

M SEALS CC100

Graphite Filled Self-Lubricating Polyester Resin Composite



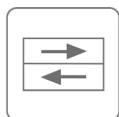
MATERIAL DATA SHEET (Version 6.0 – 05.2022)



Wear Resistance



Compressive Strength



Low Friction

Description

M Seals 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.

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