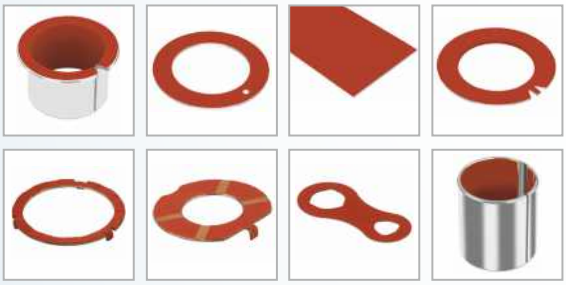
GGB
BEARING TECHNOLOGY
an EnPro Industries company

The Global Leader
in High Performance Bearing Solutions

DP4



Metal-Polymer Low Friction Plain Bearings

compliant RoHS

CHARACTERISTICS

- DP4 anti-friction bushings offer 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
- Lead-free material compliant to EVL, WEEE, and RoHS specifications
- Approved to standard DIN EN 1797: 2002-02 and ISO 21010: 2004-04 (Cryogenic Vessels – Gas/Material Compatibility) for piping, valves, fittings and other components in both gaseous and liquid oxygen for up to maximum temperature of 60°C and oxygen pressure of 25 bars. Contact GGB for further details.

AVAILABILITY

Bearing forms available in standard dimensions

- Cylindrical bushes
- Flanged bushes
- Thrust washers
- Sliding plates
- Flanged washers

Bearing forms made to order: standard bushing forms in special dimensions, half-bushings, special shapes obtained by stamping or deep drawing, bearings with locating notches, lubricant holes and machined/stamped grooves, customized bushing designs

APPLICATIONS

Automotive: Braking systems, clutches, gearbox and transmissions, hinges: door, bonnet, boot, cabriolet roof tops, pedals; pumps: axial piston, radial piston, gear and vane; seat mechanisms, steering systems, struts and shock absorbers, wiper systems, etc.

Industrial: Aerospace, agricultural equipment, construction equipment, food and beverage, 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.

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DP4 Technical Data

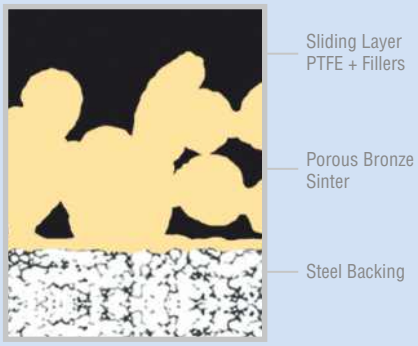
Bearing Properties		Imperial Units	Imperial Value	Metric Units	Metric Value
General					
Maximum load, p	Static	psi	36 000	N/mm^2	250
	Dynamic	psi	20 000	N/mm^2	140
Operating temperature	Min	°F	- 328	°C	- 200
	Max	°F	536	°C	280
Coefficient of linear thermal expansion	Parallel to the surface	10^{-6}/F	6	10^{-6}/K	11
	Normal to the surface	10^{-6}/F	17	10^{-6}/K	30
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			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			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	Fair
Process fluid lubricated	Good

For Superior Performance	
Water lubricated	DP4-B

Microsection



https://www.ggbearings.com/en/products/metal-polymer/dp4

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