DU®

METAL-POLYMER ANTI-FRICTION PLAIN BEARINGS

APPLICATIONS

Industrial – Aerospace, agricultural equipment, construction equipment, food and beverage, material handling equipment, forming machines: metal, plastic and rubber; office equipment, medical and scientific equipment, packaging equipment, pneumatic and hydraulic cylinders, pumps and motors, railroad and tramways, textile machinery, valves, etc.

CHARACTERISTICS

- DU self-lubricating bushings offer very good wear and low friction performance over a wide range of loads, speeds and temperatures in dry running conditions
- Bushing material suitable for lubricated applications
- Anti-friction bearing suitable for linear, oscillating and rotating movements
- 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:
Cylindrical bushes, flanged bushes, thrust washers, flanged washers, sliding plates

Metric bearings and imperial bushings made to order:
Standard bushing forms in special dimensions, half-bushings, special shapes obtained by stamping or deep drawing, customized bushing 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	36 000	N/mm^2	250
	Dynamic	psi	20 000	N/mm^2	140
Operating temperature	Min	°F	-328	°C	- 200
	Max	°F	536	°C	280
Coefficient of linear thermal expansion	Parallel to the surface	10^{-6}/F	6	10^{-6}/K	11
	Normal to the surface	10^{-6}/F	17	10^{-6}/K	30
DRY					
Maximum sliding speed, U		fpm	500	m/s	2.5
Maximum pU factor		psi x fpm	50 000	N/mm^2 x m/s	1.8
Coefficient of friction, f			0.02 - 0.25*		0.02 - 0.25*
OIL LUBRICATED					
Maximum sliding speed, U		fpm	1 000	m/s	5.0
Maximum pU factor		psi x fpm	143 000	N/mm^2 x m/s	5.0
Coefficient of friction, f			0.02 - 0.12*		0.02 - 0.12*
RECOMMENDATIONS					
Shaft surface roughness, Ra	Dry	µin	12 - 20	µm	0.3 - 0.5
	Lubricated	µin	≤ 2 - 16*	µm	≤ 0.05 - 0.40*
Shaft surface hardness	Unhardened acceptable, improved bearing life	HB	> 200	HB	> 200

* Depending on operating conditions

OPERATING PERFORMANCE	
Dry	Very Good
Oil lubricated	Very Good
Grease lubricated	Fair
Water lubricated	Fair
Process fluid lubricated	Fair

FOR SUPERIOR / LEAD-FREE PERFORMANCE	
Dry	**DP4 / DP11**
Oil lubricated	DP4 / DP31
Grease lubricated	**DP4 / DX**
Water lubricated	DP4-B
Process fluid lubricated	**DP4 / DP31**

MICROSECTION