

## Datasheet AS TEBMT31



AS TEBMT31 is a wrapped bimetal bearing. It is backed with high quality low carbon steel with tin-lead-bronze alloy (CuSn10Pb10) sintered on its surface. In order to decrease abrasion, the alloy surface can be machined with ball shaped oil sockets for easier oil storage. When necessary, an anti-erosive coating can be plated on the steel back. It is a maintenance free dry sliding bearing according ISO 3547. The TEBMT31 bearing can be made cylindrical or with flange. It is also possible to order thrust washers, strips or other shapes on request. The TEBMT31 bearing has good sliding and wear behavior and is able to operate under medium load with medium of high sliding velocity. High impact loads are possible. The bearing is a very economical solution for many applications. The TEBMT31 bearing has to be lubricated.

AS TEBMT31 is available from 10 mm up to 100 mm shaft diameter. Bigger sizes available on request.

AS TEBMT31 is used a material for bearings in for example engineering machines, rod level or gas engines.

- (1): Hardness rockwell: HRM.
- (2): Hardness rockwell: HRC.
- (3): Coefficient of friction dynamic: oil/grease.

Material	
Material	Bimetal

Availability	Unit	Value
Min. inside diameter	mm	8
Max. outside diameter	mm	305
Length standard	mm	120 (longer on request)

Physical Properties	Test Standard	Unit	Value
Density	ASTM D792	g/cm <sup>3</sup>	-
Max. swell in water at 20 °C	ASTM D570	%	-

Mechanical Properties	Test Standard	Unit	Value
Compressive strength static	ASTM D695	MPa	100
Compressive strength dynamic	ASTM D695	MPa	60
Module of elasticity	ASTM D695	MPa	-
Tensile strength	ASTM D3410	MPa	755
Shear strength	ASTM D3410	MPa	-
Impact strength	ASTM D256	kJ/m <sup>2</sup>	-
Hardness rockwell	ASTM D785	HRM/HRC	-

Thermal Properties	Test Standard	Unit	Value
Thermal expansion	ASTM D696	*10 <sup>-5</sup> / °C	-
Min. working temperature		°C	-40
Max. working temperature		°C	200
Intermittent working temperature		°C	200

Friction Properties	Test Standard	Unit	Value
Coefficient of friction dynamic	Pin-on-ring	Dry against steel	0.03-0.16 <sup>(3)</sup>
Max. sliding speed	Pin-on-ring	m/s	1.5
Max. pv load dry	Pin-on-ring	MPa*m/s	3.25
Max. pv load oil lubricated	Pin-on-ring	MPa*m/s	-
Max. pv load regular greased	Pin-on-ring	MPa*m/s	-
Wear factor	Pin-on-ring	*10 <sup>-9</sup> m <sup>2</sup> /N	-