

DX®

Metal-Polymer Plain Bearings Grease Lubricated






CHARACTERISTICS

- DX marginally lubricated bushings for grease or oil lubricated applications
- Standard parts contain grease indents in the sliding layer; plain sliding layer available by request
- Optimum performance under relatively high loads and low speeds
- Suitable for linear, oscillating and rotating movements
- Wide range of parts available from stock

AVAILABILITY

Bearing forms available in standard dimensions

-  Cylindrical bushes
-  Thrust washers
-  Sliding plates

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

APPLICATIONS

Automotive: Steering gear, power steering, pedal bushes, seat slides, king-pin bushes, tailgate pivots, brake caliper bushes, etc.

Industrial: Mechanical handling and lifting equipment, machine slides, hydraulic cylinders, hydraulic motors, ski-lifts, pneumatic equipment, medical equipment, textile machinery, agricultural equipment, scientific equipment, etc.



DX® Technical Data

Bearing Properties		Imperial Units	Imperial Value	Metric Units	Metric Value
General					
Maximum load, p	Static	psi	20 000	N/mm ²	140
	Dynamic	psi	20 000	N/mm ²	140
Operating temperature	Min	°F	- 40	°C	- 40
	Max	°F	265	°C	130
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	29
Grease Lubricated					
Maximum sliding speed, U		fpm	500	m/s	2.5
Maximum pU factor		psi x fpm	80 000	N/mm ² x m/s	2.8
Coefficient of friction			0.06 - 0.12		0.06 - 0.12
Recommendations					
Shaft surface roughness, Ra		µin	≤ 16	µm	≤ 0.4
Shaft surface hardness	Normal	HB	> 200	HB	> 200
	For longer service life	HB	> 350	HB	> 350

Operating Performance

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

For Superior / Lead-free Performance

Dry	GAR-MAX / HSG / GAR-FIL / MLG
Water lubricated	HPM / HPF / DP4-B
Process fluid lubricated	DP4 / HI-EX / GAR-FIL

Microsection



Sliding Layer POM
with or without
Lubricant Indents
for Machining

Porous Bronze
Sinter

Steel Back