



Selection Guide to Rubber		Natural Rubber (NR)	Butadiene Styrene (SBR)	Butyl (IIR)	Ethylene Propylene (EPT) (EPDM)	Neoprene (CR)	Nitrile (NBR)	Polyurethane (AU) (EU)	Silicone (SI)	Hypalon (CSM)	Polyacrylate (ACM)	Fluorelastomer (FPM)
Physical Properties	Durometer, Range	20 100	40 100	30 80	30 90	20 95	20 90	55 100	25 80	50 95	40 90	65 90
	Resilience	E	G	F	G	E	G	G	F G	G	G	F
	Tensile Stength, Psl max.	4000 <sup>+</sup>	3000 <sup>+</sup>	2000 <sup>+</sup>	2000 3000	4000 <sup>+</sup>	1000 3500	8000	600 1500	1500 2500	1700	1500 3000
	Elongation, % max.	800	450	300 800	500	650 850	400 600	250 800	90 800	250 500	450	100 450
	Compresssion Set. Resistance	G	G	F	F	F G	G	E	G E	F G	F G	G E
	Electrical Resistivity	E	E	E	E	F	P	G	E	G	F	G
	Impermeability, Gas	G	F	E	G	G	G	G	F	E	G	E
Resistance Properties	Resistance to: Impact	E	E	G	G	G	F	E	P F	F G	P	F G
	Abrasion	E	E	G	G	G	E	E	P G	G	F G	G
	Tear	E	F	G	P	G	G	E	F G	F G	F	F G
	Tesiles Stengthh, Psi @250°F	1800	1200	1000	2000	1500	700	1830	850	500	1300	300 800
	@400°F	125	170	350	400	180	130	200	400	200	225	150 300
	Elogation, % @250°F	500	250	250	300 500	350	120	300	350	60	400	100 350
	@400°F	80	60	80	0 120	0 100	20	140	200	20	150	50 160
	Heat Aging @212°F	G	G	E	E	G	G	F G	E	E	E	E
	Flame Resistance	P	P	P	P	G	P F	P F	F G	G	P F	E
	Low Tempature Stuffening °F	-20 -50	0 -50	-10 -40	-20 -50	+10 -20	+30 -20	-10 -30	-60 -160	-30 -50	+35 +10	+20 -30
	Brittle °F	-80	-80	-80	-90	-45	-65	-60	-90 -180	-60	-10	+10 -60
	Weatthering	F	F	E	E	E	G	E	E	E	E	E
	Ozone	P	P	E	E	E	P	E	E	E	E	E
	Water	E	E	E	G E	G	E	G	G	G	F	G
	Acid	F G	F G	E	G E	G	G	P F	F G	E	F	G E
	Alkali	F G	F G	E	G E	G	F G	P F	P F	E	P	F G
	Gas, Kerosene (Alipmatic Hydrocarbons)	P	P	P	P	P	E	E	P F	F	E	E
	Benzol, Toluol (Aromatic Hydrocarbons)	P	P	F G	F	P	G	P F	P	P F	P	E
	Degreaser Solvents (Halogenated Hydrocarbons)	P	P	P	P	P	P	P F	F G	P F	P	G
	Alchol	G	F	E	P	G	E	G	G	G	P	E
Synthetic Lubricants (Diester)	P F	P	F	P F	P	F G	P	P F	P	G	F G	
Hydraulic Fluids Silicates	P	P F	F	F G	P	F	-	P	G	G	G	
Phosphates	P F	P	G	G E	P	P	P	G	P F	P	F	

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

## Gasket Fabricators & Sealing Distributors Since 1946

### O-Ring & Sealing Devices

- |                              |                     |                  |
|------------------------------|---------------------|------------------|
| Back-up-Rings                | MIL Spec Seals      | Rod Wipers       |
| Braided Sheet Packing        | O-Rings             | Scraper Rings    |
| Custom Molded Rings & Shapes | O-Rings Cord        | Slipper Seals    |
| Gaskets (all types)          | O-Ring Kits         | Splicing Kits    |
| Lathe Cut Rings              | O-Ring Lubricant    | T-Seals          |
| Metal O-Rings                | Packing W/Retainers | Thread Seals     |
|                              | Piston Cups         | U-Cups V Packing |

