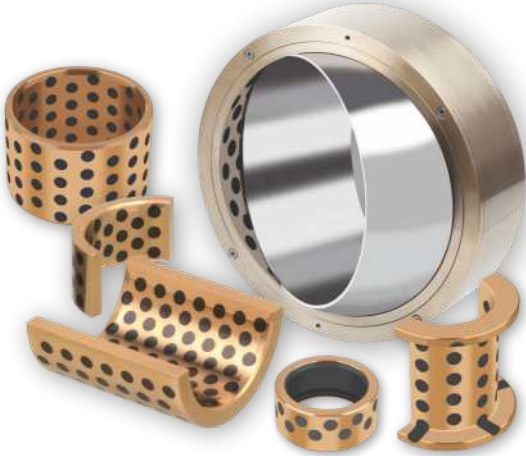


# GGB-DB<sup>®</sup>B/11

**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 C93200) for bearings ID > 180 mm or continuous casted alloy (ASTM B505 C93200) 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.



BEARING PROPERTIES		UNITS	VALUE
<b>MECHANICAL PROPERTIES OF SUPPORT BRONZE ALLOY (B271-C93200)</b>			
Minimum Yield Strength		N/mm <sup>2</sup>	97
Minimum Tensile Strength		N/mm <sup>2</sup>	207
Hardness		HB	75
Elongation (% in 50 mm)		%	15
<b>TRIBOLOGICAL PROPERTIES</b>			
Maximum Static Load Capacity		N/mm <sup>2</sup>	140
Maximum Dynamic Load Capacity		N/mm <sup>2</sup>	70
Maximum sliding speed, U		m/s	0,5
Maximum pU factor		MPa x m/s	1,0
Operating temperature	min	°C	-50
	max	°C	250
Coefficient of friction, f (dry)			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	1,2
	after assembly	H10	1,2
∅ 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

