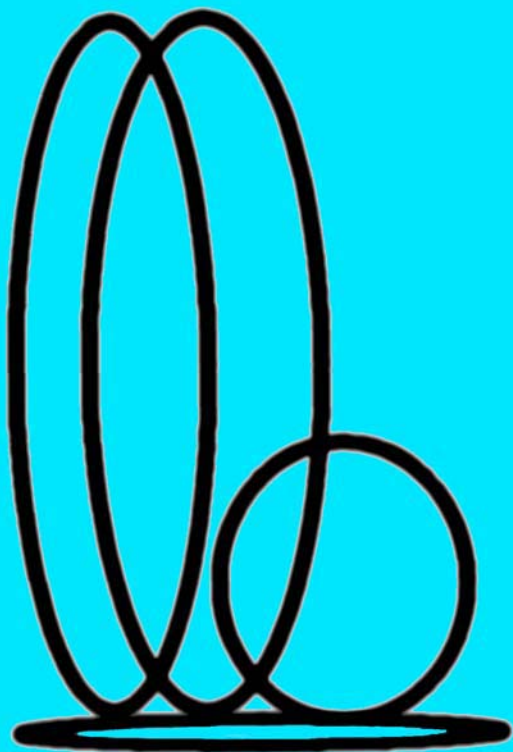
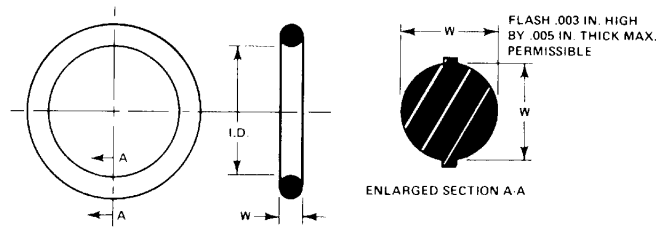


O-Rings AS 568



O-Ring Sizes by AS 568 Dash Numbers



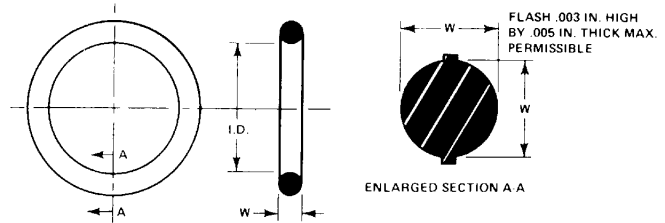
Size Ref. AS 568	Nominal Size Inches			Actual Size Inches		Vol. Cu. In.	Actual Size Millimeters		Vol. Cubic Cent.	Size Ref. AS 568
	I.D.	O.D.	W	I.D.	W		I.D.	W		
-001	1/32	3/32	1/32	.029 ± .004	.040 ± .003	.0003	.74 ± 0.10	1.02 ± 0.08	.005	-001
-002	3/64	9/64	3/64	.042 ± .004	.050 ± .003	.0006	1.07 ± 0.10	1.27 ± 0.08	.010	-002
-003	1/16	3/16	1/16	.056 ± .004	.060 ± .003	.0010	1.42 ± 0.10	1.53 ± 0.08	.016	-003
-004	5/64	13/64	1/16	.070 ± .005	.070 ± .003	.0017	1.78 ± 0.12	1.78 ± 0.08	.028	-004
-005	7/64	15/64	1/16	.101 ± .005	.070 ± .003	.0021	2.57 ± 0.12	1.78 ± 0.08	.034	-005
-006	1/8	1/4	1/16	.114 ± .005	.070 ± .003	.0022	2.90 ± 0.12	1.78 ± 0.08	.036	-006
-007	5/32	9/32	1/16	.145 ± .005	.070 ± .003	.0026	3.69 ± 0.12	1.78 ± 0.08	.043	-007
-008	3/16	5/16	1/16	.176 ± .005	.070 ± .003	.0030	4.47 ± 0.12	1.78 ± 0.08	.049	-008
-009	7/32	11/32	1/16	.208 ± .005	.070 ± .003	.0034	5.29 ± 0.12	1.78 ± 0.08	.056	-009
-010	1/4	3/8	1/16	.239 ± .005	.070 ± .003	.0037	6.07 ± 0.12	1.78 ± 0.08	.061	-010
-011	5/16	7/16	1/16	.301 ± .005	.070 ± .003	.0045	7.65 ± 0.12	1.78 ± 0.08	.074	-011
-012	3/8	1/2	1/16	.364 ± .005	.070 ± .003	.0052	9.25 ± 0.12	1.78 ± 0.08	.085	-012
-013	7/16	9/16	1/16	.426 ± .005	.070 ± .003	.0060	10.82 ± 0.12	1.78 ± 0.08	.098	-013
-014	1/2	5/8	1/16	.489 ± .005	.070 ± .003	.0068	12.42 ± 0.12	1.78 ± 0.08	.111	-014
-015	9/16	11/16	1/16	.551 ± .007	.070 ± .003	.0075	14.00 ± 0.17	1.78 ± 0.08	.123	-015
-016	5/8	3/4	1/16	.614 ± .009	.070 ± .003	.0083	15.60 ± 0.22	1.78 ± 0.08	.136	-016
-017	11/16	13/16	1/16	.676 ± .009	.070 ± .003	.0090	17.17 ± 0.22	1.78 ± 0.08	.147	-017
-018	3/4	7/8	1/16	.739 ± .009	.070 ± .003	.0098	18.77 ± 0.22	1.78 ± 0.08	.161	-018
-019	13/16	15/16	1/16	.801 ± .009	.070 ± .003	.0105	20.35 ± 0.22	1.78 ± 0.08	.172	-019
-020	7/8	1	1/16	.864 ± .009	.070 ± .003	.0113	21.95 ± 0.22	1.78 ± 0.08	.185	-020
-021	15/16	1-1/16	1/16	.926 ± .009	.070 ± .003	.0120	23.52 ± 0.22	1.78 ± 0.08	.197	-021
-022	1	1-1/8	1/16	.989 ± .010	.070 ± .003	.0128	25.12 ± 0.25	1.78 ± 0.08	.210	-022
-023	1-1/16	1-3/16	1/16	1.051 ± .010	.070 ± .003	.0136	26.70 ± 0.25	1.78 ± 0.08	.223	-023
-024	1-1/8	1-1/4	1/16	1.114 ± .010	.070 ± .003	.0143	28.30 ± 0.25	1.78 ± 0.08	.234	-024
-025	1-3/16	1-5/16	1/16	1.176 ± .011	.070 ± .003	.0151	29.87 ± 0.28	1.78 ± 0.08	.247	-025
-026	1-1/4	1-3/8	1/16	1.239 ± .011	.070 ± .003	.0158	31.47 ± 0.28	1.78 ± 0.08	.259	-026
-027	1-5/16	1-7/16	1/16	1.301 ± .011	.070 ± .003	.0166	33.05 ± 0.28	1.78 ± 0.08	.272	-027
-028	1-3/8	1-1/2	1/16	1.364 ± .013	.070 ± .003	.0173	34.65 ± 0.33	1.78 ± 0.08	.283	-028
-029	1-1/2	1-5/8	1/16	1.489 ± .013	.070 ± .003	.0188	37.82 ± 0.33	1.78 ± 0.08	.308	-029
-030	1-5/8	1-3/4	1/16	1.614 ± .013	.070 ± .003	.0204	41.00 ± 0.33	1.78 ± 0.08	.334	-030
-031	1-3/4	1-7/8	1/16	1.739 ± .015	.070 ± .003	.0219	44.17 ± 0.38	1.78 ± 0.08	.359	-031
-032	1-7/8	2	1/16	1.864 ± .015	.070 ± .003	.0234	47.35 ± 0.38	1.78 ± 0.08	.383	-032
-033	2	2-1/8	1/16	1.989 ± .018	.070 ± .003	.0249	50.52 ± 0.46	1.78 ± 0.08	.408	-033
-034	2-1/8	2-1/4	1/16	2.114 ± .018	.070 ± .003	.0264	53.70 ± 0.46	1.78 ± 0.08	.433	-034
-035	2-1/4	2-3/8	1/16	2.239 ± .018	.070 ± .003	.0279	56.87 ± 0.46	1.78 ± 0.08	.457	-035
-036	2-3/8	2-1/2	1/16	2.364 ± .018	.070 ± .003	.0294	60.04 ± 0.46	1.78 ± 0.08	.482	-036
-037	2-1/2	2-5/8	1/16	2.489 ± .018	.070 ± .003	.0309	63.22 ± 0.46	1.78 ± 0.08	.506	-037
-038	2-5/8	2-3/4	1/16	2.614 ± .020	.070 ± .003	.0325	66.40 ± 0.50	1.78 ± 0.08	.533	-038
-039	2-3/4	2-7/8	1/16	2.739 ± .020	.070 ± .003	.0340	69.57 ± 0.50	1.78 ± 0.08	.557	-039
-040	2-7/8	3	1/16	2.864 ± .020	.070 ± .003	.0355	72.75 ± 0.50	1.78 ± 0.08	.582	-040
-041	3	3-1/8	1/16	2.989 ± .024	.070 ± .003	.0370	75.92 ± 0.61	1.78 ± 0.08	.606	-041
-042	3-1/4	3-3/8	1/16	3.239 ± .024	.070 ± .003	.0400	82.27 ± 0.61	1.78 ± 0.08	.655	-042
-043	3-1/2	3-5/8	1/16	3.489 ± .024	.070 ± .003	.0430	88.62 ± 0.61	1.78 ± 0.08	.705	-043
-044	3-3/4	3-7/8	1/16	3.739 ± .027	.070 ± .003	.0461	94.97 ± 0.69	1.78 ± 0.08	.755	-044
-045	4	4-1/8	1/16	3.989 ± .027	.070 ± .003	.0491	101.32 ± 0.69	1.78 ± 0.08	.805	-045

All sizes are based on 70-durometer Nitrile compounds. Materials with unusual shrinkage during curing may have slightly different dimensions.

Technical drawing of a 1/2 inch diameter ball bearing. The drawing includes three views: a front view (left), a side view (middle), and an enlarged view of section A-A (right).

- Front View (Left):** A circular cross-section showing concentric circles representing the outer and inner diameters. A horizontal centerline is drawn through the center. A section line 'A-A' is indicated with arrows pointing to the left.
- Side View (Middle):** A longitudinal section of the bearing, showing the outer diameter (O.D.) and the inner diameter (I.D.). The width of the bearing is labeled 'W'.
- Enlarged Section A-A (Right):** A detailed view of the cross-section at section A-A. It shows a circular cross-section with a shaded area representing the bearing's interior. The width is labeled 'W'. The outer diameter is labeled 'O.D.' and the inner diameter is labeled 'I.D.'. The text 'FLASH .003 IN. HIGH BY .005 IN. THICK MAX. PERMISSIBLE' is written above the section.