### Stock Gasketing Materials

- |                     |                        |                   |
|---------------------|------------------------|-------------------|
| All MIL Spec Grades | Fibre                  | Silicone          |
| Buna N              | Leather                | Sponge Elastomers |
| Cork                | Neoprene               | TFE               |
| Cork & Rubber       | Non-asbestos Materials | Fluorocarbon      |
| Diaphragm Materials | Plastic Sheet & Shapes |                   |
| Felt                | Poly Urethane          |                   |

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**Standard O Ring Sizes**

SERIES NO.	NORMAL SIZE			MFGS STANDARD ACTUAL		SERIES NO.	NORMAL SIZE			MFGS STANDARD ACTUAL		SERIES NO.	NORMAL SIZE			MFGS STANDARD ACTUAL		SERIES NO.	NORMAL SIZE			MFGS STANDARD ACTUAL	
	I.D.	O.D.	W	I.D.	W		I.D.	O.D.	W	I.D.	W		I.D.	O.D.	W	I.D.	W		I.D.	O.D.	W	I.D.	W
001	1/32	3/32	1/32	.029	.040	047	4 1/2	4 5/8	1/16	4.489	.070	144	2 1/2	2 11/16	3/32	2.487	.103	212	7/8	1 1/8	1/8	.859	.139
002	3/64	9/64	3/64	.042	.050	048	4 3/4	4 7/8	1/16	4.739	.070	145	2 5/16	2 3/4	3/32	2.550	.103	213	1 5/16	1 13/16	1/8	.921	.139
003	1/16	3/16	1/16	.056	.060	049	5	5 1/8	1/16	4.989	.070	146	2 5/8	2 13/16	3/32	2.612	.103	214	1	1 1/4	1/8	.984	.139
004	5/64	13/64	1/16	.070	.070	050	5 1/4	5 3/8	1/16	5.239	.070	147	2 11/16	2 7/8	3/32	2.675	.103	215	1 1/16	1 13/16	1/8	1.046	.139
005	3/32	7/32	1/16	.101	.070	102	1/16	1/4	3/32	.049	.103	148	2 3/4	2 15/16	3/32	2.737	.103	216	1 1/8	1 3/8	1/8	1.109	.139
												148	2 3/4	2 15/16	3/32	2.737	.103	217	1 3/16	1 7/16	1/8	1.171	.139
006	1/8	1/4	1/16	.114	.070	103	3/32	3/32	3/32	.081	.103	149	2 13/16	3	3/32	2.800	.103	218	1 1/4	1 1/2	1/8	1.234	.139
007	3/32	3/32	1/16	.145	.070	104	1/8	5/16	3/32	.122	.103	150	2 7/8	3 1/16	3/32	2.862	.103	219	1 1/16	1 13/16	1/8	1.296	.139
008	3/16	5/16	1/16	.176	.070	105	5/32	11/32	3/32	.143	.103	151	3	3 3/16	3/32	2.987	.103	220	1 3/8	1 3/8	1/8	1.359	.139
009	7/32	11/32	1/16	.208	.070	106	3/16	3/8	3/32	.174	.103	152	3 1/4	3 7/16	3/32	3.237	.103	221	1 7/16	1 11/16	1/8	1.421	.139
010	1/4	3/8	1/16	.239	.070	107	7/32	13/32	3/32	.206	.103	153	3 1/2	3 11/16	3/32	3.487	.103	222	1 1/2	1 3/4	1/8	1.484	.139
												154	3 3/4	3 15/16	3/32	7.737	.103	222	1 1/2	1 3/4	1/8	1.484	.139
011	5/16	7/16	1/16	.301	.070	108	1/4	7/16	3/32	.237	.103	155	4	4 3/16	3/32	3.987	.103	223	1 5/8	1 7/8	1/8	1.609	.139
012	3/8	1/2	1/16	.364	.070	109	5/16	1/2	3/32	.299	.103	156	4 1/4	4 7/16	3/32	4.237	.103	224	1 3/4	2	1/8	1.734	.139
013	7/16	9/16	1/16	.426	.070	110	3/8	9/16	3/32	.362	.103	157	4 1/2	4 11/16	3/32	4.487	.103	225	1 7/8	2 1/8	1/8	1.859	.139
014	1/2	5/8	1/16	.489	.070	111	7/16	5/8	3/32	.424	.103	158	4 3/4	4 15/16	3/32	4.737	.103	226	2	2 1/4	1/8	1.984	.139
015	9/16	1 1/16	1/16	.551	.070	112	1/2	1 1/16	3/32	.487	.103	159	5	5 5/16	3/32	4.987	.103	227	2 1/8	2 3/8	1/8	2.109	.139
016	5/8	3/4	1/16	.614	.070	113	9/16	3/4	3/32	.549	.103	160	5 1/4	5 7/16	3/32	5.237	.103	228	2 1/4	2 1/2	1/8	2.234	.139
017	1 1/16	1 3/16	1/16	.676	.070	114	5/8	13/16	3/32	.612	.103	161	5 1/2	5 11/16	3/32	5.487	.103	229	2 3/8	2 5/8	1/8	2.359	.139
018	3/4	7/8	1/16	.739	.070	115	1 1/16	7/8	3/32	.674	.103	162	5 3/4	5 15/16	3/32	5.737	.103	230	2 1/2	2 3/4	1/8	2.484	.139
019	1 1/16	1 3/16	1/16	.801	.070	116	3/4	15/16	3/32	.737	.103	163	6	6 1/16	3/32	5.987	.103	231	2 5/8	2 7/8	1/8	2.609	.139
