

## MATERIAL

### AST-90 Bronze Wrapped Bearings

RoHS



### Structure

The bearings are wrapped from a cold formed homogenous bronze (CuSn8) with exceptional material properties. The standard sizes are fitted with diamond shaped lubrication indents in the bearing surface. These indents serve as lubricant reservoirs to rapidly build up a lubrication film at the start of movement and thereafter reduce the running friction. The material is suitable for construction and agricultural machinery applications. Initial lubrication at assembly is required.

### Chemical Compositions

Material type	Cu%	Sn%	P%	Pb%	Zn%
AST-090	91.3	8.5	0.2	/	/

### Technical Data

Max. load	Static	120N/mm <sup>2</sup>	Elongation	40%
	Dynamic	40N/mm <sup>2</sup>		Temp.
Max. speed (Lubrication)		2m/s	Friction coefficient	0.08~0.25
Max. PV		2.8N/mm <sup>2</sup> *m/s	Thermal conductivity	58W(m*k) <sup>-1</sup>
Tensile strength		450N/mm <sup>2</sup>	Coef. of thermal expansion	18.5*10 <sup>-6</sup> *K <sup>-1</sup>
Hardness		HB 110-150		

### Features

1. Easy installation and lubrication
2. High load capacity
3. Parts with machineable Inside diameter are available
4. Good thermal conductivity
5. Compact overall dimensions
6. Good chemical resistance.

### Typical Applications

This type of bushing is widely used in hoisting machines and other construction machines, automobiles, tractors, trucks, and machines tools. It can be fabricated into bushings, half bearings, thrust washers, spherical bearings, and more.