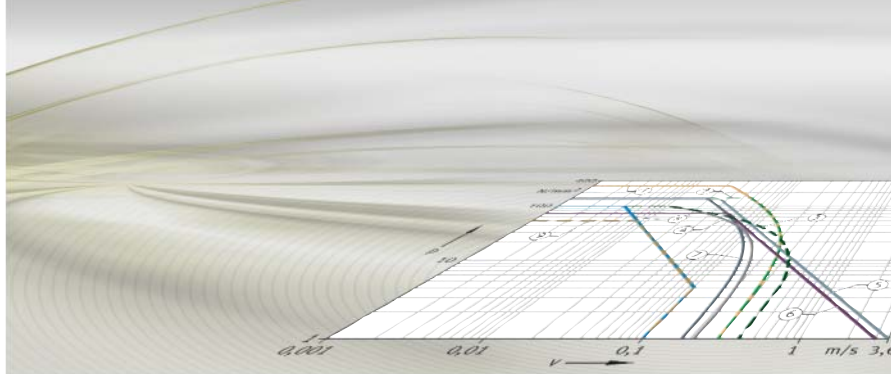




Plain bearing material E840

Features The plain bearing material E840 is a high performance material for metal/polymer composite plain bearings. The basis of the sliding layer is polyether ether ketone PEEK.

Structure The three-layered material consists of a steel backing, an intermediate layer and a sliding layer, *Figure 1*. The steel backing has a sintered porous tin/bronze intermediate layer whose pores are filled with the sliding layer. The sliding layer made from polyether ether ketone PEEK contains the anti-friction and anti-wear additives PTFE, hydrocarbon fibres and graphite.

- ① Sliding layer
- ② Intermediate layer
- ③ Steel backing

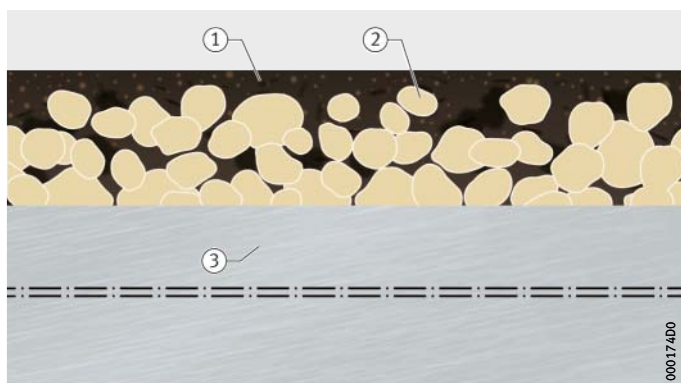


Bild 1
Plain bearing material E840

Available designs

E840 is available in material thicknesses from 0,75 mm to 2,5 mm. The layer thicknesses of the sliding and intermediate layer vary within the following ranges, as a function of the total thickness, see table.

E840

Layer	Thickness range mm	
	from	to
Sliding layer	0,03	0,08
Intermediate layer	0,16	0,32

Plain bearing material E840

Application The material conforms to the regulations for lead-free plain bearings. It is suitable for heavily loaded applications with oil or grease lubrication and a wide temperature range, see table. The special composition of the sliding layer gives the plain bearing material very good wear resistance.

Technical data The plain bearing material E840 has the following mechanical and physical characteristics, see table.

Characteristics of E840

Characteristics	Load		
Permissible specific bearing load	Static	p _{max}	250 N/mm ²
	Dynamic		120 N/mm ²
Permissible sliding velocity	With grease lubrication	v _{max}	2,5 m/s
	With oil lubrication		10 m/s
Permissible operating temperature		θ	−150 °C to +250 °C

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