DP4-B

METAL-POLYMER BRONZE BACKED PTFE PLAIN BEARINGS

APPLICATIONS

Industrial – Aerospace, agricultural equipment, construction equipment, material handling equipment, forming machines - metal, plastic and rubber; office equipment, medical and scientific equipment, packaging equipment, pneumatic and hydraulic cylinders, pumps and motors, railroad and tramways, textile machinery, valves, etc.

Others – Civil engineering, marine and offshore equipment, other applications in water or in outdoor environments, etc.

CHARACTERISTICS

- Good wear and low friction performance over a wide range of loads, speeds and temperatures in dry running conditions
- Very good performance in lubricated applications
- Good performance in greased applications
- Suitable for linear, oscillating and rotating movements
- Bronze back offers improved corrosion resistance in humid/saline environments
- Lead-free material compliant to ELV, WEEE, and RoHS specifications

AVAILABILITY

Bearing forms available in standard dimensions: Cylindrical bushes, flanged bushes, sliding plates

Bearing forms made to order: Standard forms in special dimensions, thrust washers, flanged thrust washers, half-bearings, special shapes obtained by stamping or deep drawing, bearings with locating notches, lubricant holes and machined/stamped grooves

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

BEARING PROPERTIES		IMPERIAL UNITS	IMPERIAL VALUE	METRIC UNITS	METRIC VALUE
GENERAL					
Maximum load, p	Dynamic	psi	20 000	N/mm^2	140
	Static	psi	20 000	N/mm^2	140
Operating temperature	Min	°F	-328	°C	- 200
	Max	°F	536	°C	280
Coefficient of linear thermal expansion	Parallel to the surface	10^{-6}/F	10	10^{-6}/K	18
	Normal to the surface	10^{-6}/F	20	10^{-6}/K	36
DRY					
Maximum sliding speed, U		fpm	500	m/s	2.5
Maximum pU factor		psi x fpm	29 000	N/mm^2 x m/s	1.0
Coefficient of friction, f			0.04 - 0.25*		0.04 - 0.25*
OIL LUBRICATED					
Maximum sliding speed, U		fpm	1 000	m/s	5.0
Maximum pU factor		psi x fpm	286 000	N/mm^2 x m/s	10.0
Coefficient of friction, f			0.02 - 0.08*		0.02 - 0.08*
RECOMMENDATIONS					
Shaft surface roughness, Ra	Dry	µin	12 - 20	µm	0.3 - 0.5
	Lubricated	µin	≤ 2 - 16*	µm	≤ 0.05 - 0.40*
Shaft surface hardness	Unhardened acceptable, improved bearing life	HB	> 200	HB	> 200

* Depending on operating conditions

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

MICROSECTION