	4.239 ± .030	.070 ± .003	4 1/4	4 3/8	1/16	-147	2.675 ± .022	.103 ± .003	2 11/16	2 7/8	3/32
-047	4.489 ± .030	$.070 \pm .003$	4 1/2	4 5/8	1/16	-148	2.737 ± .022	.103 ± .003	2 3/4	2 15/16	3/32
-048	4.739 ± .030	$.070 \pm .003$	4 3/4	4 7/8	1/16	-149	2.800 ± .022	.103 ± .003	2 13/16	3	3/32
-049	4.989 ± .037	.070 ± .003	5	5 1/8	1/16	-150	2.862 ± .022	.103 ± .003	2 7/8	3 1/16	3/32

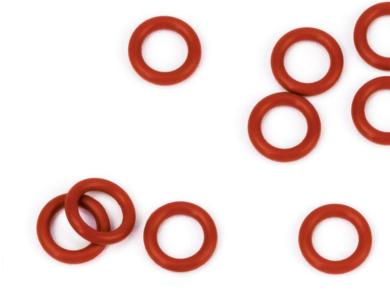
AS568	Actual Di	Actual Dimensions		ninal Refere	ence	AS568	Actual Di	mensions	Nominal Reference		
No.	I.D. Tol.	W. Tol.	I.D.	0.D.	Width	No.	I.D. Tol.	W. Tol.	I.D.	O.D.	Width
-151	2.987 ± .024	.103 ± .003	3	3 3/16	3/32	-223	1.609 ± .015	.139 ± .004	1 5/8	1 7/8	1/8
-152	3.237 ± .024	.103 ± .003	3 1/4	3 7/16	3/32	-224	1.734 ± .015	.139 ± .004	1 3/4	2	1/8
-153	3.487 ± .024	.103 ± .003	3 1/2	3 11/16	3/32	-225	1.859 ± .018	.139 ± .004	1 7/8	2 1/8	1/8
-154	3.737 ± .028	.103 ± .003	3 3/4	3 15/16	3/32	-226	1.984 ± .018	.139 ± .004	2	2 1/4	1/8
-155	3.987 ± .028	.103 ± .003	4	4 3/16	3/32	-227	2.109 ± .018	.139 ± .004	2 1/8	2 3/8	1/8
-156	4.237 ± .030	.103 ± .003	4 1/4	4 7/16	3/32	-228	2.234 ± .020	.139 ± .004	2 1/4	2 1/2	1/8
-157	4.487 ± .030	.103 ± .003	4 1/2	4 11/16	3/32	-229	2.359 ± .020	.139 ± .004	2 3/8	2 5/8	1/8
-158	4.737 ± .030	.103 ± .003	4 3/4	4 15/16	3/32	-230	2.484 ± .020	.139 ± .004	2 1/2	2 3/4	1/8
-159	4.987 ± .035	.103 ± .003	5	5 3/16	3/32	-231	2.609 ± .020	.139 ± .004	2 5/8	2 7/8	1/8
-160	5.237 ± .035	.103 ± .003	5 1/4	5 7/16	3/32	-232	2.734 ± .024	.139 ± .004	2 3/4	3	1/8
-161	5.487 ± .035	.103 ± .003	5 1/2	5 11/16	3/32	-233	2.859 ± .024	.139 ± .004	2 7/8	3 1/8	1/8
-162	5.737 ± .035	.103 ± .003	5 3/4	5 15/16	3/32	-234	2.984 ± .024	.139 ± .004	3	3 1/4	1/8
-163	5.987 ± .035	.103 ± .003	6	6 3/16	3/32	-235	3.109 ± .024	.139 ± .004	3 1/8	3 3/8	1/8
-164	6.237 ± .040	.103 ± .003	6 1/4	6 7/16	3/32	-236	3.234 ± .024	.139 ± .004	3 1/4	3 1/2	1/8
-165	6.487 ± .040	.103 ± .003	6 1/2	6 11/16	3/32	-237	3.359 ± .024	.139 ± .004	3 3/8	3 5/8	1/8
-166	6.737 ± .040	.103 ± .003	6 3/4	6 15/16	3/32	-238	3.484 ± .024	.139 ± .004	3 1/2	3 3/4	1/8
-167	6.987 ± .040	.103 ± .003	7	7 3/16	3/32	-239	3.609 ± .028	.139 ± .004	3 5/8	3 7/8	1/8
-168	7.237 ± .045	.103 ± .003	7 1/4	7 7/16	3/32	-240	3.734 ± .028	.139 ± .004	3 3/4	4	1/8
-169	7.487 ± .045	.103 ± .003	7 1/2	7 11/16	3/32	-241	3.859 ± .028	.139 ± .004	3 7/8	4 1/8	1/8
-170	7.737 ± .045	.103 ± .003	7 3/4	7 15/16	3/32	-242	3.984 ± .028	.139 ± .004	4	4 1/4	1/8
-171	7.987 ± .045	.103 ± .003	8	8 3/16	3/32	-243	4.109 ± .028	.139 ± .004	4 1/8	4 3/8	1/8
