

M SEALS FPM-BR85

85a Fluorocarbon Rubber (Genuine Viton™)

MATERIAL DATA SHEET (Version 6.0 – 05.2022)



High Temperature



Chemical Resistance

Description

M Seals material FPM-BR85 is our premium grade of Fluorocarbon rubber (FPM/FKM), which is manufactured using genuine Viton™ compound. This material provides excellent chemical and high temperature resistance in the most common hydraulic fluids, making it an excellent choice for hydraulic and pneumatic seals working in arduous applications where its resistance to heat, chemicals, weathering and ozone may be required.

FPM-BR85 is suitable for use with most mineral oils, greases, fuels, industrial phosphate ester, hydrocarbons, alcohols, diesel, fuels and air up to +210°C. It can also be used for sealing gas, air, cold water and some acids.

Physical Properties

Property	Test method	Unit	Typical value
Colour			Brown
Density	ISO 1183	g/cm ³	2.41
Hardness	DIN 53505	Shore A	85 (+/-5)
Tensile Strength	DIN 53504	MPa	9.4
Elongation at break	DIN 53504	%	168
Tear strength	DIN 53515	N/mm	16.8
Compression set (24 Hours @ 100°C, 25%)	ISO 815-1	%	7.1
Compression set (24 Hours @ 175°C, 25%)	ISO 815-1	%	12.6
Minimum service temperature		°C	-20
Maximum service temperature		°C	+210

Viton™ is a registered trademark of the Chemours company

Main Characteristics

- Excellent chemical resistance
- Excellent high temperature capability
- Good compression set resistance
- Wide temperature range

Typical Products

- U-Seals
- Wiper seals
- Static Seals & O-Rings
- T- seals

Typical Applications

Due to its excellent chemical resistance, FPM-BR85 (Viton™) Fluorocarbon elastomer can be used in a wide range of applications such as hydraulic and pneumatic systems operating in high temperature environments or applications sealing Phosphate ester type fluids (HFD).

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