GGB
BEARING TECHNOLOGY
an EnPro Industries company

The Global Leader
in High Performance Bearing Solutions

GGB-CBM®

Thin Walled Bimetal Bearings made by Metallurgic Powder

CHARACTERISTICS

- Self-lubricating and maintenance-free bearings with homogeneously distributed solid lubricant (graphite) in the sliding layer
- High load capacity and suited to temperatures from -150°C up to 280°C
- Different metallic backings are available: stainless steel, carbon steel or bronze
- Lead-free alloys are available

AVAILABILITY

Bearing forms made to order:
cylindrical bearings, flanged bearings, axial washers, sliding plates, half shells, axial and radial segment rings, spherical bushings, customized bearing forms

APPLICATIONS

Industrial: General mechanical engineering, applications at high loads, iron foundry, steel and aluminum industry, furnaces, blower, steel works, food and beverage industry, packaging equipment, agriculture and construction machines, handling equipment, tire molds, etc.

For additional market / product offerings, go to https://www.ggbearings.com

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GGB-CBM® Technical Data

Bearing Properties		Imperial Units	Imperial Value	Metric Units	Metric Value
General					
Maximum load, p	Static Dynamic	psi psi	38 000 - 41 000 12 000 - 22 000	N/mm^2 N/mm^2	260 - 280 80 - 150
Operating temperature	Min Max	°F °F	- 240 540	°C °C	- 150 280
Coefficient of linear thermal expansion		10^{-6}/F	7 - 9	10^{-6}/K	12 - 16
Dry					
Maximum sliding speed, U		fpm	60 - 100	m/s	0.3 - 0.5
Maximum pU factor		psi x fpm	14 000 - 29 000	N/mm^2 x m/s	0.5 - 1.0
Coefficient of friction			0.10 - 0.20		0.10 - 0.20
Water Lubricated					
Coefficient of friction			0.10 - 0.15		0.10 - 0.15
Recommendations					
Shaft surface roughness, Ra		µin	8 - 32	µm	0.2 - 0.8
Shaft surface hardness		HB	> 180 - >250	HB	> 180 - >250

Bearing properties and recommendations depending on GGB-CBM® material.

Operating Performance	
Dry	Good
Oil lubricated	Good
Grease lubricated	Good
Water lubricated	Good
Process fluid lubricated	Depending on Fluid

Microsection

https://www.ggbearings.com/en/products/metals-and-bimetals/ggb-cbm