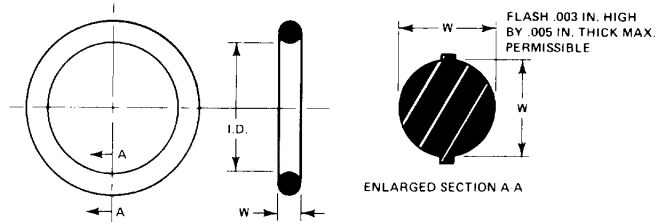
O-Ring Sizes by AS 568 Dash Numbers



Size Ref. AS 568	Nominal Size Inches I.D. O.D. W			Actual Size Inches		Vol. Cu. In.	Actual Size Millimeters		Vol. Cubic Cent.	Size Ref. AS 568
				I.D.	W		I.D.	W		
-141	2-5/16	2-1/2	3/32	2.300 ± .020	.103 ± .003	.0629	58.42 ± 0.50	2.62 ± 0.08	1.031	-141
-142	2-3/8	2-9/16	3/32	2.362 ± .020	.103 ± .003	.0645	60.00 ± 0.50	2.62 ± 0.08	1.057	-142
-143	2-7/16	2-5/8	3/32	2.425 ± .020	.103 ± .003	.0662	61.60 ± 0.50	2.62 ± 0.08	1.085	-143
-144	2-1/2	2-11/16	3/32	2.487 ± .020	.103 ± .003	.0678	63.17 ± 0.50	2.62 ± 0.08	1.111	-144
-145	2-9/16	2-3/4	3/32	2.550 ± .020	.103 ± .003	.0694	64.77 ± 0.50	2.62 ± 0.08	1.137	-145
-146	2-5/8	2-13/16	3/32	2.612 ± .020	.103 ± .003	.0711	66.35 ± 0.50	2.62 ± 0.08	1.165	-146
-147	2-11/16	2-7/8	3/32	2.675 ± .022	.103 ± .003	.0727	67.95 ± 0.55	2.62 ± 0.08	1.191	-147
-148	2-3/4	2-15/16	3/32	2.737 ± .022	.103 ± .003	.0743	69.52 ± 0.55	2.62 ± 0.08	1.218	-148
-149	2-13/16	3	3/32	2.800 ± .022	.103 ± .003	.0760	71.12 ± 0.55	2.62 ± 0.08	1.245	-149
-150	2-7/8	3-1/16	3/32	2.862 ± .022	.103 ± .003	.0776	72.70 ± 0.55	2.62 ± 0.08	1.272	-150
-151	3	3-3/16	3/32	2.987 ± .024	.103 ± .003	.0809	75.87 ± 0.61	2.62 ± 0.08	1.326	-151
-152	3-1/4	3-7/16	3/32	3.237 ± .024	.103 ± .003	.0874	82.22 ± 0.61	2.62 ± 0.08	1.432	-152
-153	3-1/2	3-11/16	3/32	3.487 ± .024	.103 ± .003	.0940	88.57 ± 0.61	2.62 ± 0.08	1.540	-153
-154	3-3/4	3-15/16	3/32	3.737 ± .028	.103 ± .003	.1005	94.92 ± 0.71	2.62 ± 0.08	1.647	-154
-155	4	4-3/16	3/32	3.987 ± .028	.103 ± .003	.1071	101.27 ± 0.71	2.62 ± 0.08	1.755	-155
-156	4-1/4	4-7/16	3/32	4.237 ± .030	.103 ± .003	.1136	107.62 ± 0.76	2.62 ± 0.08	1.862	-156
-157	4-1/2	4-11/16	3/32	4.487 ± .030	.103 ± .003	.1202	113.97 ± 0.76	2.62 ± 0.08	1.970	-157
-158	4-3/4	4-15/16	3/32	4.737 ± .030	.103 ± .003	.1267	120.32 ± 0.76	2.62 ± 0.08	2.076	-158
-159	5	5-3/16	3/32	4.987 ± .035	.103 ± .003	.1332	126.67 ± 0.89	2.62 ± 0.08	2.183	-159
-160	5-1/4	5-7/16	3/32	5.237 ± .035	.103 ± .003	.1398	133.02 ± 0.89	2.62 ± 0.08	2.291	-160
-161	5-1/2	5-11/16	3/32	5.487 ± .035	.103 ± .003	.1463	139.37 ± 0.89	2.62 ± 0.08	2.397	-161
-162	5-3/4	5-15/16	3/32	5.737 ± .035	.103 ± .003	.1529	145.72 ± 0.89	2.62 ± 0.08	2.506	-162
-163	6	6-3/16	3/32	5.987 ± .035	.103 ± .003	.1594	152.07 ± 0.89	2.62 ± 0.08	2.612	-163
-164	6-1/4	6-7/16	3/32	6.237 ± .040	.103 ± .003	.1660	158.42 ± 1.02	2.62 ± 0.08	2.720	-164
-165	6-1/2	6-11/16	3/32	6.487 ± .040	.103 ± .003	.1725	164.77 ± 1.02	2.62 ± 0.08	2.827	-165
-166	6-3/4	6-15/16	3/32	6.737 ± .040	.103 ± .003	.1790	171.12 ± 1.02	2.62 ± 0.08	2.933	-166
-167	7	7-3/16	3/32	6.987 ± .040	.103 ± .003	.1856	177.47 ± 1.02	2.62 ± 0.08	3.041	-167
-168	7-1/4	7-7/16	3/32	7.237 ± .045	.103 ± .003	.1921	183.82 ± 1.14	2.62 ± 0.08	3.148	-168
-169	7-1/2	7-11/16	3/32	7.487 ± .045	.103 ± .003	.1987	190.17 ± 1.14	2.62 ± 0.08	3.256	-169
-170	7-3/4	7-15/16	3/32	7.737 ± .045	.103 ± .003	.2052	196.52 ± 1.14	2.62 ± 0.08	3.363	-170
-171	8	8-3/16	3/32	7.987 ± .045	.103 ± .003	.2118	202.87 ± 1.14	2.62 ± 0.08	3.471	-171
-172	8-1/4	8-7/16	3/32	8.237 ± .050	.103 ± .003	.2183	209.22 ± 1.25	2.62 ± 0.08	3.577	-172
-173	8-1/2	8-11/16	3/32	8.487 ± .050	.103 ± .003	.2249	215.57 ± 1.25	2.62 ± 0.08	3.685	-173
-174	8-3/4	8-15/16	3/32	8.737 ± .050	.103 ± .003	.2314	221.92 ± 1.25	2.62 ± 0.08	3.792	-174
-175	9	9-3/16	3/32	8.987 ± .050	.103 ± .003	.2379	228.27 ± 1.25	2.62 ± 0.08	3.898	-175
-176	9-1/4	9-7/16	3/32	9.237 ± .055	.103 ± .003	.2445	234.62 ± 1.40	2.62 ± 0.08	4.007	-176
-177	9-1/2	9-11/16	3/32	9.487 ± .055	.103 ± .003	.2510	240.97 ± 1.40	2.62 ± 0.08	4.113	-177
-178	9-3/4	9-15/16	3/32	9.737 ± .055	.103 ± .003	.2576	247.32 ± 1.40	2.62 ± 0.08	4.221	-178
-179 Thru -200	O-Ring Sizes Not Assigned									
-201	3/16	7/16	1/8	.171 ± .005	.139 ± .004	.0148	4.34 ± 0.12	3.53 ± 0.10	.243	-201
-202	1/4	1/2	1/8	.234 ± .005	.139 ± .004	.0178	5.94 ± 0.12	3.53 ± 0.10	.292	-202
-203	5/16	9/16	1/8	.296 ± .005	.139 ± .004	.0207	7.52 ± 0.12	3.53 ± 0.10	.339	-203
-204	3/8	5/8	1/8	.359 ± .005	.139 ± .004	.0237	9.12 ± 0.12	3.53 ± 0.10	.388	-204
-205	7/16	11/16	1/8	.421 ± .005	.139 ± .004	.0267	10.69 ± 0.12	3.53 ± 0.10	.438	-205

All sizes are based on 70-durometer Nitrile compounds. Materials with unusual shrinkage during curing may have slightly different dimensions.

