

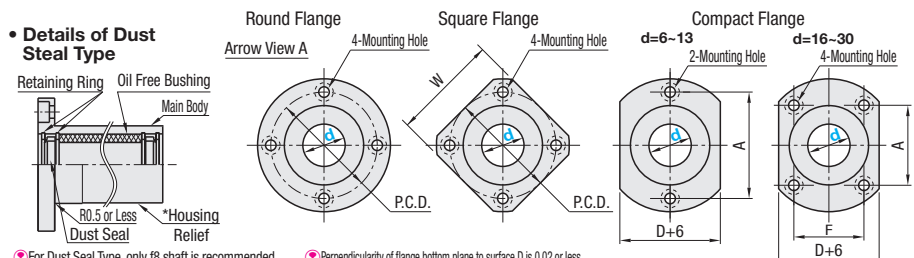
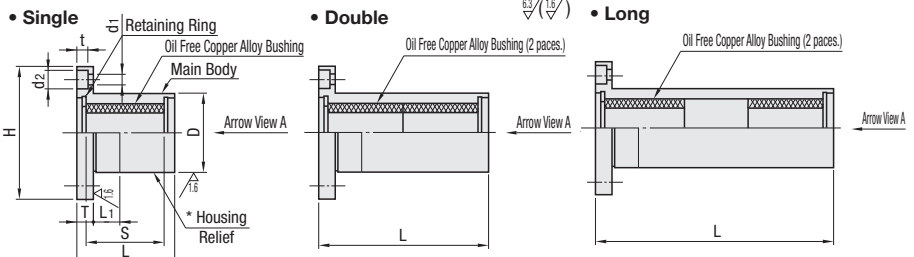
Oil Free Bushing Housing Units - Standard Flanged - Standard - Built-In Copper Alloy Bushings, Single / Double

■ **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	-	EN 1.0038 Equiv.	Electroless Nickel Plating	High Tensile Brass Alloy
	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	-	EN 1.0038 Equiv.	Electroless Nickel Plating	High Tensile Brass Alloy
	MFMW-S	MFKW-S	MFNW-S	With Non-Contact Seals	Teflon Resin			
	MFMW-DS	-	MFNW-DS	With Dust Seals	Nitrile Rubber			
Long	MFML	MFKL	-	No Seal	-	EN 1.0038 Equiv.	Electroless Nickel Plating	High Tensile Brass Alloy
	MFML-S	MFKL-S	-	With Non-Contact Seals	Teflon Resin			



Type	Part Number	D	L				L1	S	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)	Round Flange	12	22	37	-	-	5	15	28	5	3.5	6	3.1	20	22	-	20
	Square Flange	15	27	47	-	-	5	20	32	6	4.5	7.5	4.1	24	25	-	24
	Compact Flange	19	32	57	-	-	5	25	40	6	4.5	7.5	4.1	29	30	-	29
	(With Non-Contact Seals)	21	32	57	-	-	5	25	42	6	4.5	7.5	4.1	32	32	-	32
	(With Dust Seals)	23	32	57	-	-	5	25	43	6	4.5	7.5	4.1	33	34	-	33
• Double (No Seal)	Round Flange	28	37	67	45	75	10	30	48	8	5.5	9	5.1	38	37	22	31
	Square Flange	32	42	77	51	86	10	35	54	8	5.5	9	5.1	43	42	24	36
	Compact Flange	40	58	108	70	120	10	50	62	8	5.5	9	5.1	51	50	32	40
	(With Non-Contact Seals)	45	68	128	81	141	10	60	74	10	6.6	11	6.1	60	58	35	49
	(With Dust Seals)	52	68	128	-	-	10	60	82	10	6.6	11	6.1	67	64	-	-
• Long (No Seal)	Round Flange	60	80	150	-	-	15	70	96	13	9	14	8.1	78	75	-	-
	Square Flange	80	90	170	-	-	15	80	116	13	9	14	8.1	98	92	-	-
	Compact Flange	80	90	170	-	-	15	80	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
	Single	Double	
16	6	7	SER16
20	7	8	SER20
25	8	12	SER25
30	12	-	SER30

