

Oil Free Bushings

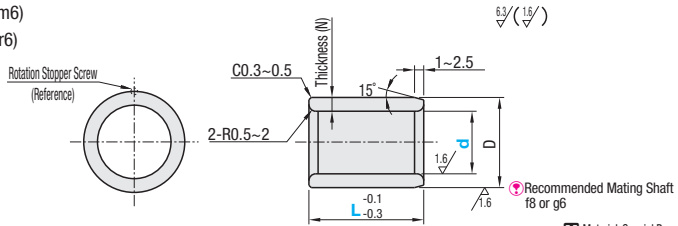
Bronze, Straight, I.D. F7 O.D. m6 / I.D. E7 O.D. r6 / Bronze, Flanged

Features: Minute sliding motion can be achieved. Excels in baking resistance. Alterations on Overall Length are available.

Straight



SHBZ (I.D. F7 O.D. m6)
SHBR (I.D. E7 O.D. r6)



Ensure the bushing remains well lubricated.
Use of Rotation Stopper Screws or Press Fit (SHBR) is recommended to affix bushings.

Material: Special Bronze Casting
Allowable Temperature: -40 ~ 150°C



Type	Part Number		L	D	Thickness (N)	* Housing Dia.		* Rotation Stopper Screw (Reference)	
	d					Ref. Dim.	Tolerance (H7)		
SHBZ SHBR	5	+0.022 +0.010	8 10 12 15	9	+0.015 +0.006	+0.028 +0.019	9 10	+0.015 0	
	6		8 10 12 15 20	10			10		
	8	+0.028 +0.013	8 10 12 15 20 25	12	+0.018 +0.007	+0.034 +0.023	12	+0.018 0	
	10		8 10 12 15 20 25	14			14		
	12		10 12 15 20 25	18			18		
	13	+0.034 +0.016	15 20	19			19		
	15		10 12 15 20 25	21	+0.021 +0.008	+0.041 +0.028	21	+0.021 0	
	16		10 12 15 20 25 30 40	22			22		
	20		15 20 25 30 40 50	28			28		
	25	+0.041 +0.020	20 25 30 40 50	33	+0.025 +0.009	+0.050 +0.034	33	+0.025 0	
	30		25 30 40 50 60	38			38		
									M4x8
									M5x8
									M6x16

* Indicated dimensions of Housing Dia. and Rotation Stopper Screws are recommended dimensions. For working on SHBZ, the use of Rotation Stopper Screws is recommended.



Part Number	L
SHBZ12	15
SHBR16	20
SHFZ16	20

Type	d	Unit Price									
		L8	L10	L12	L15	L20	L25	L30	L40	L50	L60
SHBZ	5										
	6										
	8										
	10										
	12										
	13										
	15										
	16										
	20										
	25										
30											

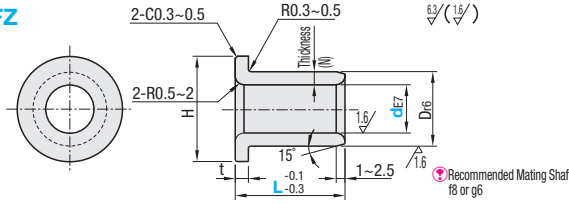
Type	d	Unit Price									
		L8	L10	L12	L15	L20	L25	L30	L40	L50	L60
SHBR	5										
	6										
	8										
	10										
	12										
	13										
	15										
	16										
	20										
	25										
30											

Features: Flanged, less likely to pull-out.

Flanged



SHFZ



Ensure the bushing remains well lubricated.
Press fitting is recommended to affix bushings.

Material: Special Bronze Casting
Allowable Temperature: -40 ~ 150°C



Features of I.D. E7 O.D. r6 Type

- Less likely to pull-out than I.D. F7 O.D. m6 Type.
- Inner Diameter after press fitting is almost equal to I.D. F7 O.D. m6 Type.

Bronze Bushings: I.D. Variations after Press Fitting (Reference)

Housing Diameter Tolerance: H7

I.D. E7 O.D. r6	I.D. F7 O.D. m6
99.82%	99.94%

Data above are obtained by test, not guaranteed.

Type	Part Number	dE7	L	Df6	Thickness (N)	H	t-0.1	* Housing Dia.		Unit Price									
								Ref. Dim.	Tolerance (H7)	L10	L12	L15	L20	L25	L30	L40	L50		
SHFZ	5	+0.032	10 12	9	+0.028	14	2	9	+0.015										
	6	+0.020	10 12 15	10	+0.019	16		10	0										
	8	+0.040 +0.025	10 12 15 20	12	+0.034 +0.023	20		12	+0.018										
	10		10 12 15 20	14		22		14	0										
	12		10 12 15 20 25 30	18		25		18											
	13	+0.050	12 15 20	19		26		19											
	15	+0.032	10 12 15 20 25	21	+0.041 +0.028	28		21	+0.021										
	16		12 15 20 25 30	22		29		22	0										
	20		15 20 25 30 40	30		40		30											
	25	+0.061 +0.040	30 40 50	35	+0.050	45		35	+0.025										
	30		30 40 50	40	+0.034	50		40	0										

* Housing diameters listed here are recommended dimensions.



Part Number	L
SHBZ12	15
SHBR16	20
SHFZ16	20