

M SEALS FPM-G75

Soft FPM/FKM Fluorocarbon Rubber (Viton™)



MATERIAL DATA SHEET (Version 6.0 – 05.2022)



High Temperature



Chemical Resistance



Compression Set Resistance



Elastic Behaviour

Description

M Seals material FPM-G75 is a soft 75a Shore hardness Fluorocarbon rubber (FPM/FKM) which is commonly referred to as Viton™. This material provides excellent elasticity and high temperature compression-set characteristics, making it an excellent choice for low-pressure hydraulic and pneumatic seals or energising elements for composite type seals.

FPM-G75 is suitable for use with most mineral oils, greases, fuels, industrial phosphate ester (HFDR) and environmentally friendly (HETG) fluids. It can also be used for sealing gas, air, cold water and some acids.

Physical Properties

| Property | Test method | Unit | Typical value |
|------------------------------------|-------------|-------------------|---------------|
| Colour | | | Grey/Black |
| Density | ISO 1183 | g/cm ³ | 2.13 |
| Hardness | DIN 53505 | Shore A | 75 (+/-5) |
| Tensile Strength | DIN 53504 | MPa | 10.3 |
| Elongation at break | DIN 53504 | % | 252 |
| Tear strength | DIN 53515 | N/mm | 5.1 |
| Rebound resilience | DIN 53512 | % | 8 |
| Compression set (24 Hours @ 175°C) | ISO 815-1 | % | 15.2 |
| Minimum service temperature | | °C | -25 |
| Maximum service temperature | | °C | +230 |

Viton™ is a registered trademark of the Chemours company

Main Characteristics

- Excellent elastic behaviour
- Excellent compression set characteristics
- Excellent chemical resistance
- Good rebound behaviour
- Wide temperature range

Typical Products

- Low pressure hydraulic seals
- Energising rings for composite seals
- Pneumatic seals
- Static Seals & O-Rings
- Depositor seals

Typical Applications

Due to its excellent elasticity and rebound behaviour, FPM-G75 FPM/FKM Fluorocarbon elastomer can be used in a wide range of applications such as low pressure hydraulic and pneumatic systems or in high temperature applications where compression set of the sealing material may be a problem.

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