

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/cm ³	ASTM D792	2,98 – 3,16
Hardness – Shore D	/	ASTM D2240	≥ 58
Tensile Strength – CD*	N/mm ²	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/mm ²	ASTM D695	8
Deformation under Load at Room Temperature After 24 Hours at 13,7 N/mm ² – 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	/	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	/	- 200 / + 260
Thermal Expansion Coefficient (Linear) 25 – 100°C	10 ⁻⁵ (mm/mm)/°C	Similar to ASTM D696	8 – 11

ELECTRICAL

Typical Properties	Unit	Method	Data-Moulded
Surface Resistivity	Ω	ASTM D257	> 10 ¹²

*CD=Cross Direction