



O-RINGS

ETHYLENE PROPYLENE RUBBER (EPM, EPDM)

Temperature range: -65° to +300°F (-54° to +149°C).

EP is recommended for:

- Phosphate ester base hydraulic fluids
• Steam (to 400°F) (204°C)
• Water
• Silicone oils and greases
• Dilute acids
• Dilute alkalis
• Ketones (MEK, acetone)
• Alcohols

EP is not recommended for:

- Petroleum oils
• Di-ester base lubricants

SILICONE RUBBER (SI)

Temperature range: -65° to +450°F (-54°C to +232°C).

Silicones are recommended for:

- Dynamic sealing application
• Dry heat
• High-aniline point oils
• Chlorinated di-phenyls

Silicones are not recommended for:

- Most petroleum fluids
• Ketones (MEK, acetone)
• Water and steam

FLUOROCARBON RUBBER VITON (FKM)

Temperature range: -15° to +400°F (-29° to +204°C).

FKM is recommended for:

- Petroleum oils
• Di-ester base lubricants
• Silicate ester base lubricants
• Silicone fluids and greases
• Halogenated hydrocarbons (carbon tetrachloride, trichloroethylene)
• Selected phosphate ester fluids
• Acids

FKM is not recommended for:

- Ketones (MEK, acetone)
• Skydrol fluids

NITRILE OR BUNA N (NBR)

Temperature range of -65° to +275°F (-54° to +135°C).

Nitrile is recommended for:

- General purpose sealing
• Petroleum oils and fluids
• Cold water
• Silicone greases and oils
• Di-Ester base lubricants
• Ethylene Glycol base fluids (Hydrolubes)

Nitrile is not recommended for:

- Halogenated hydrocarbons (carbon, tetrachloride, trichloroethylene)
• Nitro hydrocarbons (nitrobenzene, aniline)
• Phosphate ester hydraulic fluids (Skydrol, Fyrquel, Pydraul)
• Ketones (MEK, acetone)
• Strong acids
• Ozone

This information is provided as a guideline and quick reference for approximate identification of an O-ring. There may be many factors that need to be considered when determining proper O-ring material. Further investigation for a given application may be required. In addition, to more accurately determine the dimensions of an O-ring, precision measuring equipment (such as Calipers) should be used.

HOW TO USE THIS CHART

Lay O-ring over cross-section pictorials to determine approximate cross-section diameter. (For best results cut O-ring and place round cross-section onto pictorial.)

STANDARD CROSS-SECTIONS PER AS568A



.040



.050



.060



.070



.103



.139



.210

OTHER AVAILABLE CROSS-SECTIONS



.031



.039



.041

QUAD



.051



.063



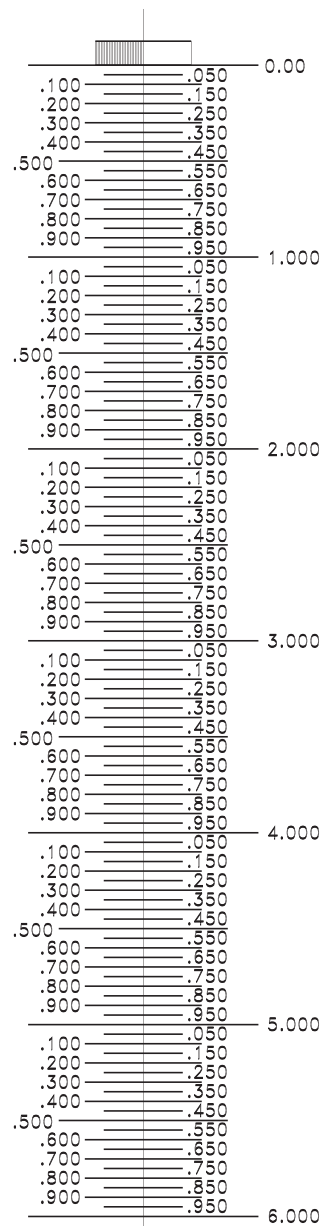
.079



.080

HOW TO USE THIS CHART

- 1. Align outer edge of O-ring to the 0.00 line.
2. Read opposite edge of O-ring for approximate outside diameter (O.D.).



