ASTM D2000 M2 HK814 A1-10 B38 EF31 EO78

Metric FKM 75 ShA O-rings

Fluorocarbon Rubber

FKM O-rings have excellent chemical resistance and can be used at temperature range of between -15°C and 200°C. Although generally more expensive than NBR (Nitrile) O-rings, FKM has found wide acceptance in the aircraft, automotive and chemical industries.

The terms FPM, FKM and Viton® can lead to incorrect interpretations. These designations stand for one single base material: fluorocarbon rubber. Viton® however is the registered trademark of the Chemours company.

RS Components is also able to supply specially compounded FKM O-rings meeting Norsok M710, FDA, USP Class VI, UL94 V0, EN549, Viton® A, B, G, GF, GLT, GFLT, ETP standards on special request. Please contact us for further information.

Colour: Black

Operating temperature range: -15°C to 200°C

Physical Property	**Test Method**	**Units**	**Typical Values**
Hardness	ASTM D 2240	Shore A	79
Tensile Strength	ASTM D 412	Mpa	14
Elongation	ASTM D 412	%	175
Modulus at 100%	ASTM D 412	Mpa	6
Specific Gravity	ASTM D 297	g/cm3	1.85
Compression Set 22h / 200°C	ASTM D 395 B	%	22
Low Temperature Resistance	ASTM D 1329 - TR10	°C	-17

Aging Property	**Test Method**	**Time (h)**	**Temperature (°C)**	**Hardness**	**Tensile Strength (%)**	**Ultimate Elongation (%)**	**Volume (%)**
Air	ASTM D 573	70	250	1	-13	-2	-
ASTM 101 Service Liquid	ASTM D 471	70	200	-10	-15	-6	13
ASTM Fuel C	ASTM D 471	70	23	-4	-21	-7	4

Chemical resistance:

- Mineral oil and grease, ASTM oil No. 1, and IRM 902 and IRM 903 oils
- Non-flammable hydraulic fluids (HFD)
- Silicone oil and grease
- Mineral and vegetable oil and grease
- Aliphatic hydrocarbons (butane, propane, natural gas)
- Aromatic hydrocarbons (benzene, toluene)
- Chlorinated hydrocarbons (trichloroethylene and carbon tetrachloride)
- Gasoline (including high alcohol content)
- High vacuum
- Very good ozone, weather and aging resistance

Not compatible with:

- Glycol based brake fluids
- Ammonia gas, amines, alkalis
- Superheated steam
- Low molecular weight organic acids (formic and acetic acids)

	Millimetres (mm)				Inches (“)				
RS Article Number	Internal Diameter	ID ± Tolerance	Cross Section	CS ± Tolerance	Internal Diameter	ID ± Tolerance	Cross Section	CS ± Tolerance	Standard Reference
1965872	100	0.82	3	0.09	3.937	0.032	0.118	0.004	
1965873	105	0.86	3	0.09	4.134	0.034	0.118	0.004	
1965874	110	0.89	3	0.09	4.331	0.035	0.118	0.004	
1965903	112	0.91	4	0.1	4.409	0.036	0.157	0.004	
1965875	115	0.93	3	0.09	4.528	0.037	0.118	0.004	
1965876	120	0.96	3	0.09	4.724	0.038	0.118	0.004	
1965877	130	1.03	3	0.09	5.118	0.041	0.118	0.004	
1965878	135	1.06	3	0.09	5.315	0.042	0.118	0.004	
1965905	135	1.06	5	0.13	5.315	0.042	0.197	0.005	
1965815	13	0.21	3	0.09	0.512	0.008	0.118	0.004	
1965901	140	1.09	4	0.1	5.512	0.043	0.157	0.004	
1965880	145	1.13	3	0.09	5.709	0.044	0.118	0.004	
1965816	14	0.22	3	0.09	0.551	0.009	0.118	0.004	
1965881	150	1.16	3	0.09	5.906	0.046	0.118	0.004	

