

DMR Material CC100

Graphite Filled Self-Lubricating Polyester Resin Composite Material



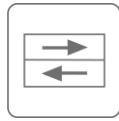
MATERIAL DATA SHEET (Version 5.0 – 05.2019)



Wear Resistance



Compressive Strength



Low Friction

Description

DMR material CC100 is a fabric reinforced, graphite filled polyester composite bearing material. The material has low water absorption and the inclusion of the internal lubrication system helps to provide lower friction values and better sliding properties.

CC100 has very high compressive strength, good rigidity and excellent wear resistance which can provide an increased life span over metallic and common engineered plastic bushes or wear rings.

Physical Properties

Property	Unit	Typical value
Colour		Dark Grey
Hardness	Rockwell M	90 – 100
Tensile strength (Lengthwise / Crosswise)	N/mm ²	65 / 60
Tensile modulus	N/mm ² x 10 ⁴	0.32
Flexural strength (Lengthwise / Crosswise)	N/mm ²	138 / 107
Compressive strength (Lengthwise / Edgewise)	N/mm ²	345 / 138
Moisture absorption	%	<0.1
Density	g/cm ³	1.25-1.35
Coefficient of friction dry		0.13
Coefficient of friction in water		0.01
Coefficient of friction in oil		0.02
Coefficient Of Linear Thermal Expansion*	°C x 10 ⁵	6-7
Service temperature	°C	-70 to +100

Main Characteristics

- Very high Compressive strength
- High Flexural strength
- Good wear and properties
- Low friction / Good sliding properties

Typical products

- Anti-Extrusion / Back-up Rings
- Thrust washers
- Bearing rings / guide rings
- Bushes

Typical Applications

Due to its high compressive and flexural strength combined with low friction and good wear resistance, CC100 is a good material choice for guide rings, bearing rings and bearing bushes commonly used in the sealing industry.

Tel: 0044 (0) 114 243 2777 . Fax: 0044 (0) 114 242 2300 . Mail: sales@dmrseals.co.uk . Web: www.dmrseals.co.uk

DMR Seals Ltd believes that the information above is an accurate description of the typical characteristics and/or uses of the product or products, however DMR Seals Ltd 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.