

Oil Free Bushing Housing Units - Pilot Flanged - Standard Type - Built-In Copper Alloy Bushings - Single / Double / Long

■ **Feature:** Suitable for vertical use. Reduces the time of manufacturing and assembling the housing.
Oil Free Bushings do not project from bushing mounting position. Space-saving on opposite of mounting side.



Standard

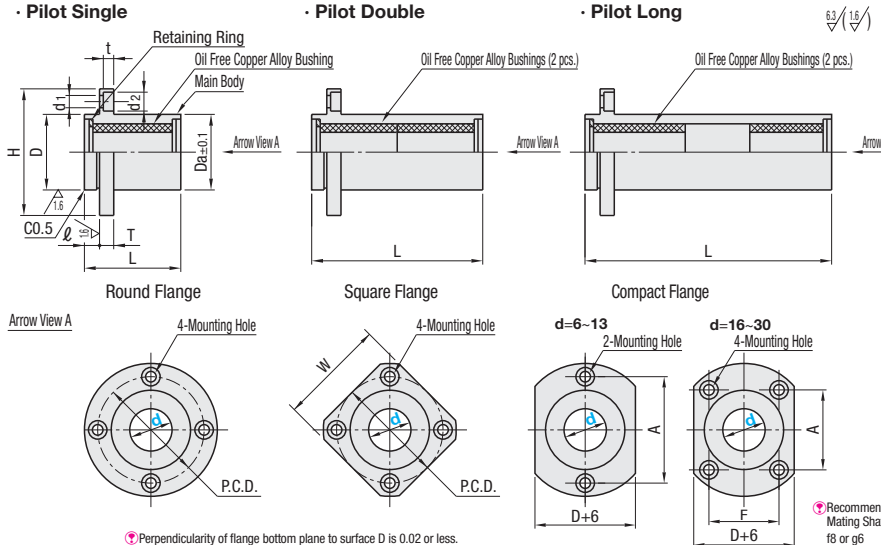
RoHS

Housing Type	Type			Seal	Housing		Bushing
	Round Flange	Square Flange	Compact Flange		Material	Surface Treatment	
Single	MFIMS	MFIS	MFINS	No Seal	SS400	Electroless Nickel Plating	High Tensile Brass Alloy Solid Lubricant Embedded
Double	MFIMS-S	MFIS-S	MFINS-S	With Non-Contact Seals			
	MFIMW	MFISW	MFINSW	With Non-Contact Seals			
Long	MFIMW-S	MFISW-S	MFINSW-S	No Seal			
	MFIML	MFISL	MFINSL	With Non-Contact Seals			

• Pilot Single

• Pilot Double

• Pilot Long



*With Non-Contact Seals
Teflon seal of 0.3mm thick is attached on the inner side of each retaining ring.

Perpendicularity of flange bottom plane to surface D is 0.02 or less.

