

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

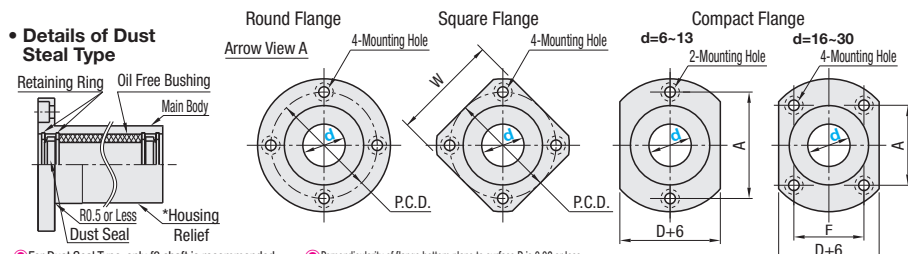
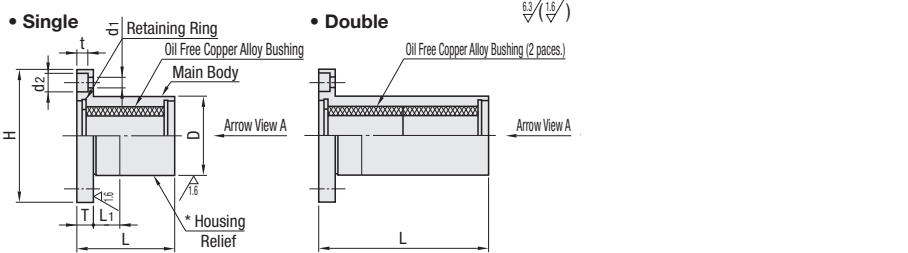
Oil Free Bushing Housing Units - Pilot Flanged - Standard - Built-In Copper Alloy Bushings, Single / Double

■ **Features:** Suitable for vertical use. Reduces the time of manufacturing and assembling the housing.

Standard Type



Housing Type	Type			Seal	Seals	Housing	Bushing	* Housing Relief
	Round Flange	Square Flange	Compact Flange					
Single	MFMS	MFKS	MFNS	No Seal	-	SS400	Electroless Nickel Plating	High Tensile Brass Alloy Solid Lubricant Embedded
	MFMS-S	MFKS-S	MFNS-S	With Non-Contact Seals	Teflon Resin			
	MFMS-DS	-	MFNS-DS	With Dust Seals	Nitrile Rubber			
Double	MFMW	MFKW	MFNW	No Seal	-	SS400	Electroless Nickel Plating	High Tensile Brass Alloy Solid Lubricant Embedded
	MFMW-S	MFKW-S	MFNW-S	With Non-Contact Seals	Teflon Resin			
	MFMW-DS	-	MFNW-DS	With Dust Seals	Nitrile Rubber			



Part Number	Type	D	L				L1	H	T	d1	d2	t	P.C.D.	W	F	A
			No Seal, With Non-Contact Seals		With Dust Seals											
			Single	Double	Single	Double										
• Single	(No Seal)	12	22	37	-	-	5	28	5	3.5	6	3.1	20	22	-	20
		15	27	47	-	-	5	32	6	4.5	7.5	4.1	24	25	-	24
		19	32	57	-	-	5	40	6	4.5	7.5	4.1	29	30	-	29
	(With Non-Contact Seals)	21	32	57	-	-	5	42	6	4.5	7.5	4.1	32	32	-	32
		23	37	67	45	75	5	43	6	4.5	7.5	4.1	33	34	-	33
		28	42	77	51	86	5	48	8	5.5	9	5.1	38	37	22	31
• Double	(No Seal)	32	58	108	70	120	10	54	8	5.5	9	5.1	43	42	24	36
		40	68	128	81	141	10	62	10	6.6	11	6.1	51	50	32	40
		45	80	150	-	-	15	74	10	6.6	11	6.1	60	58	35	49
	(With Non-Contact Seals)	52	68	128	-	-	15	82	13	9	14	8.1	67	64	-	-
		60	80	150	-	-	15	96	13	9	14	8.1	78	75	-	-
		80	90	170	-	-	15	116	13	9	14	8.1	98	92	-	-

⚠ Flanged Height-Adjusting Spacers are selectable from **p.330**. ⚠ With Dust Seals are only available in * marked sizes.

■ **Features of Dust Seal Type and Non-Contact Seal Type**
 - Contact Seals built into Dust Seal Type prevent small dust from sliding contact surface.
 - For sliding resistance of Dust Seal Type, refer to Sliding Resistance Test Data.
 - Employed Dust Seals are SER series of SAKAGAMI SEISAKUSHO LTD.
 - With Non-Contact Seals are provided to prevent larger size dust entry. Clearance between shafts and bushings (approx. 0.1mm) lowers the sliding resistance than Dust Seal Type.

d	Sliding Resistance (N)	SAKAGAMI SEISAKUSHO LTD. Dust Seal
16	6	SER16
20	7	SER20
25	8	SER25
30	12	SER30

⚠ Values are for reference only.

