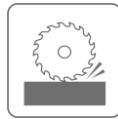
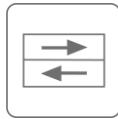


DMR Material PTB40-BRD58

Bronze Filled PTFE



MATERIAL DATA SHEET (Version 5.0 – 05.2019)



Description

DMR Seals PTB40-BRD58 material is a modified PTFE which has been reinforced with Bronze as the filler. The addition of Bronze fillers to PTFE provides higher compressive strength, increased hardness, excellent sliding ability, lower wear properties and lower creep values.

PTB40-BRD58 bronze filled PTFE material is commonly used for O-Ring energised composite seals, guide rings, wear rings and bushes. Bronze filled PTFE is mainly utilised for seals in lubricated hydraulic systems, the use of this material in water or water-based fluids should be avoided.

Physical Properties

Property	Test method	Unit	Typical value
Colour			Bronze / Brown
Density	ASTM D792	g/cm ³	2.98 – 3.16
Hardness	ASTM D2240	Shore D	≥58
Elongation at break	ASTM D4745	%	≥200
Tensile Strength	ASTM D4745	N/mm ²	≥18
Compressive strength at 1% deformation	ASTM D695	N/mm ²	≥8
Deformation under load *	ASTM D621	%	≤8
Permanent deformation **	ASTM D621	%	≤5
Coefficient of Linear Thermal Expansion ***	ASTM D696	10 ⁻⁵ (mm/mm)/ °C	8-11
Dynamic coefficient of friction	ASTM D3702	Points	0.15-0.25
Service temperature		°C	-200 to +260

* (24 Hours @ 13.7 N/mm² cross direction)

** (After release of deformation test)

*** (+25 to +100°C)

Main Characteristics

- High compressive strength
- Good sliding ability
- Good dimensional stability
- Low creep rate
- Good wear properties

Typical products

- Composite seals
- Wear strip
- Bearing rings / guide rings
- Bushes
- Bespoke parts

Typical Applications

Due to its good compressive strength and sliding ability, PTB40-BRD58 is an excellent material choice for composite seals, guide rings, wear rings, slideways and bearing bushes working in lubricated hydraulic fluids.

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.