

HSG

HIGH-LOAD FIBER REINFORCED COMPOSITE PTFE BEARINGS



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

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



BEARING PROPERTIES		IMPERIAL UNITS	IMPERIAL VALUE	METRIC UNITS	METRIC VALUE
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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, f			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

