DAISLIDE
(embedded solid lubricant)

Pb Free RoHS ELV
Excluding products BA,SL

APPLICATION
MANUFACTURE
Polymer
Metallic
MATERIALS AND SIZE
PLANNING
CORPORATE PROFILE
SPECIFICATION SHEET

DAISLIDE is a copper based bearing for heavy load applications into which solid lubricant plugs are embedded.

Features

1.Maintenance-free, requires no lubrication
2.Excellent wear resistance properties. Excellent wear resistance properties are exhibited in applications where oil film formation is difficult such as reciprocating, intermittent or oscillating motions under conditions of high load and low speed.
3.Friction coefficient is low.
4.Can be used at a range of temperatures
5.Free design is possible on the shape and the size.
6.Excellent corrosion and chemical resistance. This bearing can be used in river or sea water, in special liquids where chemical resistance of the metal base and solid lubricant is needed, and in gas where oil supply is difficult.
(In an acid or alkaline atmosphere properties may differ depending on the type, density and humidity. Please do a sample test or consult us.)
7.Excellent impact resistance

Material Type

1.Base Metal
Three types of base metal are offered:
B:Bronze (BC)
S:High Strength Brass (HBsC)
K:High Strength Special Copper Alloy
2.Solid Lubricant Plug
(1)Arrangement of solid lubricant plug
The solid lubricant plugs are aligned obliquely from the axial in line direction to enable the bearing to obtain a thin film of lubricant during movement in the axial direction.
(2)Types of solid lubricant plug
1.Plug A is for general use and is usually kept in stock.
2.Plug L is for use in water and sea water and is made to order.
Special plugs are prepared for applications in water or seawater, where electrolytic corrosion is anticipated due to the material of housing and shaft.

3.Combination with Base Metal

Plug Symbol	A			L
Base Metal	High Strength Brass	Bronze	High Strength Special Copper Alloy	High Strength Brass
Merchandise Symbol	HA SAF SAFG TA PA LA	*BA	KA	*SL
Use	General		High Load	In Water, in Seawater
Stock	Standard Stock Available	made to order		

Physical Properties

Characteristics of Base Metal

Item	Unit, etc	DAISLIDE B (Bronze Base)	DAISLIDE S (High Strength Brass Base)	DAISLIDE K (High Strength Special Copper Alloy Base)
Specific Gravity		8.7	8.2	–
Coefficient of Linear Thermal Expansion	×10-6/°C	16 – 18	16 – 20	16 – 20
Heat Transfer Coefficient	cal/sec°C·cm	0.11 – 0.15	0.09 – 0.13	–
Tensile Strength	N/mm^2	Above 196	Above 690	Above 760
Impact Strength	$N·m/cm^2$	15	19	–
Hardness	HB	60 – 80	Above 200	Above 240
Modulus of Longitudinal Elasticity	kN/mm^2	96	98 – 137	–
Compression Yield Strength (0.1%)	N/mm^2	–	Above 350	–
Solid Lubricant Area on Slide Surface	%	25 – 30		
Elongation	%	Above 15	Above 12	Above 4

Bearing Characteristics

Type	Base Metal	Oil Supply Condition	Allowable Max. Load *MPa	Allowable Max. Speed *m/min	Allowable Max. PV Value *MPa·m/min	Limit Operating Temperature *°C
DAISLIDE B	Bronze	No Oil Supply	14.7	25	58.8	250
		Grease Cup Type Periodic Lubrication	14.7	150	98.1	250
		Oil Drip Lubrication	14.7	250	196.1	250
DAISLIDE S	High Strength Brass	No Oil Supply	49.0	15	196.1	Normal Temperature
			24.5	15	98.1	250
		Grease Cup Type Periodic Lubrication	24.5	50	147.1	250
		Oil Drip Lubrication	24.5	100	196.1	250
DAISLIDE K	High Strength Special Copper Alloy	No Oil Supply	73.0	15	99.0	250
		Grease Cup Type Periodic Lubrication	73.0	30	196.1	250

* When the bearing is to be used at temperatures exceeding 100°C it is necessary to provide a margin on the PV value at the design stage.
* In the case of high strength brass base metal and the high strength special copper alloy base metal, depending on the conditions of usage, for example when the bearings are at very low speeds near to V=0, the bearings can be used at pressures higher than those given in the table above.

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HA DAISLIDE HA Bushing (Bushing Inner Diameter: 8 to 45 mm)

Designation of Part Number

HA ○○ ○○ ○○

- ○○ (3rd): Bushing Length
- ○○ (2nd): Bushing O.D.
- ○○ (1st): Bushing I.D.
- HA: Product Symbol

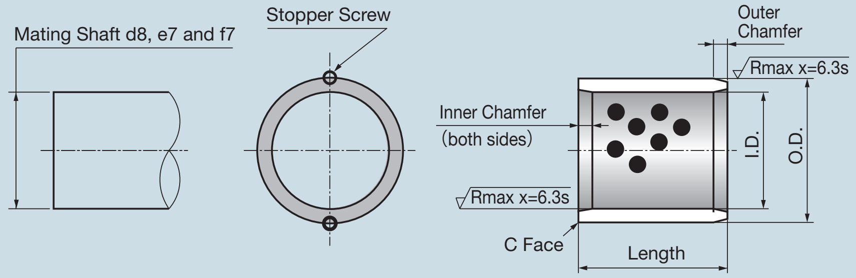
HA 061008

Please specify by part number.

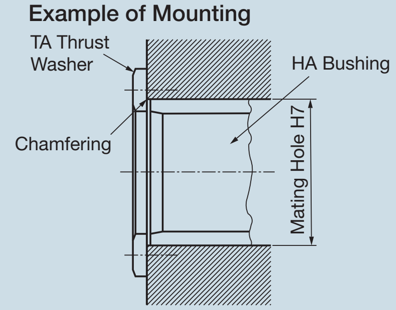
Pb Free

RoHS

ELV



d8: For General Use (High Load)
e7: For General Use (Light Load)
f7: For High-precision Use



(Unit: mm)