020	7/8	1	1/16	.864	.070	117	1 1/16	1	3/32	.799	.103	164	6 1/4	6 15/16	3/32	6.237	.103	232	2 3/4	3	1/8	2.734	.139
						118	7/8	1 1/16	3/32	.862	.103	164	6 1/4	6 15/16	3/32	6.237	.103	232	2 3/4	3	1/8	2.734	.139
021	1 5/16	1 11/16	1/16	.926	.070	119	1 5/16	1 1/8	3/32	.924	.103	165	6 1/2	6 11/16	3/32	6.487	.103	233	2 7/8	3 1/8	1/8	2.859	.139
022	1	1 1/8	1/16	.989	.070	120	1	1 1/16	3/32	.987	.103	166	6 3/4	6 15/16	3/32	6.737	.103	234	3	3 1/4	1/8	2.984	.139
023	1 1/16	1 3/16	1/16	1.051	.070	121	1 1/16	1 1/4	3/32	1.049	.103	167	7	7 1/16	3/32	6.987	.103	235	3 1/8	3 3/8	1/8	3.109	.139
024	1 1/8	1 1/4	1/16	1.114	.070	122	1 1/8	1 15/16	3/32	1.112	.103	168	7 1/4	7 11/16	3/32	7.237	.103	236	3 1/4	3 1/2	1/8	3.234	.139
025	1 3/16	1 5/16	1/16	1.176	.070	123	1 3/16	1 3/8	3/32	1.174	.103	169	7 1/2	7 11/16	3/32	7.487	.103	237	3 3/8	3 5/8	1/8	3.359	.139
026	1 1/4	1 1/2	1/16	1.239	.070	124	1 1/4	1 7/8	3/32	1.237	.103	170	7 3/4	7 15/16	3/32	7.737	.103	238	3 1/2	3 3/4	1/8	3.484	.139
027	1 5/16	1 7/16	1/16	1.301	.070	125	1 5/16	1 1/2	3/32	1.299	.103	171	8	8 1/16	3/32	7.987	.103	239	3 3/8	3 5/8	1/8	3.609	.139
028	1 3/8	1 1/2	1/16	1.364	.070	126	1 3/8	1 15/16	3/32	1.362	.103	172	8 1/4	8 11/16	3/32	8.237	.103	240	3 3/4	4	1/8	3.734	.139
029	1 1/2	1 5/8	1/16	1.489	.070	127	1 1/2	1 5/8	3/32	1.424	.103	173	8 1/2	8 11/16	3/32	8.487	.103	241	3 7/8	4 1/8	1/8	3.859	.139
030	1 5/8	1 3/4	1/16	1.614	.070	128	1 1/2	1 11/16	3/32	1.487	.103	174	8 3/4	8 15/16	3/32	8.737	.103	242	4	4 1/4	1/8	3.984	.139
031	1 3/4	1 7/8	1/16	1.739	.070																		
032	1 7/8	2	1/16	1.864	.070	129	1 7/8	1 3/4	3/32	1.549	.103	175	9	9 1/16	3/32	8.987	.103	243	4 1/8	4 3/8	1/8	4.109	.139
033	2	2 1/8	1/16	1.989	.070	130	1 5/8	1 13/16	3/32	1.612	.103	176	9 1/4	9 11/16	3/32	9.237	.103	244	4 1/4	4 1/2	1/8	4.234	.139
034	2 1/8	2 1/4	1/16	2.114	.070	131	1 11/16	1 7/8	3/32	1.674	.103	177	9 1/2	9 11/16	3/32	9.487	.103	245	4 3/8	4 5/8	1/8	4.359	.139
035	2 1/4	2 3/8	1/16	2.239	.070	132	1 3/4	1 15/16	3/32	1.737	.103	178	9 3/4	9 15/16	3/32	9.737	.103	246	4 1/2	4 3/4	1/8	4.484	.139
036	2 3/8	2 1/2	1/16	2.364	.070	133	1 13/16	2	3/32	1.799	.103	201	3/16	7/16	1/8	.171	.139	247	4 5/8	4 7/8	1/8	4.609	.139
037	2 1/2	2 5/8	1/16	2.489	.070	134	1 7/8	2 1/16	3/32	1.862	.103	202	1/4	1/2	1/8	.234	.139	248	4 3/4	5	1/8	4.734	.139
038	2 5/8	2 3/4	1/16	2.614	.070	135	1 15/16	2 1/8	3/32	1.925	.103	203	3/16	9/16	1/8	.296	.139	249	4 7/8	5 1/8	1/8	4.859	.139
039	2 3/4	2 7/8	1/16	2.739	.070	136	2	2 1/16	3/32	1.987	.103	204	5/8	5/8	1/8	.359	.139	250	5	5 1/4	1/8	4.984	.139
040	2 7/8	3	1/16	2.864	.070	137	2 1/16	2 1/4	3/32	2.050	.103	205	7/16	1 1/16	1/8	.421	.139	251	5 1/8	5 3/8	1/8	5.109	.139
041	3	3 3/8	1/16	2.989	.070	138	2 1/8	2 5/16	3/32	2.112	.103	206	1/2	3/4	1/8	.484	.139	252	5 1/4	5 1/2	1/8	5.234	.139
												206	1/2	3/4	1/8	.484	.139	253	5 3/8	5 5/8	1/8	5.359	.139
042	3 1/4	3 3/8	1/16	3.239	.070	139	2 3/16	2 3/8	3/32	2.175	.103	207	9/16	1 1/16	1/8	.546	.139	254	5 1/2	5 3/4	1/8	5.484	.139
043	3 1/2	3 5/8	1/16	3.489	.070	140	2 1/4	2 1/2	3/32	2.237	.103	208	5/8	7/8	1/8	.609	.139	255	5 5/8	5 7/8	1/8	5.609	.139
044	3 3/4	3 3/4	1/16	3.739	.070	141	2 5/16	2 1/2	3/32	2.300	.103	209	1 1/16	1 5/16	1/8	.671	.139	256	5 3/4	6	1/8	5.734	.139
045	4	4 1/8	1/16	3.989	.070	142	2 3/8	2 5/16	3/32	2.362	.103	210	3/4	1	1/8	.734	.139	257	5 7/8	6 1/8	1/8	5.859	.139
046	4 1/4	4 3/8	1/16	4.239	.070	143	2 7/16	2 5/8	3/32	2.425	.103	211	1 1/16	1 1/16	1/8	.796	.139	258	6	6 1/4	1/8	5.984	.139