-172	8.237 ± .050	.103 ± .003	8 1/4	8 7/16	3/32	-244	4.234 ± .030	.139 ± .004	4 1/4	4 1/2	1/8
-173	8.487 ± .050	.103 ± .003	8 1/2	8 11/16	3/32	-245	4.359 ± .030	.139 ± .004	4 3/8	4 5/8	1/8
-174	8.737 ± .050	.103 ± .003	8 3/4	8 15/16	3/32	-246	4.484 ± .030	.139 ± .004	4 1/2	4 3/4	1/8
-175	8.987 ± .050	.103 ± .003	9	9 3/16	3/32	-247	4.609 ± .030	.139 ± .004	4 5/8	4 7/8	1/8
-176	9.237 ± .055	.103 ± .003	9 1/4	9 7/16	3/32	-248	4.734 ± .030	.139 ± .004	4 3/4	5	1/8
-177	9.487 ± .055	.103 ± .003	9 1/2	9 11/16	3/32	-249	4.859 ± .035	.139 ± .004	4 7/8	5 1/8	1/8
-178	9.737 ± .055	.103 ± .003	9 3/4	9 15/16	3/32	-250	4.984 ± .035	.139 ± .004	5	5 1/4	1/8
-201	.171 ± .005	.139 ± .004	3/16	7/16	1/8	-251	5.109 ± .035	.139 ± .004	5 1/8	5 3/8	1/8
-202	.234 ± .005	.139 ± .004	1/4	1/2	1/8	-252	5.234 ± .035	.139 ± .004	5 1/4	5 1/2	1/8
-203	.296 ± .005	.139 ± .004	5/16	9/16	1/8	-253	5.359 ± .035	.139 ± .004	5 3/8	5 5/8	1/8
-204	.359 ± .005	.139 ± .004	3/8	5/8	1/8	-254	5.484 ± .035	.139 ± .004	5 1/2	5 3/4	1/8
-205	.421 ± .005	.139 ± .004	7/16	11/16	1/8	-255	5.609 ± .035	.139 ± .004	5 5/8	5 7/8	1/8
-206	.484 ± .005	.139 ± .004	1/2	3/4	1/8	-256	5.734 ± .035	.139 ± .004	5 3/4	6	1/8
-207	.546 ± .007	.139 ± .004	9/16	13/16	1/8	-257	5.859 ± .035	.139 ± .004	5 7/8	6 1/8	1/8
-208	.609 ± .009	.139 ± .004	5/8	7/8	1/8	-258	5.984 ± .035	.139 ± .004	6	6 1/4	1/8
-209	.671 ± .009	.139 ± .004	11/16	15/16	1/8	-259	6.234 ± .040	.139 ± .004	6 1/4	6 1/2	1/8
-210	.734 ± .010	.139 ± .004	3/4	1	1/8	-260	6.484 ± .040	.139 ± .004	6 1/2	6 3/4	1/8
-211	.796 ± .010	.139 ± .004	13/16	1 1/16	1/8	-261	6.734 ± .040	.139 ± .004	6 3/4	7	1/8
-212	.859 ± .010	.139 ± .004	7/8	1 1/8	1/8	-262	6.984 ± .040	.139 ± .004	7	7 1/4	1/8
-213	.921 ± .010	.139 ± .004	15/16	1 3/16	1/8	-263	7.234 ± .045	.139 ± .004	7 1/4	7 1/2	1/8
-214	.984 ± .010	.139 ± .004	1	1 1/4	1/8	-264	7.484 ± .045	.139 ± .004	7 1/2	7 3/4	1/8
-215	1.046 ± .010	.139 ± .004	1 1/16	1 5/16	1/8	-265	7.734 ± .045	.139 ± .004	7 3/4	8	1/8
-216	1.109 ± .012	.139 ± .004	1 1/8	1 3/8	1/8	-266	7.984 ± .045	.139 ± .004	8	8 1/4	1/8
-217	1.171 ± .012	.139 ± .004	1 3/16	1 7/16	1/8	-267	8.234 ± .050	.139 ± .004	8 1/4	8 1/2	1/8
-218	1.234 ± .012	.139 ± .004	1 1/4	1 1/2	1/8	-268	8.484 ± .050	.139 ± .004	8 1/2	8 3/4	1/8
-219	1.296 ± .012	.139 ± .004	1 5/16	1 9/16	1/8	-269	8.734 ± .050	.139 ± .004	8 3/4	9	1/8
-220	1.359 ± .012	.139 ± .004	1 3/8	1 5/8	1/8	-270	8.984 ± .050	.139 ± .004	9	9 1/4	1/8
-221	1.421 ± .012	.139 ± .004	1 7/16	1 11/16	1/8	-271	9.234 ± .055	.139 ± .004	9 1/4	9 1/2	1/8
-222	1.484 ± .015	.139 ± .004	1 1/2	1 3/4	1/8	-272	9.484 ± .055	.139 ± .004	9 1/2	9 3/4	1/8

