

M SEALS BFPM-B85

Standard 85a FPM/FKM Fluorocarbon Rubber (Viton™)



MATERIAL DATA SHEET (Version 6.0 – 05.2022)



High Temperature



Chemical Resistance

Description

M Seals material BFPM-B85 is our standard commercial grade Fluorocarbon rubber (FPM/FKM), which is commonly referred to as Viton™. 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.

BFPM-B85 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			Black
Density	ISO 1183	g/cm ³	1.86
Hardness	DIN 53505	Shore A	85 (+/-5)
Tensile Strength	DIN 53504	MPa	11.6
Elongation at break	DIN 53504	%	211.6
Tear strength	DIN 53515	N/mm	20.4
Rebound resilience	DIN 53512	%	10
Compression set (24 Hours @ 100°C, 25%)	ISO 815-1	%	10.5
Compression set (24 Hours @ 175°C, 25%)	ISO 815-1	%	16.5
Minimum service temperature		°C	-25
Maximum service temperature		°C	+210

Viton™ is a registered trademark of the Chemours company

Main Characteristics

- Excellent chemical resistance
- Excellent high temperature capability
- Good tear resistance
- Wide temperature range

Typical Products

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

Typical Applications

Due to its excellent chemical resistance, BFPM-B85 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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