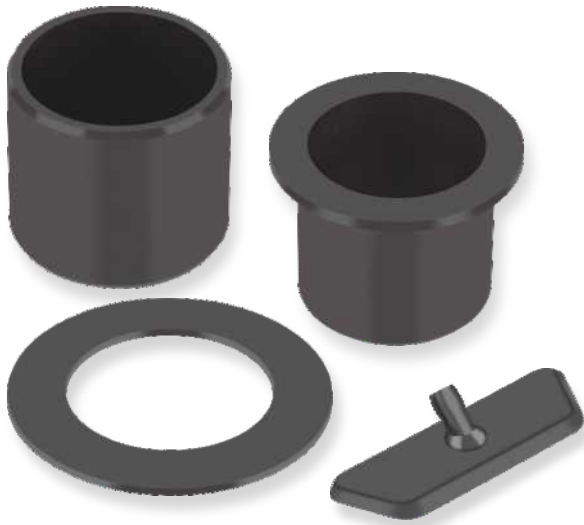


EP[®]44

SELF-LUBRICATING ENGINEERED PLASTIC BEARINGS



APPLICATIONS

General – Generally applicable within the limits of the material properties

Industrial – Domestic appliances, valve technology, electronics assembly, apparatus engineering 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 for high temperature applications
- 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 bushes, thrust washers, sliding plates, half-bearings, special shapes obtained by stamping, bearings with locating notches, lubricant holes and machined grooves, customized bearing designs



BEARING PROPERTIES		IMPERIAL UNITS	IMPERIAL VALUE	METRIC UNITS	METRIC VALUE
GENERAL					
Maximum load, p	Static	psi	14 000	N/mm ²	95
	Min	°F	- 40	°C	- 40
Operating temperature	Max	°F	460	°C	240
		10 ⁻⁶ /F	15	10 ⁻⁶ /K	27
Coefficient of linear thermal expansion					
DRY					
Maximum sliding speed, U		fpm	200	m/s	1.0
Maximum pU factor	For A _H / A _C = 5	psi x fpm	3 100	N/mm ² x m/s	0.11
	For A _H / A _C = 10	psi x fpm	12 000	N/mm ² x m/s	0.42
	For A _H / A _C = 20	psi x fpm	48 300	N/mm ² x m/s	1.69
Coefficient of friction, f			0.16 - 0.26		0.16 - 0.26
RECOMMENDATIONS					
Shaft surface roughness, Ra		µin	8 - 32	µm	0.2 - 0.8
Shaft surface hardness		HV	> 450	HV	> 450

OPERATING PERFORMANCE	
Dry	Good
Oil lubricated	Very Good
Grease lubricated	Very Good
Water lubricated	Very Good
Process fluid lubricated	Good after resistance testing

MICROSECTION



PPS + Solid Lubricant + Fillers