

PTFE carbon 25% 62 Shore D black

Polytetrafluorethylene

Material Code: 0805G

Carbon filled PTFE grades benefit from improved compressive strength and being carbon a conductive filler, offers good thermal and electrical conductivity. Excellent resistance to load with low coefficient of friction and high wear resistance an improvement if compared to virgin PTFE. Carbon filled PTFE offers enhanced chemical resistance with excellent load carrying properties combined with low friction and high wear resistance. Suitable for wet operating conditions and for contact with corrosive agents.

PHYSICAL – MECHANICAL

Typical Properties	Unit	Method	Data-Moulded
Density	g/cm ³	ASTM D792	2,05- 2,11
Hardness – Shore D	/	ASTM D2240	≥ 62
Tensile Strength – CD*	N/mm ²	ISO 527 v = 50mm/min microtensile die	≥ 14
Elongation at Break – CD*	%	ISO 527 v = 50mm/min microtensile die	≥ 75
Compressive Strength at 1% Deformation – CD*	N/mm ²	ASTM D695	≤ 7
Deformation under Load at Room Temperature After 24 Hours at 13,7 N/mm ² – CD*	%	ASTM D621	≤ 7
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	0,12 – 0,25
Wear Factor K	/	ASTM D3702	0,010 – 0,020

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	10 - 12

ELECTRICAL

Typical Properties	Unit	Method	Data-Moulded
Volume Resistivity	Ω • cm	ASTM D257	10 ⁴
Surface Resistivity	Ω	ASTM D257	10 ⁴
*CD=Cross Direction			