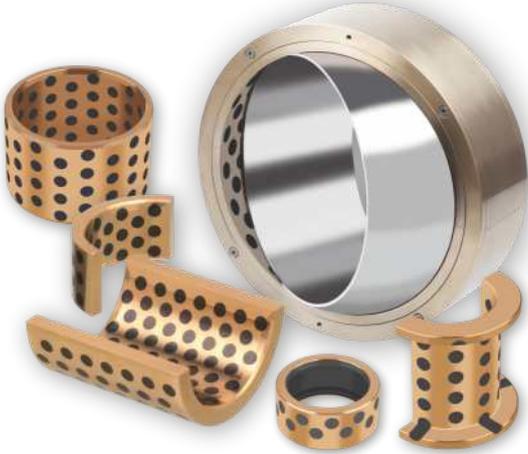# GGB-DB®D/11

CAST BRONZE BUSHINGS WITH SOLID LUBRICANT INSERTS MADE OF GRAPHITE

SELF-LUBRICATING BEARING SPECIFICATION

The bearings are self-lubricating, completely free of maintenance, consisting of a centrifuge casted bronze alloy (ASTM B271 C86300) for bearings ID > 180 mm or continuous casted alloy (ASTM B505 C86300) for bearings ID < 180 mm, highly wear resistant, whose contact surfaces are provided with inserts of solid lubricant plugs composed of graphite, patterned according to the so-called "macro distribution principle" and following the type of movement to which the bearing will be subjected.

The bearings are supplied with running-in film of 15 to 20 μm, which has the function of ensuring solid lubricant transference to the mating material during the first movements.

They must have high static and dynamic load capacity, stable coefficient of friction and no "stick-slip" effect, corrosion resistant, insensitive to dirt and suitable for applications in water, oil or grease.

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

BEARING PROPERTIES		UNITS	VALUE
MECHANICAL PROPERTIES OF SUPPORT BRONZE ALLOY (B271-C86300)			
Minimum Yield Strength		N/mm^2	414
MinimumTensile Strength		N/mm^2	758
Hardness		HB	210
Elongation (% in 50 mm)		%	12
TRIBOLOGICAL PROPERTIES			
Maximum Static Load Capacity		N/mm^2	400
Maximum Dynamic Load Capacity		N/mm^2	250
Maximum sliding speed, U		m/s	0,5
Maximum pU factor		MPa x m/s	1,5
Operating temperature	min	°C	-50
	max	°C	350
Coefficient of friction, f (dry)			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

1 — Sliding surface with running-in-film

2 — Solid lubricant

3 — Base material (bronze)