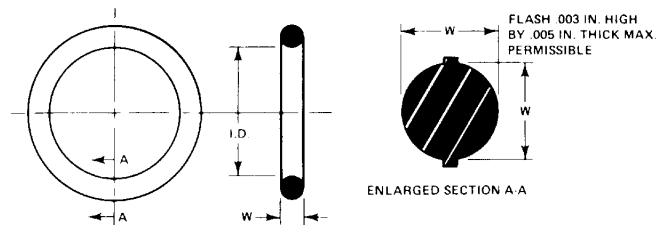
O-Ring Sizes by AS 568 Dash Numbers



Size Ref. AS 568	Nominal Size Inches			Actual Size Inches		Vol. Cu. In.	Actual Size Millimeters		Vol. Cubic Cent.	Size Ref. AS 568
	I.D.	O.D.	W	I.D.	W		I.D.	W		
-206	1/2	3/4	1/8	.484 ± .005	.139 ± .004	.0297	12.29 ± 0.12	3.53 ± 0.10	.487	-206
-207	9/16	13/16	1/8	.546 ± .007	.139 ± .004	.0327	13.87 ± 0.17	3.53 ± 0.10	.536	-207
-208	5/8	7/8	1/8	.609 ± .009	.139 ± .004	.0357	15.47 ± 0.23	3.53 ± 0.10	.585	-208
-209	11/16	15/16	1/8	.671 ± .009	.139 ± .004	.0386	17.04 ± 0.23	3.53 ± 0.10	.633	-209
-210	3/4	1	1/8	.734 ± .010	.139 ± .004	.0416	18.64 ± 0.25	3.53 ± 0.10	.682	-210
-211	13/16	1-1/16	1/8	.796 ± .010	.139 ± .004	.0446	20.22 ± 0.25	3.53 ± 0.10	.731	-211
-212	7/8	1-1/8	1/8	.859 ± .010	.139 ± .004	.0476	21.82 ± 0.25	3.53 ± 0.10	.780	-212
-213	15/16	1-3/16	1/8	.921 ± .010	.139 ± .004	.0505	23.40 ± 0.25	3.53 ± 0.10	.828	-213
-214	1	1-1/4	1/8	.984 ± .010	.139 ± .004	.0535	25.00 ± 0.25	3.53 ± 0.10	.877	-214
-215	1-1/16	1-5/16	1/8	1.046 ± .010	.139 ± .004	.0565	26.57 ± 0.25	3.53 ± 0.10	.926	-215
-216	1-1/8	1-3/8	1/8	1.109 ± .012	.139 ± .004	.0595	28.17 ± 0.30	3.53 ± 0.10	.975	-216
-217	1-3/16	1-7/16	1/8	1.171 ± .012	.139 ± .004	.0625	29.75 ± 0.30	3.53 ± 0.10	1.024	-217
-218	1-1/4	1-1/2	1/8	1.234 ± .012	.139 ± .004	.0655	31.34 ± 0.30	3.53 ± 0.10	1.073	-218
-219	1-5/16	1-9/16	1/8	1.296 ± .012	.139 ± .004	.0684	32.92 ± 0.30	3.53 ± 0.10	1.121	-219
-220	1-3/8	1-5/8	1/8	1.359 ± .012	.139 ± .004	.0714	34.52 ± 0.30	3.53 ± 0.10	1.170	-220
-221	1-7/16	1-11/16	1/8	1.421 ± .012	.139 ± .004	.0744	36.10 ± 0.30	3.53 ± 0.10	1.219	-221
-222	1-1/2	1-3/4	1/8	1.484 ± .015	.139 ± .004	.0774	37.70 ± 0.38	3.53 ± 0.10	1.268	-222
-223	1-5/8	1-7/8	1/8	1.609 ± .015	.139 ± .004	.0833	40.87 ± 0.38	3.53 ± 0.10	1.365	-223
-224	1-3/4	2	1/8	1.734 ± .015	.139 ± .004	.0893	44.05 ± 0.38	3.53 ± 0.10	1.463	-224
-225	1-7/8	2-1/8	1/8	1.859 ± .018	.139 ± .004	.0952	47.22 ± 0.46	3.53 ± 0.10	1.560	-225
-226	2	2-1/4	1/8	1.984 ± .018	.139 ± .004	.1012	50.40 ± 0.46	3.53 ± 0.10	1.658	-226
-227	2-1/8	2-3/8	1/8	2.109 ± .018	.139 ± .004	.1072	53.57 ± 0.46	3.53 ± 0.10	1.757	-227
-228	2-1/4	2-1/2	1/8	2.234 ± .020	.139 ± .004	.1131	56.75 ± 0.50	3.53 ± 0.10	1.853	-228
-229	2-3/8	2-5/8	1/8	2.359 ± .020	.139 ± .004	.1191	59.92 ± 0.50	3.53 ± 0.10	1.952	-229
-230	2-1/2	2-3/4	1/8	2.484 ± .020	.139 ± .004	.1250	63.10 ± 0.50	3.53 ± 0.10	2.048	-230
-231	2-5/8	2-7/8	1/8	2.609 ± .020	.139 ± .004	.1310	66.27 ± 0.50	3.53 ± 0.10	2.147	-231
-232	2-3/4	3	1/8	2.734 ± .024	.139 ± .004	.1370	69.44 ± 0.61	3.53 ± 0.10	2.245	-232
-233	2-7/8	3-1/8	1/8	2.859 ± .024	.139 ± .004	.1429	72.62 ± 0.61	3.53 ± 0.10	2.342	-233
-234	3	3-1/4	1/8	2.984 ± .024	.139 ± .004	.1489	75.79 ± 0.61	3.53 ± 0.10	2.440	-234
-235	3-1/8	3-3/8	1/8	3.109 ± .024	.139 ± .004	.1548	78.97 ± 0.61	3.53 ± 0.10	2.537	-235
-236	3-1/4	3-1/2	1/8	3.234 ± .024	.139 ± .004	.1608	82.14 ± 0.61	3.53 ± 0.10	2.635	-236
-237	3-3/8	3-5/8	1/8	3.359 ± .024	.139 ± .004	.1668	85.32 ± 0.61	3.53 ± 0.10	2.733	-237
-238	3-1/2	3-3/4	1/8	3.484 ± .024	.139 ± .004	.1727	88.49 ± 0.61	3.53 ± 0.10	2.830	-238
-239	3-5/8	3-7/8	1/8	3.609 ± .028	.139 ± .004	.1787	91.67 ± 0.71	3.53 ± 0.10	2.928	-239
-240	3-3/4	4	1/8	3.734 ± .028	.139 ± .004	.1846	94.84 ± 0.71	3.53 ± 0.10	3.025	-240
-241	3-7/8	4-1/8	1/8	3.859 ± .028	.139 ± .004	.1906	98.02 ± 0.71	3.53 ± 0.10	3.123	-241
-242	4	4-1/4	1/8	3.984 ± .028	.139 ± .004	.1966	101.19 ± 0.71	3.53 ± 0.10	3.222	-242
-243	4-1/8	4-3/8	1/8	4.109 ± .028	.139 ± .004	.2025	104.37 ± 0.71	3.53 ± 0.10	3.318	-243
-244	4-1/4	4-1/2	1/8	4.234 ± .030	.139 ± .004	.2085	107.54 ± 0.76	3.53 ± 0.10	3.417	-244
-245	4-3/8	4-5/8	1/8	4.359 ± .030	.139 ± .004	.2144	110.72 ± 0.76	3.53 ± 0.10	3.513	-245
-246	4-1/2	4-3/4	1/8	4.484 ± .030	.139 ± .004	.2204	113.89 ± 0.76	3.53 ± 0.10	3.612	-246
-247	4-5/8	4-7/8	1/8	4.609 ± .030	.139 ± .004	.2263	117.07 ± 0.76	3.53 ± 0.10	3.708	-247
-248	4-3/4	5	1/8	4.734 ± .030	.139 ± .004	.2323	120.24 ± 0.76	3.53 ± 0.10	3.807	-248
-249	4-7/8	5-1/8	1/8	4.859 ± .035	.139 ± .004	.2383	123.42 ± 0.89	3.53 ± 0.10	3.905	-249
-250	5	5-1/4	1/8	4.984 ± .035	.139 ± .004	.2442	126.59 ± 0.89	3.53 ± 0.10	4.002	-250

All sizes are based on 70-durometer Nitrile compounds. Materials with unusual shrinkage during curing may have slightly different dimensions.

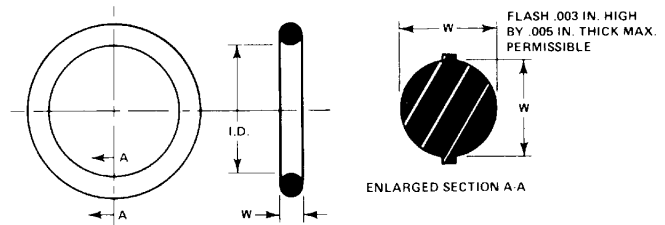
O-Ring Sizes by AS 568 Dash Numbers



Size Ref. AS 568	Nominal Size Inches			Actual Size Inches		Vol. Cu. In.	Actual Size Millimeters		Vol. Cubic Cent.	Size Ref. AS 568
	I.D.	O.D.	W	I.D.	W		I.D.	W		
-251	5-1/8	5-3/8	1/8	5.109 ± .035	.139 ± .004	.2502	129.77 ± 0.89	3.53 ± 0.10	4.100	-251
-252	5-1/4	5-1/2	1/8	5.234 ± .035	.139 ± .004	.2561	132.94 ± 0.89	3.53 ± 0.10	4.197	-252
-253	5-3/8	5-5/8	1/8	5.359 ± .035	.139 ± .004	.2621	136.12 ± 0.89	3.53 ± 0.10	4.295	-253
-254	5-1/2	5-3/4	1/8	5.484 ± .035	.139 ± .004	.2681	139.30 ± 0.89	3.53 ± 0.10	4.393	-254
-255	5-5/8	5-7/8	1/8	5.609 ± .035	.139 ± .004	.2740	142.47 ± 0.89	3.53 ± 0.10	4.490	-255
-256	5-3/4	6	1/8	5.734 ± .035	.139 ± .004	.2800	145.65 ± 0.89	3.53 ± 0.10	4.588	-256
-257	5-7/8	6-1/8	1/8	5.859 ± .035	.139 ± .004	.2859	148.82 ± 0.89	3.53 ± 0.10	4.685	-257
-258	6	6-1/4	1/8	5.984 ± .035	.139 ± .004	.2919	152.00 ± 0.89	3.53 ± 0.10	4.783	-258
-259	6-1/4	6-1/2	1/8	6.234 ± .040	.139 ± .004	.3038	158.35 ± 1.02	3.53 ± 0.10	4.978	-259
-260	6-1/2	6-3/4	1/8	6.484 ± .040	.139 ± .004	.3157	164.70 ± 1.02	3.53 ± 0.10	5.173	-260
-261	6-3/4	7	1/8	6.734 ± .040	.139 ± .004	.3277	171.05 ± 1.02	3.53 ± 0.10	5.370	-261
-262	7	7-1/4	1/8	6.984 ± .040	.139 ± .004	.3396	177.40 ± 1.02	3.53 ± 0.10	5.565	-262
-263	7-1/4	7-1/2	1/8	7.234 ± .045	.139 ± .004	.3515	183.75 ± 1.14	3.53 ± 0.10	5.760	-263
-264	7-1/2	7-3/4	1/8	7.484 ± .045	.139 ± .004	.3634	190.10 ± 1.14	3.53 ± 0.10	5.955	-264
-265	7-3/4	8	1/8	7.734 ± .045	.139 ± .004	.3753	196.45 ± 1.14	3.53 ± 0.10	6.150	-265
-266	8	8-1/4	1/8	7.984 ± .045	.139 ± .004	.3872	202.80 ± 1.14	3.53 ± 0.10	6.345	-266
-267	8-1/4	8-1/2	1/8	8.234 ± .050	.139 ± .004	.3992	209.15 ± 1.25	3.53 ± 0.10	6.542	-267
-268	8-1/2	8-3/4	1/8	8.484 ± .050	.139 ± .004	.4111	215.50 ± 1.25	3.53 ± 0.10	6.737	-268
-269	8-3/4	9	1/8	8.734 ± .050	.139 ± .004	.4230	221.85 ± 1.25	3.53 ± 0.10	6.932	-269
-270	9	9-1/4	1/8	8.984 ± .050	.139 ± .004	.4349	228.20 ± 1.25	3.53 ± 0.10	7.127	-270
-271	9-1/4	9-1/2	1/8	9.234 ± .055	.139 ± .004	.4468	234.55 ± 1.40	3.53 ± 0.10	7.322	-271
-272	9-1/2	9-3/4	1/8	9.484 ± .055	.139 ± .004	.4588	240.90 ± 1.40	3.53 ± 0.10	7.518	-272
-273	9-3/4	10	1/8	9.734 ± .055	.139 ± .004	.4707	247.25 ± 1.40	3.53 ± 0.10	7.713	-273
-274	10	10-1/4	1/8	9.984 ± .055	.139 ± .004	.4826	253.60 ± 1.40	3.53 ± 0.10	7.908	-274
-275	10-1/2	10-3/4	1/8	10.484 ± .055	.139 ± .004	.5064	266.30 ± 1.40	3.53 ± 0.10	8.298	-275
-276	11	11-1/4	1/8	10.984 ± .065	.139 ± .004	.5303	279.00 ± 1.65	3.53 ± 0.10	8.690	-276
-277	11-1/2	11-3/4	1/8	11.484 ± .065	.139 ± .004	.5541	291.70 ± 1.65	3.53 ± 0.10	9.080	-277
-278	12	12-1/4	1/8	11.984 ± .065	.139 ± .004	.5779	304.40 ± 1.65	3.53 ± 0.10	9.470	-278
-279	13	13-1/4	1/8	12.984 ± .065	.139 ± .004	.6256	329.80 ± 1.65	3.53 ± 0.10	10.252	-279
-280	14	14-1/4	1/8	13.984 ± .065	.139 ± .004	.6733	355.20 ± 1.65	3.53 ± 0.10	11.033	-280
-281	15	15-1/4	1/8	14.984 ± .065	.139 ± .004	.7210	380.60 ± 1.65	3.53 ± 0.10	11.815	-281
-282	16	16-1/4	1/8	15.955 ± .075	.139 ± .004	.7672	405.26 ± 1.90	3.53 ± 0.10	12.572	-282
-283	17	17-1/4	1/8	16.955 ± .080	.139 ± .004	.8149	430.66 ± 2.05	3.53 ± 0.10	13.354	-283
-284	18	18-1/4	1/8	17.955 ± .085	.139 ± .004	.8626	456.06 ± 2.15	3.53 ± 0.10	14.136	-284
-285 Thru -308	O-Ring Sizes Not Assigned									
-309	7/16	13/16	3/16	.412 ± .005	.210 ± .005	.0677	10.46 ± 0.12	5.34 ± 0.12	1.109	-309
-310	1/2	7/8	3/16	.475 ± .005	.210 ± .005	.0745	12.07 ± 0.12	5.34 ± 0.12	1.221	-310
-311	9/16	15/16	3/16	.537 ± .007	.210 ± .005	.0813	13.64 ± 0.17	5.34 ± 0.12	1.332	-311
-312	5/8	1	3/16	.600 ± .009	.210 ± .005	.0881	15.24 ± 0.22	5.34 ± 0.12	1.444	-312
-313	11/16	1-1/16	3/16	.662 ± .009	.210 ± .005	.0949	16.81 ± 0.22	5.34 ± 0.12	1.555	-313
-314	3/4	1-1/8	3/16	.725 ± .010	.210 ± .005	.1017	18.42 ± 0.25	5.34 ± 0.12	1.667	-314
-315	13/16	1-3/8	3/16	.787 ± .010	.210 ± .005	.1085	19.99 ± 0.25	5.34 ± 0.12	1.778	-315

All sizes are based on 70-durometer Nitrile compounds. Materials with unusual shrinkage during curing may have slightly different dimensions.

