

EPTTM73

Self-Lubricating Engineered Plastic Bearings



CHARACTERISTICS

- Good bearing performance in dry working conditions
- Good performance in lubricated or marginally lubricated applications
- Corrosion resistant in humid/saline environments
- Very good dimensional stability
- Very good weight performance ratio
- Within injection moulding tool feasibility unlimited dimensions and design features
- Compliant to EVL, WEEE and RoHS specifications



AVAILABILITY

Bearing forms made to order: cylindrical bushings, flanged bearings, thrust washers, sliding plates, half-bearings, customized bearing designs

APPLICATIONS

General: Generally applicable within the limits of the material properties

Automotive: Automatic gears, pumps, sealing in turbo compressors, piston rings, valve seats, sealings

Industrial: Continuous furnaces, drying furnaces for coating, textile machines and many more

Other: Aerospace: Weight saving by replacement of aluminum or metal alloys, while providing superior stability and viscosity
Applicable in extreme high and low temperatures e.g. turbojet engine compressor blade



EP™73 Technical Data

Bearing Properties		Imperial Units	Imperial Value	Metric Units	Metric Value
General					
Maximum load, p	Static	psi	15 000	N/mm ²	105
Operating temperature	Min	°F	-330	°C	-200
	Max	°F	500	°C	260
Coefficient of linear thermal expansion		10 ⁻⁶ /F	14	10 ⁻⁶ /K	25
Dry					
Maximum sliding speed, U		fpm	500	m/s	2.5
Maximum pU factor	for A _H /A _C = 5	psi x fpm	2 800	N/mm ² x m/s	0.10
	for A _H /A _C = 10	psi x fpm	11 100	N/mm ² x m/s	0.39
	for A _H /A _C = 20	psi x fpm	44 900	N/mm ² x m/s	1.57
Coefficient of friction			0.19 - 0.31		0.19 - 0.31
Lubricated					
Maximum sliding speed, U		fpm	1 000	m/s	5.0
Recommendations					
Surface roughness, Ra		µin	8 - 32	µm	0.2 - 0.8
Surface hardness		HV	> 200	HV	> 200

Operating Performance

Dry	Good
Oil lubricated	Good
Grease lubricated	Good
Water lubricated	Fair
Process fluid lubricated	Good after resistance testing

For Superior Performance

Water lubricated	EP64
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Microsection



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