Bushing I.D.	Recommended Dimension Mating Part: Housing I.D.	Shaft Dia.: General Purpose (Heavy Load)	Shaft Dia.: General Purpose (Light Load)	Shaft Dia.: High Accuracy Purpose	Bushing Dimensions: I.D.	O.D.	Part Number & Bushing Length Tolerance $^{-0.1}_{-0.3}$: 8	10	12	15	16	19	20	25	30	35	40	50	60	70	80	Face C	Chamfer on O.D.	Chamfer on I.D.	Bushing I.D.
6	$\phi 10H7^{+0.015}_{0}$	$\phi 6d8^{-0.030}_{-0.048}$	$\phi 6e7^{-0.020}_{-0.032}$	$\phi 6f7^{-0.010}_{-0.022}$	$\phi 6^{+0.022}_{+0.010}$	$\phi 10^{+0.015}_{+0.006}$	061008	061010	061012	061015												C0.3	1.5x15°	1x10°	6
8	$\phi 12H7^{+0.018}_{0}$	$\phi 8d8^{-0.040}_{-0.062}$	$\phi 8e7^{-0.025}_{-0.040}$	$\phi 8f7^{-0.013}_{-0.028}$	$\phi 8^{+0.028}_{+0.013}$	$\phi 12^{+0.018}_{+0.007}$	081208	081210	081212	081215												C0.5	0.75x15°	1x10°	8
10	$\phi 14H7^{+0.018}_{0}$	$\phi 10d8^{-0.040}_{-0.062}$	$\phi 10e7^{-0.025}_{-0.040}$	$\phi 10f7^{-0.013}_{-0.028}$	$\phi 10^{+0.028}_{+0.013}$	$\phi 14^{+0.018}_{+0.007}$	101408	101410	101412	101415			101420									C0.5	0.75x15°	1x10°	10
12	$\phi 18H7^{+0.018}_{0}$	$\phi 12d8^{-0.050}_{-0.077}$	$\phi 12e7^{-0.032}_{-0.050}$	$\phi 12f7^{-0.016}_{-0.034}$	$\phi 12^{+0.034}_{+0.016}$	$\phi 18^{+0.018}_{+0.007}$	121808	121810	121812	121815	121816	121819	121820	121825	121830							C0.5	2x15°	2x10°	12
13	$\phi 19H7^{+0.021}_{0}$	$\phi 13d8^{-0.050}_{-0.077}$	$\phi 13e7^{-0.032}_{-0.050}$	$\phi 13f7^{-0.016}_{-0.034}$	$\phi 13^{+0.034}_{+0.016}$	$\phi 19^{+0.021}_{+0.008}$		131910	131912	131915			131920	131925	131930							C0.5	2x15°	2x10°	13
14	$\phi 20H7^{+0.021}_{0}$	$\phi 14d8^{-0.050}_{-0.077}$	$\phi 14e7^{-0.032}_{-0.050}$	$\phi 14f7^{-0.016}_{-0.034}$	$\phi 14^{+0.034}_{+0.016}$	$\phi 20^{+0.021}_{+0.008}$		142010	142012	142015			142020	142025	142030							C0.5	2x15°	2x10°	14
15	$\phi 21H7^{+0.021}_{0}$	$\phi 15d8^{-0.050}_{-0.077}$	$\phi 15e7^{-0.032}_{-0.050}$	$\phi 15f7^{-0.016}_{-0.034}$	$\phi 15^{+0.034}_{+0.016}$	$\phi 21^{+0.021}_{+0.008}$		152110	152112	152515	152116		152120	152125	152130	152135	152140					C0.5	2x15°	2x10°	15
16	$\phi 22H7^{+0.021}_{0}$	$\phi 16d8^{-0.050}_{-0.077}$	$\phi 16e7^{-0.032}_{-0.050}$	$\phi 16f7^{-0.016}_{-0.034}$	$\phi 16^{+0.034}_{+0.016}$	$\phi 22^{+0.021}_{+0.008}$		162210	162212	162215	162216	162219	162220	162225	162230	162235	162240					C0.5	2x15°	2x10°	16
17	$\phi 23H7^{+0.021}_{0}$	$\phi 17d8^{-0.050}_{-0.077}$	$\phi 17e7^{-0.032}_{-0.050}$	$\phi 17f7^{-0.016}_{-0.034}$	$\phi 17^{+0.034}_{+0.016}$	$\phi 23^{+0.021}_{+0.008}$				172315												C0.5	2x15°	2x10°	17
18	$\phi 24H7^{+0.021}_{0}$	$\phi 18d8^{-0.050}_{-0.077}$	$\phi 18e7^{-0.032}_{-0.050}$	$\phi 18f7^{-0.016}_{-0.034}$	$\phi 18^{+0.034}_{+0.016}$	$\phi 24^{+0.021}_{+0.008}$		182410	182412	182415	182416		182420	182425	182430	182435	182440					C0.5	2x15°	2x10°	18
19	$\phi 26H7^{+0.021}_{0}$	$\phi 19d8^{-0.065}_{-0.098}$	$\phi 19e7^{-0.040}_{-0.061}$	$\phi 19f7^{-0.020}_{-0.041}$	$\phi 19^{+0.041}_{+0.020}$	$\phi 26^{+0.021}_{+0.008}$				192615			192620									C0.5	2x15°	2x10°	19
20	$\phi 28H7^{+0.021}_{0}$	$\phi 20d8^{-0.065}_{-0.098}$	$\phi 20e7^{-0.040}_{-0.061}$	$\phi 20f7^{-0.020}_{-0.041}$	$\phi 20^{+0.041}_{+0.020}$	$\phi 28^{+0.021}_{+0.008}$		202810	202812	202815	202816	202819	202820	202825	202830	202835	202840	202850				C0.5	2x15°	2x10°	20
20	$\phi 30H7^{+0.021}_{0}$	$\phi 20d8^{-0.065}_{-0.098}$	$\phi 20e7^{-0.040}_{-0.061}$	$\phi 20f7^{-0.020}_{-0.041}$	$\phi 20^{+0.041}_{+0.020}$	$\phi 28^{+0.021}_{+0.008}$		203010	203012	203015	203016		203020	203025	203030	203035	203040	203050				C0.5	2x15°	2x10°	20
22	$\phi 32H7^{+0.025}_{0}$	$\phi 22d8^{-0.065}_{-0.098}$	$\phi 22e7^{-0.040}_{-0.061}$	$\phi 22f7^{-0.020}_{-0.041}$	$\phi 22^{+0.041}_{+0.020}$	$\phi 32^{+0.025}_{+0.009}$			223212	223215			223220	223225								C0.5	2x15°	2.5x10°	22
25	$\phi 33H7^{+0.025}_{0}$	$\phi 25d8^{-0.065}_{-0.098}$	$\phi 25e7^{-0.040}_{-0.061}$	$\phi 25f7^{-0.020}_{-0.041}$	$\phi 25^{+0.041}_{+0.020}$	$\phi 33^{+0.025}_{+0.009}$			253312	253315	253316		253320	253325	253330	253335	253340	253350	253360			C0.5	2.5x15°	2.5x10°	25
25	$\phi 35H7^{+0.025}_{0}$	$\phi 25d8^{-0.065}_{-0.098}$	$\phi 25e7^{-0.040}_{-0.061}$	$\phi 25f7^{-0.020}_{-0.041}$	$\phi 25^{+0.041}_{+0.020}$	$\phi 35^{+0.025}_{+0.009}$			253512	253515	253516		253520	253525	253530	253535	253540	253550	253560			C0.5	2.5x15°	2.5x10°	25
28	$\phi 38H7^{+0.025}_{0}$	$\phi 28d8^{-0.065}_{-0.098}$	$\phi 28e7^{-0.040}_{-0.061}$	$\phi 28f7^{-0.020}_{-0.041}$	$\phi 28^{+0.041}_{+0.020}$	$\phi 38^{+0.025}_{+0.009}$							283820	283825	283830		283840					C0.5	2.5x15°	2.5x10°	28
30	$\phi 38H7^{+0.025}_{0}$	$\phi 30d8^{-0.065}_{-0.098}$	$\phi 30e7^{-0.040}_{-0.061}$	$\phi 30f7^{-0.020}_{-0.041}$	$\phi 30^{+0.041}_{+0.020}$	$\phi 38^{+0.025}_{+0.009}$			303812	303815			303820	303825	303830	303835	303840	303850	303860			C0.5	3x15°	3x10°	30
30	$\phi 40H7^{+0.025}_{0}$	$\phi 30d8^{-0.065}_{-0.098}$	$\phi 30e7^{-0.040}_{-0.061}$	$\phi 30f7^{-0.020}_{-0.041}$	$\phi 30^{+0.041}_{+0.020}$	$\phi 40^{+0.025}_{+0.009}$			304012	304015			304020	304025	304030	304035	304040	304050	304060			C0.5	3x15°	3x10°	30
31.5	$\phi 40H7^{+0.025}_{0}$	$\phi 31.5d8^{-0.080}_{-0.119}$	$\phi 31.5e7^{-0.040}_{-0.061}$	$\phi 31.5f7^{-0.020}_{-0.041}$	$\phi 31.5^{+0.050}_{+0.025}$	$\phi 40^{+0.025}_{+0.009}$									314030		314040					C0.5	3x15°	3x10°	31.5
32	$\phi 42H7^{+0.025}_{0}$	$\phi 32d8^{-0.080}_{-0.119}$	$\phi 32e7^{-0.050}_{-0.075}$	$\phi 32f7^{-0.025}_{-0.050}$	$\phi 32^{+0.050}_{+0.025}$	$\phi 42^{+0.025}_{+0.009}$							324220		324230		324240					C0.5	3x15°	3x10°	32
35	$\phi 44H7^{+0.025}_{0}$	$\phi 35d8^{-0.080}_{-0.119}$	$\phi 35e7^{-0.050}_{-0.075}$	$\phi 35f7^{-0.025}_{-0.050}$	$\phi 35^{+0.050}_{+0.025}$	$\phi 44^{+0.025}_{+0.009}$							354420	354425	354430	354435	354440	354450	354460			C0.5	3x15°	3x10°	35
35	$\phi 45H7^{+0.025}_{0}$	$\phi 35d8^{-0.080}_{-0.119}$	$\phi 35e7^{-0.050}_{-0.075}$	$\phi 35f7^{-0.025}_{-0.050}$	$\phi 35^{+0.050}_{+0.025}$	$\phi 45^{+0.025}_{+0.009}$							354520	354525	354530	354535	354540	354550	354560			C0.5	3x15°	3x10°	35
38	$\phi 48H7^{+0.025}_{0}$	$\phi 38d8^{-0.080}_{-0.119}$	$\phi 38e7^{-0.050}_{-0.075}$	$\phi 38f7^{-0.025}_{-0.050}$	$\phi 38^{+0.050}_{+0.025}$	$\phi 48^{+0.025}_{+0.009}$											384840					C0.5	3x15°	3x10°	38
40	$\phi 50H7^{+0.025}_{0}$	$\phi 40d8^{-0.080}_{-0.119}$	$\phi 40e7^{-0.050}_{-0.075}$	$\phi 40f7^{-0.025}_{-0.050}$	$\phi 40^{+0.050}_{+0.025}$	$\phi 50^{+0.025}_{+0.009}$				405015			405020	405025	405030	405035	405040	405050	405060	405070	405080	C0.5	3x15°	3x10°	40
40	$\phi 55H7^{+0.030}_{0}$	$\phi 40d8^{-0.080}_{-0.119}$	$\phi 40e7^{-0.050}_{-0.075}$	$\phi 40f7^{-0.025}_{-0.050}$	$\phi 40^{+0.050}_{+0.025}$	$\phi 55^{+0.030}_{+0.011}$				405515					405530	405535	405540	405550	405560			C0.5	3x15°	3x10°	40

