

## DX<sup>®</sup>

### METAL-POLYMER PLAIN BEARINGS GREASE LUBRICATED



### 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.

### 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

**Metric bearings and imperial bushings 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



BEARING PROPERTIES		IMPERIAL UNITS	IMPERIAL VALUE	METRIC UNITS	METRIC VALUE
--------------------	--	----------------	----------------	--------------	--------------

GENERAL					
Maximum load, p	Static	psi	20 000	N/mm <sup>2</sup>	140
	Dynamic	psi	20 000	N/mm <sup>2</sup>	140
Operating temperature	Min	°F	- 40	°C	- 40
	Max	°F	265	°C	130
Coefficient of linear thermal expansion	Parallel to the surface	10 <sup>-6</sup> /F	6	10 <sup>-6</sup> /K	11
	Normal to the surface	10 <sup>-6</sup> /F	17	10 <sup>-6</sup> /K	29

GREASE LUBRICATED					
Maximum sliding speed, U		fpm	500	m/s	2.5
Maximum pU factor		psi x fpm	50 000	N/mm <sup>2</sup> x m/s	2.8
Coefficient of friction, f			0.06 - 0.12		0.06 - 0.12

RECOMMENDATIONS					
Shaft surface roughness, Ra	Lubricated	µin	≤ 16	µm	≤ 0.40
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**