AS568	Actual Dimensions		Nor	ninal Refere	ence	AS568	Actual Din	nensions	Nor	ninal Refer	ence
No.	I.D. Tol.	W. Tol.	I.D.	O.D.	Width	No.	I.D. Tol.	W. Tol.	I.D.	O.D.	Width
-273	9.734 ± .055	.139 ± .004	9 3/4	10	1/8	-347	4.225 ± .030	.210 ± .005	4 1/4	4 5/8	3/16
-274	9.984 ± .055	.139 ± .004	10	10 1/4	1/8	-348	4.350 ± .030	.210 ± .005	4 3/8	4 3/4	3/16
-275	10.484 ± .055	.139 ± .004	10 1/2	10 3/4	1/8	-349	4.475 ± .030	.210 ± .005	4 1/2	4 7/8	3/16
-276	10.984 ± .065	.139 ± .004	11	11 1/4	1/8	-350	4.600 ± .030	.210 ± .005	4 5/8	5	3/16
-277	11.484 ± .065	.139 ± .004	11 1/2	11 3/4	1/8	-351	4.725 ± .030	.210 ± .005	4 3/4	5 1/8	3/16
-278	11.984 ± .065	.139 ± .004	12	12 1/4	1/8	-352	4.850 ± .030	.210 ± .005	4 7/8	5 1/4	3/16
-279	12.984 ± .065	.139 ± .004	13	13 1/4	1/8	-353	4.975 ± .037	.210 ± .005	5	5 3/8	3/16
-280	13.984 ± .065	.139 ± .004	14	14 1/4	1/8	-354	5.100 ± .037	.210 ± .005	5 1/8	5 1/2	3/16
-281	14.984 ± .065	.139 ± .004	15	15 1/4	1/8	-355	5.225 ± .037	.210 ± .005	5 1/4	5 5/8	3/16
-282	15.955 ± .075	.139 ± .004	16	16 1/4	1/8	-356	5.350 ± .037	.210 ± .005	5 3/8	5 3/4	3/16
-283	16.955 ± .080	.139 ± .004	17	17 1/4	1/8	-357	5.475 ± .037	.210 ± .005	5 1/2	5 7/8	3/16
-284	17.955 ± .085	.139 ± .004	18	18 1/4	1/8	-358	5.600 ± .037	.210 ± .005	5 5/8	6	3/16
-309	.412 ± .005	.210 ± .005	7/16	13/16	3/16	-359	5.725 ± .037	.210 ± .005	5 3/4	6 1/8	3/16
-310	.475 ± .005	.210 ± .005	1/2	7/8	3/16	-360	5.850 ± .037	.210 ± .005	5 7/8	6 1/4	3/16
-311	.537 ± .007	.210 ± .005	9/16	15/16	3/16	-361	5.975 ± .037	.210 ± .005	6	6 3/8	3/16
-312	.600 ± .009	.210 ± .005	5/8	1	3/16	-362	6.225 ± .040	.210 ± .005	6 1/4	6 5/8	3/16
-313	.662 ± .009	.210 ± .005	11/16	1 1/16	3/16	-363	6.475 ± .040	.210 ± .005	6 1/2	6 7/8	3/16
-314	.725 ± .010	.210 ± .005	3/4	1 1/8	3/16	-364	6.725 ± .040	.210 ± .005	6 3/4	7 1/8	3/16
-315	.787 ± .010	.210 ± .005	13/16	1 3/16	3/16	-365	6.975 ± .040	.210 ± .005	7	7 3/8	3/16
-316	.850 ± .010	.210 ± .005	7/8	1 1/4	3/16	-366	7.225 ± .045	.210 ± .005	7 1/4	7 5/8	3/16
-317	.912 ± .010	.210 ± .005	15/16	1 5/16	3/16	-367	7.475 ± .045	.210 ± .005	7 1/2	, 7 7/8	3/16
-318	.975 ± .010	.210 ± .005	1	1 3/8	3/16	-368	7.725 ± .045	.210 ± .005	7 3/4	8 1/8	3/16
-319	1.037 ± .010	.210 ± .005	1 1/16	1 7/16	3/16	-369	7.975 ± .045	.210 ± .005	8	8 3/8	3/16
-320	1.100 ± .012	.210 ± .005	1 1/8	1 1/2	3/16	-370	8.225 ± .050	.210 ± .005	8 1/4	8 5/8	3/16