* DAISLIDE HA can be used with TA thrust washer in the thrust load environment.

HA DAISLIDE HA Bushing (Bushing Inner Diameter: 45 to 160 mm)

Designation of Part Number

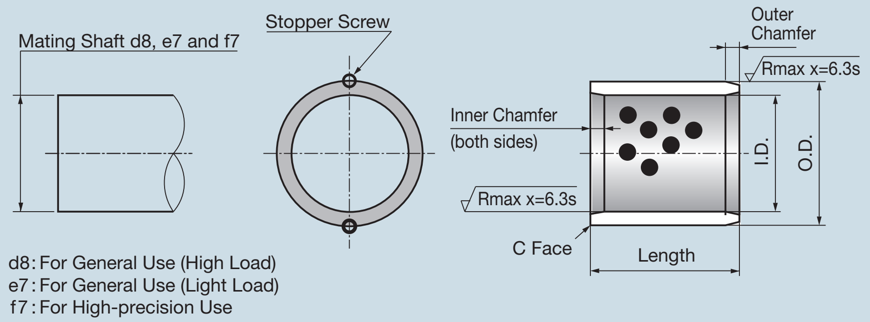
HA ○○ ○○ ○○

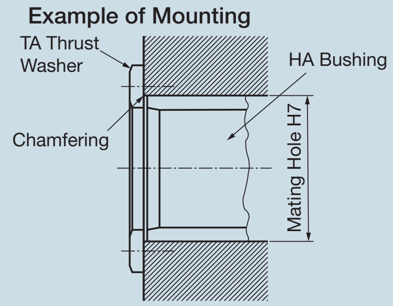
- Bushing Length
- Bushing O.D.
- Bushing I.D.
- Product Symbol

Pb Free
RoHS
ELV

HA 455530

Please specify by part number.





(Unit: mm)

