

HSG

High-Load Fiber Reinforced Composite PTFE Bearings



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

AVAILABILITY

Bearing forms available in standard dimensions

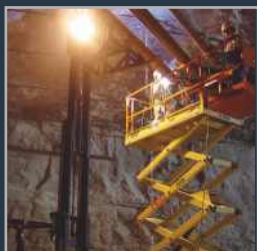
-  Plain cylindrical bushes

Non-standard parts 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



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.



HSG Technical Data

Bearing Properties		Imperial Units	Imperial Value	Metric Units	Metric Value
General					
Maximum load, p	Static	psi	60 000	N/mm ²	415
	Dynamic	psi	20 000	N/mm ²	140
Operating temperature	Min	°F	- 320	°C	- 195
	Max	°F	320	°C	160
Dry					
Maximum sliding speed, U		fpm	25	m/s	0.13
Maximum pU factor		psi x fpm	30 000	N/mm ² x m/s	1.05
Coefficient of friction			0.05 - 0.30*		0.05 - 0.30*
Recommendations					
Shaft surface roughness, Ra		µin	6 - 16	µm	0.15 - 0.40
Shaft surface hardness	Normal	HB	> 350	HB	> 350
	For longer service life	HB	> 480	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

