

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 oil lubricated
	minimum		+150 +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

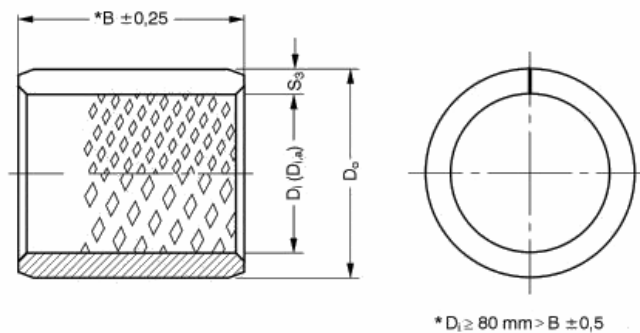
dry	fair
oil lubricated	good
grease lubricated	very good
water lubricated	fair
process fluid lubricated	fair

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 MoS₂, 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
1010MBZ	10	12	10	2215MBZ	22	25	15	4030MBZ	40	44	30	7580MBZ	75	80	80
1215MBZ	12	14	15	2230MBZ	22	25	30	4040MBZ	40	44	40	8040MBZ	80	85	40
1415MBZ	14	16	15	2515MBZ	25	28	15	4050MBZ	40	44	50	8080MBZ	80	85	80
1420MBZ	14	16	20	2525MBZ	25	28	25	4530MBZ	45	50	30	9040MBZ	90	95	40
1515MBZ	15	17	15	2530MBZ	25	28	30	4550MBZ	45	50	50	9090MBZ	90	95	90
1525MBZ	15	17	25	2830MBZ	28	31	30	5030MBZ	50	55	30	10050MBZ	100	105	50
1615MBZ	16	18	15	3020MBZ	30	34	20	5040MBZ	50	55	40	10095MBZ	100	105	95
1620MBZ	16	18	20	3030MBZ	30	34	30	5060MBZ	50	55	60				
1625MBZ	16	18	25	3040MBZ	30	34	40	5540MBZ	55	60	40				
1815MBZ	18	21	15	3220MBZ	32	36	20	5560MBZ	55	60	60				
1820MBZ	18	21	20	3230MBZ	32	36	30	6030MBZ	60	65	30				
1825MBZ	18	21	25	3240MBZ	32	36	40	6040MBZ	60	65	40				
2015MBZ	20	23	15	3520MBZ	35	39	20	6060MBZ	60	65	60				
2020MBZ	20	23	20	3530MBZ	35	39	30	6540MBZ	65	70	40				
2025MBZ	20	23	25	3540MBZ	35	39	40	7040MBZ	70	75	40				
2030MBZ	20	23	30	4020MBZ	40	44	20	7080MBZ	70	75	80				