Recommended Mating Shaft: f8 or g6

Part Number		d	Tolerance	D	Tolerance	Da	L			ℓ	H	T	d1	d2	t	P.C.D.	W	F	A
Type							Single	Double	Long										
• Single	(No Seal)	6	+0.022 0	12	0 -0.018	11.8	22	37	52	5	28	5	3.5	6	3.1	20	22	-	20
	(With Non-Contact Seals)	8	+0.028 0	15	-	14.8	27	47	67	6	32	6	4.5	7.5	4.1	24	25	-	24
		10	19	-	18.8	-	40	-	29	30	-	29	-	-	-	-	-	-	-
		12	21	-	20.8	32	57	82	42	32	-	32	-	-	-	-	-	-	-
		13	23	-	22.8	-	43	-	33	34	-	33	-	-	-	-	-	-	-
		16	28	-	27.8	37	67	97	48	38	37	22	31	-	-	-	-	-	-
• Double	(No Seal)	20	+0.034 0	32	0 -0.021	31.6	42	77	112	8	54	8	5.5	9	5.1	43	42	24	36
	(With Non-Contact Seals)	25	+0.041 0	40	-	39.6	58	108	158	62	51	50	32	40	-	-	-	-	-
		30	45	-	44.6	68	128	188	10	74	-	60	58	35	49	-	-	-	-
		35	52	-	51.6	68	128	-	10	82	-	67	64	-	-	-	-	-	-
		40	60	-	59.6	80	150	-	13	96	-	78	75	-	-	-	-	-	-
		50	80	-	79.6	90	170	-	13	116	-	98	92	-	-	-	-	-	-
• Long	(No Seal)	35	+0.050 0	52	0 -0.030	51.6	68	128	-	10	82	-	-	-	-	-	-	-	-
	(With Non-Contact Seals)	40	60	-	59.6	80	150	-	13	96	-	78	75	-	-	-	-	-	-
		45	65	-	64.6	90	160	-	13	106	-	88	82	-	-	-	-	-	-
		50	70	-	69.6	100	170	-	13	116	-	98	92	-	-	-	-	-	-
		55	75	-	74.6	110	180	-	13	126	-	108	102	-	-	-	-	-	-
		60	80	-	79.6	120	190	-	13	136	-	118	112	-	-	-	-	-	-

For Feature of With Non-Contact Seals, refer to P.349. Perpendicularity of flange bottom plane to surface D is 0.02 or less. Flanged Height-Adjusting Spacers are selectable from P.286

Oil Free Bushing Housing Units - Pilot Flanged - Compact Type - Built-In Copper Alloy Bushings, Single / Double

■ **Feature:** Thinning the outer cylinder and cutting out mounting holes from the flange have made up to 5mm smaller in P.C.D. and up to 9mm smaller in flange diameter compared to Oil Free Bushing Housing Units - Pilot Flanged - Standard Type -.



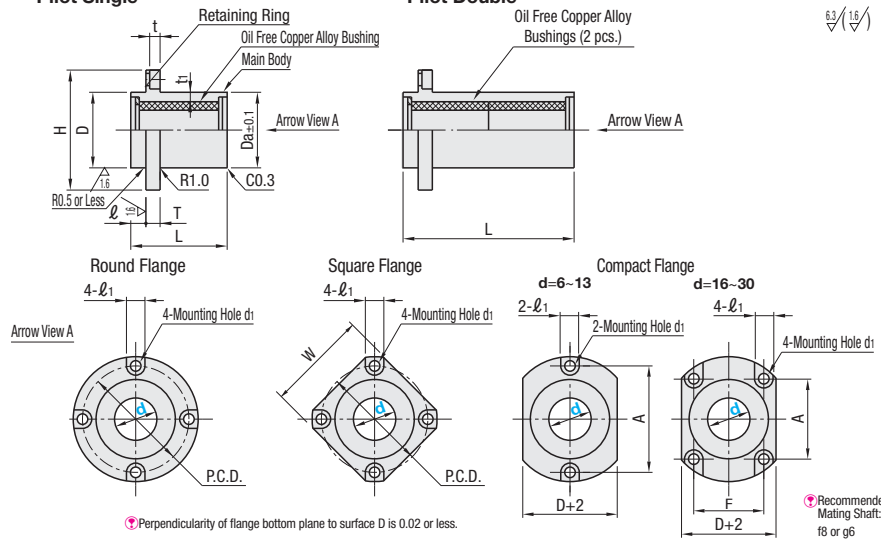
Compact

RoHS

Housing Type	Type			Seal	Housing		Bushing
	Round Flange	Square Flange	Compact Flange		Material	Surface Treatment	
Single	MFIMSC	MFISCS	MFINSC	No Seal	SS400	Electroless Nickel Plating	High Tensile Brass Alloy Solid Lubricant Embedded
Double	MFIMSC-S	MFISCS-S	MFINSC-S	With Non-Contact Seals			
	MFIMWC	MFISWC	MFINWC	With Non-Contact Seals			
Long	MFIMWC-S	MFISWC-S	MFINWC-S	No Seal			
	MFIML	MFISL	MFINL	With Non-Contact Seals			

• Pilot Single

• Pilot Double



*With Non-Contact Seals
Teflon seal of 0.3mm thick is attached on the inner side of each retaining ring.

