DRAKE HTT-200BG COMPOSITE

For bearing & wear applications at working temperatures up to 200°F (93°C)



DESCRIPTION

DRAKE HTT-200BG is a standard self-lubricating bearing and wear resistant thermoset composite with a working temperature capability up to 200°F (93°C). Its high surface hardness contributes to HTT-200BG's low static coefficient of friction which reduces noise and slip-stick.

COMPOSITION

High performance thermoset resin, low friction woven textile, PTFE and MoS_2 lubricants

KEY ATTRIBUTES

- Self-lubricating
- High load capable
- High mechanical strength
- Low coefficient of friction
- Low thermal expansion
- Chemical & corrosion resistant

AVAILABILITY

- Tube, plate in standard and custom sizes
  - *Many sizes available with no tooling charge*
- Precision machined parts

PHYSICAL PROPERTIES	SI UNIT	SAE UNIT	METHODS
Compressive Strength			
Ultimate	345 MPa	50,000 PSI	
Yield	103 MPa	15,000 PSI	ASTM D695
Modulus	3,447 MPa	500,000 PSI	
Tensile Strength	75 MPa	11,000 PSI	ASTM D638
Tensile Modulus of Elasticity	3,240 MPa	470,000 PSI	ASTM D638
Poisson's Ratio	0.231		ASTM D3039-08
Shear Strength	82 MPa	12,000 PSI	ASTM D2344
Flexural Modulus of Elasticity	1,793 MPa	260,000 PSI	ASTM D790
Hardness Rockwell M	100		ASTM D785
Density	1.3 g/cm^3	0.047 lbs/in^3	ASTM D792
Water Swell	<0.15%		ASTM D570
ELECTRICAL PROPERTIES			
Dielectric Strength	7.087 kV/mm	180 volts/mil	ASTM D149-97a
Volume Resistivity	1.7 x 10^{15} ohm-cm		ASTM D257-07
THERMAL PROPERTIES	**SI UNIT**	**SAE UNIT**	**METHODS**
Operating Temperatures	-40° to 93°C	-40° to 200°F	
Coefficient of Linear Thermal Expansion			
Normal to Laminate	6.3 x 10^{-5}/ Δ°C	3.5 x 10^{-5}/ Δ°F	
Parallel to Laminate	3.24 x 10^{-5}/ Δ°C	1.8 x 10^{-5}/ Δ°F	
FRICTION & WEAR			
Coefficient of Friction, Dry Dynamic	0.05 - 0.10		

Note: Property values based on test specimens taken from sheet.