

# DMR Material PTC10-GD56

## Carbon Graphite Reinforced PTFE



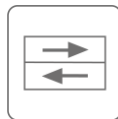
### MATERIAL DATA SHEET (Version 5.0 – 05.2019)



High Temperature



Chemical Resistance



Low Friction



Wear Resistance

### Description

DMR Seals PTC10-GD56 material is a 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 <sup>3</sup>	2.14
Hardness	ASTM D2240	Shore D	≥60
Tensile Strength	ASTM D4894	N/mm <sup>2</sup>	≥24
Elongation at break	ASTM D4894	%	≥300
Service temperature *		°C	-200 to +260

\* (Individual testing in application conditions is mandatory)

### Main Characteristics

- 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

### Typical Applications

Due to its excellent wear resistance, compressive strength and sliding ability, PTC10-GD56 is an excellent material choice for composite seals, valve seat seals, guide rings, back-up rings, spring energised seals and bearing bushes where our harder FPTC25-GD63 material may be unsuitable due to lower flexibility.

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