Source of information: Parker O-Ring Handbook, Parker Seals, ORD5700, Parker Hannifin Corporation, Cleveland, OH



replacement parts industries, inc.

CALL (800) 221-9723 • FAX (818) 882-7028 • EMAIL order@rpiiparts.com • WEBSITE www.rpiiparts.com

As of March, 2009

O-RING CHART BY SIZE

RPI PART #	X-SEC	ID	OD	IND PART #	MATERIAL	DURO	QTY
RPO324	.031	.239	.301	Custom	Nitrile (Buna N)	70	12
RPO328	.031	.288	.351	Metric	Nitrile (Buna N)	70	12
RPO617	.032	.165	.229	Custom	Nitrile (Buna N)	70	12
RPO493	.038	.032	.108	Custom	EPDM	70	12
RPO309	.040	.029	.109	AS568-001	Nitrile (Buna N)	70	12
RPO308	.040	.070	.150	5-051	Nitrile (Buna N)	70	12
RPO496	.040	.070	.150	Custom	EPDM	70	12
RPO494	.040	.176	.256	Custom	EPDM	70	12
RPO497	.040	.176	.256	Custom	Viton	75	12
RPO319	.041-Q	.028	.110	Q4001	Nitrile (Buna N)	70	12
RPO310	.050	.042	.142	AS568-002	Nitrile (Buna N)	70	12
RPO352	.050	.042	.142	AS568-002	Viton	90	12
RPO486	.050	.042	.142	AS568-002	EPDM	70	12
RPO450	.051	.547	.649	5-001	Silicone	70	6
RPO311	.060	.056	.176	AS568-003	Nitrile (Buna N)	70	12
RPO484	.060	.056	.176	AS568-003	Viton	75	12
RPO487	.060	.056	.176	AS568-003	EPDM	70	12
RPO495	.062	.400	.524	Custom	Viton	75	12
RPO301	.070	.489	.629	AS568-014	Nitrile (Buna N)	70	12
RPO312	.070	.070	.210	AS568-004	Nitrile (Buna N)	70	12
RPO313	.070	.101	.241	AS568-005	Nitrile (Buna N)	70	12
RPO489	.070	.101	.241	AS568-005	EPDM	70	12
RPO307	.070	.114	.254	AS568-006	EPDM	70	12
RPO320	.070	.114	.254	AS568-006	Viton	70	12
RPO609	.070	.114	.254	AS568-006	Silicone	70	12
RPO314	.070	.145	.285	AS568-007	Nitrile (Buna N)	70	12
RPO342	.070	.145	.285	AS568-007	Viton	70	12
RPO359	.070	.145	.285	AS568-007	EPDM	70	6
RPO306	.070	.176	.316	AS568-008	EPDM	70	12
RPO327	.070	.176	.316	AS568-008	Natural Silicone	70	12
RPO330	.070	.176	.316	AS568-008	Teflon	n/a	6
RPO315	.070	.208	.348	AS568-009	Nitrile (Buna N)	70	12
RPO339	.070	.208	.348	AS568-009	Viton	70	12
RPO492	.070	.208	.348	AS568-009	Silicone	70	12
RPO305	.070	.239	.379	AS568-010	Nitrile (Buna N)	70	12
RPO329	.070	.239	.379	AS568-010	Teflon	n/a	6
RPO386	.070	.239	.379	AS568-010	Silicone	70	6
RPO304	.070	.301	.441	AS568-011	Nitrile (Buna N)	70	12
RPO331	.070	.301	.441	AS568-011	Neoprene	70	6
RPO343	.070	.301	.441	AS568-011	Silicone	70	12
RPO360	.070	.301	.441	AS568-011	EPDM	80	6
RPO385	.070	.301	.441	AS568-011	Viton	60	12
RPO303	.070	.364	.504	AS568-012	Nitrile (Buna N)	70	12
RPO498	.070	.364	.504	AS568-012	EPDM	70	12
RPO302	.070	.426	.566	AS568-013	Nitrile (Buna N)	70	12