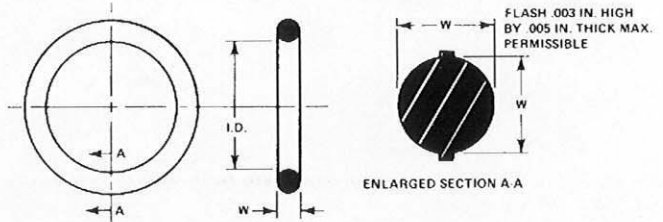
O-Ring Sizes by AS 568 Dash Numbers



Size Ref. AS 568	Nominal Size Inches			Actual Size Inches		Vol. Cu. In.	Actual Size Millimeters		Vol. Cubic Cent.	Size Ref. AS 568
	I.D.	O.D.	W	I.D.	W		I.D.	W		
-316	7/8	1-1/4	3/16	.850 ± .010	.210 ± .005	.1153	21.59 ± 0.25	5.34 ± 0.12	1.889	-316
-317	15/16	1-5/16	3/16	.912 ± .010	.210 ± .005	.1221	23.16 ± 0.25	5.34 ± 0.12	2.001	-317
-318	1	1-3/8	3/16	.975 ± .010	.210 ± .005	.1289	24.77 ± 0.25	5.34 ± 0.12	2.112	-318
-319	1-1/16	1-7/16	3/16	1.037 ± .010	.210 ± .005	.1357	26.34 ± 0.25	5.34 ± 0.12	2.224	-319
-320	1-1/8	1-1/2	3/16	1.100 ± .012	.210 ± .005	.1425	27.94 ± 0.30	5.34 ± 0.12	2.335	-320
-321	1-3/16	1-9/16	3/16	1.162 ± .012	.210 ± .005	.1493	29.51 ± 0.30	5.34 ± 0.12	2.447	-321
-322	1-1/4	1-5/8	3/16	1.225 ± .012	.210 ± .005	.1561	31.12 ± 0.30	5.34 ± 0.12	2.558	-322
-323	1-5/16	1-11/16	3/16	1.287 ± .012	.210 ± .005	.1629	32.69 ± 0.30	5.34 ± 0.12	2.669	-323
-324	1-3/8	1-3/4	3/16	1.350 ± .012	.210 ± .005	.1697	34.29 ± 0.30	5.34 ± 0.12	2.781	-324
-325	1-1/2	1-7/8	3/16	1.475 ± .015	.210 ± .005	.1833	37.47 ± 0.38	5.34 ± 0.12	3.004	-325
-326	1-5/8	2	3/16	1.600 ± .015	.210 ± .005	.1970	40.65 ± 0.38	5.34 ± 0.12	3.228	-326
-327	1-3/4	2-1/8	3/16	1.725 ± .015	.210 ± .005	.2106	43.82 ± 0.38	5.34 ± 0.12	3.451	-327
-328	1-7/8	2-1/4	3/16	1.850 ± .015	.210 ± .005	.2242	46.99 ± 0.38	5.34 ± 0.12	3.674	-328
-329	2	2-3/8	3/16	1.975 ± .018	.210 ± .005	.2378	50.16 ± 0.46	5.34 ± 0.12	3.897	-329
-330	2-1/8	2-1/2	3/16	2.100 ± .018	.210 ± .005	.2514	53.34 ± 0.46	5.34 ± 0.12	4.120	-330
-331	2-1/4	2-5/8	3/16	2.225 ± .018	.210 ± .005	.2650	56.52 ± 0.46	5.34 ± 0.12	4.343	-331
-332	2-3/8	2-3/4	3/16	2.350 ± .018	.210 ± .005	.2786	59.69 ± 0.46	5.34 ± 0.12	4.565	-332
-333	2-1/2	2-7/8	3/16	2.475 ± .020	.210 ± .005	.2922	62.87 ± 0.50	5.34 ± 0.12	4.788	-333
-334	2-5/8	3	3/16	2.600 ± .020	.210 ± .005	.3058	66.04 ± 0.50	5.34 ± 0.12	5.011	-334
-335	2-3/4	3-1/8	3/16	2.725 ± .020	.210 ± .005	.3194	69.22 ± 0.50	5.34 ± 0.12	5.234	-335
-336	2-7/8	3-1/4	3/16	2.850 ± .020	.210 ± .005	.3330	72.39 ± 0.50	5.34 ± 0.12	5.457	-336
-337	3	3-3/8	3/16	2.975 ± .024	.210 ± .005	.3466	75.57 ± 0.61	5.34 ± 0.12	5.680	-337
-338	3-1/8	3-1/2	3/16	3.100 ± .024	.210 ± .005	.3602	78.74 ± 0.61	5.34 ± 0.12	5.903	-338
-339	3-1/4	3-5/8	3/16	3.225 ± .024	.210 ± .005	.3738	81.92 ± 0.61	5.34 ± 0.12	6.125	-339
-340	3-3/8	3-3/4	3/16	3.350 ± .024	.210 ± .005	.3874	85.09 ± 0.61	5.34 ± 0.12	6.348	-340
-341	3-1/2	3-7/8	3/16	3.475 ± .024	.210 ± .005	.4010	88.27 ± 0.61	5.34 ± 0.12	6.571	-341
-342	3-5/8	4	3/16	3.600 ± .028	.210 ± .005	.4146	91.44 ± 0.71	5.34 ± 0.12	6.794	-342
-343	3-3/4	4-1/8	3/16	3.725 ± .028	.210 ± .005	.4282	94.62 ± 0.71	5.34 ± 0.12	7.017	-343
-344	3-7/8	4-1/4	3/16	3.850 ± .028	.210 ± .005	.4418	97.79 ± 0.71	5.34 ± 0.12	7.240	-344
-345	4	4-3/8	3/16	3.975 ± .028	.210 ± .005	.4554	100.96 ± 0.71	5.34 ± 0.12	7.463	-345
-346	4-1/8	4-1/2	3/16	4.100 ± .028	.210 ± .005	.4690	104.14 ± 0.71	5.34 ± 0.12	7.686	-346
-347	4-1/4	4-5/8	3/16	4.225 ± .030	.210 ± .005	.4826	107.32 ± 0.76	5.34 ± 0.12	7.908	-347
-348	4-3/8	4-3/4	3/16	4.350 ± .030	.210 ± .005	.4962	110.49 ± 0.76	5.34 ± 0.12	8.131	-348
-349	4-1/2	4-7/8	3/16	4.475 ± .030	.210 ± .005	.5098	113.67 ± 0.76	5.34 ± 0.12	8.354	-349
-350	4-5/8	5	3/16	4.600 ± .030	.210 ± .005	.5234	116.84 ± 0.76	5.34 ± 0.12	8.577	-350
-351	4-3/4	5-1/8	3/16	4.725 ± .030	.210 ± .005	.5370	120.02 ± 0.76	5.34 ± 0.12	8.800	-351
-352	4-7/8	5-1/4	3/16	4.850 ± .030	.210 ± .005	.5506	123.19 ± 0.76	5.34 ± 0.12	9.023	-352
-353	5	5-3/8	3/16	4.975 ± .037	.210 ± .005	.5642	126.37 ± 0.94	5.34 ± 0.12	9.246	-353
-354	5-1/8	5-1/2	3/16	5.100 ± .037	.210 ± .005	.5778	129.54 ± 0.94	5.34 ± 0.12	9.468	-354
-355	5-1/4	5-5/8	3/16	5.225 ± .037	.210 ± .005	.5914	132.72 ± 0.94	5.34 ± 0.12	9.691	-355
-356	5-3/8	5-3/4	3/16	5.350 ± .037	.210 ± .005	.6050	135.89 ± 0.94	5.34 ± 0.12	9.914	-356
-357	5-1/2	5-7/8	3/16	5.475 ± .037	.210 ± .005	.6186	139.07 ± 0.94	5.34 ± 0.12	10.137	-357
-358	5-5/8	6	3/16	5.600 ± .037	.210 ± .005	.6322	142.24 ± 0.94	5.34 ± 0.12	10.360	-358
-359	5-3/4	6-1/8	3/16	5.725 ± .037	.210 ± .005	.6458	145.42 ± 0.94	5.34 ± 0.12	10.583	-359
-360	5-7/8	6-1/4	3/16	5.850 ± .037	.210 ± .005	.6594	148.59 ± 0.94	5.34 ± 0.12	10.806	-360

All sizes are based on 70-durometer Nitrile compounds. Materials with unusual shrinkage during curing may have slightly different dimensions.

