HSG

HIGH-LOAD FIBER REINFORCED COMPOSITE PTFE BEARINGS

compliant RoHS

APPLICATIONS

Industrial – Steering linkages, hydraulic cylinder pivots, king pin bearings, boom lifts, scissor lifts, cranes, hoists, lift gates, backhoes, trenchers, skid steer loaders, front end loaders, etc.

CHARACTERISTICS

- Self-lubricating plain bearing material
- High static load capacity (twice as much as standard GAR-MAX® bearings)
- Excellent shock and misalignment resistance
- Excellent contamination resistance
- Very good friction and wear properties
- Good chemical resistance
- Tested acc. to ASTM E595/ECSS-Q-ST-70-02C - Outgassing properties of materials used in Spacecraft equipment

AVAILABILITY

Bearing forms available in standard dimensions: Plain cylindrical bushes

Bearing forms made to order: cylindrical bushes with non-standard lengths and wall thickness, flanged bearings, hexagonal and square bores, liner on outer diameter, customized bearing designs

For questions and assistance, contact a GGB engineer at: **https://www.ggbearings.com/en/contact**

BEARING PROPERTIES		UNITS	VALUE
GENERAL			
Maximum load, p	Static	N/mm^2	415
	Dynamic	N/mm^2	140
Operating temperature	Min	°C	- 195
	Max	°C	160
DRY			
Maximum sliding speed, U		m/s	0.13
Maximum pU factor		N/mm^2 x m/s	1.05
Coefficient of friction, f			0.05 - 0.30*
RECOMMENDATIONS			
Shaft surface roughness, Ra		µm	0.15 - 0.40
Shaft surface hardness	Normal	HB	> 350
	For longer service life	HB	> 480

* Depending on operating conditions

OPERATING PERFORMANCE	
Dry	Very Good
Oil lubricated	Fair
Grease lubricated	Fair
Water lubricated	Fair
Process fluid lubricated	Fair

FOR SUPERIOR PERFORMANCE	
Oil lubricated	GAR-FIL
Grease lubricated	DX / DX10
Water lubricated	HPF / HPM
Process fluid lubricated	GAR- FIL

MICROSECTION