RPI PART #	X-SEC	ID	OD	IND PART #	MATERIAL	DURO	QTY
RPO388	.070	.426	.566	AS568-013	Silicone	70	6
RPO485	.070	.426	.566	AS568-013	EPDM	70	12
RPO326	.070	.489	.629	AS568-014	Viton	70	12
RPO488	.070	.489	.625	AS568-014	EPDM	70	12
RPO608	.070	.489	.629	AS568-014	Silicone	70	12
RPO316	.070	.551	.691	AS568-015	Nitrile (Buna N)	70	12
RPO341	.070	.551	.691	AS568-015	Viton	70	12
RPO439	.070	.551	.691	AS568-015	EPDM	70	6
RPO317	.070	.614	.754	AS568-016	Nitrile (Buna N)	70	12
RPO318	.070	.676	.816	AS568-017	Nitrile (Buna N)	70	12
RPO334	.070	.739	.879	AS568-018	Nitrile (Buna N)	70	12
RPO340	.070	.739	.879	AS568-018	Viton	70	12
RPO490	.070	.739	.879	AS568-018	EPDM	70	12
RPO325	.070	.801	.941	AS568-019	Nitrile (Buna N)	70	12
RPO355	.070	.801	.941	AS568-019	Silicone	70	6
RPO444	.070	.801	.941	AS568-019	EPDM	70	12
RPO438	.070	.864	1.004	AS568-020	EPDM	70	12
RPO354	.070	.926	1.066	AS568-021	Silicone	70	6
RPO322	.070	1.051	1.191	AS568-023	Nitrile (Buna N)	70	12
RPO390	.070	1.114	1.254	AS568-024	Silicone	70	6
RPO607	.070	1.239	1.379	AS568-026	Silicone	70	12
RPO335	.070	1.489	1.629	AS568-029	Nitrile (Buna N)	70	12
RPO321	.070	2.114	2.254	AS568-034	Nitrile (Buna N)	70	12
RPO344	.070	2.239	2.379	AS568-035	Nitrile (Buna N)	70	6
RPO491	.103	.206	.412	AS568-107	EPDM	70	12
RPO448	.103	.237	.443	AS568-108	EPDM	70	6
RPO323	.103	.362	.568	AS568-110	Nitrile (Buna N)	70	12
RPO387	.103	.362	.568	AS568-110	Silicone	70	6
RPO395	.103	.362	.568	AS568-110	EPDM	70	12
RPO356	.103	.424	.630	AS568-111	Nitrile (Buna N)	70	12
RPO357	.103	.424	.630	AS568-111	EPDM	70	12
RPO353	.103	.487	.693	AS568-112	Nitrile (Buna N)	70	12
RPO358	.103	.549	.755	AS568-113	EPDM	80	6
RPO610	.103	.924	1.130	AS568-119	Silicone	70	12
RPO389	.103	1.049	1.255	AS568-121	Silicone	70	6
RPO605	.103	1.174	1.380	AS568-123	Silicone	70	12
RPO346	.103	2.425	2.631	AS568-143	Nitrile (Buna N)	70	12
RPO612	.103	3.237	3.443	AS568-152	Viton	70	3
LIQ005	.103	3.987	4.193	AS568-155	Nitrile (Buna N)	70	1
RPO244	.139	.296	.574	AS568-203	Silicone	60	6
RPO350	.139	.796	1.074	AS568-211	Nitrile (Buna N)	70	12
RPO606	.139	.859	1.137	AS568-212	Silicone	70	12
RPO613	.139	3.484	3.762	AS568-238	Viton	70	12
RPO345	.139	4.359	4.637	AS568-245	Nitrile (Buna N)	70	6
RPO361	.210	.912	1.332	AS568-317	Nitrile (Buna N)	70	6

O-rings are sold separately in quantities indicated above. For O-ring Kits, see pages 503-504.