-321	1.162 ± .012	.210 ± .005	1 3/16	1 9/16	3/16	-371	8.475 ± .050	.210 ± .005	8 1/2	8 7/8	3/16
-322	1.225 ± .012	.210 ± .005	1 1/4	1 5/8	3/16	-372	8.725 ± .050	.210 ± .005	8 3/4	9 1/8	3/16
-323	1.287 ± .012	.210 ± .005	1 5/16	1 11/16	3/16	-373	8.975 ± .050	.210 ± .005	9	9 3/8	3/16
-324	1.350 ± .012	.210 ± .005	1 3/8	1 3/4	3/16	-374	9.225 ± .055	.210 ± .005	9 1/4	9 5/8	3/16
-325	1.475 ± .015	.210 ± .005	1 1/2	1 7/8	3/16	-375	9.475 ± .055	.210 ± .005	9 1/2	9 7/8	3/16
-326	1.600 ± .015	.210 ± .005	1 5/8	2	3/16	-376	9.725 ± .055	.210 ± .005	9 3/4	10 1/8	3/16
-327	1.725 ± .015	.210 ± .005	1 3/4	2 1/8	3/16	-377	9.975 ± .055	.210 ± .005	10	10 3/8	3/16
-328	1.850 ± .015	.210 ± .005	1 7/8	2 1/4	3/16	-378	10.475 ± .060	.210 ± .005	10 1/2	10 7/8	3/16
-329	1.975 ± .018	.210 ± .005	2	2 3/8	3/16	-379	10.975 ± .060	.210 ± .005	11	11 3/8	3/16
-330	2.100 ± .018	.210 ± .005	2 1/8	2 1/2	3/16	-380	11.475 ± .065	.210 ± .005	11 1/2	11 7/8	3/16
-331	2.225 ± .018	.210 ± .005	2 1/4	2 5/8	3/16	-381	11.975 ± .065	.210 ± .005	12	12 3/8	3/16
-332	2.350 ± .018	.210 ± .005	2 3/8	2 3/4	3/16	-382	12.975 ± .065	.210 ± .005	13	13 3/8	3/16
-333	2.475 ± .020	.210 ± .005	2 1/2	2 7/8	3/16	-383	13.975 ± .070	.210 ± .005	14	14 3/8	3/16
-334	2.600 ± .020	.210 ± .005	2 5/8	3	3/16	-384	14.975 ± .070	.210 ± .005	15	15 3/8	3/16
-335	2.725 ± .020	.210 ± .005	2 3/4	3 1/8	3/16	-385	15.955 ± .075	.210 ± .005	16	16 3/8	3/16
-336	2.850 ± .020	.210 ± .005	2 7/8	3 1/4	3/16	-386	16.955 ± .080	.210 ± .005	17	17 3/8	3/16
-337	2.975 ± .024	.210 ± .005	3	3 3/8	3/16	-387	17.955 ± .085	.210 ± .005	18	18 3/8	3/16
-338	3.100 ± .024	.210 ± .005	3 1/8	3 1/2	3/16	-388	18.955 ± .090	.210 ± .005	19	19 3/8	3/16
-339	3.225 ± .024	.210 ± .005	3 1/4	3 5/8	3/16	-389	19.955 ± .095	.210 ± .005	20	20 3/8	3/16
-340	3.350 ± .024	.210 ± .005	3 3/8	3 3/4	3/16	-390	20.955 ± .095	.210 ± .005	21	21 3/8	3/16
-341	3.475 ± .024	.210 ± .005	3 1/2	3 7/8	3/16	-391	21.955 ± .100	.210 ± .005	22	22 3/8	3/16
-342	3.600 ± .028	.210 ± .005	3 5/8	4	3/16	-392	22.940 ± .105	.210 ± .005	23	23 3/8	3/16
-343	3.725 ± .028	.210 ± .005	3 3/4	4 1/8	3/16	-393	23.940 ± .110	.210 ± .005	24	24 3/8	3/16
-344	3.850 ± .028	.210 ± .005	3 7/8	4 1/4	3/16	-394	24.940 ± .115	.210 ± .005	25	25 3/8	3/16
-345	3.975 ± .028	.210 ± .005	4	4 3/8	3/16	-395	25.940 ± .120	.210 ± .005	26	26 3/8	3/16
-346	4.100 ± .028	.210 ± .005	4 1/8	4 1/2	3/16	-425	4.475 ± .033	.275 ± .006	4 1/2	5	1/4

