Product Information

FELDER Bearing White Metal WM 80

Lead containing bearing white metal Sn80Sb12Cu6Pb2

Item no.: 13800055

All information about our products is the result of our long-standing experience, which we would like to pass on to our customers as application support. Since we do not have any influence on the application with our products, please see the warranty claims in our conditions of sale because our liability is limited.

This product information does not constitute warranted properties.

Description

The lead containing **FELDER Bearing White Metal WM 80** is suitable for medium stress, has a good sliding property, high to low sliding speeds in the hydrodynamic area, good compressive stress, is sensitive to alternating bending fatigue stress and edge pressure and has a high wear resistance with rough pins (cast iron).

Application

FELDER Bearing White Metal WM 80 can be soldered on alloys on a basis of Cu-Zn-Sn (red brass), cast steel, steel and with an intermediate layer on GJL (flake-graphite cast iron, former “GG”). **FELDER Bearing White Metal WM 80** is used for slide bearings for turbines, compressors, electric machines and ram rollers.

Properties

Alloy	Alloy components	Density	Melting range	Casting temperature	Brinell hardness HB 10/250/180 at			
					20° C	50° C	100° C	150° C
Sn80Sb12Cu6Pb	Sn Rest Sb 11 - 13 % Cu 5 - 7 % Pb 1 - 3 %	7.39 g/dm³	183° to 400 °C	from 520° C	27	23	13	7

Compressive stress:	0.2 % offset yield strength:	62 N/mm² at 20° C, 37 N/mm² at 100° C
	2 % offset yield strength:	87 N/mm² at 20° C, 69 N/mm² at 100° C
	Compressive strength:	189 N/mm² at 20° C, 121 N/mm² at 100° C
	Strain at failure:	46 % at 20° C, 53 % at 100°C
Tensile stress:	0.2 % expansion limit:	62 N/mm²
	Tensile strength:	89 N/mm²
	Modulus of elasticity:	55.7 kN/mm²
	Elongation:	3.0 %

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Coefficient of linear thermal expansion at 20 - 100° C:	21.6 10^{-6}·K^{-1}
Bond strength (steel C10, bearing metal thickness≥6 mm) (DIN ISO 4386-2):	39 N/mm²
Bending fatigue strength:	approx. 28 N/mm²
Medium number of impact to fracture:	490 J
Medium of impact energy to fracture:	134 J

Processing Advice

FELDER Bearing White Metal WM 80 can be used with all known applications. These are among others the centrifugal- and static casting procedure, soldering and bonding. A pre-tinning of the bearing support elements is essentially for the anchoring of the bearing metal. This is carried out by dipping into a solder bath or, with larger bearings, by wipe tinning.

Delivery Form

8 - 10 kg blocks

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