O-RING CHART BY PART

RPI PART #	X-SEC	ID	OD	IND PART #	MATERIAL	DURO	QTY
L10005	.103	3.987	4.193	AS568-155	Nitrile (Buna N)	70	1
RPO244	.139	.296	.574	AS568-203	Silicone	60	6
RPO301	.070	.489	.629	AS568-014	Nitrile (Buna N)	70	12
RPO302	.070	.426	.566	AS568-013	Nitrile (Buna N)	70	12
RPO303	.070	.364	.504	AS568-012	Nitrile (Buna N)	70	12
RPO304	.070	.301	.441	AS568-011	Nitrile (Buna N)	70	12
RPO305	.070	.239	.379	AS568-010	Nitrile (Buna N)	70	12
RPO306	.070	.176	.316	AS568-008	EPDM	70	12
RPO307	.070	.114	.254	AS568-006	EPDM	70	12
RPO308	.040	.070	.150	5-051	Nitrile (Buna N)	70	12
RPO309	.040	.029	.109	AS568-001	Nitrile (Buna N)	70	12
RPO310	.050	.042	.142	AS568-002	Nitrile (Buna N)	70	12
RPO311	.060	.056	.176	AS568-003	Nitrile (Buna N)	70	12
RPO312	.070	.070	.210	AS568-004	Nitrile (Buna N)	70	12
RPO313	.070	.101	.241	AS568-005	Nitrile (Buna N)	70	12
RPO314	.070	.145	.285	AS568-007	Nitrile (Buna N)	70	12
RPO315	.070	.208	.348	AS568-009	Nitrile (Buna N)	70	12
RPO316	.070	.551	.691	AS568-015	Nitrile (Buna N)	70	12
RPO317	.070	.614	.754	AS568-016	Nitrile (Buna N)	70	12
RPO318	.070	.676	.816	AS568-017	Nitrile (Buna N)	70	12
RPO319	.041-Q	.028	.110	Q4001	Nitrile (Buna N)	70	12
RPO320	.070	.114	.254	AS568-006	Viton	70	12
RPO321	.070	2.114	2.254	AS568-034	Nitrile (Buna N)	70	12
RPO322	.070	1.051	1.191	AS568-023	Nitrile (Buna N)	70	12
RPO323	.103	.362	.568	AS568-110	Nitrile (Buna N)	70	12
RPO324	.031	.239	.301	Custom	Nitrile (Buna N)	70	12
RPO325	.070	.801	.941	AS568-019	Nitrile (Buna N)	70	12
RPO326	.070	.489	.629	AS568-014	Viton	70	12
RPO327	.070	.176	.316	AS568-008	Natural Silicone	70	12
RPO328	.031	.288	.351	Metric	Nitrile (Buna N)	70	12
RPO329	.070	.239	.379	AS568-010	Teflon	n/a	6
RPO330	.070	.176	.316	AS568-008	Teflon	n/a	6
RPO331	.070	.301	.441	AS568-011	Neoprene	70	6
RPO334	.070	.739	.879	AS568-018	Nitrile (Buna N)	70	12
RPO335	.070	1.489	1.629	AS568-029	Nitrile (Buna N)	70	12
RPO339	.070	.208	.348	AS568-009	Viton	70	12
RPO340	.070	.739	.879	AS568-018	Viton	70	12
RPO341	.070	.551	.691	AS568-015	Viton	70	12
RPO342	.070	.145	.285	AS568-007	Viton	70	12
RPO343	.070	.301	.441	AS568-011	Silicone	70	12
RPO344	.070	2.239	2.379	AS568-035	Nitrile (Buna N)	70	6
RPO345	.139	4.359	4.637	AS568-245	Nitrile (Buna N)	70	6
RPO346	.103	2.425	2.631	AS568-143	Nitrile (Buna N)	70	12
RPO350	.139	.796	1.074	AS568-211	Nitrile (Buna N)	70	12
RPO352	.050	.042	.142	AS568-002	Viton	90	12

