

EP[®]73

SELF-LUBRICATING ENGINEERED PLASTIC BEARINGS



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

CHARACTERISTICS

- Good bearing performance in dry working conditions
- Good bearing 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 ELV, WEEE and RoHS specifications

AVAILABILITY

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



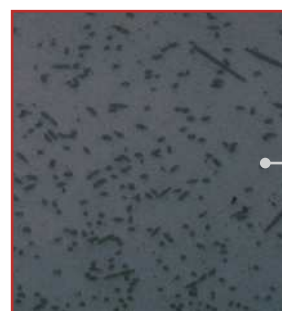
| BEARING PROPERTIES | | UNITS | VALUE |
|---|--|-------------------------|-------------|
| GENERAL | | | |
| Maximum load, p | Static | N/mm ² | 105 |
| Operating temperature | Min | °C | - 200 |
| | Max | °C | 260 |
| Coefficient of linear thermal expansion | | 10 ⁻⁶ /K | 25 |
| DRY | | | |
| Maximum sliding speed, U | | m/s | 2.5 |
| Maximum pU factor | For A _H / A _C = 5 | N/mm ² x m/s | 0.10 |
| | For A _H / A _C = 10 | N/mm ² x m/s | 0.39 |
| | For A _H / A _C = 20 | N/mm ² x m/s | 1.57 |
| Coefficient of friction, f | | | 0.19 - 0.31 |
| LUBRICATED | | | |
| Maximum sliding speed, U | | m/s | 5.0 |
| RECOMMENDATIONS | | | |
| Shaft surface roughness, Ra | | µm | 0.2 - 0.8 |
| Shaft surface hardness | | 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

PAI + Solid
Lubricant + Fillers