

## EP<sup>®</sup>64

### SELF-LUBRICATING ENGINEERED PLASTIC BEARINGS



### APPLICATIONS

**General** – Generally applicable within the limits of the material properties

**Industrial** – Domestic appliances, transportation equipment, apparatus engineering, conveyor equipment and many more

### CHARACTERISTICS

- Good performance in lubricated or marginally lubricated applications
- Excellent flow erosion and cavitation resistance
- Corrosion resistant in humid/saline environments
- Suitable for very high temperature applications
- 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

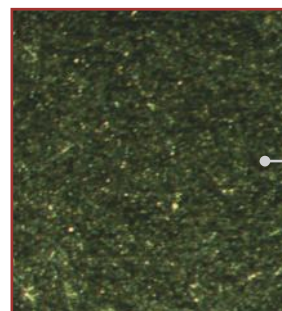


| BEARING PROPERTIES          |  | UNITS                   | VALUE               |
|-----------------------------|--|-------------------------|---------------------|
| <b>GENERAL</b>              |  |                         |                     |
| Maximum load, p             | Static                                   | N/mm <sup>2</sup>       | 125                 |
|                             | Min                                      | °C                      | - 100               |
| Operating temperature       | Max                                      | °C                      | 290                 |
|                             | Coefficient of linear thermal expansion  |                         | 10 <sup>-6</sup> /K |
| <b>DRY</b>                  |  |                         |                     |
| Maximum sliding speed, U    |  | m/s                     | 1.0                 |
| Maximum pU factor           | For A <sub>H</sub> / A <sub>C</sub> = 5  | N/mm <sup>2</sup> x m/s | 0.09                |
|                             | For A <sub>H</sub> / A <sub>C</sub> = 10 | N/mm <sup>2</sup> x m/s | 0.35                |
|                             | For A <sub>H</sub> / A <sub>C</sub> = 20 | N/mm <sup>2</sup> x m/s | 1.40                |
| Coefficient of friction, f  |  |                         | 0.3 - 0.5           |
| <b>RECOMMENDATIONS</b>      |  |                         |                     |
| Shaft surface roughness, Ra |  | µm                      | 0.1 - 0.5           |
| Shaft surface hardness      |  | HV                      | > 450               |

#### OPERATING PERFORMANCE

|                          |                               |
|--------------------------|-------------------------------|
| Dry                      | Good                          |
| Oil lubricated           | Very Good                     |
| Grease lubricated        | Very Good                     |
| Water lubricated         | Good                          |
| Process fluid lubricated | Good after resistance testing |

#### MICROSECTION



PEEK + Solid  
Lubricant + Fillers