■ **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
6	MFMS/MFMS-S	MFKS/MFKS-S	MFNS/MFNS-S	MFMS-S/MFMS-DS	MFKS-S/MFKS-DS	MFNS-S/MFNS-DS
8						
10						
12						
13						
16						
20						
25						
30						
35						
40						
50						

With Dust Seals Price List

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

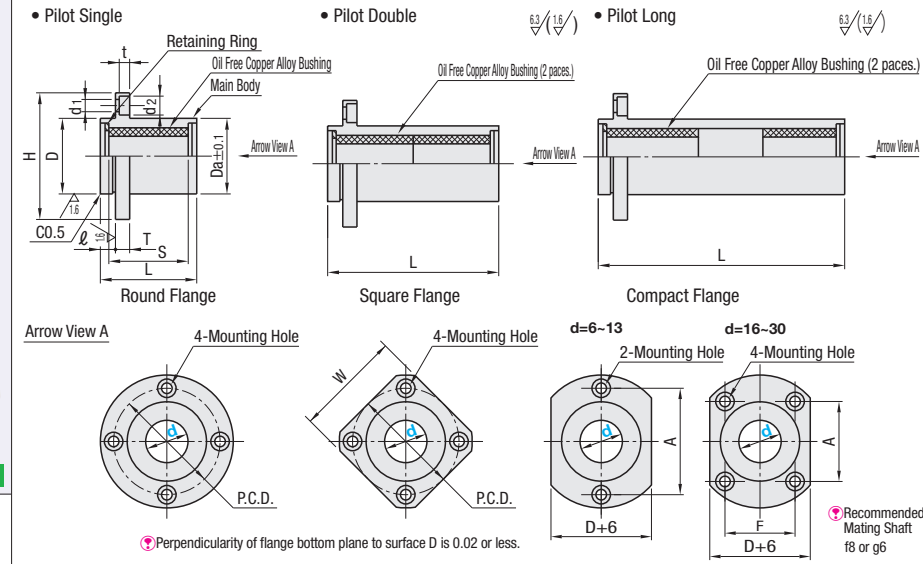
Oil Free Bushing Housing Units - Pilot Flanged - Standard - Built-In Copper Alloy Bushings, Single / Double

■ **Features:** Suitable for vertical use. Reduces the time of manufacturing and assembling the housing.
 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	EN 1.0038 Equiv.	Electroless Nickel Plating	High Tensile Brass Alloy
	MFIMS-S	MFIKS-S	MFINS-S	With Non-Contact Seals			
Double	MFIMW	MFIKW	MFINW	No Seal	EN 1.0038 Equiv.	Electroless Nickel Plating	High Tensile Brass Alloy
	MFIMW-S	MFIKW-S	MFINW-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

Type	Part Number	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)	Round Flange	6											
Square Flange	8	+0.028/0	15	-0.018	14.8	27		47	67	20	5	32	6	4.5	7.5	4.1	24	25	-	24
Compact Flange	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	32		57	82	25	6	42	6	4.5	7.5	4.1	32	32	-	32
(With Dust Seals)	16	0	28	0	27.8	37		67	97	30	8	48	6	4.5	7.5	4.1	38	37	22	31
• Double (No Seal)	Round Flange	20	0	32	0	31.6	42	77	112	35	54	54	8	5.5	9	5.1	43	42	24	36
	Square Flange	25	+0.041/0	40	-0.025	39.6	58	108	158	50	8	62	8	5.5	9	5.1	51	50	32	40
	Compact Flange	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	52	0	51.6	68	128	-	60	10	82	10	6.6	11	6.1	67	64	-	-
	(With Dust Seals)	40	+0.050/0	60	-0.030	59.6	80	150	-	70	13	96	13	9	14	8.1	78	75	-	-
• Long (No Seal)	Round Flange	40	0	60	0	59.6	80	150	-	70	13	96	13	9	14	8.1	78	75	-	-
	Square Flange	50	0	80	0	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	MFIMS-S	MFIKS-S	MFINS-S	MFIMW-S	MFIKW-S	MFINW-S
6												
8												
10												
12												
13												
16												
20												
25												
30												
35												
40												
50												

Ordering Example
 Part Number
 MFIMS6
 MFIMS-S6

Ordering Example
 Part Number
 MFMS6
 MFMS-S6