

## MBZ – low maintenance bearing material

### 1. Structure

Homogenous bronze (CuSn8 – tin: 8%, lead: <0,55%, copper balance) with lubrication indentations.

### 2. Characteristics

- thin-wall bronze bearing material for lubricated applications,
- bearing surface is indented for grease lubrication,
- can also work with oil lubrication,
- optimum performance under relatively high loads and low speeds,
- good wear resistance,
- can be loaded with edge pressures,
- lubrication indentations are constant dispensers of lubricant.

### 3. Applications

- industrial: mechanical handling and lifting equipment, hydraulic cylinders, pneumatic equipment, medical equipment, textile machinery, agricultural equipment, etc.

### 4. Availability

- from stock: cylindrical bushes,,
- to order: flanged bushes, thrust washers, strips and non standard parts.

### 5. Technical data

Parameter		Unit	Value
Maximum load	static	MPa	120
	dynamic		40
Maximum sliding speed	grease lubricated	m/s	2,5
Maximum p x v factor	grease lubricated	MPa x m/s	2,8
Work temperature	maximum	°C	grease lubricated +150
	minimum		oil lubricated +250
			-40
Coefficient of friction	grease lubricated	-	0,06 – 0,15
Surface Ra finish	shaft	µm	0,2 – 0,8
	housing		1,8 – 3,2
Fitting	shaft	-	h8
	housing		H8
Shaft hardness	standard	HB	200
	for longer service life		>350

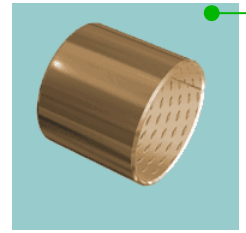
### 6. Working conditions

dry	fair
oil lubricated	good
grease lubricated	very good
water lubricated	fair
process fluid lubricated	fair

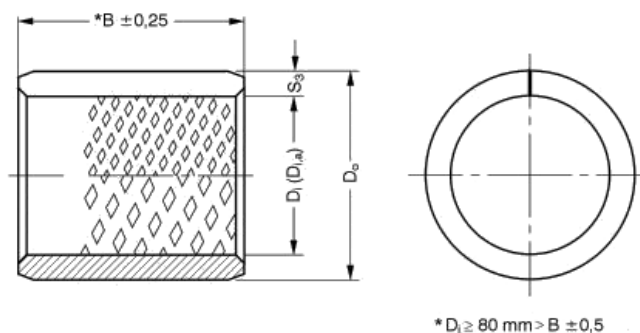
### 7. Assembly tips

Assemble with stepped shaft in housings with insertion chamfer. Before assembly moisten housing or bush with oil. Fixture: no additional fixture is necessary after press fitting in, however gluing is permissible in special applications or with reciprocating motion.

Caution: Do not use any lubricants containing MoS<sub>2</sub>, graphite or any other solid ingredients (can result with increased wear due to higher friction).



## 8. Series range



Tab. 1. Cylindrical bushes

Symbol	Di	Do	B	Code	Di	Do	B	Code	Di	Do	B	Code	Di	Do	B
<b>1010MBZ</b>	10	12	10	<b>2215MBZ</b>	22	25	15	<b>4030MBZ</b>	40	44	30	<b>7580MBZ</b>	75	80	80
<b>1215MBZ</b>	12	14	15	<b>2230MBZ</b>	22	25	30	<b>4040MBZ</b>	40	44	40	<b>8040MBZ</b>	80	85	40
<b>1415MBZ</b>	14	16	15	<b>2515MBZ</b>	25	28	15	<b>4050MBZ</b>	40	44	50	<b>8080MBZ</b>	80	85	80
<b>1420MBZ</b>	14	16	20	<b>2525MBZ</b>	25	28	25	<b>4530MBZ</b>	45	50	30	<b>9040MBZ</b>	90	95	40
<b>1515MBZ</b>	15	17	15	<b>2530MBZ</b>	25	28	30	<b>4550MBZ</b>	45	50	50	<b>9090MBZ</b>	90	95	90
<b>1525MBZ</b>	15	17	25	<b>2830MBZ</b>	28	31	30	<b>5030MBZ</b>	50	55	30	<b>10050MBZ</b>	100	105	50
<b>1615MBZ</b>	16	18	15	<b>3020MBZ</b>	30	34	20	<b>5040MBZ</b>	50	55	40	<b>10095MBZ</b>	100	105	95
<b>1620MBZ</b>	16	18	20	<b>3030MBZ</b>	30	34	30	<b>5060MBZ</b>	50	55	60				
<b>1625MBZ</b>	16	18	25	<b>3040MBZ</b>	30	34	40	<b>5540MBZ</b>	55	60	40				
<b>1815MBZ</b>	18	21	15	<b>3220MBZ</b>	32	36	20	<b>5560MBZ</b>	55	60	60				
<b>1820MBZ</b>	18	21	20	<b>3230MBZ</b>	32	36	30	<b>6030MBZ</b>	60	65	30				
<b>1825MBZ</b>	18	21	25	<b>3240MBZ</b>	32	36	40	<b>6040MBZ</b>	60	65	40				
<b>2015MBZ</b>	20	23	15	<b>3520MBZ</b>	35	39	20	<b>6060MBZ</b>	60	65	60				
<b>2020MBZ</b>	20	23	20	<b>3530MBZ</b>	35	39	30	<b>6540MBZ</b>	65	70	40				
<b>2025MBZ</b>	20	23	25	<b>3540MBZ</b>	35	39	40	<b>7040MBZ</b>	70	75	40				
<b>2030MBZ</b>	20	23	30	<b>4020MBZ</b>	40	44	20	<b>7080MBZ</b>	70	75	80				