Bushing I.D.	Recommended Dimension Mating Part: Housing I.D.	Shaft Dia.: General Purpose (Heavy Load)	Shaft Dia.: General Purpose (Light Load)	Shaft Dia.: High Accuracy Purpose	Bushing Dimensions: O.D.	Wall Thickness	Part Number & Bushing Length Tolerance $^{-0.1}_{-0.3}$: 20	25	30	35	40	50	60	70	80	90	100	120	130	140	150	Face C	Chamfer on O.D.	Chamfer on I.D.	Bushing I.D.
45	φ55H7 $^{+0.030}_{0}$	φ45d8 $^{-0.080}_{-0.119}$	φ45e7 $^{-0.050}_{-0.075}$	φ45f7 $^{-0.025}_{-0.050}$	φ45 $^{+0.050}_{+0.025}$	φ55 $^{+0.030}_{+0.011}$			455530	455535	455540	455550	455560									C0.5	3.5 x 15°	3.5 x 10°	45
45	φ56H7 $^{+0.030}_{0}$	φ45d8 $^{-0.080}_{-0.119}$	φ45e7 $^{-0.050}_{-0.075}$	φ45f7 $^{-0.025}_{-0.050}$	φ45 $^{+0.050}_{+0.025}$	φ56 $^{+0.030}_{+0.011}$			455630	455635	455640	455650	455660									C0.5	3.5 x 15°	3.5 x 10°	45
45	φ60H7 $^{+0.030}_{0}$	φ45d8 $^{-0.080}_{-0.119}$	φ45e7 $^{-0.050}_{-0.075}$	φ45f7 $^{-0.025}_{-0.050}$	φ45 $^{+0.050}_{+0.025}$	φ60 $^{+0.030}_{+0.011}$			456030	456035	456040	456050	456060	456070	456080							C0.5	3.5 x 15°	3.5 x 10°	45
50	φ60H7 $^{+0.030}_{0}$	φ50d8 $^{-0.080}_{-0.119}$	φ50e7 $^{-0.050}_{-0.075}$	φ50f7 $^{-0.025}_{-0.050}$	φ50 $^{+0.050}_{+0.025}$	φ60 $^{+0.030}_{+0.011}$	506020		506030	506035	506040	506050	506060	506070	506080							C0.5	4.0 x 15°	4.0 x 10°	50
50	φ62H7 $^{+0.030}_{0}$	φ50d8 $^{-0.080}_{-0.119}$	φ50e7 $^{-0.050}_{-0.075}$	φ50f7 $^{-0.025}_{-0.050}$	φ50 $^{+0.050}_{+0.025}$	φ62 $^{+0.030}_{+0.011}$			506230	506235	506240	506250	506260	506270	506280							C0.5	4.0 x 15°	4.0 x 10°	50
50	φ65H7 $^{+0.030}_{0}$	φ50d8 $^{-0.080}_{-0.119}$	φ50e7 $^{-0.050}_{-0.075}$	φ50f7 $^{-0.025}_{-0.050}$	φ50 $^{+0.050}_{+0.025}$	φ65 $^{+0.030}_{+0.011}$			506530		506540	506550	506560	506570	506580		5065100					C0.5	4.0 x 15°	4.0 x 10°	50
55	φ70H7 $^{+0.030}_{0}$	φ55d8 $^{-0.100}_{-0.146}$	φ55e7 $^{-0.060}_{-0.090}$	φ55f7 $^{-0.030}_{-0.060}$	φ55 $^{+0.060}_{+0.030}$	φ70 $^{+0.030}_{+0.011}$			557030	557035	557040	557050	557060	557070								C0.5	4.0 x 15°	4.0 x 10°	55
60	φ74H7 $^{+0.030}_{0}$	φ60d8 $^{-0.100}_{-0.146}$	φ60e7 $^{-0.060}_{-0.090}$	φ60f7 $^{-0.030}_{-0.060}$	φ60 $^{+0.060}_{+0.030}$	φ74 $^{+0.030}_{+0.011}$			607430	607435	607440	607450	607460	607470	607480							C0.5	4.0 x 15°	4.0 x 10°	60
60	φ75H7 $^{+0.030}_{0}$	φ60d8 $^{-0.100}_{-0.146}$	φ60e7 $^{-0.060}_{-0.090}$	φ60f7 $^{-0.030}_{-0.060}$	φ60 $^{+0.060}_{+0.030}$	φ75 $^{+0.030}_{+0.011}$			607530	607535		607550	607560	607570	607580		6075100					C0.5	4.0 x 15°	4.0 x 10°	60
63	φ75H7 $^{+0.030}_{0}$	φ63d8 $^{-0.100}_{-0.146}$	φ63e7 $^{-0.060}_{-0.090}$	φ63f7 $^{-0.030}_{-0.060}$	φ63 $^{+0.060}_{+0.030}$	φ75 $^{+0.030}_{+0.011}$							637560	637570	637580							C0.5	4.0 x 15°	4.0 x 10°	63
65	φ80H7 $^{+0.030}_{0}$	φ65d8 $^{-0.100}_{-0.146}$	φ65e7 $^{-0.060}_{-0.090}$	φ65f7 $^{-0.030}_{-0.060}$	φ65 $^{+0.060}_{+0.030}$	φ80 $^{+0.030}_{+0.011}$					658040	658050	658060	658070	658080							C0.5	4.0 x 15°	4.0 x 10°	65
70	φ85H7 $^{+0.035}_{0}$	φ70d8 $^{-0.100}_{-0.146}$	φ70e7 $^{-0.060}_{-0.090}$	φ70f7 $^{-0.030}_{-0.060}$	φ70 $^{+0.060}_{+0.030}$	φ85 $^{+0.035}_{+0.013}$			708530	708535		708550	708560	708570	708580		7085100					C0.5	4.0 x 15°	4.0 x 10°	70
70	φ90H7 $^{+0.035}_{0}$	φ70d8 $^{-0.100}_{-0.146}$	φ70e7 $^{-0.060}_{-0.090}$	φ70f7 $^{-0.030}_{-0.060}$	φ70 $^{+0.060}_{+0.030}$	φ90 $^{+0.035}_{+0.013}$						709050	709060	709070	709080							C0.5	4.0 x 15°	4.0 x 10°	70
75	φ90H7 $^{+0.035}_{0}$	φ75d8 $^{-0.100}_{-0.146}$	φ75e7 $^{-0.060}_{-0.090}$	φ75f7 $^{-0.030}_{-0.060}$	φ75 $^{+0.060}_{+0.030}$	φ90 $^{+0.035}_{+0.013}$						759050	759060	759070	759080		7590100					C0.5	4.0 x 15°	4.0 x 10°	75
75	φ95H7 $^{+0.035}_{0}$	φ75d8 $^{-0.100}_{-0.146}$	φ75e7 $^{-0.060}_{-0.090}$	φ75f7 $^{-0.030}_{-0.060}$	φ75 $^{+0.060}_{+0.030}$	φ95 $^{+0.035}_{+0.013}$							759560	759570	759580		7595100					C0.5	4.0 x 15°	4.0 x 10°	75
80	φ96H7 $^{+0.035}_{0}$	φ80d8 $^{-0.100}_{-0.146}$	φ80e7 $^{-0.060}_{-0.090}$	φ80f7 $^{-0.030}_{-0.060}$	φ80 $^{+0.060}_{+0.030}$	φ96 $^{+0.035}_{+0.013}$					809640	809650	809660	809670	809680		8096100	8096120				C0.5	4.0 x 15°	4.0 x 10°	80
80	φ100H7 $^{+0.035}_{0}$	φ80d8 $^{-0.100}_{-0.146}$	φ80e7 $^{-0.060}_{-0.090}$	φ80f7 $^{-0.030}_{-0.060}$	φ80 $^{+0.060}_{+0.030}$	φ100 $^{+0.035}_{+0.013}$					8010040	8010050	8010060	8010070	8010080		80100100	80100120		80100140		C0.5	4.0 x 15°	4.0 x 10°	80
85	φ100H7 $^{+0.035}_{0}$	φ85d8 $^{-0.120}_{-0.174}$	φ85e7 $^{-0.072}_{-0.107}$	φ85f7 $^{-0.036}_{-0.071}$	φ85 $^{+0.071}_{+0.036}$	φ100 $^{+0.035}_{+0.013}$							8510060		8510080							C1.0	5.0 x 15°	5.0 x 10°	85
90	φ110H7 $^{+0.035}_{0}$	φ90d8 $^{-0.120}_{-0.174}$	φ90e7 $^{-0.072}_{-0.107}$	φ90f7 $^{-0.036}_{-0.071}$	φ90 $^{+0.071}_{+0.036}$	φ110 $^{+0.035}_{+0.013}$						9011050	9011060		9011080	9011090	90110100	90110120				C1.0	5.0 x 15°	5.0 x 10°	90
100	φ120H7 $^{+0.035}_{0}$	φ100d8 $^{-0.120}_{-0.174}$	φ100e7 $^{-0.072}_{-0.107}$	φ100f7 $^{-0.036}_{-0.071}$	φ100 $^{+0.071}_{+0.036}$	φ120 $^{+0.035}_{+0.013}$						10012050	10012060	10012070	10012080	10012090	100120100	100120120		100120140		C1.0	5.0 x 15°	5.0 x 10°	100
110	φ130H7 $^{+0.040}_{0}$	φ110d8 $^{-0.120}_{-0.174}$	φ110e7 $^{-0.072}_{-0.107}$	φ110f7 $^{-0.036}_{-0.071}$	φ110 $^{+0.071}_{+0.036}$	φ130 $^{+0.040}_{+0.015}$						11013050		11013070	11013080		110130100	110130120				C1.0	5.0 x 15°	6.0 x 10°	110
120	φ140H7 $^{+0.040}_{0}$	φ120d8 $^{-0.120}_{-0.174}$	φ120e7 $^{-0.072}_{-0.107}$	φ120f7 $^{-0.036}_{-0.071}$	φ120 $^{+0.071}_{+0.036}$	φ140 $^{+0.040}_{+0.015}$								12014070	12014080	12014090	120140100	120140120		120140140		C1.0	5.0 x 15°	6.0 x 10°	120
125	φ145H7 $^{+0.040}_{0}$	φ125d8 $^{-0.145}_{-0.208}$	φ125e7 $^{-0.085}_{-0.125}$	φ125f7 $^{-0.043}_{-0.083}$	φ125 $^{+0.083}_{+0.043}$	φ145 $^{+0.040}_{+0.015}$											125145100	125145120				C1.0	5.0 x 15°	6.0 x 10°	125
130	φ150H7 $^{+0.040}_{0}$	φ130d8 $^{-0.145}_{-0.208}$	φ130e7 $^{-0.085}_{-0.125}$	φ130f7 $^{-0.043}_{-0.083}$	φ130 $^{+0.083}_{+0.043}$	φ150 $^{+0.040}_{+0.015}$									13015080		130150100		130150130			C1.0	5.0 x 15°	6.0 x 10°	130
140	φ160H7 $^{+0.040}_{0}$	φ140d8 $^{-0.145}_{-0.208}$	φ140e7 $^{-0.085}_{-0.125}$	φ140f7 $^{-0.043}_{-0.083}$	φ140 $^{+0.083}_{+0.043}$	φ160 $^{+0.040}_{+0.015}$											140160100			140160140		C1.0	5.0 x 15°	6.0 x 10°	140
150	φ170H7 $^{+0.040}_{0}$	φ150d8 $^{-0.145}_{-0.208}$	φ150e7 $^{-0.085}_{-0.125}$	φ150f7 $^{-0.043}_{-0.083}$	φ150 $^{+0.083}_{+0.043}$	φ170 $^{+0.040}_{+0.015}$									15017080		150170100				150170150	C1.0	5.0 x 15°	6.0 x 10°	150
160	φ180H7 $^{+0.040}_{0}$	φ160d8 $^{-0.145}_{-0.208}$	φ160e7 $^{-0.085}_{-0.125}$	φ160f7 $^{-0.043}_{-0.083}$	φ160 $^{+0.083}_{+0.043}$	φ180 $^{+0.040}_{+0.015}$									16018080		160180100				160180150	C1.0	5.0 x 15°	6.0 x 10°	160

