

PTFE bronze 40% 60 Shore D brown

Filled Polytetrafluorethylene

This PTFE consisting of 40% bronze and 60% PTFE virgin has excellent sliding conditions, wear properties and improved strength. PTFE brown has thermal and electrical conductivity.

Mechanical, physical and thermal properties

Material code: 0803G

Properties	Condition	Standard	Unit	Unit		
Color				brown		
Hardness	23°C	ISO 868/3 sec.	Shore D	60 ± 3		
		ISO 868/15 sec.	Shore D	59 ± 3		
Density	23°C	DIN 53 479	g/cm ³	3,11	kg/m ³	3110
Ball indentation hardness	23°C	DIN 53 456 H 135/30	MPa	33 ± 5	psi	4790 ± 725
Tensile strength	23°C	ASTM D 4745-79	MPa	≥22	psi	≥3190
Elongation at break	23°C	ASTM D 4745-79	%	≥200		
Compression strength	23°C	DIN 53 455	MPa	≥10	Psi	≥1450
Thermal conductivity	23°C	DIN 52 612	$\frac{J \times 10^3}{M \times h \times K}$	≥4,0		
Coefficient of therm. Expansion	23°C-200°C		K ⁻¹ x 10 ⁻⁵	≥8		
Coefficient of friction*	23°C		μ	≥0,13		
Minimum service temperature			°C	-200	°F	-328
Maximum service temperature			°C	260	°F	500
Young's modulus	23°C	DIN 53 457	MPa	≥1375	Psi	≥199500

*dynamic coefficient of friction, dry, steel, 16MnCr5: v= 0,6 m/s; p=0,05 MPa; t=5h

Resistant to: almost all chemicals

No resistant to: molten alkali metals, halogenides, elemental fluorine