

FP®

# SELF-LUBRICATING ENGINEERED PLASTIC BEARINGS





#### **APPLICATIONS**

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

**Industrial** – Medical equipment, awnings and blinds, scientific equipment, gaming equipment, office equipment, etc.

# **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 available in standard dimensions:** Plain cylindrical bushes, plain flanged bushes

Bearing forms made to order: Standard forms in

**Bearing forms made to order:** Standard forms in special dimensions, thrust washers, half-bearings, sliding plates, customized bearing designs







## **EP® DATASHEET**



BEARING PROPERTIES		UNITS	VALUE
GENERAL			
Maximum load, p	Static	N/mm²	80
	Dynamic	N/mm <sup>2</sup>	40
Operating temperature	Min	°C	- 40
	Max	°C	140
Coefficient of linear thermal expansion		10 <sup>-6</sup> /K	22
DRY			
Maximum sliding speed, U		m/s	1.0
Maximum pU factor	For $A_H / A_C = 5$	N/mm <sup>2</sup> x m/s	0.06
	For $A_H / A_C = 10$	N/mm <sup>2</sup> x m/s	0.24
	For A <sub>H</sub> / A <sub>C</sub> = 20	N/mm <sup>2</sup> x m/s	1.00
Coefficient of friction, f			0.15 - 0.30
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		

**MICROSECTION** 

PA6.6T + Solid
Lubricant + Fillers

FOR SUPERIOR / LEAD-FREE PERFORMANCE

Water lubricated

EP22