

## EP<sup>®</sup>12

### SELF-LUBRICATING ENGINEERED PLASTIC BEARINGS



### APPLICATIONS

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

**Industrial** – Domestic appliances, furniture, office equipment, sports equipment and many more

### 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 price performance ratio
- Very good weight performance ratio
- Within injection moulding tool feasibility unlimited dimensions and design features
- Compliant to ELV, WEEE and RoHS specifications

### AVAILABILITY

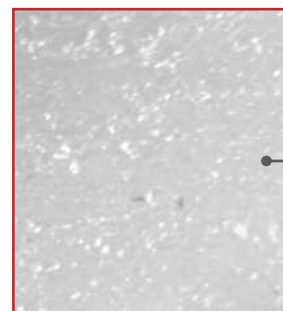
**Bearing forms made to order:** Cylindrical bushings, flange bushings, thrust washers, bushings, plates, special bearings



BEARING PROPERTIES		IMPERIAL UNITS	IMPERIAL VALUE	METRIC UNITS	METRIC VALUE
<b>GENERAL</b>					
Maximum load, p	Static	psi	9 500	N/mm <sup>2</sup>	65
	Min	°F	- 40	°C	- 40
Operating temperature	Max	°F	260	°C	125
	Coefficient of linear thermal expansion		10 <sup>-6</sup> /F	67	10 <sup>-6</sup> /K
<b>DRY</b>					
Maximum sliding speed, U		fpm	200	m/s	1.0
Maximum pU factor	For A <sub>H</sub> / A <sub>C</sub> = 5	psi x fpm	1 100	N/mm <sup>2</sup> x m/s	0.04
	For A <sub>H</sub> / A <sub>C</sub> = 10	psi x fpm	2 500	N/mm <sup>2</sup> x m/s	0.09
	For A <sub>H</sub> / A <sub>C</sub> = 20	psi x fpm	5 100	N/mm <sup>2</sup> x m/s	0.18
Coefficient of friction, f			0.18 - 0.30		0.18 - 0.30
<b>RECOMMENDATIONS</b>					
Shaft surface roughness, Ra		µin	4 - 20	µm	0.1 - 0.5
Shaft surface hardness		HV	> 200	HV	> 200

OPERATING PERFORMANCE	
Dry	Very Good
Oil lubricated	Good
Grease lubricated	Good
Water lubricated	Fair
Process fluid lubricated	Good after resistance testing
FOR SUPERIOR / LEAD-FREE PERFORMANCE	
Water lubricated	EP22

**MICROSECTION**



→ POM  
+ Solid Lubricant