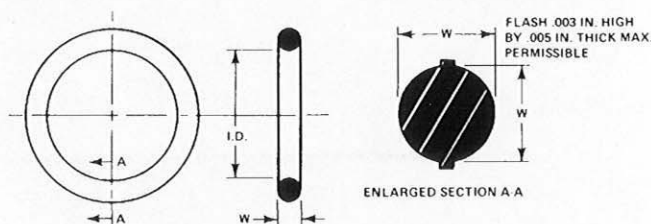
O-Ring Sizes by AS 568 Dash Numbers



Size Ref. AS 568	Nominal Size Inches			Actual Size Inches		Vol. Cu. In.	Actual Size Millimeters		Vol. Cubic Cent.	Size Ref. AS 568
	I.D.	O.D.	W	I.D.	W		I.D.	W		
-361	6	6-3/8	3/16	5.975 ± .037	.210 ± .005	.6730	151.77 ± 0.94	5.34 ± 0.12	11.029	-361
-362	6-1/4	6-5/8	3/16	6.225 ± .040	.210 ± .005	.7002	158.12 ± 1.02	5.34 ± 0.12	11.474	-362
-363	6-1/2	6-7/8	3/16	6.475 ± .040	.210 ± .005	.7274	164.47 ± 1.02	5.34 ± 0.12	11.920	-363
-364	6-3/4	7-1/8	3/16	6.725 ± .040	.210 ± .005	.7546	170.82 ± 1.02	5.34 ± 0.12	12.366	-364
-365	7	7-3/8	3/16	6.975 ± .040	.210 ± .005	.7818	177.17 ± 1.02	5.34 ± 0.12	12.811	-365
-366	7-1/4	7-5/8	3/16	7.225 ± .045	.210 ± .005	.8090	183.52 ± 1.14	5.34 ± 0.12	13.257	-366
-367	7-1/2	7-7/8	3/16	7.475 ± .045	.210 ± .005	.8362	189.87 ± 1.14	5.34 ± 0.12	13.703	-367
-368	7-3/4	8-1/8	3/16	7.725 ± .045	.210 ± .005	.8634	196.22 ± 1.14	5.34 ± 0.12	14.149	-368
-369	8	8-3/8	3/16	7.975 ± .045	.210 ± .005	.8906	202.57 ± 1.14	5.34 ± 0.12	14.594	-369
-370	8-1/4	8-5/8	3/16	8.225 ± .050	.210 ± .005	.9178	208.92 ± 1.30	5.34 ± 0.12	15.040	-370
-371	8-1/2	8-7/8	3/16	8.475 ± .050	.210 ± .005	.9450	215.27 ± 1.30	5.34 ± 0.12	15.486	-371
-372	8-3/4	9-1/8	3/16	8.725 ± .050	.210 ± .005	.9722	221.62 ± 1.30	5.34 ± 0.12	15.932	-372
-373	9	9-3/8	3/16	8.975 ± .050	.210 ± .005	.9994	227.97 ± 1.30	5.34 ± 0.12	16.377	-373
-374	9-1/4	9-5/8	3/16	9.225 ± .055	.210 ± .005	1.0266	234.32 ± 1.40	5.34 ± 0.12	16.823	-374
-375	9-1/2	9-7/8	3/16	9.475 ± .055	.210 ± .005	1.0538	240.67 ± 1.40	5.34 ± 0.12	17.269	-375
-376	9-3/4	10-1/8	3/16	9.725 ± .055	.210 ± .005	1.0811	247.02 ± 1.40	5.34 ± 0.12	17.716	-376
-377	10	10-3/8	3/16	9.975 ± .055	.210 ± .005	1.1083	253.37 ± 1.40	5.34 ± 0.12	18.162	-377
-378	10-1/2	10-7/8	3/16	10.475 ± .060	.210 ± .005	1.1627	266.07 ± 1.52	5.34 ± 0.12	19.053	-378
-379	11	11-3/8	3/16	10.975 ± .060	.210 ± .005	1.2171	278.77 ± 1.52	5.34 ± 0.12	19.945	-379
-380	11-1/2	11-7/8	3/16	11.475 ± .065	.210 ± .005	1.2715	291.47 ± 1.65	5.34 ± 0.12	20.836	-380
-381	12	12-3/8	3/16	11.975 ± .065	.210 ± .005	1.3259	304.17 ± 1.65	5.34 ± 0.12	21.728	-381
-382	13	13-3/8	3/16	12.975 ± .065	.210 ± .005	1.4347	329.55 ± 1.65	5.34 ± 0.12	23.511	-382
-383	14	14-3/8	3/16	13.975 ± .070	.210 ± .005	1.5435	354.97 ± 1.78	5.34 ± 0.12	25.293	-383
-384	15	15-3/8	3/16	14.975 ± .070	.210 ± .005	1.6523	380.37 ± 1.78	5.34 ± 0.12	27.076	-384
-385	16	16-3/8	3/16	15.955 ± .075	.210 ± .005	1.7590	405.26 ± 1.90	5.34 ± 0.12	28.825	-385
-386	17	17-3/8	3/16	16.955 ± .080	.210 ± .005	1.8678	430.65 ± 2.05	5.34 ± 0.12	30.608	-386
-387	18	18-3/8	3/16	17.955 ± .085	.210 ± .005	1.9766	456.06 ± 2.15	5.34 ± 0.12	32.391	-387
-388	19	19-3/8	3/16	18.955 ± .090	.210 ± .005	2.0854	481.46 ± 2.25	5.34 ± 0.12	34.174	-388
-389	20	20-3/8	3/16	19.955 ± .095	.210 ± .005	2.1942	506.86 ± 2.25	5.34 ± 0.12	35.957	-389
-390	21	21-3/8	3/16	20.955 ± .095	.210 ± .005	2.3030	532.26 ± 2.25	5.34 ± 0.12	37.739	-390
-391	22	22-3/8	3/16	21.955 ± .100	.210 ± .005	2.4118	557.66 ± 2.55	5.34 ± 0.12	39.522	-391
-392	23	23-3/8	3/16	22.940 ± .105	.210 ± .005	2.5190	582.65 ± 2.65	5.34 ± 0.12	41.279	-392
-393	24	24-3/8	3/16	23.940 ± .110	.210 ± .005	2.6278	608.10 ± 2.80	5.34 ± 0.12	43.062	-393
-394	25	25-3/8	3/16	24.940 ± .115	.210 ± .005	2.7366	633.50 ± 2.90	5.34 ± 0.12	44.845	-394
-395	26	26-3/8	3/16	25.940 ± .120	.210 ± .005	2.8454	658.85 ± 3.05	5.34 ± 0.12	46.628	-395

All sizes are based on 70-durometer Nitrile compounds. Materials with unusual shrinkage during curing may have slightly different dimensions.

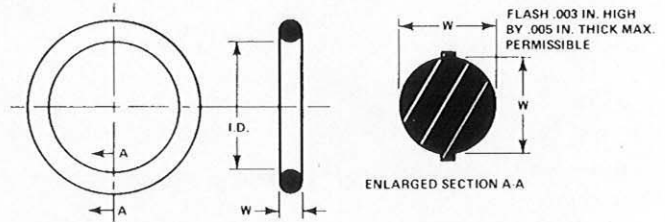
O-Ring Sizes by AS 568 Dash Numbers



Size Ref.	Nominal Size Inches			Actual Size Inches		Vol. Cu. In.	Actual Size Millimeters		Vol. Cu. In.	Size Ref.
	I.D.	O.D.	W	I.D.	W		I.D.	W		
-400	1 3/8	1 7/8	1/4	1.350	.275		34.29	6.98		-400
-401	1 1/2	2	1/4	1.475	.275		37.47	6.98		-401
-402	1 5/8	2 1/8	1/4	1.600	.275		40.64	6.98		-402
-403	1 3/4	2 1/4	1/4	1.725	.275		43.82	6.98		-403
-404	1 7/8	2 3/8	1/4	1.850	.275		46.99	6.98		-404
-405	2	2 1/2	1/4	1.975	.275		50.17	6.98		-405
-406	2 1/8	2 5/8	1/4	2.100	.275		53.34	6.98		-406
-407	2 1/4	2 3/4	1/4	2.225	.275		57.15	6.98		-407
-408	2 3/8	2 7/8	1/4	2.350	.275		59.69	6.98		-408
-409	2 1/2	3	1/4	2.475	.275		62.87	6.98		-409
-410	2 5/8	3 1/8	1/4	2.600	.275		66.04	6.98		-410
-411	2 3/4	3 1/4	1/4	2.725	.275		69.22	6.98		-411
-412	2 7/8	3 3/8	1/4	2.850	.275		72.39	6.98		-412
-413	3	3 1/2	1/4	2.975	.275		75.57	6.98		-413
-414	3 1/8	3 5/8	1/4	3.100	.275		78.74	6.98		-414
-415	3 1/4	3 3/4	1/4	3.225	.275		81.92	6.98		-415
-416	3 3/8	3 7/8	1/4	3.350	.275		85.09	6.98		-416
-417	3 1/2	4	1/4	3.475	.275		88.27	6.98		-417
-418	3 5/8	4 1/8	1/4	3.600	.275		91.44	6.98		-418
-419	3 3/4	4 1/4	1/4	3.725	.275		94.62	6.98		-419
-420	3 7/8	4 3/8	1/4	3.850	.275		97.79	6.98		-420
-421	4	4 1/2	1/4	3.975	.275		100.97	6.98		-421
-422	4 1/8	4 5/8	1/4	4.100	.275		104.14	6.98		-422
-423	4 1/4	4 3/4	1/4	4.225	.275		107.32	6.98		-423
-424	4 3/8	4 7/8	1/4	4.350	.275		110.49	6.98		-424
-425	4-1/2	5	1/4	4.475 ± .033	.275 ± .006	.8863	113.67 ± 0.83	6.98 ± 0.15	14.524	-425
-426	4-5/8	5-1/8	1/4	4.600 ± .033	.275 ± .006	.9097	116.84 ± 0.83	6.98 ± 0.15	14.907	-426
-427	4-3/4	5-1/4	1/4	4.725 ± .033	.275 ± .006	.9330	120.02 ± 0.83	6.98 ± 0.15	15.289	-427
-428	4-7/8	5-3/8	1/4	4.850 ± .033	.275 ± .006	.9563	123.19 ± 0.83	6.98 ± 0.15	15.671	-428
-429	5	5-1/2	1/4	4.975 ± .037	.275 ± .006	.9796	126.37 ± 0.93	6.98 ± 0.15	16.053	-429
-430	5-1/8	5-5/8	1/4	5.100 ± .037	.275 ± .006	1.0030	129.54 ± 0.93	6.98 ± 0.15	16.436	-430
-431	5-1/4	5-3/4	1/4	5.225 ± .037	.275 ± .006	1.0263	132.72 ± 0.93	6.98 ± 0.15	16.818	-431
-432	5-3/8	5-7/8	1/4	5.350 ± .037	.275 ± .006	1.0496	135.89 ± 0.93	6.98 ± 0.15	17.200	-432
-433	5-1/2	6	1/4	5.475 ± .037	.275 ± .006	1.0729	139.07 ± 0.93	6.98 ± 0.15	17.582	-433
-434	5-5/8	6-1/8	1/4	5.600 ± .037	.275 ± .006	1.0963	142.24 ± 0.93	6.98 ± 0.15	17.965	-434
-435	5-3/4	6-1/4	1/4	5.725 ± .037	.275 ± .006	1.1196	145.42 ± 0.93	6.98 ± 0.15	18.347	-435
-436	5-7/8	6-3/8	1/4	5.850 ± .037	.275 ± .006	1.1429	148.59 ± 0.93	6.98 ± 0.15	18.729	-436
-437	6	6-1/2	1/4	5.975 ± .037	.275 ± .006	1.1662	151.77 ± 0.93	6.98 ± 0.15	19.111	-437
-438	6-1/4	6-3/4	1/4	6.225 ± .040	.275 ± .006	1.2129	158.12 ± 1.01	6.98 ± 0.15	19.876	-438
-439	6-1/2	7	1/4	6.475 ± .040	.275 ± .006	1.2595	164.47 ± 1.01	6.98 ± 0.15	20.640	-439
-440	6-3/4	7-1/4	1/4	6.725 ± .040	.275 ± .006	1.3062	170.82 ± 1.01	6.98 ± 0.15	21.405	-440

All sizes are based on 70-durometer Nitrile compounds. Materials with unusual shrinkage during curing may have slightly different dimensions.

