

FKM (or fluoroelastomers) are a class of polymers that retain their rubbery elasticity under very harsh conditions, such as high temperatures or exposure to various chemical agents. It can be molded or extruded to produce various rubber products such as O-rings, seals, diaphragms, gaskets, films, valve plates, hoses, rubber rollers, etc.

Characteristics of fluorine rubber

1. Excellent corrosion resistance: most chemicals will not damage fluororubber.
2. It can maintain its mechanical strength in a wide temperature range, and the highest temperature for sustainable use of fluororubber is 180°C; some varieties can be used at low temperatures of -60 to -40°C.
3. Resistant to various oils, fuels, various solvents, hydraulic fluids, concentrated acids, and strong oxidants.
4. Flame retardancy: a self-extinguishing rubber.
5. Ozone resistance, light resistance, weather resistance, radiation resistance, vacuum resistance, and low air permeability.
6. Non-stick and low coefficient of friction

Dipolymer							
performance	Experiment Method	Measurement conditions	Unit	Index			
				QF230	QF250	QF270	QF2100
Density	GB/T 533	A	g/cm ³	1.82±0.02			
Mooney viscosity	GB/T 1232.1	ML(I+10)121°C	/	30±10	50±10	70±10	100 ~ 190
Tensile strength (before aging)	GB/T 528	ambient Temperature: 23°C±2°C	MPa	>9	>10	>12	>14
Elongation at break (before aging)	GB/T 528	ambient Temperature: 23°C±2°C	%	>150	>160	>170	>180
compression set	GB/T7759	200°Cx24h	%	<13	<13	<13	<12
oil resistance	GB/T1690	3# jet fuel weight gain after 200°Cx24h	%	<6	<6	<6	<6
Water content	Dry Box	105°Cx2h	%	<0.3	<0.3	<0.3	<0.3

Terpolymer							
performance	Experiment Method	Measurement conditions	Unit	Index			
				QF330	QF370	QF340H	QF370H
Density	GB/T 533	A	g/cm ³	1.86±0.02		1.89±0.02	
Mooney viscosity	GB/T 1232.1	ML(I+10)121°C	/	35±15	70±20	45±15	70±15
Tensile strength (before aging)	GB/T 528	Amient Temperature: 23°C±2°C	MPa	>8	>9	>8	>9
Elongation at break (before aging)	GB/T 528	Amient Temperature: 23°C±2°C	%	>250	>250	>250	>250
compression set	GB/T7759	200°Cx24h	%	<25	<25	<35	<35
oil resistance	GB/T1690	4109 diester oil resistance weight gain after 180°Cx24h	%	<6	<6	<5	<5
water content	Dry Box	105°Cx2h	%	<0.3	<0.3	<0.3	<0.3