Perpendicularity of flange bottom plane to surface D is 0.02 or less.

Recommended Mating Shaft: f8 or g6

Part Number		d	Tolerance	D	Tolerance	Da	L			ℓ	H	T	d1	d2	t	P.C.D.	W	F	A
Type							Single	Double	Long										
• Single	(No Seal)	6	+0.022 0	12	0 -0.018	11.8	22	37	52	5	28	5	3.5	6	3.1	20	22	-	20
	(With Non-Contact Seals)	8	+0.028 0	15	-	14.8	27	47	67	6	32	6	4.5	7.5	4.1	24	25	-	24
		10	19	-	18.8	-	40	-	29	30	-	29	-	-	-	-	-	-	-
		12	21	-	20.8	32	57	82	42	32	-	32	-	-	-	-	-	-	-
		13	23	-	22.8	-	43	-	33	34	-	33	-	-	-	-	-	-	-
		16	28	-	27.8	37	67	97	48	38	37	22	31	-	-	-	-	-	-
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		30	45	-	44.6	68	128	188	10	74	-	60	58	35	49	-	-	-	-
		35	52	-	51.6	68	128	-	10	82	-	67	64	-	-	-	-	-	-
		40	60	-	59.6	80	150	-	13	96	-	78	75	-	-	-	-	-	-
		50	80	-	79.6	90	170	-	13	116	-	98	92	-	-	-	-	-	-

For Feature of With Non-Contact Seals, refer to P.349. Perpendicularity of flange bottom plane to surface D is 0.02 or less. Flanged Height-Adjusting Spacers are selectable from P.286

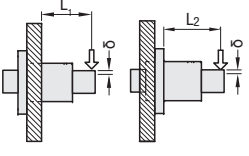
Outer Cylinder Strength of Flanged Oil Free Bushings

Test Conditions

1. Tester: Universal Tensile Compression Testing Machine
2. Bushing: Copper Alloy Type
3. Shaft: MISUMI's Hardened g6 Shaft

Testing Method

Load(*) and displacement measured when the shaft is deflected 1 degree.
(*) Load at approx. 5% of the tensile strength of SS400



Strength Test Data

d	Dimension				Standard Flanged				Pilot Flanged			
	D		Thickness of Outer Cylinder (mm)		L1		Load (N)		L2		Load (N)	
	MFMS	MFMSC	MFMS	MFMSC	MFMS	MFMSC	MFMS	MFMSC	MFMS	MFMSC	MFMS	MFMSC
6	12	12	1.5	1.5	22	686	660	0.38	22	681	643	0.38
8	15	15	2.0	2.0	27	1310	1178	0.47	27	1507	1285	0.47
10	19	18	2.5	2.0	31	2024	1656	0.54	30	1866	1518	0.52
12	21	20	2.5	2.0	26	3068	2520	0.45	30	3973	3320	0.52
13	23	21	3.0	2.0	26	3568	3032	0.45	30	4217	3765	0.52
16	28	26	3.0	2.0	31	5506	4894	0.54	35	6028	5107	0.61
20	32	30	3.0	2.0	34	5652	4926	0.59	36	6748	6251	0.63
25	40	36	4.5	2.5	50	7977	6592	0.87	52	9243	7461	0.91
30	45	42	4.5	3.0	58	10799	9719	1.01	58	10545	9109	1.01

*Values are for reference only.

Ordering Example
Part Number
MFIMS6
MFIMS-S6

Ordering Example
Part Number
MFIMSC6
MFIMWC-S25