

HPM

**FIBER REINFORCED
COMPOSITE HYDRO BEARING**



APPLICATIONS

Industrial – Servo-motor bearings, operating ring sliding segments, linkage bearings, wicket gate bearings, guide vane bearings, intake gate sliding segments, intake gate roller bearings, spillway gate bearings, trash rate bearings, fish screen bearings, trunnion bearings, blade bearings, injector bearings, deflector bearings, ball and butterfly trunnion bearings, etc.

CHARACTERISTICS

- Designed for hydropower applications
- High load capacity
- Excellent shock and edge loading capacity
- Low friction, superior wear rate and bearing life
- Excellent corrosion resistance
- Dimensionally stable - very low water absorption, low swelling
- Environmentally friendly

AVAILABILITY

Bearing forms available in standard dimensions:
Plain cylindrical bushes

Bearing forms made to order: cylindrical bushes with non-standard dimensions, customized bearing designs



BEARING PROPERTIES		UNITS	VALUE
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GENERAL

Maximum load, p	Static	N/mm ²	210
	Dynamic	N/mm ²	140
Operating temperature	Min	°C	- 196
	Max	°C	160

DRY

Maximum sliding speed, U		m/s	0.13
Maximum pU factor		N/mm ² x m/s	1.23
Coefficient of friction, f			0.03 - 0.12*

RECOMMENDATIONS

Shaft surface roughness, Ra		µm	0.2 - 0.8
Shaft surface hardness	Normal	HB	> 180
	For longer service life	HB	> 480

* Depending on operating conditions

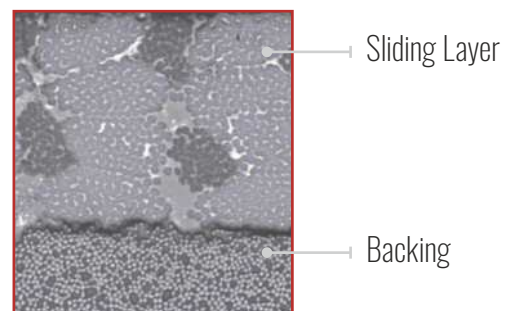
OPERATING PERFORMANCE

Dry	Very Good
Oil lubricated	Fair
Grease lubricated	Poor
Water lubricated	Very Good
Process fluid lubricated	Poor

FOR SUPERIOR PERFORMANCE

Oil lubricated	GAR-FIL / HPF
Grease lubricated	DX / DX10
Process fluid lubricated	GAR- FIL / HPF

MICROSECTION



For additional product offerings visit:
<https://www.ggbearings.com/en/our-products/fiber-reinforced-composite-bearings/hpmb>