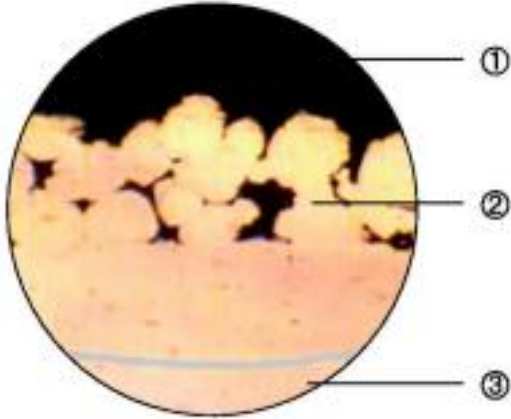


MATERIAL

AST-11 Bronze Backed with Bronze Powder PTFE/Fiber Dry Bearings

RoHS



Structure

1. The 0.01-0.03mm thick PTFE/fiber mixture provides an excellent initial transfer film which effectively coats the mating surfaces of the bearing assembly to form an oxide type solid lubricant film.
2. The sintered bronze powder thickness of 0.20-0.35 mm, provides maximum conductivity of heat away from the bearing surface and acts as a reservoir for the PTFE/Fiber mixture.
3. The bronze backing provides exceptionally high load carrying capacity, excellent heat dissipation, and very good corrosion resistance.

Features

Suitable for dry running, with a low coefficient of friction, lower wear, and good sliding characteristics, the transfer film created can protect the mating metal surface in applications with rotary and oscillating motion. These bearings also have very good chemical resistance and low water absorption and swelling. They offer very good lubrication and the bronze backing provides very good corrosion resistance.

Technical Data

	Static	250 N/mm ²	Friction coefficient		0.03~0.20
	Very low speed	140 N/mm ²		Dry running	2m/s
Max. load	Rotating oscillating	60N/mm ²	Max. speed	Hydrodynamic operation	>2m/s
Max. PV dry running	Short-term operation	3.6N/mm ² *m/s	Thermal conductivity		60W(m*K) ⁻¹
	Continuous operation	1.8N/mm ² *m/s	Coefficient of thermal expansion		18*10 ⁻⁶ *K ⁻¹
Temp. limit		-195°C~+280°C			

Typical Applications

This material meets the demanding criteria for long life and trouble-free performance with or without lubricant. The bronze backing provides good corrosion resistance, anti-magnetic properties, and good thermal conductivity. The bearings are particularly appropriate for high temperature environments where oil is inefficient and the machine must operate continuously for extended periods. Typical applications include the steel industry in applications such as bushings for roller grooves in successive casting machines, cement grouting pumps, and screw conveyers for construction equipment.