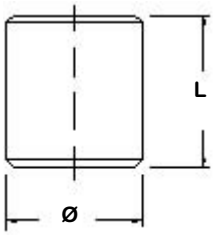
Metric Sintered Self-Lubricating Bars



Part No.	Material	Diameter Ø	Length L
BAR 20X52 B	Oil-Bronze	20	52
BAR 30X52 B		30	52
BAR 40X52 B		40	52
BAR 50X60 B		50	60
BAR 60X60 B		60	60
BAR 80X80 B		80	80
BAR 10X22 G	Graphite-Bronze	10	22
BAR 20X52 G		20	52
BAR 30X52 G		30	52
BAR 40X52 G		40	52
BAR 50X60 G		50	60
BAR 60X60 G		60	60
BAR 80X80 G		80	80

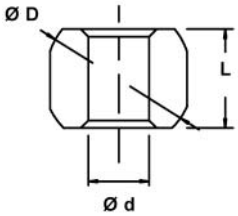
Machining

Machining of self-lubricated bearings should be avoided. Casting produces a far superior bearing. Oil-Bronze and Graphite-Bronze should be turned with diamond or carbide tips, quality ISO K 20, with a tip radius of max. 0.1-0.2 mm. Suitable cutting speeds are 100-200 m/min.

The bearing surface of self-lubricating bearings must not be ground as the oil transportation pores are then closed. The outer surface of bearing can be machined in any way required. The bearing can be heated on an electrical hot plate after machining to check that the pores are still open. Oil will then ooze out of the pores.

Bearings usually loose oil during the turning operation and the oil should be replaced before the bearing is used. A simple method of doing this is accomplished by immersing the bearing in oil SAE 20 heated to 80°C (176°F). The bearing should be immersed until the oil has cooled. The pores are filled with oil by this process and the bearing is then ready for use.

Metric Sintered Self-Lubricating Spherical Bearings



Inside Ø d H7	Outside Ø D h11	Length L h13	Inside Ø d H7	Outside Ø D h11	Length L h13
2	5	3	8	16	11
3	8	6	8	19	14
4	10	8	9	22	14
5	10	7	10	18	12
5	13	10	10	22	14
6	12	8	12	25	20
6	15	11	16	30	20
7	16	11	20	40	25
			25	50	30

Non-Stock, request price (quantity sensitive)

Precision Case Hardened And Ground Shafting*

HARDNESS: HRc 60 • TOLERANCE: h6 • 1m LENGTHS

Diameter mm	Weight kg/m	Weight lbs/m	Depth of Hardness mm	Diametrical Tolerance (h6) µm	Concentricity µm	Cylindricity µm
8	0.0395	0.0869	0.6-1	0- 9	4	6
12	0.0888	0.1954	1.1-1.7	0-11	5	8
16	0.1580	0.3476	1.1-1.7	0-11	5	8
20	0.2465	0.5423	1.8-2.1	0-13	6	10
25	0.3850	0.8470	1.8-2.1	0-13	6	10
30	0.5550	1.2210	2.2	0-13	6	10
40	0.9860	2.1692	2.2	0-16	8	12
50	1.5410	3.3902	2.2	0-16	8	12

1 µm (micrometer) = 0.001 mm (millimeter) • Concentricity relates to the degree of roundness • Cylindricity relates to the degree of taper, convexity (crowing) and concavity
***Inquire for linear shafting.**

Key/Flat Stock

ISO-TOLERANCE h9 (SLIP FIT)
MATERIAL: C 1045
DIN 6880

Size mm	Size mm
2X2	18X18
3X3	7X18
4X4	10X20
3X5	12X20
5X5	20X20
4X6	8X20
6X6	14X22
7X7	22X22
5X8	9X22
7X8	14X25
8X8	22X25
10X10	25X25
6X10	16X28
8X10	18X32
12X12	20X36
6X12	22X40
8X12	25X45
14X14	28X50
6X14	32X56
9X14	32X63
10X16	36X70
16X16	40X80
7X16	45X90
11X18	50X100

1 Meter Lengths (39")
0.5 m (500 mm) Lengths (19.7")
0.25 m (250 mm) Lengths (9.8")
3 m lengths available in some sizes

1.4571 Stainless Steel
(AISI 316 TI)

Size mm	Size mm
2X2	7X16*
3X3	11X18
4X4	7X18
3X5	12X20
5X5	8X20
4X6	14X22
6X6	9X22
5X8	14X25
7X8	16X28
8X8	18X32
10X10	20X36
6X10	22X40
8X10	25X45
12X12	
6X12	
8X12	
6X14	
9X14	
10X16	

*** = W.Nr.1.4541 (AISI 321)**

Hex Rod

MATERIAL: C 1045
(replaces former C1028)

Size mm
7
8
9
10
13
16
17
19
22
24
27
30
32
36
41
46
50
55

1 Meter Lengths (39")

NOTE: 3m lengths available in some sizes. Some sizes only currently available in C1028. Check before heat treating.