

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 special dimensions, thrust washers, half-bearings, sliding plates, customized bearing designs



BEARING PROPERTIES		IMPERIAL UNITS	IMPERIAL VALUE	METRIC UNITS	METRIC VALUE
GENERAL					
Maximum load, p	Static	psi	12 000	N/mm ²	80
	Dynamic	psi	6 000	N/mm ²	40
Operating temperature	Min	°F	- 40	°C	- 40
	Max	°F	280	°C	140
Coefficient of linear thermal expansion		10 ⁻⁶ /F	12	10 ⁻⁶ /K	22
DRY					
Maximum sliding speed, U		fpm	700	m/s	1.0
Maximum pU factor	For A _H / A _C = 5	psi x fpm	1 700	N/mm ² x m/s	0.06
	For A _H / A _C = 10	psi x fpm	6 800	N/mm ² x m/s	0.24
	For A _H / A _C = 20	psi x fpm	28 600	N/mm ² x m/s	1.00
Coefficient of friction, f			0.15 - 0.30		0.15 - 0.30
RECOMMENDATIONS					
Shaft surface roughness, Ra		µin	8 - 32	µm	0.2 - 0.8
Shaft surface hardness		HV	> 200	HV	> 200

OPERATING PERFORMANCE	
Dry	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



PA6.6T + Solid Lubricant + Fillers