

GGB-DB®

CAST BRONZE BUSHINGS WITH SOLID LUBRICANT INSERTS



APPLICATIONS

Industrial – Offshore industry, underwater equipment, bridges and civil engineering, iron and steel industry equipment, cranes and conveyors, deep and open cast mining equipment, construction and earthmoving equipment, etc.

CHARACTERISTICS

- Maintenance-free bearing material for heavy duty applications
- Excellent performance under high loads and intermittent operation
- Available with PTFE or graphite inserts for temperatures above 250°C

AVAILABILITY

Bearing forms made to order: Cylindrical bushes, flanged bushes, thrust washers, sliding plates, pintle bearings, half-bearings, axial and radial segment rings, self-aligning spherical bearings, customized bearing designs



BEARING PROPERTIES		UNITS	VALUE DB®B/11	VALUE DB®B/16	VALUE DB®C/11	VALUE DB®C/16	VALUE DB®D/11	VALUE DB®D/16
MECHANICAL PROPERTIES								
Minimum Yield Strength		N/mm ²	97	97	275	275	414	414
Minimum Tensile Strength		N/mm ²	207	207	620	620	758	758
Hardness		HB	75	75	190	190	210	210
Elongation (% in 50 mm)		%	15	15	6	6	12	12
TRIBOLOGICAL PROPERTIES								
Maximum Static Load Capacity		N/mm ²	140	140	350	350	400	400
Maximum Dynamic Load Capacity		N/mm ²	70	70	200	200	250	250
Maximum sliding speed, U		m/s	0.5	0.5	0.5	0.5	0.5	0.5
Maximum pU factor		N/mm ² x m/s	1.0	1.0	1.0	1.0	1.5	1.5
Operating temperature	min	°C	-50	-50	-50	-50	-50	-50
	max	°C	250	180	320	180	350	180
Coefficient of friction, f (dry)			0.05 - 0.18	0.05 - 0.18	0.05 - 0.18	0.05 - 0.18	0.05 - 0.18	0.05 - 0.18

RECOMMENDATION TO ASSEMBLY AND TOLERANCES		TOLERANCES	ROUGHNESS (µm)
Ø Housing		H7	3.2
Ø OD Bearing		s6	3.2
Ø ID Bearing	before assembly	E8	1.2
	after assembly	H10	1.2
Ø Shaft		d8	0.2 - 0.8
Concentricity Inner/Outer Bearing		IT9	

For bearing bores > 200mm, tolerances should be calculated by our application engineering team based on the parameters of each application. Your specific application may require special fitting instructions.

MICROSECTION

