

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
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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
	max	°C	250	180	320	180	350
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)
∅ Housing	H7	3.2
∅ OD Bearing	s6	3.2
∅ ID Bearing	before assembly	E8
	after assembly	H10
∅ 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

