

MATERIAL GRADE: TA200

Graphite Composite



DESCRIPTION

Economical dry-running grade for general industrial service

TA200 uses a graphite solid lubricant to provide reliable self-lubricating performance in dry and atmospheric conditions. It offers high compressive strength and good wear resistance at a lower cost than PTFE-filled grades. TA200 is well suited to industrial hydraulics, material handling, and general machinery where the bearing runs dry, greased, or in occasional splash conditions. The graphite filler maintains lubricity at elevated operating temperatures. For continuously immersed or seawater applications, TA100 is recommended instead.

SAMPLE APPLICATIONS

- Hydraulic cylinders
- Material handling and general machinery
- Oil and gas bushings and thrust washers
- On-deck marine applications
- General industrial bushing applications

MATERIAL BENEFITS

- Self-lubricating
- Low friction
- Excellent load-bearing capability
- No metallic scoring
- Negligible water swell
- Easily machined to precision tolerances
- Wide range of sizes and profiles

MECHANICAL PROPERTIES

Temperature range	-40 to +250 °F	-40 to +120 °C
Compressive strength		
Normal to laminate	45,000 psi	310 N/mm ²
Parallel to laminate	13,000 psi	90 N/mm ²
Tensile strength	14,000 psi	96 N/mm ²
Shear strength	9,000 psi	62 N/mm ²
Hardness, Rockwell M	100	
Density	1.25 g/cm ³	
Swell in water	<0.15% of wall thickness	
Thermal expansion ×10⁻⁵	1/°F (68–212 °F)	1/°C (20–100 °C)
Normal to laminate	5.0–5.5	9.0–10.0
Parallel to laminate	2.7–3.3	5.0–6.0
Coefficient of friction	0.10–0.20	
Color	Dark gray	

AVAILABLE SIZES

Tube stock		
Minimum ID	3/8"	9.5 mm
Maximum OD	48"	1220 mm
Available lengths	27, 32, 40"	686, 813, 1016 mm
Machined parts		
Minimum ID	3/8"	9.5 mm
Maximum OD	48"	1220 mm
Sheet		
Minimum thickness	1/8"	3.2 mm
Maximum thickness	4"	102 mm
Maximum length	48"	1220 mm
Maximum width	30"	762 mm

Values are typical and measured in laboratory conditions, primarily to DIN test standards; hardness is measured on the Rockwell M scale. Strength values are loads at failure. Performance in service may vary. For more about our test methods, please contact us.