



Flourine Elastomer Explosive Decompression Resistant (FPM ED)

SPECIFICATIONS

Property	Spec	Value
Hardness Shore A	ISO 868	85 ± 5
Modulus 100% (MPa)	DIN 53 504	≥6
Tensile Strength (MPa)	DIN 53 504	≥10
Elongation at Break	DIN 53 504	≥200%
Tear Strength (kN/m)	DIN ISO 34-1	≥20
Spec. Gravity (g/cm ³)	ISO 1183	1860
Rebound Elasticity	DIN 53 512	11%
Abrasion (mm ³)	DIN 53 516	175
Compression Set: 24hr, 70C @ 25% def	ISO 815	≤30%
Compression Set: 24hr, 100C @ 25% def.	ISO 815	≤35%
Compression Set: 24hr, 150C @ 25% def.	ISO 815	≤45%
Service Temperature (min)		-20C
Service Temperature (max)		220C
Temp. Max Hot Air (Short)		300C

DESCRIPTION

MF200 is a FPM material with hardness 85A, specially compounded for ED Resistant applications. FPM typically has 65 to 70% fluorine content. There are five types of FPM, 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 FPM 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 FPM 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 FPM are available and need to be prudently selected. FPM can be molded by compression, transfer and injection molding processes. FPM can be a cost-effective material when its expected life time exceeds that which many other elastomers can provide.