

LUB-MET® sliding bearing



Types	LMZ Cylindrical bushing	LMB Flanged bushing	LMA Thrust washer	LMS Stripes
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TECHNICAL DATA

Description	Solid bronze sliding bearing with solid lubricant in sliding layer, Maintenance-free
Properties	For high operational demands (also impact load), oscillating movements, wear-resistant, unsusceptible to dirt, corrosion resistant, long length of life.
Material*	Standard material CuZn25Al5 / ASTM C86300

MATERIAL PROPERTIES **

Specific load capacity static	≤ 150	[N/mm ²]
Specific load capacity dynamic	≤ 100	[N/mm ²]
Sliding speed	≤ 0,3 - 1,0	[m/s]
Friction value	0,03 - 0,20	[μ] lubricated / dry
Temperature strain	-100 - +300	[C°]
Max. Pv - value	1,5	[N/mm ² x m/s]
Hardness	190 - 220	[HB]
Solid lubricant share	Approx. 25-30	[%]

TOLERANCE DETAILS

Housing – Ø Bushing after mounting Shaft tolerance	H7 Information after consulting. Delivered bushings with tolerances: r6/E7 f7 / h6
Shaft material	The hardness difference to the bearing should be 100HB at least, preferably hardened and dressed to size, surface roughness ≤ Rz 6,3.

MOUNTING ADVISE

Housing – Ø Shaft Force fitting mandrel	Mounting bevel, min. 1,5 mm x 15-45° Mounting bevel, 5 mm x 15°, edges rounded The application of an adequate force fitting mandrel is advisable. Grease lubrication of the outer surface may be necessary when mounting.
Maintenance	LUB-MET® is a maintenance-free sliding bearing, but primary lubrication is necessary! Therefore a none-ageing lithium stiffened grease should be used.

Cylindrical and flanged bushings, thrust washer strips are standard fabrication.
Custom sizes are manufactured in a short term!

* ADDITIONAL METAL ALLOYS	YIELD STRENGHT N/mm ²	TENSILE STRENGHT N/mm ²	HARDNESS/HB 10
CuPb15Sn / ASTM C93900	110	220	65
CuSn7ZnPb2 / ASTM C93200	130	270	75
CuSn12 / ASTM C90800	150	280	95
CuAl10Ni / ASTM C95500	300	700	160

* As a special design additional sliding alloys are available.

** The above stated material properties are valid for optimal operating conditions. Through changes of the application conditions e.g. higher sliding speed or strain, these values are subject to change.