AS568	Actual Di	mensions	Nor	ninal Refer	ence
No.	I.D. Tol.	W. Tol.	I.D.	0.D.	Width
-426	4.600 ± .033	.275 ± .006	4 5/8	5 1/8	1/4
-427	4.725 ± .033	.275 ± .006	4 3/4	5 1/4	1/4
-428	4.850 ± .033	.275 ± .006	4 7/8	5 3/8	1/4
-429	4.975 ± .037	.275 ± .006	5	5 1/2	1/4
-430	5.100 ± .037	.275 ± .006	5 1/8	5 5/8	1/4
-431	5.225 ± .037	.275 ± .006	5 1/4	5 3/4	1/4
-432	5.350 ± .037	.275 ± .006	5 3/8	5 7/8	1/4
-433	5.475 ± .037	.275 ± .006	5 1/2	6	1/4
-434	5.600 ± .037	.275 ± .006	5 5/8	6 1/8	1/4
-435	5.725 ± .037	.275 ± .006	5 3/4	6 1/4	1/4
-436	5.850 ± .037	.275 ± .006	5 7/8	6 3/8	1/4
-437	5.975 ± .037	.275 ± .006	6	6 1/2	1/4
-438	6.225 ± .040	.275 ± .006	6 1/4	6 3/4	1/4
-439	6.475 ± .040	.275 ± .006	6 1/2	7	1/4
-440	6.725 ± .040	.275 ± .006	6 3/4	7 1/4	1/4
-441	6.975 ± .040	.275 ± .006	7	7 1/2	1/4
-442	7.225 ± .045	.275 ± .006	7 1/4	7 3/4	1/4
-443	7.475 ± .045	.275 ± .006	7 1/2	8	1/4
-444	7.725 ± .045	.275 ± .006	7 3/4	8 1/4	1/4
-445	7.975 ± .045	.275 ± .006	8	8 1/2	1/4
-446	8.475 ± .055	.275 ± .006	8 1/2	9	1/4
-447	8.975 ± .055	.275 ± .006	9	9 1/2	1/4
-448	9.475 ± .055	.275 ± .006	9 1/2	10	1/4
-449	9.975 ± .055	.275 ± .006	10	10 1/2	1/4
-450	10.475 ± .060	.275 ± .006	10 1/2	11	1/4
-451	10.975 ± .060	.275 ± .006	11	11 1/2	1/4
-452	11.475 ± .060	.275 ± .006	11 1/2	12	1/4
-453	11.975 ± .060	.275 ± .006	12	12 1/2	1/4
-454	12.475 ± .060	.275 ± .006	12 1/2	13	1/4
-455	12.975 ± .060	.275 ± .006	13	13 1/2	1/4
-456	13.475 ± .070	.275 ± .006	13 1/2	14	1/4
-457	13.975 ± .070	.275 ± .006	14	14 1/2	1/4
-458	14.475 ± .070	.275 ± .006	14 1/4	15	1/4
-459	14.975 ± .070	.275 ± .006	15	15 1/2	1/4
-460	15.475 ± .070	.275 ± .006	15 1/2	16	1/4
-461	15.955 ± .075	.275 ± .006	16	16 1/2	1/4
-462	16.455 ± .075	.275 ± .006	16 1/2	17	1/4
-463	16.955 ± .080	.275 ± .006	17	17 1/2	1/4
-464	17.455 ± .085	.275 ± .006	17 1/2	18	1/4
-465	17.955 ± .085	.275 ± .006	18	18 1/2	1/4
-466	18.455 ± .085	.275 ± .006	18 1/2	19	1/4
-467	18.955 ± .090	.275 ± .006	19	19 1/2	1/4
-468	19.455 ± .090	.275 ± .006	19 1/2	20	1/4
-469	19.955 ± .090	.275 ± .006	20	20 1/2	1/4
-470	20.955 ± .090	.275 ± .006	21	21 1/2	1/4
-471	21.955 ± .100	.275 ± .006	22	22 1/2	1/4
-472	22.940 ± .105	.275 ± .006	23	23 1/2	1/4
-473	23.940 ± .110	.275 ± .006	24	24 1/2	1/4
-474	24.940 ± .115	.275 ± .006	25	25 1/2	1/4
-475	25.940 ± .120	.275 ± .006	26	26 1/2	1/4