■ **Test Conditions**
 1. Tester: Push-Pull Gauge
 2. Bushing: Copper Alloy Type
 3. Shaft: MISUMI f8 shaft

■ **Testing Method**
 Measured the load when the shaft started to move.
 * Velocity 1mm/s approx.

No Seal, With Non-Contact Seals Price List

d	(No Seal) Unit Price			(With Non-Contact Seals) Unit Price					
	Single	Double	Long	Single	Double	Long	Single	Double	Long
6	MFMS	MFKS	MFNS	MFMS-S	MFKS-S	MFNS-S	MFMS-S	MFKS-S	MFNS-S
8									
10									
12									
16									
20									
25									
30									
35									
40									
50									

With Dust Seals Price List

d	(With Dust Seals) Unit Price			
	Single	Double	Long	Long
16	MFMS-DS	MFNS-DS	MFMS-DS	MFNS-DS
20				
25				
30				

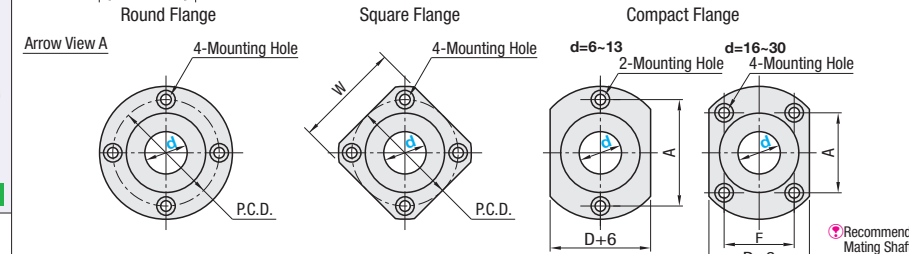
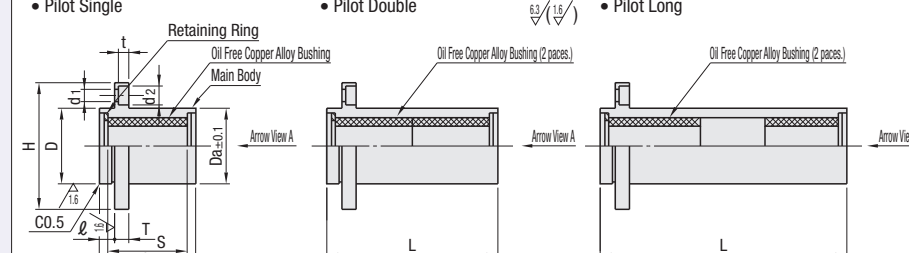
■ **Features:** Suitable for vertical use. Reduces the time of manufacturing and assembling the housing.

Oil Free Bushings do not project from bushing mounting position. Saves space on the opposite side.

Standard Type



Housing Type	Type			Seal	Housing	Bushing	Operating Temperature (°C)
	Round Flange	Square Flange	Compact Flange				
Single	MFIMS	MFIKS	MFINS	No Seal	SS400	Electroless Nickel Plating	High Tensile Brass Alloy
	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	SS400	Electroless Nickel Plating	High Tensile Brass Alloy
	MFIML	MFIKL	-	No Seal			
	MFIML-S	MFIKL-S	-	With Non-Contact Seals			



* 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	Type	d	Tolerance	D	Tolerance	Da	L			S	ℓ	H	T	d1	d2	t	P.C.D.	W	F	A
							Single	Double	Long											
							• Single	(No Seal)	6											
8	+0.028/0	15	-0.018	14.8	27	47			67	20	5	32	5	4.5	7.5	4.1	24	25	-	24
10	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	28	0	27.8	47		77	112	35	8	48	8	5.5	9	5.1	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	40	-0.025	39.6	58	108	158	50	7	62	10	6.6	11	6.1	51	50	32	40
		30	0	45	0	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	60	-0.030	59.6	80	150	-	70	13	96	13	9	14	8.1	78	75	-	-
• Long	(No Seal)	40	0	80	0	79.6	90	170	-	80	13	116	13	9	14	8.1	98	92	-	-
		50	0	80	-0.030	79.6	90	170	-	80	13	116	13	9	14	8.1	98	92	-	-

⚠ For Features of Non-Contact Seal Type, refer to **P.393**. ⚠ Flanged Height-Adjusting Spacers are selectable from **p.330**.

d	(No Seal) Unit Price						(With Non-Contact Seals) Unit Price									
	Single		Double		Long		Single		Double		Long					
	MFIMS	MFIKS	MFINS	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																

Ordering Example: Part Number MFIMS6 MFIMS-S6