* DAISLIDE HA can be used with TA thrust washer in the thrust load environment.

SAF DAISLIDE SAF Flanged Bushing (Bushing Inner Diameter: 6 to 120 mm)

Designation of Part Number

SAF ○○ ○○

- Bushing Length
- Bushing O.D.
- Product Symbol

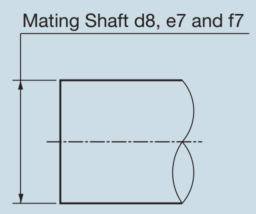
SAF 0610

Please specify by part number.

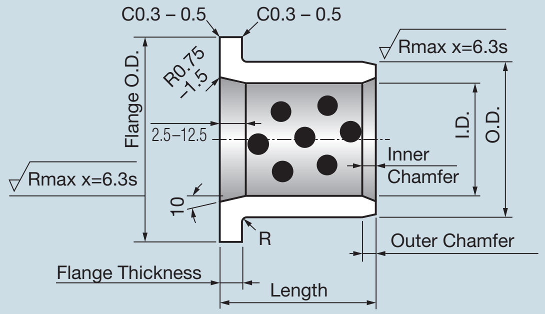
Pb Free

RoHS

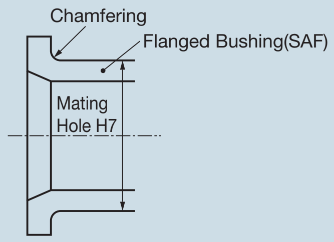
ELV



d8: For General Use (High Load)
e7: For General Use (Light Load)
f7: For High-precision Use



Example of Mounting



(Unit: mm)

