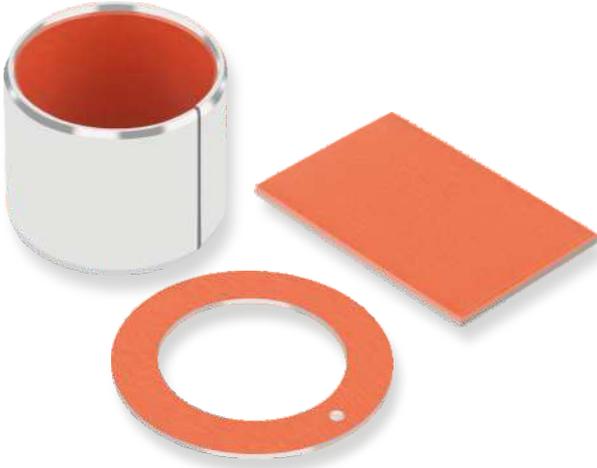


DS

METAL-POLYMER HYDRODYNAMIC COMPOSITE BEARINGS



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

- Self-lubricating bushings for operation in mixed film lubrication conditions
- Sliding layer is machinable (ca. 0.4 mm above bronze sinter layer)
- Resistant to fretting corrosion damage to the shaft under low amplitude oscillating movements
- Similar in performance to DX® but with lower friction

AVAILABILITY

Bearing forms made to order: Cylindrical bushes, thrust washers, sliding plates, half-bearings, special shapes obtained by stamping, customized bearing designs



BEARING PROPERTIES		UNITS	VALUE
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GENERAL

Maximum load, p	Static	N/mm ²	110
	Dynamic	N/mm ²	45
Operating temperature	Min	°C	- 60
	Max	°C	130

DRY

Maximum sliding speed, U	m/s	1.5
Maximum pU factor	N/mm ² x m/s	1.4
Coefficient of friction, f		0.15 - 0.30

GREASE LUBRICATED

Maximum sliding speed, U	m/s	2.5
Maximum pU factor	N/mm ² x m/s	2.8
Coefficient of friction, f		0.05 - 0.10

OIL LUBRICATED

Maximum sliding speed, U	m/s	10.0
Maximum pU factor	N/mm ² x m/s	10.0
Coefficient of friction, f		0.03 - 0.08

RECOMMENDATIONS

Shaft surface roughness, Ra	Lubricated	µm	≤ 0.40
Shaft surface hardness	Normal	HB	> 200
	For longer service life	HB	> 350

OPERATING PERFORMANCE

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

FOR SUPERIOR / LEAD-FREE PERFORMANCE

Water lubricated	HPM / HPF / DP4-B
Process fluid lubricated	DP4 / GAR-FIL / HI-EX

MICROSECTION