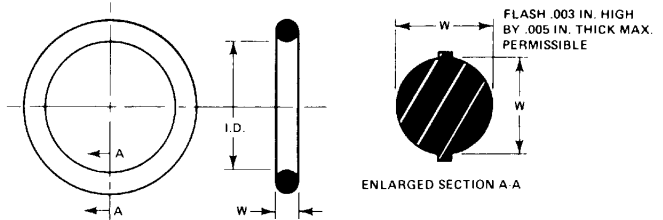
O-Ring Sizes by AS 568 Dash Numbers



Size Ref. AS 568	Nominal Size Inches			Actual Size Inches		Vol. Cu. In.	Actual Size Millimeters		Vol. Cubic Cent.	Size Ref. AS 568
	I.D.	O.D.	W	I.D.	W		I.D.	W		
-441	7	7-1/2	1/4	6.975 ± .040	.275 ± .006	1.3528	177.17 ± 1.01	6.98 ± 0.15	22.168	-441
-442	7-1/4	7-3/4	1/4	7.225 ± .045	.275 ± .006	1.3995	183.52 ± 1.14	6.98 ± 0.15	22.934	-442
-443	7-1/2	8	1/4	7.475 ± .045	.275 ± .006	1.4461	189.87 ± 1.14	6.98 ± 0.15	23.697	-443
-444	7-3/4	8-1/4	1/4	7.725 ± .045	.275 ± .006	1.4928	196.22 ± 1.14	6.98 ± 0.15	24.463	-444
-445	8	8-1/2	1/4	7.975 ± .045	.275 ± .006	1.5394	202.57 ± 1.14	6.98 ± 0.15	25.226	-445
-446	8-1/2	9	1/4	8.475 ± .055	.275 ± .006	1.6327	215.27 ± 1.40	6.98 ± 0.15	26.755	-446
-447	9	9-1/2	1/4	8.975 ± .055	.275 ± .006	1.7260	227.97 ± 1.40	6.98 ± 0.15	28.284	-447
-448	9-1/2	10	1/4	9.475 ± .055	.275 ± .006	1.8193	240.67 ± 1.40	6.98 ± 0.15	29.813	-448
-449	10	10-1/2	1/4	9.975 ± .055	.275 ± .006	1.9126	253.37 ± 1.40	6.98 ± 0.15	31.342	-449
-450	10-1/2	11	1/4	10.475 ± .060	.275 ± .006	2.0059	266.07 ± 1.52	6.98 ± 0.15	32.871	-450
-451	11	11-1/2	1/4	10.975 ± .060	.275 ± .006	2.0992	278.77 ± 1.52	6.98 ± 0.15	34.400	-451
-452	11-1/2	12	1/4	11.475 ± .060	.275 ± .006	2.1925	291.47 ± 1.52	6.98 ± 0.15	35.929	-452
-453	12	12-1/2	1/4	11.975 ± .060	.275 ± .006	2.2858	304.17 ± 1.52	6.98 ± 0.15	37.458	-453
-454	12-1/2	13	1/4	12.475 ± .060	.275 ± .006	2.3791	316.87 ± 1.52	6.98 ± 0.15	38.987	-454
-455	13	13-1/2	1/4	12.975 ± .060	.275 ± .006	2.4724	329.57 ± 1.52	6.98 ± 0.15	40.515	-455
-456	13-1/2	14	1/4	13.475 ± .070	.275 ± .006	2.5657	342.27 ± 1.78	6.98 ± 0.15	42.044	-456
-457	14	14-1/2	1/4	13.975 ± .070	.275 ± .006	2.6590	354.97 ± 1.78	6.98 ± 0.15	43.573	-457
-458	14-1/2	15	1/4	14.475 ± .070	.275 ± .006	2.7523	367.67 ± 1.78	6.98 ± 0.15	45.102	-458
-459	15	15-1/2	1/4	14.975 ± .070	.275 ± .006	2.8456	380.37 ± 1.78	6.98 ± 0.15	46.631	-459
-460	15-1/2	16	1/4	15.475 ± .070	.275 ± .006	2.9389	393.07 ± 1.78	6.98 ± 0.15	48.160	-460
-461	16	16-1/2	1/4	15.955 ± .075	.275 ± .006	3.0285	405.26 ± 1.90	6.98 ± 0.15	49.628	-461
-462	16-1/2	17	1/4	16.455 ± .075	.275 ± .006	3.1218	417.96 ± 1.90	6.98 ± 0.15	51.157	-462
-463	17	17-1/2	1/4	16.955 ± .080	.275 ± .006	3.2151	430.66 ± 2.05	6.98 ± 0.15	52.686	-463
-464	17-1/2	18	1/4	17.455 ± .085	.275 ± .006	3.3084	443.36 ± 2.15	6.98 ± 0.15	54.215	-464
-465	18	18-1/2	1/4	17.955 ± .085	.275 ± .006	3.4017	456.06 ± 2.15	6.98 ± 0.15	55.744	-465
-466	18-1/2	19	1/4	18.455 ± .085	.275 ± .006	3.4950	468.76 ± 2.15	6.98 ± 0.15	57.273	-466
-467	19	19-1/2	1/4	18.955 ± .090	.275 ± .006	3.5883	481.46 ± 2.25	6.98 ± 0.15	58.802	-467
-468	19-1/2	20	1/4	19.455 ± .090	.275 ± .006	3.6816	494.16 ± 2.25	6.98 ± 0.15	60.331	-468
-469	20	20-1/2	1/4	19.955 ± .090	.275 ± .006	3.7749	506.86 ± 2.45	6.98 ± 0.15	61.860	-469
-470	21	21-1/2	1/4	20.955 ± .090	.275 ± .006	3.9615	532.26 ± 2.45	6.98 ± 0.15	64.917	-470
-471	22	22-1/2	1/4	21.955 ± .100	.275 ± .006	4.1481	557.66 ± 2.55	6.98 ± 0.15	67.975	-471
-472	23	23-1/2	1/4	22.940 ± .105	.275 ± .006	4.3319	582.65 ± 2.65	6.98 ± 0.15	70.987	-472
-473	24	24-1/2	1/4	23.940 ± .110	.275 ± .006	4.5184	608.10 ± 2.80	6.98 ± 0.15	74.043	-473
-474	25	25-1/2	1/4	24.940 ± .115	.275 ± .006	4.7050	633.50 ± 2.90	6.98 ± 0.15	77.101	-474
-475	26	26-1/2	1/4	25.940 ± .120	.275 ± .006	4.8916	658.85 ± 3.05	6.98 ± 0.15	80.159	-475

All sizes are based on 70-durometer Nitrile compounds. Materials with unusual shrinkage during curing may have slightly different dimensions.

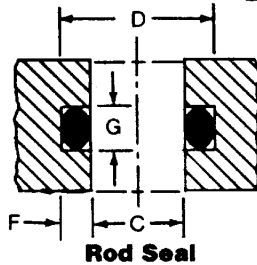
O-Rings For Tube Fitting Bosses



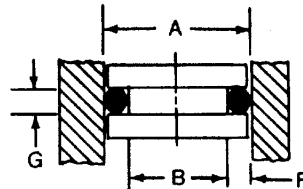
Size Ref. AS 568	Tube Size O.D.	Actual Size Inches		Vol. Cu. In.	Actual Size Millimeters		Vol. Cubic Cent.	Size Ref. AS 568
		I.D.	W		I.D.	W		
—901	3/32	.185 ± .005	.056 ± .003	.0019	4,70 ± 0,13	1,42 ± 0,08	.031	—901
—902	1/8	.239 ± .005	.064 ± .003	.0031	6,07 ± 0,13	1,63 ± 0,08	.051	—902
—903	3/16	.301 ± .005	.064 ± .003	.0037	7,65 ± 0,13	1,63 ± 0,08	.061	—903
—904	1/4	.351 ± .005	.072 ± .003	.0054	8,92 ± 0,13	1,83 ± 0,08	.088	—904
—905	5/16	.414 ± .005	.072 ± .003	.0062	10,52 ± 0,13	1,83 ± 0,08	.102	—905
—906	3/8	.468 ± .005	.078 ± .003	.0082	11,89 ± 0,13	1,98 ± 0,08	.134	—906
—907	7/16	.530 ± .005	.082 ± .003	.0102	13,46 ± 0,18	2,08 ± 0,08	.167	—907
—908	1/2	.644 ± .009	.087 ± .003	.0137	16,36 ± 0,23	2,21 ± 0,08	.225	—908
—909	9/16	.706 ± .009	.097 ± .003	.0186	17,94 ± 0,23	2,46 ± 0,08	.305	—909
—910	5/8	.755 ± .009	.097 ± .003	.0198	19,18 ± 0,23	2,46 ± 0,08	.324	—910
—911	11/16	.863 ± .009	.116 ± .004	.0325	21,92 ± 0,23	2,95 ± 0,10	.533	—911
—912	3/4	.924 ± .009	.116 ± .004	.0345	23,47 ± 0,23	2,95 ± 0,10	.565	—912
—913	13/16	.986 ± .010	.116 ± .004	.0366	25,04 ± 0,25	2,95 ± 0,10	.600	—913
—914	7/8	1.047 ± .010	.116 ± .004	.0386	26,60 ± 0,25	2,95 ± 0,10	.633	—914
—916	1	1.171 ± .010	.116 ± .004	.0427	29,75 ± 0,25	2,95 ± 0,10	.700	—916
—918	1-1/8	1.355 ± .012	.116 ± .004	.0488	34,42 ± 0,30	2,95 ± 0,10	.800	—918
—920	1-1/4	1.475 ± .014	.118 ± .004	.0547	37,46 ± 0,35	3,00 ± 0,10	.896	—920
—924	1-1/2	1.720 ± .014	.118 ± .004	.0631	43,68 ± 0,35	3,00 ± 0,10	1.034	—924
—928	1-3/4	2.090 ± .018	.118 ± .004	.0759	53,09 ± 0,45	3,00 ± 0,10	1.244	—928
—932	2	2.337 ± .018	.118 ± .004	.0843	59,36 ± 0,45	3,00 ± 0,10	1.381	—932

All sizes are based on 90-durometer Nitrile compounds. Materials with unusual shrinkage during curing may have slightly different dimensions.

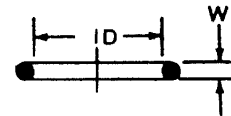
Groove Design For O-Ring Installation



Rod Seal



Piston Seal



O-Ring

Uniform Dash Number	Actual Cross Section Diameter	Diametral Squeeze (Minimum)		Gland Depth F		Groove Width G ± .003			Diametral Clearance (Maximum) D		Eccentricity (Maximum)	Radius (R)
		Dynamic ¹	Static	Dynamic ¹ +.000 - .001	Static +.000 - .004	No Backup Ring	One Backup Ring	Two Backup Rings	500 PSI	1500 PSI		
-001	.040 + .003	.004	.006	.033	.031	.056	—	—	.005	.0025	.002	.010
-002	.050 + .003	.005	.008	.042	.039	.070	—	—	.006	.003	.002	.010
-003	.060 + .003	.006	.009	.051	.048	.084	—	—	.007	.0035	.002	.016
-004 thru -050	.070 + .003	.007	.011	.060	.056	.098	.140	.207	.008	.004	.002	.016
-102 thru -178	.103 + .003	.010	.015	.090	.085	.144	.173	.240	.009	.004	.002	.016
-201 thru -284	.139 + .004	.014	.021	.121	.114	.195	.210	.277	.010	.006	.003	.031
-309 thru -395	.210 + .005	.021	.032	.184	.173	.294	.313	.412	.011	.007	.004	.031
-425 thru -475	.275 + .006	.028	.042	.241	.227	.385	.410	.540	.012	.008	.005	.047

Note 1. The following sizes are not normally recommended for dynamic service, although special applications may permit their use:

-001 thru -003 -223 thru -284
-013 thru -050 -350 thru -395
-117 thru -178 -461 thru -475

Note 2. Clearances shown are based on 70 durometer materials. The clearances must be held to an absolute minimum consistent with design requirements for temperature variations and should not exceed the values shown.

Note 3. Total indicator reading between groove and adjacent bearing surface. All surfaces and corners must be free of tool marks and scratches.

