

Attached file

Test Articles		Measurement	Unit	FKM [VDF-HFP]	FKM [VDF-HFP-TFE]	FKM [Cold resistance]	FFKO	HNBR	VMQ	ACM	EPDM	JIS
Basic Physical Properties		Tensile Strength	MPa	13.4	17.3	15.7	7.50	23.3	9.24	12.0	16.1	K6251
		Elongation	%	260	420	370	200	260	200	200	330	↑
		Hardness	Duro A	72	70	69	67	70	71	74	73	K6253
Heat Aging	150°C × 1000h	Tensile strength change	%	+10	+29	-7	-3	+34	0	-	-55	K6257
		Elongation change	%	-8	-7	-3	-23	-72	-15	-	-100	
		Hardness change	%	0	+3	+1	+3	+14	+4	-	+21	
Heat Aging	200°C × 1000h	Tensile strength change	%	+7	0	-20	-34	-	-17	-	-	K6257
		Elongation change	%	-11	+10	+13	-25	-	-30	-	-	
		Hardness change	%	+2	+4	+2	-1	-	+5	-	-	
Compression Set (25% compression)	150°C × 1000h	Compression set	%	24	23	17	30	31	16	55	48	K6262
Compression Set (25% compression)	200°C × 1000h	Compression set	%	57	50	42	92	-	82	-	-	K6262
Oil Resistance IRM903	150°C × 70h	Tensile strength change	%	-2	+8	-16	+2	-11	-	-17	-58	K6258
		Elongation change	%	+3	+12	-11	0	-3	-	-17	-60	
		Hardness change	%	-2	-2	-3	0	-4	-	-11	-24	
		Volume change	%	+2	+2	+2	+2	+10	-	+19	+123	
Fuel Resistance Fuel C	40°C × 48h	Tensile strength change	%	-37	-3	-30	-18	-61	-42	-82	-	K6258
		Elongation change	%	-15	-10	-28	-12	-56	-64	-77	-	
		Hardness change	%	-6	+8	-10	-3	-11	-17	-18	-	
		Volume change	%	+9	+3	+13	+8	+53	+179	+129	-	
Fuel Resistance Fuel C+ Dodecanediamine (0.4wt%)	40°C × 1000h →Dry: 80°C × 24h	Tensile strength change	%	-88	-	-91	-9	-	-	-	-	K6258
		Elongation change	%	-90	-	-86	-8	-	-	-	-	
		Hardness change	%	+13	-	+17	-1	-	-	-	-	
		Volume change	%	+2	-	-4	+2	-	-	-	-	
Chlorine Water Resistance NaClO aq. (100ppm)	90°C × 1000h	appearance		-	No Change	-	-	Rough surface	Foaming	Rough surface	Rough surface	K6258
Ozone Resistance 50pphm	40°C × 72h	appearance		No crack	No crack	No crack	No crack	Crack	No crack	No crack	No crack	K6259

※The above data are measured values.