

GGB-FP20

METAFRAM Oil Impregnated Sintered Iron Bearings



CHARACTERISTICS

- Similar to SINT A 10, impregnation group 1
- Maintenance-free bearing for general engineering applications
- Optimum performance under relatively light loads and high speeds
- Produced by powder metallurgy process and therefore suitable for complex shapes

AVAILABILITY

Bearing forms made to order: Cylindrical bushes, flanged bushes and customized bearing designs



APPLICATIONS

Industrial: FHP motor bearings, domestic appliances and hand tools



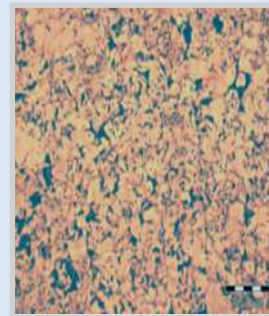
GGB-FP20 Technical Data

Bearing Properties		Imperial Units	Imperial Value	Metric Units	Metric Value
General					
Maximum load, p	Static	psi	6 500	N/mm ²	45.0
	Dynamic	psi	1 100 - 3 200*	N/mm ²	8.0 - 22.5*
Operating temperature	Min	°F	- 290 / 25*	°C	- 180 / - 5*
	Max	°F	190 / 570*	°C	90 / 300*
Minimum density		lb/in ³	0.2	g/cm ³	5.6
Minimum apparent porosity		%	20		20
Oil Lubricated					
Maximum sliding speed, U		fpm	20 - 780*	m/s	0.1 - 4.0*
Maximum pU factor		psi x fpm	2 800 - 51 400*	N/mm ² x m/s	0.1 - 1.8*
Coefficient of friction			0.05 - 0.25*		0.05 - 0.25*
Recommendations					
Shaft surface roughness, Ra	Normal	µin	≤ 8 - ≤ 12*	µm	≤ 0.2 - ≤ 0.3*
Shaft surface hardness	For longer service	HB	> 240 - > 355*	HB	> 240 - > 355*

* Bearing properties depending on oil or solid lubricants

Operating Performance	
Dry	Good (PTFE/MoS ₂)
Oil lubricated	Good (oil impregnated)
Grease lubricated	Not recommended
Water lubricated	Not recommended
Process fluid lubricated	Not recommended

Microsection



GGB-FP20:
1 to 4% Cu,
< 0.25% C,
other < 2%
Rest Fe
Impregnation
group 1
(up to +80°C)