



Fluorine Elastomer (FPM 70)

SPECIFICATIONS

Property	Spec	Value
Hardness (shore A)	ASTM D 2240	70A ± 5
Specific Gravity	ASTM D 297	1.91 g/cm ³ ± 0.03
Tensile Strength	ASTM D 412/C	12-16 Mpa
Elongation at Break	ASTM D 412/C	150-250%
Tear Resistance	ASTM D 624/B	>25 N/m
Tear Resistance	DIN D 53507/B	>4 N/m
Compression Set 150C; 22hrs	VDA 675 216 B	<30%
Compression Set 175C; 72hrs	ASTM D 395 B	<30%
Compression Set 175C; 1000hrs	ASTM D 395 B	<60%
Compression Set 200C; 70hrs	ASTM D 395 B	<50%
Compression Set 200C; 22hrs	ASTM D 395 D	<25%
Low Temperature Test TR10%	ASTM D 1329	<-16C
Brittle Point	ASTM D 2137 A	-

DESCRIPTION

MF88 is a FPM material with hardness 70A, specially compounded for standard grade applications FKM typically has 65 to 70% fluorine content. There are five types of FKM, and they are differentiated either by trade names or specific end-use characteristics. The higher the fluorine content, the better fluid resistance they have. On the downside, higher fluorine content can reduce physical properties of an elastomer in regards to being prone to compression set or extrusion problems. In general FKM has good resistance to mineral oils, greases and some phosphate esters (HFD), silicon oils or grease, chlorinated solvents, air, ozone and fuels. The general grade FKM is not recommended for steam and hot water that is above 100°C, phosphate esters like Skydrol, polar solvents, fuels containing methanol, gear lubricants with EP additives, engine oils with amine additives, amines, alkalis, organic acids, and brake fluids. For special applications including the above incompatible environments, specialty types of FKM are available and need to be prudently selected. FKM can be molded by compression, transfer and injection molding processes. FKM can be a cost-effective material when its expected life time exceeds that which many other elastomers