

M SEALS BFPM-RGDB85

RGD Resistant FPM/FKM Fluorocarbon Rubber



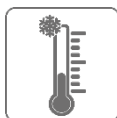
MATERIAL DATA SHEET (Version 6.0 – 05.2022)



Norsok M710
Annex B



High Temperature



Low Temperature



Chemical resistance



ISO 10423
API6A FF/HH

Description

M Seals material BFPM-RGDB85 is a Norsok M710 (Annex B) certified RGD resistant Fluorocarbon rubber (FPM/FKM) which is commonly used in high pressure Oil & Gas applications. BFPM-RGDB85 has also been tested against the requirements of ISO 10423 Appendix F.1.13.5.2 (API 6A) in respect of sour fluid (FF/HH) resistance at +135°C. This material provides resistance to rapid gas decompression, excellent chemical resistance and a useful temperature range making it an excellent choice for seals and components working in arduous environments.

BFPM-RGDB85 is suitable for use with most mineral oils, crude oils, greases, fats, petroleum fluids, hydrocarbons and biodegradable oils.

It should *not* be used for applications involving fluids containing Amines, Ketones, Glycols and hot water/steam.

Physical Properties

Property	Test method	Unit	Typical value
Colour			Black
Density	ISO 1183	g/cm ³	2.0
Hardness	ISO 868	Shore A	86 (+/-3)
Tensile Strength	DIN 53504	MPa	12.5
Elongation at break	DIN 53504	%	240
Tear strength	ISO 34-1	kN/m	28.2
Rebound resilience	DIN 53512	%	8
Compression set (24 Hours @ 175°C, 25%)	ISO 815-1	%	19.9
All values are subject to +/-25% tolerance			
Minimum service temperature		°C	-30
Maximum service temperature		°C	+210

Main Characteristics

- Norsok M710 Annex B certified – 1000 Rating
- ISO 10423 / API6A FF/HH certified at +135°C
- Excellent RGD (Rapid Gas Decompression) resistance
- Excellent chemical resistance
- Useful temperature range

Typical Products

- Hydraulic seals for high pressure gas use
- T-Seals
- Energised U-Rings
- Static Seals & O-Rings
- Bespoke parts

Norsok M710 Rev 2 Annex B Test Conditions

Test Gas: 90/10 mol% CH₄/CO₂

Test Temperature: 100°C

Test Pressure: 150 bar (15 MPa) decompressed at 20 bar/min over 10 cycles

Seal Details: 4 Specimens of BS 1806-312 (15.24mm Internal Diameter – 5.33mm Cross Section)

Result

The four test seals passed with a Norsok rating of **1000**

Tel: 0044 (0) 114 243 2777 . Fax: 0044 (0) 114 242 2300 . Mail: sales.esd@m-seals.co.uk . Web: www.m-seals.com

M Seals believes that the information above is an accurate description of the typical characteristics and/or uses of the product or products, however M Seals makes no warranty, expressed or implied, that parts manufactured from this / and or any other material will perform satisfactorily in the customers application. It is the customers responsibility to thoroughly test products in their specific application to determine performance, efficiency and safety for each end-use product, device or application. The information and data contained herein are based on standard test pieces according to the corresponding ISO, DIN & ASTM standards and cannot be directly related to finished seals, gaskets or other sealing products and should be used only as a general guide.