RPI PART #	X-SEC	ID	OD	IND PART #	MATERIAL	DURO	QTY
RPO353	.103	.487	.693	AS568-112	Nitrile (Buna N)	70	12
RPO354	.070	.926	1.066	AS568-021	Silicone	70	6
RPO355	.070	.801	.941	AS568-019	Silicone	70	6
RPO356	.103	.424	.630	AS568-111	Nitrile (Buna N)	70	12
RPO357	.103	.424	.630	AS568-111	EPDM	70	12
RPO358	.103	.549	.755	AS568-113	EPDM	80	6
RPO359	.070	.145	.285	AS568-007	EPDM	70	6
RPO360	.070	.301	.441	AS568-011	EPDM	80	6
RPO361	.210	.912	1.332	AS568-317	Nitrile (Buna N)	70	6
RPO385	.070	.301	.441	AS568-011	Viton	60	12
RPO386	.070	.239	.379	AS568-010	Silicone	70	6
RPO387	.103	.362	.568	AS568-110	Silicone	70	6
RPO388	.070	.426	.566	AS568-013	Silicone	70	6
RPO389	.103	1.049	1.255	AS568-121	Silicone	70	6
RPO390	.070	1.114	1.254	AS568-024	Silicone	70	6
RPO395	.103	.362	.568	AS568-110	EPDM	70	12
RPO438	.070	.864	1.004	AS568-020	EPDM	70	12
RPO439	.070	.551	.691	AS568-015	EPDM	70	6
RPO444	.070	.801	.941	AS568-019	EPDM	70	12
RPO448	.103	.237	.443	AS568-108	EPDM	70	6
RPO450	.051	.547	.649	5-001	Silicone	70	6
RPO484	.060	.056	.176	AS568-003	Viton	75	12
RPO485	.070	.426	.566	AS568-013	EPDM	70	12
RPO486	.050	.042	.142	AS568-002	EPDM	70	12
RPO487	.060	.056	.176	AS568-003	EPDM	70	12
RPO488	.070	.489	.625	AS568-014	EPDM	70	12
RPO489	.070	.101	.241	AS568-005	EPDM	70	12
RPO490	.070	.739	.879	AS568-018	EPDM	70	12
RPO491	.103	.206	.412	AS568-107	EPDM	70	12
RPO492	.070	.208	.348	AS568-009	Silicone	70	12
RPO493	.038	.032	.108	Custom	EPDM	70	12
RPO494	.040	.176	.256	Custom	EPDM	70	12
RPO495	.062	.400	.524	Custom	Viton	75	12
RPO496	.040	.070	.150	Custom	EPDM	70	12
RPO497	.040	.176	.256	Custom	Viton	75	12
RPO498	.070	.364	.504	AS568-012	EPDM	70	12
RPO605	.103	1.174	1.380	AS568-123	Silicone	70	12
RPO606	.139	.859	1.137	AS568-212	Silicone	70	12
RPO607	.070	1.239	1.379	AS568-026	Silicone	70	12
RPO608	.070	.489	.629	AS568-014	Silicone	70	12
RPO609	.070	.114	.254	AS568-006	Silicone	70	12
RPO610	.103	.924	1.130	AS568-119	Silicone	70	12
RPO612	.103	3.237	3.443	AS568-152	Viton	70	3
RPO613	.139	3.484	3.762	AS568-238	Viton	70	3
RPO617	.032	.165	.229	Custom	Nitrile (Buna N)	70	12

O-rings are sold separately in quantities indicated above. For O-ring Kits, see pages 503-504.



replacement parts industries, inc.

CALL (800) 221-9723 • FAX (818) 882-7028 • EMAIL order@rpiparts.com • WEBSITE www.rpiparts.com

As of March, 2009