

# **HPF**

# FIBER REINFORCED COMPOSITE BEARINGS WITH PTFE TAPE LINER





#### **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, bladebearings, injector bearings, deflector bearings, ball and butterfly trunnion bearings, etc.

#### **CHARACTERISTICS**

- Proprietary filled PTFE tape machinable liner
- Designed for hydropower applications
- Machinable bearing surface
- High load capacity
- Excellent shock and edge loading capacity
- Excellent corrosion resistance
- Dimensionally stable very low water absorption, low swelling
- Environmentally friendly
- Tested by Powertech Test to evaluate performance of self-lubricated bushings in wicket gate applications

### **AVAILABILITY**

**Bearing forms available in standard dimensions:** 

Plain cylindrical bushes, sliding plates

**Bearing forms made to order:** cylindrical bushes with non-

standard dimensions, customized bearing designs







#### HPF DATASHEET

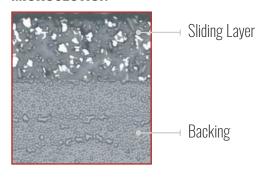


BEARING PROPERTIES		UNITS	VALUE
GENERAL			
Maximum load, p	Dynamic	N/mm²	140
maximum roda, p	Static	N/mm <sup>2</sup>	140
Operating temperature	Min	°C	- 195
operating temperature	Max	°C	140
DRY			
Maximum sliding speed, U		m/s	2.5
Maximum pU factor		N/mm <sup>2</sup> x m/s	1.23
Coefficient of friction			0.02 - 0.10*
GREASEDLUBRICATION			
Coefficient of friction			0.02 - 0.08*
RECOMMENDATIONS			
Shaft surface roughness, Ra		μm	0.2 - 0.8
Shaft surface hardness	Normal	НВ	> 180
Silait Surface Haruffess	For longer service life	НВ	> 480

<sup>\*</sup> Depending on operating conditions

Oil lubricated	Very Good
Oil lubricated	Very Good
	very dood
Grease lubricated	Poor
Water lubricated	Very Good
Process fluid lubricated	Good

## **MICROSECTION**



**Grease lubricated** 

DX / DX10