

# Wieland-S40 CuZn37Mn3Al2PbSi Slide Bearings

# Wieland

## Wieland-CuZn40Al2:

Special brass, highly load resistant due to the addition of Al, Mn and Si. Good resistance to corrosion, low friction factor. Hardened shaft recommended under heavy load. Application whenever impact load is added to otherwise heavy load, e. g. excavator joints, king pin bushings, friction clutches, valve seats, bearings of hydraulic or pneumatic lifts on tractors.

### Composition (standard values)

Cu	58 %
Mn	2 %
Al	1.5 %
Pb	0.7 %
Si	0.5 %
Zn	balance

### Material designation

Wieland	S40
EN	12449 : 1999

### Physical properties

(standard values)

Density	[g/cm <sup>3</sup> ]	8.1
Coefficient of thermal expansion (20-300 °C)	[10 <sup>-6</sup> /K]	20.4
Thermal conductivity	[W/m · K]	63
Modulus of elasticity (20 °C)	[GPa]	93

### Max. load

Oscillating bearing up to 120 MPa

### Types available

Machined bushings

### Dimensions of the tubes for machined bushings

OD up to 200 mm

Wall thickness depending on OD 2 to 30 mm

### Mechanical properties (standard values)

Temper		
Hardness	[HB/HRB]	155/85
Tensile strength R <sub>m</sub>	[MPa]	640
0.2 %-proof stress R <sub>p0.2</sub>	[MPa]	345
Elongation A5	[%]	18

1 MPa = 1 N/mm<sup>2</sup>

# **Wieland**

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