O-ring groove dimensions may be calculated as follows:

Rod Seal

Given: **Example**
Rod Diameter C = .500"
O-ring Cross Section W = 3/32" nominal
Dynamic application
No back-ups required

Determine:
O-ring size = AS-568-112 (1 1/2" ID x 3/32" W nominal dimensions)
Gland Depth F = .090 + .000" (from chart)
Groove Width G = .144 ± .003" (from chart)
Rod Gland D = C + 2F = .500" + 2x.090" = .680"

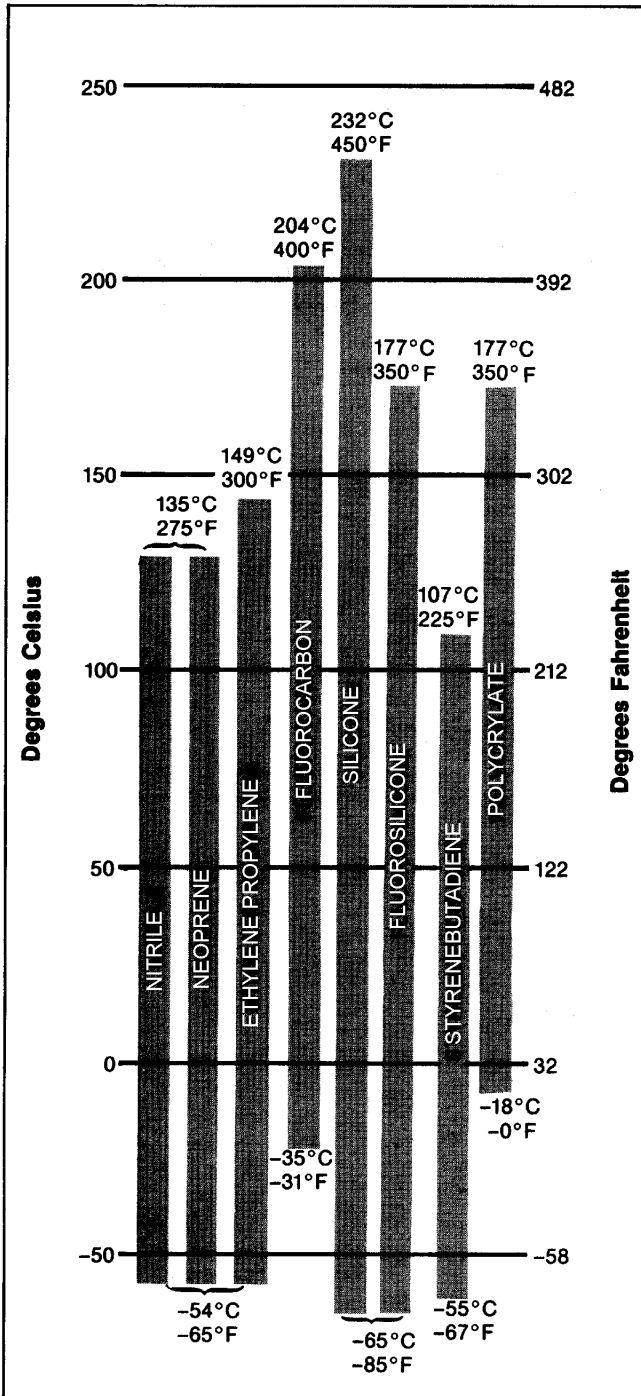
Piston Seal

Given: **Example**
Cylinder Bore A = 1.000"
O-ring Cross Section W = 1/8" nominal
Static application
No back-ups required

Determine:
O-ring size = AS568-210 (1" OD x 1/8" W nominal dimensions)
Gland Depth F = .114 + .000" (from chart)
Groove Width G = .195 ± .003" (from chart)
Piston Groove B = A - 2F = 1.000" - 2x.114" = .772"

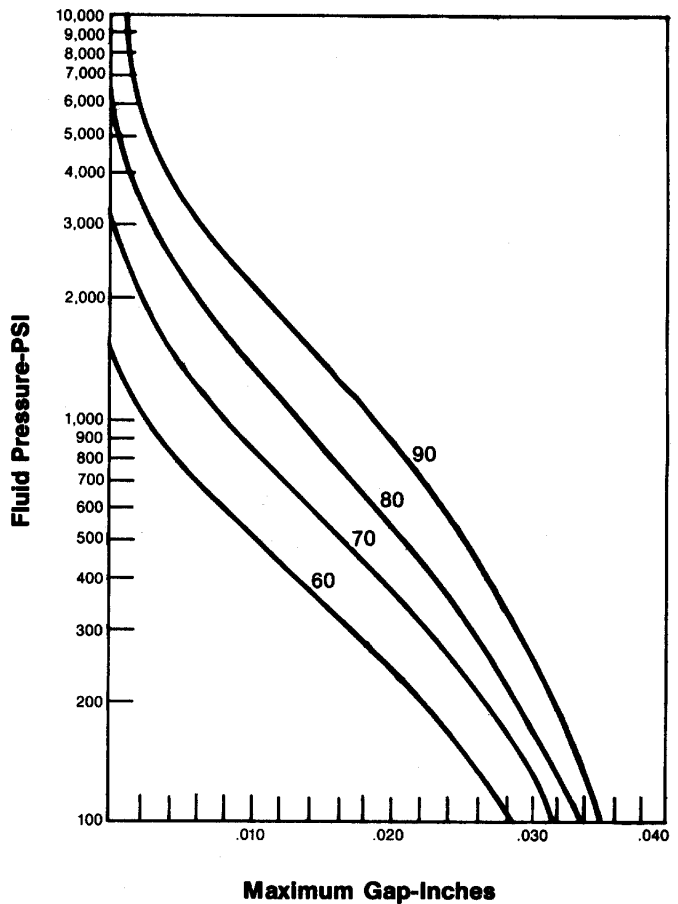
Temperature Range Chart

The temperature range for any compound is determined by the base elastomer used. This chart depicts the maximum temperature range for each elastomer. The temperature range for a specific compound may not reach these maximum limits. Higher temperatures may be considered if exposure is short term or intermittent.



Durometer Chart

The hardness of rubber compounds is measured by the Shore A durometer; the higher the durometer number, the harder the compound. 70-durometer hardness should be used wherever possible as it offers the best combination of properties for most O-ring applications. Softer compounds stretch easier and seal better on rough surfaces. Harder compounds offer greater abrasion resistance and resistance to extrusion. Extrusion must always be considered where high pressures are used. The proper hardness may be selected from this chart by matching the fluid pressure with the maximum extrusion gap.



Fluid Compatibility Table

The recommendations shown in this table are based on data supplied by polymer manufacturers, and comparison made with similar materials. These are general guidelines only and users must conduct their own functional tests to determine the suitability of any compound for their particular application.

To aid in your selection, materials are ranked in order of increasing cost with Nitriles costing the least and Fluoroelastomers costing the most.

R = Recommended
M = Marginal
U = Unsatisfactory
X = Insufficient Data

Increasing cost →

Fluid	Nitrile	SBR	EPDM	Neoprene	Polyacrylate	Urethane	Silicone	Fluoroelastomer	Fluid	Nitrile	SBR	EPDM	Neoprene	Polyacrylate	Urethane	Silicone	Fluoroelastomer
Acetaldehyde	U	R	U	R	U	U	R	U	Bromine	U	U	U	U	U	U	U	R
Acetamide	R	U	U	R	U	U	M	U	Bromobenzene	U	U	U	U	U	U	U	R
Acetic Acid	M	M	R	R	U	U	R	U	Bunker Oil	R	U	U	U	R	R	U	R
Acetone	U	M	R	M	U	U	M	U	Butane	R	M	U	R	R	U	U	R
Acetophenone	U	U	R	U	U	U	U	U	Butter	R	U	M	R	R	R	U	R
Acetylene	R	R	R	R	X	X	R	R	Butyl Acetate	U	U	U	U	U	U	U	U
Ammonia	R	R	R	R	U	X	R	U	Butyl Alcohol	R	R	R	R	U	U	R	R
Ammonium Hydroxide	R	R	R	R	U	U	R	R	Butyl Amine	M	U	U	U	U	U	R	U
Amyl Acetate	U	U	M	U	U	U	U	U	Butyl Carbitol	U	U	R	M	U	X	U	M
Anderol L-774	M	U	U	U	R	U	U	R	Butyl Cellosolve	M	U	R	M	U	U	X	U
Antifreeze	R	R	R	R	U	U	R	R	Butyraldehyde	U	U	R	U	U	U	U	U
Aniline	U	U	R	U	U	U	U	M	Carbitol	R	R	R	R	U	U	R	R
Ansul Ether	M	U	M	U	U	R	U	U	Carbitol Acetate	U	U	U	U	U	U	U	R
Aroclocs	M	U	R	U	U	X	M	R	Carbon Disulfide	U	U	U	U	U	X	U	R
Askarel	R	U	U	U	U	U	U	R	Carbon Tetrachloride	U	U	U	U	U	U	U	R
ASTM #1	R	U	U	R	R	R	R	R	Carbonic Acid	R	R	R	R	R	R	R	R
ASTM #3	R	U	U	R	R	R	U	R	Castor Oil	R	R	R	R	R	R	R	R
ASTM Fuel A	R	U	U	R	R	R	U	R	Cellosolve	U	R	U	U	U	U	U	U
ASTM Fuel B	R	U	U	U	U	R	U	R	Chassis Grease	R	U	U	M	R	X	U	R
ASTM Fuel C	R	U	U	U	U	R	U	R	Chloracetic Acid	U	U	R	U	U	U	X	U
ASTM Fuel D	M	U	U	U	U	R	U	R	Chloracetone	U	U	R	M	X	X	U	R
Auto. Transmission Fluid	R	U	U	M	R	R	M	R	Chlordane	R	U	U	M	X	X	U	R
Beer	R	R	R	R	U	U	R	R	Chlorine	U	U	R	U	U	U	X	R
Benzaldehyde	U	U	R	U	U	U	U	U	Chlorobenzol	U	U	U	U	U	U	U	R
Benzene	U	U	U	U	U	U	U	R	Chloroform	U	U	U	U	U	U	U	R
Benzine	R	U	U	R	R	R	U	R	Chlorosulfonic Acid	U	U	U	U	U	U	U	U
Benzoic Acid	U	U	U	U	U	U	U	R	Chrome Plating Solution	U	U	R	U	U	U	R	R
Benzophenone	U	U	R	X	U	U	U	R	Chromic Acid	U	U	X	U	X	X	M	R
Benzyl Alcohol	U	U	R	R	U	U	X	R	Citric Acid	R	R	R	R	X	X	R	R
Bleach	R	R	R	R	U	U	U	R	Cod Liver Oil	R	U	U	R	R	U	R	R
Borax	R	R	R	U	R	R	R	R	Coffee	R	U	U	U	U	U	R	R
Boric Acid	R	R	R	R	U	R	R	R	Corn Oil	R	U	U	U	U	U	R	R
Brake Fluid	U	R	R	R	U	U	R	U	Creosote	R	U	U	R	R	M	U	R
(non-petroleum)	U	R	R	R	U	U	R	U	Creosote Oil	R	U	U	M	X	X	M	R