**Standard O Ring Sizes**

SERIES NO.	NORMAL SIZE			MFGS STANDARD ACTUAL		SERIES NO.	NORMAL SIZE			MFGS STANDARD ACTUAL		SERIES NO.	NORMAL SIZE			MFGS STANDARD ACTUAL		SERIES NO.	NORMAL SIZE			MFGS STANDARD ACTUAL	
	I.D.	O.D.	W	I.D.	W		I.D.	O.D.	W	I.D.	W		I.D.	O.D.	W	I.D.	W		I.D.	O.D.	W	I.D.	W
259	6 1/4	6 1/2	1/8	6.234	.139	329	2	2 3/8	3/16	1.975	.210	375	9 1/2	9 7/8	3/16	9.475	.210	450	10 1/2	11	1/4	10.475	.275
260	6 1/2	6 3/4	1/8	6.484	.139	330	2 1/8	2 1/2	3/16	2.100	.210	376	9 3/4	10 1/8	3/16	9.725	.210	451	11	11 1/2	1/4	10.975	.275
261	6 3/4	7	1/8	6.734	.139	331	2 1/4	2 5/8	3/16	2.225	.210	377	10	10 3/8	3/16	9.975	.210	452	11 1/2	12	1/4	11.475	.275
262	7	7 1/4	1/8	6.984	.139	332	2 3/8	2 3/4	3/16	2.350	.210	378	10 1/2	10 7/8	3/16	10.475	.210	453	12	12 1/2	1/4	11.975	.275
263	7 1/4	7 1/																					