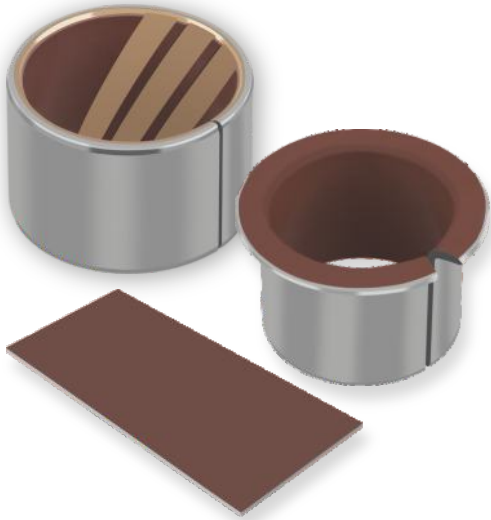


DTS10®

METAL-POLYMER HYDRODYNAMIC COMPOSITE BEARINGS



APPLICATIONS

Industrial – Compressors: scroll and reciprocating, pumps and motors: external and internal gear, pumps, vane pumps, axial and radial piston pumps, gerotor pumps, etc., hydraulic cylinders

CHARACTERISTICS

- The first polymer-lined precision bearing for lubricated conditions offering low friction and high wear resistance that is designed to be machined on-site for tight tolerances
- Excellent wear resistance and low friction in lubricated hydraulic applications
- Excellent chemical resistance, fatigue strength, cavitation and flow erosion resistance, and good behavior in dry start-up conditions
- A minimum overlay thickness of 0.1 mm permits, under carefully controlled conditions, machining of the assembled bore for improved dimensional tolerance and reduced geometric defects, while retaining a thin layer of PTFE sliding surface
- Compatible with most standard machining processes including turning, broaching, reaming, and milling
- Lead-free material compliant to ELV, WEEE, and RoHS specifications

AVAILABILITY

Bearing forms made to order: Cylindrical bushes, thrust washers, sliding plates, half-bearings, special shapes obtained by stamping, bearings with locating notches, lubricant holes and machined grooves, customized bearing designs



BEARING PROPERTIES		UNITS	VALUE
GENERAL			
Maximum load, p	Static	N/mm ²	140
Operating temperature	Min	°C	- 200
	Max	°C	280
FLUID LUBRICATED			
Maximum sliding speed, U		m/s	10.0
Maximum pU factor		N/mm ² x m/s	100*
Coefficient of friction, f			0.01 - 0.08
RECOMMENDATIONS			
Shaft surface roughness, Ra	Lubricated	µm	≤ 0.05 - 0.20*
Shaft surface hardness		HB	> 200

* Depending on operating conditions

OPERATING PERFORMANCE	
Dry	Fair
Oil lubricated	Excellent
Grease lubricated	Fair
Water lubricated	Fair
Process fluid lubricated	Good
FOR SUPERIOR / LEAD-FREE PERFORMANCE	
Dry	GAR-MAX / HSG / GAR-FIL / MLG
Grease lubricated	DX / DX10
Water lubricated	HPM / HPF / DP4-B

MICROSECTION



- Sliding Layer
PTFE + Fillers
- Porous Bronze
Sinter
- Steel Backing