

Flanged Oil-Free Bushings (Build-In Copper Alloy)

Standard Single, Double & Long Type

Oil-Free Bushings

Flanged Oil-Free Bushings – Standard

RoHS10

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

Housing Type	Type			Seal	Housing		Bushings	Operating Temperature (°C)
	Round Flange	Square Flange	Compact		Material	Surface Treatment		
Single	MFIMS	MFIKS	MFINS	No Seal	1018 Carbon Steel or equivalent	Electroless Nickel Plating	High Tensile Brass Alloy	-40-150
	MFIMS-S	MFIKS-S	MFINS-S	With Non-Contact Seals				
	MFIMW	MFIKW	MFINW	No Seal				
Double	MFIMW-S	MFIKW-S	MFINW-S	With Non-Contact Seals				
	MFIML	MFIKL	—	No Seal				
Long	MFIML-S	MFIKL-S	—	With Non-Contact Seals				

Pilot Single

Pilot Double

Pilot Long

Round Flange

Square Flange

Compact Flange

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

Ⓢ Recommended Mating Shaft: f8 or g6

Part Number	Type	d	Tol.	D	Tol.	Da	L			S	I	H	T	d1	d2	t	P.C.D.	W	F	A
							Single	Double	Long											
Single	No Seal	6	+0.022/0	12	0	11.8	22	37	52	15	5	28	5	3.5	6	3.1	20	22	—	20
		8	+0.028/0	15	-0.018	14.8	27	47	67	20	6	32	6	4.5	7.5	4.1	24	25	—	24
		10	+0.034/0	19	0	18.8	32	57	82	25	6	40	6	4.5	7.5	4.1	29	30	—	29
	With Non-Contact Seals	12	+0.034/0	21	-0.021	20.8	37	67	97	30	6	42	6	4.5	7.5	4.1	32	32	—	32
		16	+0.034/0	28	0	27.8	37	67	97	30	6	48	6	4.5	7.5	4.1	38	37	22	31
		20	+0.041/0	32	0	31.6	42	77	112	35	8	54	8	5.5	9	5.1	43	42	24	36
Double	No Seal	25	+0.041/0	40	0	39.6	58	108	158	50	8	62	8	5.5	9	5.1	51	50	32	40
		30	+0.041/0	45	-0.025	44.6	68	128	188	60	10	74	10	6.6	11	6.1	60	58	35	49
	With Non-Contact Seals	(35)	+0.050/0	52	0	51.6	68	128	—	60	10	82	10	6.6	11	6.1	67	64	—	—
		(40)	+0.050/0	60	-0.030	59.6	80	150	—	70	13	96	13	9	14	8.1	78	75	—	—
Long	With Non-Contact Seals	(50)	+0.050/0	80	0	79.6	90	170	—	80	13	116	13	9	14	8.1	98	92	—	—

Ⓢ Sizes in () are not available for Long Housing Type nor Compact Flanges. Ⓢ For Feature of With Non-Contact Seals, refer to P.452. Ⓢ Flanged Height-Adjusting Spacers are selectable from P.384.

Part Number Example

Part Number: MFIMS6
MFIMS-S6

d	(No Seal) Available Types						(With Non-Contact Seals) Available Types											
	Single	MFIMS	MFIKS	MFINS	Double	MFIMW	MFIKW	MFINW	MFIML	MFIKL	MFIMS-S	MFIKS-S	MFINS-S	MFIMW-S	MFIKW-S	MFINW-S	MFIML-S	MFIKL-S
6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
8	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
10	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
12	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
13	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
16	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
20	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
25	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
30	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
35	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
40	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
50	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Oil-Free Bushings (Built-In Copper Alloy)

Flanged / Small Flange

Oil-Free Bushings

Oil-Free Bushings – Center Flanged Type

RoHS10

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

Type	Seal	Housing		Bushings	
		Material	Surface Treatment		Material
MFCMW	No Seal	1018 Carbon Steel Equivalent	Electroless Nickel Plating	High Tensile Brass Alloy	
MFCMW-S	With Non-Contact Seals			Solid Lubricant Embedded (Graphite)	
MFCCKW	No Seal			High Tensile Brass Alloy	Solid Lubricant Embedded (Graphite)
MFCCKW-S	With Non-Contact Seals				
MFCNW	No Seal				
MFCNW-S	With Non-Contact Seals				

Round Flange

Square Flange

Compact Flange

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

Ⓢ Recommended Mating Shaft: f8 or g6

Ⓢ For Feature of With Non-Contact Seals, refer to P.452. Ⓢ Flanged Height-Adjusting Spacers are selectable from P.384.

Oil-Free Bushings – Small Flange

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

Type	Seal	Housing		Bushings
		Material	Surface Treatment	
MFST	No Seal	1018 Carbon Steel or equivalent	Electroless Nickel Plating	High Tensile Brass Alloy
MFST-S	With Non-Contact Seals			Solid Lubricant Embedded (Graphite)

Ⓢ Recommended Mating Shaft: f8 or g6

Application Example

(1) Horizontal Use

(2) Vertical Use

Part Number	Type	d	Tolerance	D	L	Hh7	T	M	P.C.D.
MFST	No Seal	6	+0.022/0	12	22	23	6	M3	17
		8	+0.028/0	15	27	27			21
		10	+0.034/0	19	32	34			26
	With Non-Contact Seals	12	+0.034/0	21	37	37	8	M4	29
		13	+0.034/0	23	38	30			
		16	+0.034/0	28	37	43			35
With Non-Contact Seals	20	+0.041/0	32	42	48	10	M5	39	
	25	+0.041/0	40	58	56			47	
	30	+0.041/0	45	68	66			12	M6

Part Number Example

Part Number: MFCMW6
MFST10