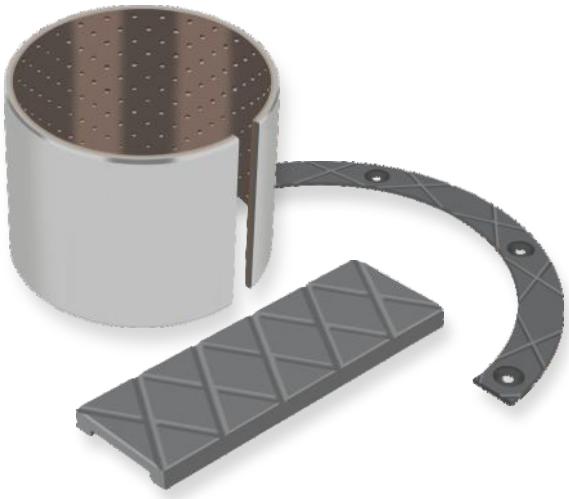
GGB-CBM®

THIN WALLED BIMETAL BEARINGS MADE BY METALLURGIC POWDER



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.

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

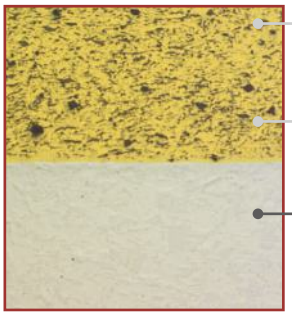
AVAILABILITY

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

compliant RoHS

BEARING PROPERTIES		UNITS	VALUE
GENERAL			
Maximum load, p	Static	N/mm^2	260 - 280
	Dynamic	N/mm^2	80 - 150
Operating temperature	Min	°C	- 150
	Max	°C	280
Coefficient of linear thermal expansion		$10^{-6}/K$	12 - 16
DRY			
Maximum sliding speed, U		m/s	0.3 - 0.5
Maximum pU factor		N/mm^2 x m/s	0.5 - 1.0
Coefficient of friction, f			0.10 - 0.20
WATER LUBRICATED			
Coefficient of friction, f			0.10 - 0.15
RECOMMENDATIONS			
Shaft surface roughness, Ra		µm	0.2 - 0.8
Shaft surface hardness		HB	> 180 - > 250

* Bearing properties and recommendations depending on GGB-CBM® material grade. This information is available by downloading the GGB-CBM® brochure.

OPERATING PERFORMANCE	
Dry	Good
Oil lubricated	Good
Grease lubricated	Good
Water lubricated	Good
Process fluid lubricated	Depending on Fluid

MICROSECTION