Bushing I.D.	Recommended Dimension Mating Part: Housing I.D.	Shaft Dia: General Purpose (Heavy Load)	Shaft Dia: General Purpose (Light Load)	Shaft Dia: High Accuracy Purpose	Bushing Dimensions: Flange O.D.	Flange Thickness	O.D.	Wall Thickness	Part Number & Bushing Length Tolerance $^{-0.1}_{-0.3}$: 10	12	15	17	18	20	23	25	30	35	40	50	60	67	80	100	Chamfer on O.D.	Chamfer on I.D.	Bushing I.D.
6	Φ10H7 $^{+0.015}_{0}$	Φ6d8 $^{-0.030}_{-0.048}$	Φ6e7 $^{-0.020}_{-0.032}$	Φ6f7 $^{-0.010}_{-0.022}$	Φ16 ±0.25	2 $^{0}_{-0.1}$	Φ6 $^{+0.032}_{+0.020}$	Φ10 $^{+0.028}_{+0.019}$	**0610**	**0612**	**0615**														1.5x15°	1.0x10°	6
8	Φ12H7 $^{+0.018}_{0}$	Φ8d8 $^{-0.040}_{-0.062}$	Φ8e7 $^{-0.025}_{-0.040}$	Φ8f7 $^{-0.013}_{-0.028}$	Φ20 ±0.25	2 $^{0}_{-0.1}$	Φ8 $^{+0.045}_{+0.030}$	Φ12 $^{+0.038}_{+0.023}$	**0810**	**0812**	**0815**														0.75x15°	1.0x10°	8
10	Φ14H7 $^{+0.018}_{0}$	Φ10d8 $^{-0.040}_{-0.062}$	Φ10e7 $^{-0.025}_{-0.040}$	Φ10f7 $^{-0.013}_{-0.028}$	Φ22 ±0.25	2 $^{0}_{-0.1}$	Φ10 $^{+0.045}_{+0.030}$	Φ14 $^{+0.038}_{+0.023}$	**1010**	**1012**	**1015**	**1017**		**1020**											0.75x15°	1.0x10°	10
12	Φ18H7 $^{+0.018}_{0}$	Φ12d8 $^{-0.050}_{-0.077}$	Φ12e7 $^{-0.032}_{-0.050}$	Φ12f7 $^{-0.016}_{-0.034}$	Φ25 ±0.25	3 $^{0}_{-0.1}$	Φ12 $^{+0.050}_{+0.032}$	Φ18 $^{+0.038}_{+0.023}$	**1210**	**1212**	**1215**			**1220**		**1225**	**1230**								2.0x15°	2.0x10°	12
13	Φ19H7 $^{+0.021}_{0}$	Φ13d8 $^{-0.050}_{-0.077}$	Φ13e7 $^{-0.032}_{-0.050}$	Φ13f7 $^{-0.016}_{-0.034}$	Φ26 ±0.25	3 $^{0}_{-0.1}$	Φ13 $^{+0.060}_{+0.042}$	Φ19 $^{+0.045}_{+0.028}$	**1310**	**1312**	**1315**			**1320**		**1325**	**1330**								2.0x15°	2.0x10°	13
14	Φ20H7 $^{+0.021}_{0}$	Φ14d8 $^{-0.050}_{-0.077}$	Φ14e7 $^{-0.032}_{-0.050}$	Φ14f7 $^{-0.016}_{-0.034}$	Φ27 ±0.25	3 $^{0}_{-0.1}$	Φ14 $^{+0.060}_{+0.042}$	Φ20 $^{+0.045}_{+0.028}$			**1415**			**1420**		**1425**									2.0x15°	2.0x10°	14
15	Φ21H7 $^{+0.021}_{0}$	Φ15d8 $^{-0.050}_{-0.077}$	Φ15e7 $^{-0.032}_{-0.050}$	Φ15f7 $^{-0.016}_{-0.034}$	Φ28 ±0.25	3 $^{0}_{-0.1}$	Φ15 $^{+0.060}_{+0.042}$	Φ21 $^{+0.045}_{+0.028}$	**1510**	**1512**	**1515**			**1520**		**1525**	**1530**								2.0x15°	2.0x10°	15
16	Φ22H7 $^{+0.021}_{0}$	Φ16d8 $^{-0.050}_{-0.077}$	Φ16e7 $^{-0.032}_{-0.050}$	Φ16f7 $^{-0.016}_{-0.034}$	Φ29 ±0.25	3 $^{0}_{-0.1}$	Φ16 $^{+0.060}_{+0.042}$	Φ22 $^{+0.045}_{+0.028}$		**1612**	**1615**		**1618**	**1620**	**1623**	**1625**	**1630**	**1635**	**1640**						2.0x15°	2.0x10°	16
18	Φ24H7 $^{+0.021}_{0}$	Φ18d8 $^{-0.050}_{-0.077}$	Φ18e7 $^{-0.032}_{-0.050}$	Φ18f7 $^{-0.016}_{-0.034}$	Φ32 ±0.25	3 $^{0}_{-0.1}$	Φ18 $^{+0.060}_{+0.042}$	Φ24 $^{+0.045}_{+0.028}$			**1815**			**1820**		**1825**	**1830**	**1835**	**1840**						2.0x15°	2.0x10°	18
20	Φ30H7 $^{+0.021}_{0}$	Φ20d8 $^{-0.065}_{-0.098}$	Φ20e7 $^{-0.040}_{-0.061}$	Φ20f7 $^{-0.020}_{-0.041}$	Φ40 ±0.25	5 $^{0}_{-0.1}$	Φ20 $^{+0.071}_{+0.050}$	Φ30 $^{+0.045}_{+0.028}$			**2015**			**2020**		**2025**	**2030**	**2035**	**2040**						2.0x15°	2.0x10°	20
25	Φ35H7 $^{+0.025}_{0}$	Φ25d8 $^{-0.065}_{-0.098}$	Φ25e7 $^{-0.040}_{-0.061}$	Φ25f7 $^{-0.020}_{-0.041}$	Φ45 ±0.25	5 $^{0}_{-0.1}$	Φ25 $^{+0.081}_{+0.060}$	Φ35 $^{+0.055}_{+0.034}$			**2515**			**2520**		**2525**	**2530**	**2535**	**2540**	**2550**					2.5x15°	2.5x10°	25
30	Φ40H7 $^{+0.025}_{0}$	Φ30d8 $^{-0.065}_{-0.098}$	Φ30e7 $^{-0.040}_{-0.061}$	Φ30f7 $^{-0.020}_{-0.041}$	Φ50 ±0.25	5 $^{0}_{-0.1}$	Φ30 $^{+0.081}_{+0.060}$	Φ40 $^{+0.055}_{+0.034}$						**3020**		**3025**	**3030**	**3035**	**3040**	**3050**					3.0x15°	3.0x10°	30
30	Φ40H7 $^{+0.025}_{0}$	Φ30d8 $^{-0.065}_{-0.098}$	Φ30e7 $^{-0.040}_{-0.061}$	Φ30f7 $^{-0.020}_{-0.041}$	Φ60 ±0.25	5 $^{0}_{-0.1}$	Φ30 $^{+0.081}_{+0.060}$	Φ40 $^{+0.055}_{+0.034}$										***3035F**							3.0x15°	3.0x10°	30
31.5	Φ40H7 $^{+0.025}_{0}$	Φ31.5d8 $^{-0.080}_{-0.119}$	Φ31.5e7 $^{-0.050}_{-0.075}$	Φ31.5f7 $^{-0.025}_{-0.050}$	Φ50 ±0.25	5 $^{0}_{-0.1}$	Φ31.5 $^{+0.085}_{+0.060}$	Φ40 $^{+0.055}_{+0.034}$						**3120**			**3130**	**3135**	**3140**						3.0x15°	3.0x10°	31.5
35	Φ45H7 $^{+0.025}_{0}$	Φ35d8 $^{-0.080}_{-0.119}$	Φ35e7 $^{-0.050}_{-0.075}$	Φ35f7 $^{-0.025}_{-0.050}$	Φ60 ±0.25	5 $^{0}_{-0.1}$	Φ35 $^{+0.085}_{+0.060}$	Φ45 $^{+0.055}_{+0.034}$						**3520**		**3525**	**3530**	**3535**	**3540**	**3550**					3.0x15°	3.0x10°	35
40	Φ50H7 $^{+0.025}_{0}$	Φ40d8 $^{-0.080}_{-0.119}$	Φ40e7 $^{-0.050}_{-0.075}$	Φ40f7 $^{-0.025}_{-0.050}$	Φ65 ±0.25	5 $^{0}_{-0.1}$	Φ40 $^{+0.091}_{+0.066}$	Φ50 $^{+0.055}_{+0.034}$						**4020**		**4025**	**4030**	**4035**	**4040**	**4050**					3.0x15°	3.0x10°	40
45	Φ55H7 $^{+0.030}_{0}$	Φ45d8 $^{-0.080}_{-0.119}$	Φ45e7 $^{-0.050}_{-0.075}$	Φ45f7 $^{-0.025}_{-0.050}$	Φ70 ±0.25	5 $^{0}_{-0.1}$	Φ45 $^{+0.091}_{+0.066}$	Φ55 $^{+0.066}_{+0.041}$									**4530**	**4535**	**4540**	**4550**	**4560**				3.5x15°	3.5x10°	45
50	Φ60H7 $^{+0.030}_{0}$	Φ50d8 $^{-0.080}_{-0.119}$	Φ50e7 $^{-0.050}_{-0.075}$	Φ50f7 $^{-0.025}_{-0.050}$	Φ75 ±0.25	5 $^{0}_{-0.1}$	Φ50 $^{+0.091}_{+0.066}$	Φ60 $^{+0.066}_{+0.041}$									**5030**	**5035**	**5040**	**5050**	**5060**				4.0x15°	4.0x10°	50
55	Φ65H7 $^{+0.030}_{0}$	Φ55d8 $^{-0.100}_{-0.146}$	Φ55e7 $^{-0.060}_{-0.090}$	Φ55f7 $^{-0.030}_{-0.060}$	Φ80 ±0.25	5 $^{0}_{-0.1}$	Φ55 $^{+0.100}_{+0.070}$	Φ65 $^{+0.066}_{+0.041}$											**5540**		**5560**				4.0x15°	4.0x10°	55
60	Φ75H7 $^{+0.030}_{0}$	Φ60d8 $^{-0.100}_{-0.146}$	Φ60e7 $^{-0.060}_{-0.090}$	Φ60f7 $^{-0.030}_{-0.060}$	Φ90 ±0.25	7.5 $^{0}_{-0.1}$	Φ60 $^{+0.100}_{+0.070}$	Φ75 $^{+0.068}_{+0.043}$											**6040**	**6050**	**6060**		**6080**		4.0x15°	4.0x10°	60
63	Φ75H7 $^{+0.030}_{0}$	Φ63d8 $^{-0.100}_{-0.146}$	Φ63e7 $^{-0.060}_{-0.090}$	Φ63f7 $^{-0.030}_{-0.060}$	Φ85 ±0.25	7.5 $^{0}_{-0.1}$	Φ63 $^{+0.100}_{+0.070}$	Φ75 $^{+0.068}_{+0.043}$														**6367**			4.0x15°	4.0x10°	63
65	Φ80H7 $^{+0.030}_{0}$	Φ65d8 $^{-0.100}_{-0.146}$	Φ65e7 $^{-0.060}_{-0.090}$	Φ65f7 $^{-0.030}_{-0.060}$	Φ95 ±0.25	7.5 $^{0}_{-0.1}$	Φ65 $^{+0.100}_{+0.070}$	Φ80 $^{+0.068}_{+0.043}$													**6560**				4.0x15°	4.0x10°	65
70	Φ85H7 $^{+0.035}_{0}$	Φ70d8 $^{-0.100}_{-0.146}$	Φ70e7 $^{-0.060}_{-0.090}$	Φ70f7 $^{-0.030}_{-0.060}$	Φ105 ±0.25	7.5 $^{0}_{-0.1}$	Φ70 $^{+0.111}_{+0.081}$	Φ85 $^{+0.080}_{+0.051}$												**7050**			**7080**		4.0x15°	4.0x10°	70
75	Φ90H7 $^{+0.035}_{0}$	Φ75d8 $^{-0.100}_{-0.146}$	Φ75e7 $^{-0.060}_{-0.090}$	Φ75f7 $^{-0.030}_{-0.060}$	Φ110 ±0.25	7.5 $^{0}_{-0.1}$	Φ75 $^{+0.111}_{+0.081}$	Φ90 $^{+0.080}_{+0.051}$													**7560**				4.0x15°	4.0x10°	75
80	Φ100H7 $^{+0.035}_{0}$	Φ80d8 $^{-0.100}_{-0.146}$	Φ80e7 $^{-0.060}_{-0.090}$	Φ80f7 $^{-0.030}_{-0.060}$	Φ120 ±0.25	10 $^{0}_{-0.1}$	Φ80 $^{+0.111}_{+0.081}$	Φ100 $^{+0.080}_{+0.051}$													**8060**		**8080**	**80100**	4.0x15°	4.0x10°	80
90	Φ110H7 $^{+0.035}_{0}$	Φ90d8 $^{-0.120}_{-0.174}$	Φ90e7 $^{-0.072}_{-0.107}$	Φ90f7 $^{-0.036}_{-0.071}$	Φ130 ±0.25	10 $^{0}_{-0.1}$	Φ90 $^{+0.117}_{+0.082}$	Φ110 $^{+0.083}_{+0.054}$													**9060**		**9080**		5.0x15°	5.0x10°	90
100	Φ120H7 $^{+0.035}_{0}$	Φ100d8 $^{-0.120}_{-0.174}$	Φ100e7 $^{-0.072}_{-0.107}$	Φ100f7 $^{-0.036}_{-0.071}$	Φ150 ±0.40	10 $^{0}_{-0.1}$	Φ100 $^{+0.117}_{+0.082}$	Φ120 $^{+0.083}_{+0.054}$															**10080**	**100100**	5.0x15°	5.0x10°	100
120	Φ140H7 $^{+0.040}_{0}$	Φ120d8 $^{-0.120}_{-0.174}$	Φ120e7 $^{-0.072}_{-0.107}$	Φ120f7 $^{-0.036}_{-0.071}$	Φ170 ±0.40	10 $^{0}_{-0.1}$	Φ120 $^{+0.132}_{+0.097}$	Φ140 $^{+0.096}_{+0.063}$															**12080**	**120100**	5.0x15°	5.0x10°	120

