

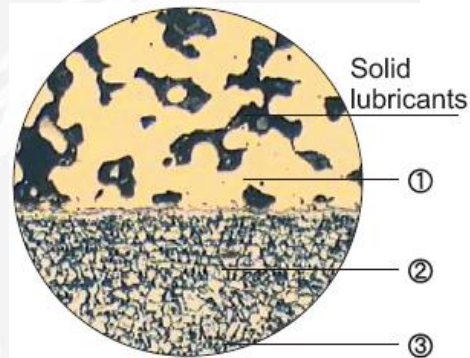
## MATERIAL

### AST-850BM Metal Backed Bronze Powder with Solid Lubricants



#### Structure

1. The sintered bronze powder with PTFE and graphite provides good wear resistance with low friction and excellent load carrying capacity. This material can be machined after fitting for precise tolerance control. AST can provide a PTFE or graphite sprayed layer on the work surface for lower starting friction.
2. The metal backing provides exceptionally high load carrying capacity and excellent heat dissipation.
3. The 0.002 mm thick Copper plating provides good corrosion resistance.



#### Features

AST850BM comprises a metal shell lined with a sintered copper alloy uniformly dispersed with graphite and PTFE solid lubricants.

1. Suitable for hostile environments and high loads and where lubrication is impractical
2. Suitable for rotary, oscillating and linear movements
3. Suitable for micro-movements
4. Does not become electrostatically charged
5. Low coefficient of friction without stick-slip effects
6. Maintenance free operation

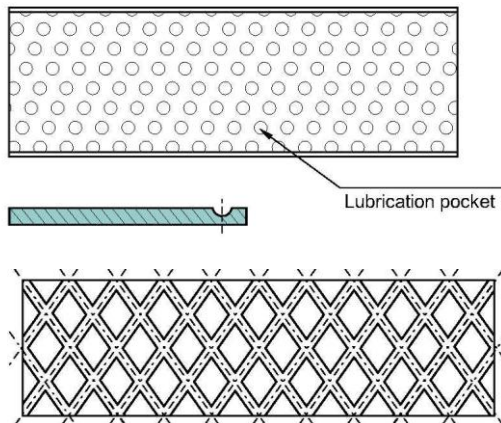
## AST-850BM Metal Backed Bronze Powder with Solid Lubricants

### Tech. Data

AST standard material		AST850BM1	AST850BM2	AST850BM3	AST850BM4
Backing metal		Steel	Steel	Stainless steel	Bronze
Lining layer	Composition	CuSn12+SL	CuSn10Pb10+SL	CuSn12+SL	CuSn12+SL
	Solid lubricants	6%	6%	6%	6%
	Hardness	>40HB	>40HB	>40HB	>40HB
	Compression deformation 150Mpa	<0.005mm	<0.005mm	<0.005mm	<0.005mm
Max. load	Static	150N/mm <sup>2</sup>	120N/mm <sup>2</sup>	150N/mm <sup>2</sup>	150N/mm <sup>2</sup>
	Dynamic	100N/mm <sup>2</sup>	80N/mm <sup>2</sup>	100N/mm <sup>2</sup>	100N/mm <sup>2</sup>
Max. speed		0.5m/s	0.5m/s	0.5m/s	0.5m/s
Max. PV		1.5	1.5	1.5	1.5
Friction coefficient		0.05-0.2	0.03-0.2	0.05-0.2	0.05-0.2
Temp.°C:		-195~+280	-195~+280	-195~+280	-195~+280

### Bearing Surface

The standard bearings are supplied with a plain, uninterrupted surface. AST can also supply them with cleaning grooves (useful for small angular movements or in the presence of abrasive media or dirt) or small indentations (for grease-lubricated



### Typical Applications

These bearings have been widely used in water turbines, vane controls, injection molding machinery, packing machines, construction equipment, tire molds, paper production machinery, furnace expansion plates, automotive transmissions, heavy lifting chain linkages, food production equipment, etc.

