EP®63

SELF-LUBRICATING ENGINEERED PLASTIC BEARINGS

APPLICATIONS

General – Generally applicable within the limits of the material properties

Industrial – Domestic appliances, valve technology, electronics assembly, agricultural machinery and many more

CHARACTERISTICS

- Good bearing performance in dry working conditions
- Good performance in lubricated or marginally lubricated applications
- 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
- Approved to standard FAR 25.853 and FAR 25.855 - Federal Aviation Regulations – making it suitable for interior aircraft applications

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

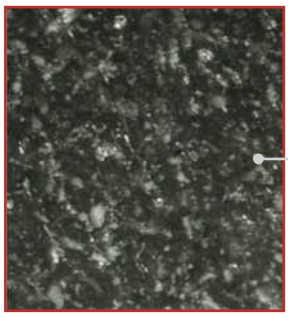
For questions and assistance, contact a GGB engineer at: **https://www.ggbearings.com/en/contact**

BEARING PROPERTIES		IMPERIAL UNITS	IMPERIAL VALUE	METRIC UNITS	METRIC VALUE
GENERAL					
Maximum load, p	Static	psi	13 000	N/mm^2	90
Operating temperature	Min	°F	- 150	°C	- 100
	Max	°F	550	°C	290
Coefficient of linear thermal expansion		10^{-6}/F	28	10^{-6}/K	50
DRY					
Maximum sliding speed, U		fpm	200	m/s	1.0
Maximum pU factor	For A_H / A_C = 5	psi x fpm	4 500	N/mm^2 x m/s	0.16
	For A_H / A_C = 10	psi x fpm	18 800	N/mm^2 x m/s	0.66
	For A_H / A_C = 20	psi x fpm	75 200	N/mm^2 x m/s	2.63
Coefficient of friction, f			0.12 - 0.21		0.12 - 0.21
RECOMMENDATIONS					
Shaft surface roughness, Ra		µin	4 - 20	µm	0.1 - 0.5
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 PERFORMANCE	
Water lubricated	EP64

MICROSECTION



PEEK + Solid Lubricant + Fillers