* 3035 F has lube also in the Flange part.

SAFG DAISLIDE SAFG Flanged Bushing (Bushing Inner Diameter: 6 to 50 mm)

Designation of Part Number

SAFG ○○ ○○
- Bushing length
- Bushing O.D.
- Product symbol

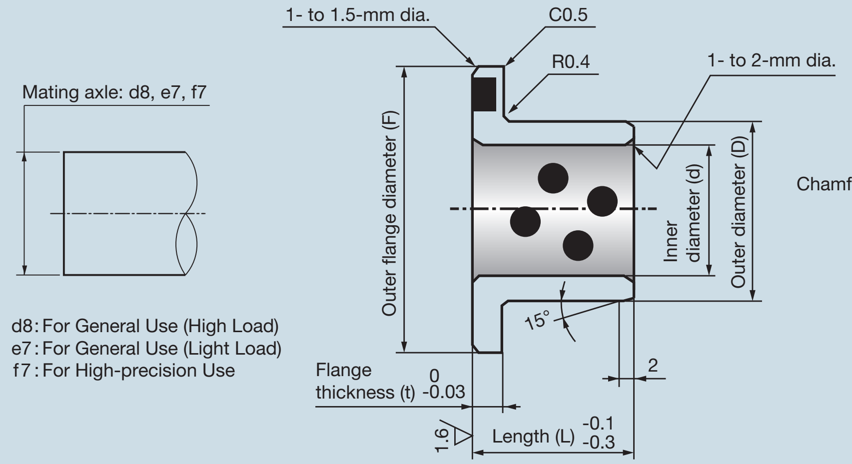
SAFG 0610

Please specify by part number.

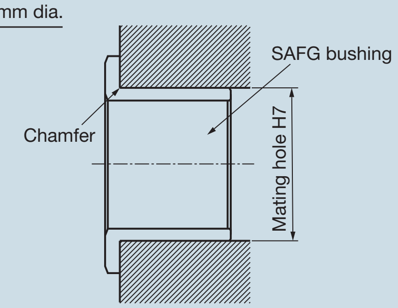
Pb Free

RoHS

ELV



Example of installation



- Suitable for applications with rotating, oscillating, or reciprocating motion.
- Capable of handling thrust loads simultaneously with just one bushing.

(Unit: mm)

