

M SEALS PTC10-GD56-M710

Norsok M-710 Compliant Carbon Graphite PTFE



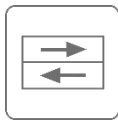
MATERIAL DATA SHEET (Version 6.0 – 05.2022)



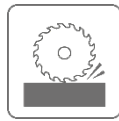
High Temperature



Chemical Resistance



Low Friction



Wear Resistance

Description

M Seals PTC10-GD56-M710 material is a Norsok M-710 compliant PTFE which has been reinforced with a filler of Carbon/Graphite. The addition of Carbon/Graphite fillers to PTFE provides higher compressive strength, lower wear and lower creep values while improving sliding properties. This material is softer than its sister grade PTC25-GD63, making it slightly more flexible.

PTC10-GD56 PTFE material is commonly used for spring energised seals, O-Ring energised composite seals and back-up rings. While PTC10-GD56 can work in a variety of fluids, it is particularly suitable for dry or poorly lubricated applications, such as water or water based hydraulic fluids.

Physical Properties

Property	Test method	Unit	Typical value
Colour			Grey/Black
Density	ASTM D4894	g/cm ³	2.14
Hardness	ASTM D2240	Shore D	≥60
Tensile Strength	ASTM D4894	N/mm ²	≥24
Elongation at break	ASTM D4894	%	≥300
Service temperature *		°C	-200 to +260

* (Individual testing in application conditions is mandatory)

Main Characteristics

- Norsok M-710 Compliant
- Good choice for unlubricated service
- Good sliding ability
- Softer than standard grade and more flexible
- Low creep rate
- Low wear properties

Typical Products

- Composite seals
- Back-up Rings
- Bearing rings / guide rings
- Spring energised seals
- Valve seat seals
- Bespoke Parts

Typical Applications

Due to its Norsok M-710 compliance, excellent wear resistance, compressive strength and sliding ability, PTC10-GD56-M710 is an excellent material choice for composite seals, valve seat seals, guide rings, back-up rings, spring energised seals and bearing bushes commonly used in the oil and gas industry. As mentioned above, this material is particularly suited to unlubricated service using water or water based fluids.

PLEASE NOTE: If Norsok M-710 compliance is required, a 3.1 material certificate must be purchased and this requirement must be confirmed at time of order placement. This is due to different processes required at the manufacturing stage to achieve Norsok M-710 compliance.

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