Fluid Compatibility Table

R = Recommended
M = Marginal
U = Unsatisfactory
X = Insufficient Data

Increasing cost →

Fluid	Nitrile	SBR	EPDM	Neoprene	Polyacrylate	Urethane	Silicone	Fluoroelastomer	Fluid	Nitrile	SBR	EPDM	Neoprene	Polyacrylate	Urethane	Silicone	Fluoroelastomer
Creosylic Acid	U	U	U	U	U	U	U	R	Formic Acid	M	R	R	R	X	X	M	U
Crude Oil	R	U	U	U	R	X	U	R	Freon 12	R	R	R	R	X	X	U	R
Cyclohexane	R	U	U	M	R	R	U	R	Fuel Oil	R	U	U	R	R	U	U	R
Cyclohexanol	R	U	U	R	X	X	U	R	Furan	U	U	X	U	U	X	X	X
Decalin	U	U	U	U	U	U	U	R	Furfural	U	U	R	U	U	X	U	U
Denatured Alcohol	R	R	R	R	U	U	U	R	Furfuryl Alcohol	U	U	R	U	U	U	U	X
Diacetone	U	U	R	U	U	U	U	U	Fyrquel	U	U	R	U	U	U	U	R
Dibutyl Amine	U	U	U	M	U	U	U	U	Gallic Acid	R	R	R	R	U	U	X	R
Dibutyl Phthalate	U	U	R	U	U	X	X	M	Gasoline	R	U	R	U	U	R	U	R
Dichloro Aniline	U	U	U	U	U	U	U	M	Gelatin	R	R	R	R	U	U	R	R
Dichloro Butane	R	U	U	U	U	U	U	R	Glucose	R	R	R	R	X	U	R	R
Diesel Oil	R	U	U	M	U	U	U	R	Glycerine	R	R	R	R	U	U	R	R
Diethylamine	R	R	R	R	U	M	R	U	Heptane	R	U	U	R	R	R	U	R
Diethyl Benzene	M	U	U	U	X	X	X	R	Hexaldehyde	U	U	R	R	X	X	R	U
Diethylene Glycol	R	R	R	R	U	U	U	R	Hexane	U	U	R	R	R	R	U	R
Dimethyl Ether	U	U	U	M	M	U	U	U	Hexanol	R	R	M	R	U	U	R	R
Dimethyl Formamide	U	X	R	X	X	X	R	U	Home Heating Oil	R	U	U	M	R	R	R	R
Dimethyl Phthalate	U	U	R	U	U	X	X	R	Hydrazine	R	R	R	R	X	X	R	X
Dimethyl Terephthalate	U	U	U	U	U	U	U	R	Hydrochloric Acid	R	M	R	R	M	U	U	R
Dioctyl Phthalate	U	U	R	U	U	U	M	R	Hydrocyanic Acid	R	R	R	R	U	X	M	R
Dioxane	U	U	R	U	U	U	U	U	Hydrogen Peroxide	R	R	R	R	U	X	R	R
Diphenyl	U	U	U	U	U	U	U	R	Hydrogen Sulfide	U	U	R	R	U	X	M	U
Dow Corning 550	R	R	R	R	R	R	R	R	Hydroquinone	M	U	U	U	U	X	X	R
Dow Gard	R	R	R	R	M	M	R	R	Hypoid Gear Lube	R	U	U	M	R	R	M	R
Dowtherm A & E	U	U	U	U	U	U	U	R	Iodine	R	R	R	U	X	X	X	R
Elco 28	R	U	U	M	R	R	R	U	Isocyanate	X	X	X	X	X	X	X	R
Epoxy Resins	X	X	R	R	X	X	X	R	Iso Octane	R	U	U	R	R	R	U	R
Ethane	R	U	U	R	R	M	U	R	Iso Phorone	U	U	R	U	U	U	U	U
Ethanol	R	R	R	R	U	R	R	R	Isopar	R	X	U	R	R	R	U	R
Ethanolamine	R	R	R	R	U	M	R	U	Isopropanol	R	R	R	R	U	U	R	R
Ethyl Acetate	U	U	R	U	U	U	R	U	Isopropyl Acetate	U	U	R	U	U	U	U	U
Ethyl Benzene	U	U	U	U	U	U	U	R	JP-4(MIL-J-5624)	R	U	U	U	R	R	U	R
Ethyl Cellulose	R	R	R	R	U	R	R	U	JP-5(MIL-J-5624)	R	U	U	U	R	R	U	R
Ethyl Chloride	R	R	R	R	M	R	U	R	Kerosine	R	U	U	R	R	R	U	R
Ethyl Ether	M	U	M	U	U	R	U	U	Lactic Acid	R	R	R	R	U	X	X	R
Ethyl Formate	U	U	R	R	X	X	X	R	Lacquers	U	U	U	U	U	U	U	U
Ethyl Hexanol	M	U	R	R	X	X	X	R	Lard	U	U	U	R	U	R	U	R
Ethyl Merlaptan	U	U	X	M	X	X	M	R	Linoleic Acid	R	U	U	R	X	X	R	R
Ethylene Chloride	U	U	U	U	U	U	U	R	Linseed Oil	R	U	M	M	R	X	R	R
Ethylene Oxide	U	U	R	U	U	U	U	U	Lye Solutions	R	R	R	R	U	U	R	R
Formaldehyde	M	M	R	M	U	U	U	U	Malathion	R	U	U	X	X	X	U	R
									Maleic Acid	U	U	U	U	U	X	X	R

Fluid Compatibility Table

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Increasing cost →

Fluid	Nitrile	SBR	EPDM	Neoprene	Polyacrylate	Urethane	Silicone	Fluoroelastomer	Fluid	Nitrile	SBR	EPDM	Neoprene	Polyacrylate	Urethane	Silicone	Fluoroelastomer
Mercury	R	R	R	R	X	X	X	R	Propyl Acetate	U	U	R	U	U	U	U	U
Meter-Cresol	U	U	U	R	U	U	U	R	Pydraul	U	U	R	U	U	U	U	R
Methane	R	U	U	R	R	M	U	R	Pyranol	R	U	U	R	R	U	U	R
Methanol	R	R	R	R	U	U	R	U	Pyridine	U	R	U	U	U	X	U	U
Methyl Acetate	U	U	R	R	U	U	U	U	Rapeseed Oil	R	U	R	U	U	R	U	R
Methacrylic Acid	U	U	R	R	U	U	U	M	Resurcinol	X	R	R	X	X	X	X	X
Methyl Cellosolve	M	U	R	M	U	U	U	U	SAE10W30	R	U	U	M	R	R	R	R
Methylene Chloride	U	U	U	U	U	U	U	R	Seawater	R	R	R	R	U	U	R	X
Methyl Ethyl Ketone	U	U	R	U	U	U	U	U	Silicone Grease	R	R	R	R	R	R	R	R
Methyl Mercaptan	X	X	R	X	X	X	X	X	Silver Nitrate	R	R	R	R	R	R	R	R
Milk	R	R	R	R	U	U	R	R	Skelly Solvent	R	U	U	U	X	X	X	R
Mineral Oil	R	U	M	R	R	R	R	R	Skydrol	U	U	R	U	U	U	U	R
Mineral Spirits	R	U	U	U	R	R	U	R	Skydrol 500	U	U	R	U	U	U	U	U
Monovinyl Acetylene	R	R	R	R	X	X	R	R	Sodium Hydroxide	R	R	U	R	U	R	R	R
Mustard	X	R	R	X	X	X	R	R	Sovasol	R	U	U	R	R	U	U	R
Naphtha	R	U	U	U	R	R	U	R	Soy Bean Oil	R	U	M	M	R	X	R	R
Naphthalene	U	U	U	U	X	X	U	R	Stearic Acid	R	R	R	R	X	X	R	X
Naphthenic Acid	R	U	U	U	X	X	U	R	Stoddard Solvent	R	U	R	R	R	R	U	R
Natural Gas	R	R	U	R	R	R	R	R	Sucrose	R	R	R	R	U	U	R	R
Neatsfoot Oil	R	U	R	U	R	R	R	R	Sulfuric Acid	R	R	R	R	U	U	U	R
Nitric Acid	U	M	R	U	U	U	U	M	Tall Oil	R	U	U	M	R	U	X	R
Nitrobenzene	U	U	U	U	U	U	U	R	Tannic Acid	R	R	R	R	U	X	R	R
Nitropropane	U	U	R	U	U	U	U	U	Tar	R	U	U	M	U	X	R	R
Octane	R	U	U	U	U	U	U	R	Tartaric Acid	R	R	R	R	X	X	R	R
Octanol	R	R	R	R	U	U	R	R	Tetrachloro Ethane	U	U	U	U	U	U	U	R
Oleic Acid	M	U	U	M	X	X	U	R	Tetralin	U	U	U	U	U	U	U	R
Oleum	R	U	U	M	X	X	U	R	Tidewater Oil	R	U	U	U	U	R	U	R
Oronite 8200	R	U	R	R	X	R	U	R	Toluene	U	U	U	U	U	U	U	R
Oxalic Acid	R	R	R	R	X	X	R	R	Trichloro Ethylene	M	U	U	U	U	U	U	U
Peanut Oil	R	U	M	M	R	X	R	R	Triethanol Amine	M	R	R	U	U	U	X	U
Pentane	R	M	U	R	R	U	U	R	Turbine Oil	R	U	U	U	R	U	U	R
Perchloroethylene	R	U	U	U	U	U	U	R	Turpentine	R	U	R	U	R	X	U	R
Petroleum Ether	U	U	U	U	U	U	U	R	UCDN 50HB280X	R	R	U	R	R	X	R	R
Phenol	U	U	U	U	U	U	U	R	Univis J-43	R	U	U	R	R	R	U	R
Phenylhydrazine	U	M	U	U	U	X	X	R	Varnish	R	U	U	U	U	M	U	R
Phosphoric Acid	R	R	R	R	M	U	R	R	Vinegar	R	R	R	R	U	U	R	R
Pine Oil	R	U	U	U	X	X	U	R	Water	R	R	R	R	U	U	R	R
Potassium Hydroxide	R	R	R	R	U	U	M	U	Wheat Germ Oil	R	U	U	M	R	R	R	R
Propane	R	U	U	R	R	M	U	R	Whiskey & Wine	R	R	R	R	U	U	R	R
Propanol	R	R	R	R	U	U	R	R	Wood Oil	R	U	U	R	X	M	U	R

Comparison of Properties Chart

This chart matches the general rubber properties required in most O-ring applications with the capabilities of commonly used elastomers. Since no one elastomer is rated "excellent" for all properties, compromises are

sometimes necessary when selecting an elastomer for a specific O-ring application. Start with the most critical properties to narrow your choices.

Property	Nitrile	SBR	Neoprene	Ethylene Propylene	Fluorocarbon	Fluorosilicone	Polyacrylate	Polyurethane	Silicone
Ozone resistance	P	P	GE	E	E	E	E	E	E
Weather resistance	F	F	E	E	E	E	E	E	E
Heat resistance	G	FG	G	E	E	E	E	F	E
Chemical resistance	FG	FG	FG	E	E	E	P	F	GE
Oil resistance	E	P	FG	P	E	G	E	G	PG
Impermeability	G	F	G	G	G	P	E	G	P
Cold resistance	G	G	FG	GE	FP	GE	P	G	E
Tear resistance	FG	FG	FG	GE	F	P	FG	GE	P
Abrasion resistance	G	G	G	GE	G	P	G	E	P
Set resistance	GE	G	F	GE	GE	GE	F	F	GE
Dynamic properties	GE	G	F	GE	GE	P	F	E	P
Acid resistance	F	F	FG	G	E	FG	P	P	FG
Tensile strength	GE	GE	G	GE	GE	F	F	E	P
Electrical properties	F	G	F	G	F	E	F	FG	E
Water/Steam resistance	FG	FG	F	E	FG	F	P	P	F
Flame resistance	P	P	G	P	E	G	P	P	F

E = Excellent G = Good F = Fair P = Poor

GLOSSARY OF O-RING TERMS AND ABBREVIATIONS

AF

Air Force

AMS

Aerospace Material Specification

AN

Airforce-Navy

AS-568A

Aerospace Standard Uniform Dash Numbering System for O-Rings.

ASTM

American Society for Testing and Materials.

Clearance, Diametral

The difference in diameters of two surfaces to be sealed.

Cross-Sectional Diameter (C/S)

One half the difference between the ID and OD of an O-Ring.

Dynamic Seal

An application where an O-Ring is to seal two parts which are in motion.

Elongation

Percent of stretch before breaking.

Extrusion

The extension, under pressure, of a portion of an O-Ring into the clearance between mating parts.

Face Seal

An application where an O-Ring seals in a plane perpendicular to its axis.

Flash

Excess rubber left around an O-Ring at mold parting lines.

Gland

Seal assembly, including O-Ring, groove and contacting surfaces.

Groove

The recess into which an O-Ring is fitted.

Hardness

Property usually measured with a Shore A Durometer. A reading of 40° is soft, 90° is hard.

ID

The inside diameter of an O-Ring.

MIL

Military

Modulus

Stress at 100% elongation.

MS

Military Standard

OD

The outside diameter of an O-Ring.

SAE

Society of Automotive Engineers

Seal

An O-Ring that prevents fluid flow.

Set, Compression

Permanent distortion of an O-Ring after compression.

Squeeze

Cross-sectional compression on an O-Ring.

Static Seal

An O-Ring designed to function between parts having no relative motion. (A Gasket)

Tensile

The pulling strength before breaking, measured in pounds per square inch.

W

The cross-sectional diameter of an O-Ring.