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# PTFE bronze 40% 58 Shore D brown

Polytetrafluorethylene

Material Code: 0803G

The content of difference percentages of bronze filler improve the wear resistance as well as the thermal and electrical conductivity, for all applications where high mechanical loads and high-speed rubbing contacts are expected. Easy to machine. Specific filler to satisfy the heaviest applications, excellent mechanical properties, perfect for machine tool applications. Self-lubricant, wear resistant material providing low friction, stick-slip free operations, vibration dampening, long life with minimum wear. All PTFE grades filled with bronze show a reduced chemical inertness.

#### PHYSICAL - MECHANICAL

Typical Properties	Unit	Method	Data-Moulded
Density	g/cm³	ASTM D792	2,98 - 3,16
Hardness – Shore D	/	ASTM D2240	≥ 58
Tensile Strength - CD*	N/mm²	ISO 527 v = 50mm/min microtensile die	≥ 20
Elongation at Break – CD*	%	ISO 527 v = 50mm/min microtensile die	≥ 220
Compressive Strength at 1% Deformation – CD*	N/mm²	ASTM D695	8
Deformation under Load at Room Temperature After 24 Hours at 13,7 N/mm² – CD*	%	ASTM D621	≤ 8
Permanent Deformation Under Load After 24 Hours of Rest at Room Temperature – CD*	%	ASTM D621	≤ 5

#### TRIBOLOGICAL

Typical Properties	Unit	Method	Data-Moulded
Dynamic Coefficient of Friction	1	ASTM D1894 ASTM D3702	0,15 - 0,25
Wear Factor K	/	ASTM D3702	0,010 - 0,030

## **THERMAL**

Typical Properties	Unit	Method	Data-Moulded
Service Temperature (Min-Max)	°C	1	- 200 / + 260
Thermal Expansion Coefficient (Linear) 25 – 100°C	10 <sup>-5</sup> (mm/mm)/°C	Similar to ASTM D696	8 - 11

### **ELECTRICAL**

Typical Properties	Unit	Method	Data-Moulded
Surface Resistivity	Ω	ASTM D257	> 1012
top ones placetics			

<sup>\*</sup>CD=Cross Direction

Errors and changes reserved – 2024-02

Note: the data listed here, fall within the normal range of product properties described, but they should not be used to establish specification limits nor used alone as the basis of design. Our supplier assumes no obligation or liability for any advice furnished by it or for results obtained to these products.