1965882	155	1.19	3	0.09	6.102	0.047	0.118	0.004	
1965817	15	0.23	3	0.09	0.591	0.009	0.118	0.004	
1965818	16	0.24	3	0.09	0.63	0.009	0.118	0.004	
1965819	17	0.24	3	0.09	0.669	0.009	0.118	0.004	
1965887	18	0.25	3.5	0.1	0.709	0.01	0.138	0.004	
1965820	18	0.25	3	0.09	0.709	0.01	0.118	0.004	
1965822	19.5	0.26	3	0.09	0.768	0.01	0.118	0.004	BS4158:0195-30
1965888	19	0.26	3.5	0.1	0.748	0.01	0.138	0.004	
1965821	19	0.26	3	0.09	0.748	0.01	0.118	0.004	
1965823	20	0.26	3	0.09	0.787	0.01	0.118	0.004	
1965825	21.5	0.28	3	0.09	0.846	0.011	0.118	0.004	BS4158:0215-30
1965883	215	1.59	3	0.09	8.465	0.063	0.118	0.004	
1965889	21	0.27	3.5	0.1	0.827	0.011	0.138	0.004	
1965824	21	0.27	3	0.09	0.827	0.011	0.118	0.004	
1965826	22	0.28	3	0.09	0.866	0.011	0.118	0.004	
1965827	23	0.29	3	0.09	0.906	0.011	0.118	0.004	
1965886	24.4	0.3	3.1	0.09	0.961	0.012	0.122	0.004	JISB2401:G25
1965890	24	0.29	3.5	0.1	0.945	0.011	0.138	0.004	
1965828	24	0.29	3	0.09	0.945	0.011	0.118	0.004	
1965897	24	0.29	4	0.1	0.945	0.011	0.157	0.004	
1965884	250	1.82	3	0.09	9.843	0.072	0.118	0.004	
1965830	25	0.3	3	0.09	0.984	0.012	0.118	0.004	
1965902	275	1.98	4	0.1	10.827	0.078	0.157	0.004	
1965831	27	0.32	3	0.09	1.063	0.013	0.118	0.004	
1965832	28	0.32	3	0.09	1.102	0.013	0.118	0.004	
1965833	29	0.33	3	0.09	1.142	0.013	0.118	0.004	
1965904	29	0.33	4	0.1	1.142	0.013	0.157	0.004	
1965834	30	0.34	3	0.09	1.181	0.013	0.118	0.004	
1965835	33	0.36	3	0.09	1.299	0.014	0.118	0.004	
1965836	34	0.37	3	0.09	1.339	0.015	0.118	0.004	
1965837	35	0.37	3	0.09	1.378	0.015	0.118	0.004	
1965906	35	0.37	5	0.13	1.378	0.015	0.197	0.005	
1965838	36	0.38	3	0.09	1.417	0.015	0.118	0.004	
1965839	37	0.39	3	0.09	1.457	0.015	0.118	0.004	
1965842	38.5	0.4	3	0.09	1.516	0.016	0.118	0.004	
1965840	38	0.4	3	0.09	1.496	0.016	0.118	0.004	
1965892	39	0.4	3.5	0.1	1.535	0.016	0.138	0.004	
1965843	39	0.4	3	0.09	1.535	0.016	0.118	0.004	
1965844	40	0.41	3	0.09	1.575	0.016	0.118	0.004	
1965845	42	0.42	3	0.09	1.654	0.017	0.118	0.004	
1965846	45	0.44	3	0.09	1.772	0.017	0.118	0.004	

1965847	48	0.47	3	0.09	1.89	0.019	0.118	0.004	
1965848	49	0.47	3	0.09	1.929	0.019	0.118	0.004	
1965849	50	0.48	3	0.09	1.969	0.019	0.118	0.004	
1965850	51	0.49	3	0.09	2.008	0.019	0.118	0.004	
1965851	52	0.49	3	0.09	2.047	0.019	0.118	0.004	
1965893	55	0.52	3.5	0.1	2.165	0.02	0.138	0.004	
1965852	55	0.52	3	0.09	2.165	0.02	0.118	0.004	
1965853	57	0.53	3	0.09	2.244	0.021	0.118	0.004	
1965854	60	0.55	3	0.09	2.362	0.022	0.118	0.004	
1965855	61	0.56	3	0.09	2.402	0.022	0.118	0.004	
1965898	63	0.57	4	0.1	2.48	0.022	0.157	0.004	
1965856	64	0.58	3	0.09	2.52	0.023	0.118	0.004	
1965858	65	0.58	3	0.09	2.559	0.023	0.118	0.004	
1965859	66	0.59	3	0.09	2.598	0.023	0.118	0.004	
1965860	67	0.6	3	0.09	2.638	0.024	0.118	0.004	
1965894	70	0.62	3.5	0.1	2.756	0.024	0.138	0.004	
1965861	70	0.62	3	0.09	2.756	0.024	0.118	0.004	
1965862	72	0.63	3	0.09	2.835	0.025	0.118	0.004	
1965865	74.5	0.65	3	0.09	2.933	0.026	0.118	0.004	BS4158:0745-30 AND SMS1588:S 74.5 x 3
1965864	74	0.65	3	0.09	2.913	0.026	0.118	0.004	
1965866	80	0.69	3	0.09	3.15	0.027	0.118	0.004	
1965895	83	0.71	3.5	0.1	3.268	0.028	0.138	0.004	
1965899	83	0.71	4	0.1	3.268	0.028	0.157	0.004	
1965867	84.5	0.72	3	0.09	3.327	0.028	0.118	0.004	BS4158:0845-30 AND SMS1588:S 84.5 x 3
1965900	84	0.72	4	0.1	3.307	0.028	0.157	0.004	JISB2401:V-85
1965868	88	0.74	3	0.09	3.465	0.029	0.118	0.004	
1965896	90	0.76	3.5	0.1	3.543	0.03	0.138	0.004	
1965869	90	0.76	3	0.09	3.543	0.03	0.118	0.004	
1965870	92	0.77	3	0.09	3.622	0.03	0.118	0.004	
1965871	96	0.8	3	0.09	3.78	0.031	0.118	0.004	