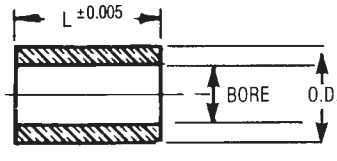


# SINTERED BRONZE BEARINGS

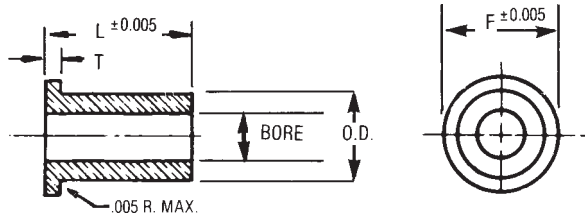
## Sleeve & Flanged

## Oil-Impregnated

### SLEEVE



### FLANGED



**Material:** Bronze, MIL-B-438/438  
Type 2, Grade 1

#### Specifications:

Density:	6.4 - 6.8 gm/cm <sup>3</sup>	PV (100ft./min.):	50,000
Porosity (% by Vol.):	19 min.	Static, P:	8,000 PSI
Tensile Strength:	14,000 PSI	Dynamic P:	2,000 PSI
Compressive Yield Strength:	11,000 PSI	Speed V:	1,200 fpm

**Bearing Design Calculations For Loads & Speed:** The load carrying capability of sleeve bearings is expressed by a PV factor in the following formula:

$$PV = \frac{.262 WN}{L}$$

$$P = \frac{W}{LD}$$

$$V = .262 DN$$

Where:

P = Load, PSI  
V = Shaft Speed (fpm)

W = Load (lbs.)

L = Bearing Length (In.)

D = Bearing I.D. (In.)

N = Shaft Speed (Rpm)

#### Recommended Press Fits

Outside Diameter In.	Press Fit, In.	
	Minimum	Maximum
Up to 0.760	0.001	0.003
0.761 to 1.150	0.0015	0.004
1.511 to 2.510	0.002	0.005
2.511 to 3.010	0.002	0.006
Over 3.010	0.002	0.007

#### Running Clearances

Shaft Size In.	Clearance, min. in. Sintered Bronze
Up to 0.760	0.0005
0.761 to 1.150	0.001
1.511 to 2.510	0.00015
Over 2.510	0.002

Shaft Size	Bore +.000 -.001	O.D. +.000 -.001	L ±.005	F ±.005	T ±.0025	Part No. Sleeve	Part No. Flange
1/8	.127	.252	.125 .250 .375	.360	.047	B10-1 B10-2 B10-3	B11-1 B11-2 B11-3
3/16	.189	.314	.250 .375 .500 .625	.370	.047	B10-5 B10-6 B10-7 B10-8	B11-5 B11-6 B11-7 B11-8
1/4	.252	.377	.250 .375 .500 .625	.560	.047	B10-9 B10-10 B10-11 B10-12	B11-9 B11-10 B11-11 B11-12
1/4	.252	.439	.375 .500 .625 .750			B10-31 B10-32 B10-33 B10-34	
1/4	.252	.503	.500 .625 .750	.625	.062	B10-49 — B10-51	— B11-50 B11-51
5/16	.315	.440	.250 .375 .500 .625	.563	.062	B10-13 B10-14 B10-15 B10-16	B11-13 B11-14 B11-15 B11-16
3/8	.377	.502	.250 .375 .500 .625 .750	.625	.062		B11-17 B11-18 B11-19 B11-20 B11-21
3/8	.378	.503	.250 .375 .500 .625 .750			B10-17 B10-18 B10-19 B10-20 B10-21	
1/2	.502	.628	.375 .500 .625 .750 1.000			B10-22 B10-23 B10-24 B10-25 B10-26	
1/2	.502	.627	.375 .500 .625 .750 1.000	.875	.062		B11-22 B11-23 B11-24 B11-25 B11-26
5/8	.628	.753	.500 .750 1.000			B10-52 B10-53 B10-54	
5/8	.627	.753	.500 .750 1.000	1.000	.094		B11-52 B11-53 B11-54
3/4	.753	1.003	.500 .750 1.000 1.250	1.125	.125	B10-55 B10-56 B10-57 B10-58	B11-55 B11-56 B11-57 B11-58
7/8	.878	1.003	.500 .750 1.000			B10-59 B10-60 B10-61	
		1.128	.625 .750 1.000	1.500	.125	— B10-63 B10-64	B11-62 B11-63 B11-64
1	1.004	1.254	.500 .750 1.000			B10-65 B10-66 B10-67	
	1.003	1.253	.750 1.000 1.250	1.625	.125		B11-68 B11-69 B11-70