Standard O-Ring Boss Gaskets for Straight Thread Tube Fittings

AS568	Actual Di	mensions	Tube Size (O.D.)
No.	I.D. Tol.	W. Tol.	Fractional
-901	.185 ±.005	.056 ±.003	3/32
-902	.239 ±.005	.064 ±.003	1/8
-903	.301 ±.005	.064 ±.003	3/16
-904	.351 ±.005	.072 ±.003	1/4
-905	.414 ±.005	.072 ±.003	5/16
-906	.468 ±.005	.078 ±.003	3/8
-907	.530 ±.007	.082 ±.003	7/16
-908	.644 ±.009	.087 ±.003	1/2
-909	.706 ±.009	.097 ±.003	9/16
-910	.755 ±.009	.097 ±.003	5/8
-911	.863 ±.009	.116 ±.004	11/16
-912	.924 ±.009	.116 ±.004	3/4
-913	.986 ±.010	.116 ±.004	13/16
-914	1.047 ±.010	.116 ±.004	7/8
-916	1.171 ±.010	.116 ±.004	1
-918	1.355 ±.012	.116 ±.004	1 1/8
-920	1.475 ±.014	.118 ±.004	1 1/4
-924	1.720 ±.014	.118 ±.004	1 1/2
-928	2.090 ±.018	.118 ±.004	1 3/4
-932	2.337 ±.018	.118 ±.004	2



One Source for All Your Sealing Needs

Apple Rubber stocks AS568 and ISO 3601 standard sizes, most common metric sizes, plus a wide variety of non-standard o-ring sizes. Our materials meet mil-spec, UL, medical and automotive specifications.

Apple Rubber offers expert custom molding for non-standard rubber products. With in-house tooling, we save more time and resources compared to offshore operations. We offer expertise at any level of production, from prototype to high volume tooling.

When you call Apple Rubber, you deal directly with the manufacturer. Our experienced staff provides complete and comprehensive service to help you get the correct product for your application.

Full Line of Quality Apple Rubber Products

Products:

O-Rings — standards, metrics, MicrOrings,® MacrOrings

LSR (Liquid Silicone Rubber)

Composite seals (rubber bonded to plastic or metal)

Custom-molded seals and shapes

Medical seals

Thermobonded seals

FilterSeal™

Military specs

Standard and exotic materials

Services:

Design capabilities

Prototyping and production runs

Full quality-control laboratory

Class 10,000 (7) Cleanroom

ISO 9001 / AS 9100 Certifications

ITAR Registered



310 Erie Street Lancaster, New York 14086 P (716) 684-6560 F (716) 684-8302 info@applerubber.com For more information or to order call 1-800-828-7745 or visit applerubber.com.