Bushing inner diameter	Recommended Dimension Mating Part				Bushing Dimensions												Bushing inner diameter
	Houshing I.D.	Shaft Dia			Outer flange diameter (F)	Flange Thickness (t)	Inner diameter (d)	Outer diameter (D)	Part Number and Bushing Length Tolerance $^{-0.1}_{-0.3}$								
		General Purpose (Heavy Load)	General Purpose (Light Load)	High Accuracy Purpose					10	12	14	15	20	25	35	45	
6	φ10H7 $^{+0.015}_{0}$	φ6d8 $^{-0.030}_{-0.048}$	φ6e7 $^{-0.020}_{-0.032}$	φ6f7 $^{-0.010}_{-0.022}$	φ20 ±0.25	3 $^{0}_{-0.03}$	φ6 $^{+0.032}_{+0.020}$	φ10 $^{+0.028}_{+0.019}$	0610	0612							6
8	φ12H7 $^{+0.018}_{0}$	φ8d8 $^{-0.040}_{-0.062}$	φ8e7 $^{-0.025}_{-0.040}$	φ8f7 $^{-0.013}_{-0.028}$	φ25 ±0.25	3 $^{0}_{-0.03}$	φ8 $^{+0.040}_{+0.025}$	φ12 $^{+0.034}_{+0.023}$		0812		0815					8
10	φ14H7 $^{+0.018}_{0}$	φ10d8 $^{-0.040}_{-0.062}$	φ10e7 $^{-0.025}_{-0.040}$	φ10f7 $^{-0.013}_{-0.028}$	φ25 ±0.25	3 $^{0}_{-0.03}$	φ10 $^{+0.040}_{+0.025}$	φ14 $^{+0.034}_{+0.023}$		1012		1015	1020				10
12	φ18H7 $^{+0.018}_{0}$	φ12d8 $^{-0.050}_{-0.077}$	φ12e7 $^{-0.032}_{-0.050}$	φ12f7 $^{-0.016}_{-0.034}$	φ30 ±0.25	3 $^{0}_{-0.03}$	φ12 $^{+0.050}_{+0.032}$	φ18 $^{+0.034}_{+0.023}$		1212		1215	1220	1225			12
13	φ19H7 $^{+0.021}_{0}$	φ13d8 $^{-0.050}_{-0.077}$	φ13e7 $^{-0.032}_{-0.050}$	φ13f7 $^{-0.016}_{-0.034}$	φ30 ±0.25	3 $^{0}_{-0.03}$	φ13 $^{+0.050}_{+0.032}$	φ19 $^{+0.041}_{+0.028}$		1312		1315	1320	1325			13
15	φ21H7 $^{+0.021}_{0}$	φ15d8 $^{-0.050}_{-0.077}$	φ15e7 $^{-0.032}_{-0.050}$	φ15f7 $^{-0.016}_{-0.034}$	φ35 ±0.25	3 $^{0}_{-0.03}$	φ15 $^{+0.050}_{+0.032}$	φ21 $^{+0.041}_{+0.028}$		1512		1515	1520	1525			15
16	φ22H7 $^{+0.021}_{0}$	φ16d8 $^{-0.050}_{-0.077}$	φ16e7 $^{-0.032}_{-0.050}$	φ16f7 $^{-0.016}_{-0.034}$	φ35 ±0.25	3 $^{0}_{-0.03}$	φ16 $^{+0.050}_{+0.032}$	φ22 $^{+0.041}_{+0.028}$		1612		1615	1620	1625			16
18	φ24H7 $^{+0.021}_{0}$	φ18d8 $^{-0.050}_{-0.077}$	φ18e7 $^{-0.032}_{-0.050}$	φ18f7 $^{-0.016}_{-0.034}$	φ40 ±0.25	3 $^{0}_{-0.03}$	φ18 $^{+0.050}_{+0.032}$	φ24 $^{+0.041}_{+0.028}$			1814		1820	1825			18
20	φ28H7 $^{+0.021}_{0}$	φ20d8 $^{-0.065}_{-0.098}$	φ20e7 $^{-0.040}_{-0.061}$	φ20f7 $^{-0.020}_{-0.041}$	φ45 ±0.25	5 $^{0}_{-0.03}$	φ20 $^{+0.061}_{+0.040}$	φ28 $^{+0.041}_{+0.028}$			2014		2020	2025			20
25	φ33H7 $^{+0.025}_{0}$	φ25d8 $^{-0.065}_{-0.098}$	φ25e7 $^{-0.040}_{-0.061}$	φ25f7 $^{-0.020}_{-0.041}$	φ50 ±0.25	5 $^{0}_{-0.03}$	φ25 $^{+0.061}_{+0.040}$	φ33 $^{+0.050}_{+0.034}$			2514		2520	2525			25
30	φ38H7 $^{+0.025}_{0}$	φ30d8 $^{-0.065}_{-0.098}$	φ30e7 $^{-0.040}_{-0.061}$	φ30f7 $^{-0.020}_{-0.041}$	φ55 ±0.25	5 $^{0}_{-0.03}$	φ30 $^{+0.061}_{+0.040}$	φ38 $^{+0.050}_{+0.034}$					3020	3025	3035		30
35	φ44H7 $^{+0.025}_{0}$	φ35d8 $^{-0.080}_{-0.119}$	φ35e7 $^{-0.050}_{-0.075}$	φ35f7 $^{-0.025}_{-0.050}$	φ65 ±0.25	5 $^{0}_{-0.03}$	φ35 $^{+0.075}_{+0.050}$	φ44 $^{+0.050}_{+0.034}$					3520	3525	3535		35
40	φ50H7 $^{+0.025}_{0}$	φ40d8 $^{-0.080}_{-0.119}$	φ40e7 $^{-0.050}_{-0.075}$	φ40f7 $^{-0.025}_{-0.050}$	φ70 ±0.25	7 $^{0}_{-0.03}$	φ40 $^{+0.075}_{+0.050}$	φ50 $^{+0.050}_{+0.034}$						4025	4035	4045	40
50	φ62H7 $^{+0.030}_{0}$	φ50d8 $^{-0.080}_{-0.119}$	φ50e7 $^{-0.050}_{-0.075}$	φ50f7 $^{-0.025}_{-0.050}$	φ90 ±0.25	8 $^{0}_{-0.03}$	φ50 $^{+0.075}_{+0.050}$	φ62 $^{+0.060}_{+0.041}$							5035	5045	50

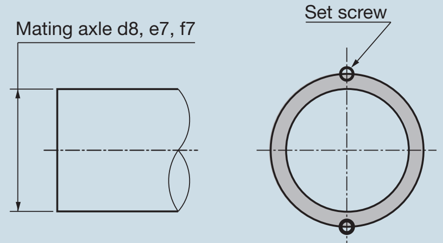
BA DAISLIDE BA Bushing

Designation of Part Number

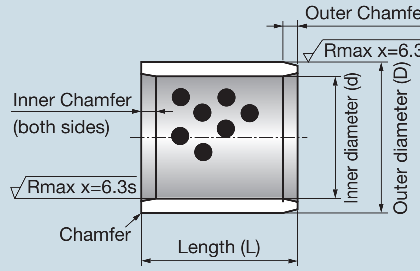
BA ○○ ○○ ○○
- Bushing length
- Bushing outer diameter
- Bushing inner diameter
- Product symbol

BA 121816

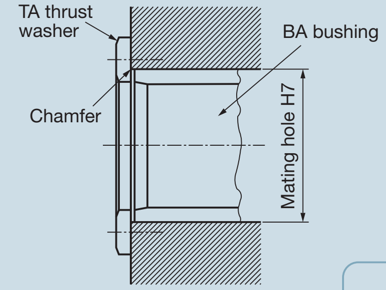
Please specify by Part No.
This product is produced on order only.



d8: General purpose (high bearing load)
e7: General purpose (light bearing load)
f7: High precision



Example of installation



(Unit: mm)

Bushing inner diameter	Recommended mating dimensions: Housing inner diameter	Axle diameter: General Purpose (high bearing load)	Axle diameter: General Purpose (light bearing load)	Axle diameter: High precision	Bushing Dimensions: Inner diameter (d)	Outer diameter (D)	Part Number & Bushing Length Tolerance $^{-0.1}_{-0.3}$: 15	16	20	25	30	35	40	50	60	70	80	100	Outer chamfer: Chamfer	Outer chamfer: Press fit	Inner chamfer	Bushing inner diameter
12	Φ18H7 $^{+0.018}_{0}$	Φ12d8 $^{-0.050}_{-0.077}$	Φ12e7 $^{-0.032}_{-0.050}$	Φ12f7 $^{-0.016}_{-0.034}$	Φ12 $^{+0.050}_{+0.032}$	Φ18 $^{+0.038}_{+0.023}$		121816	121820	121825	121830								C0.5	2.0 x 15°	2.0 x 10°	12
15	Φ21H7 $^{+0.021}_{0}$	Φ15d8 $^{-0.050}_{-0.077}$	Φ15e7 $^{-0.032}_{-0.050}$	Φ15f7 $^{-0.016}_{-0.034}$	Φ15 $^{+0.060}_{+0.042}$	Φ21 $^{+0.045}_{+0.028}$	152115		152120	152125									C0.5	2.0 x 15°	2.0 x 10°	15
18	Φ24H7 $^{+0.021}_{0}$	Φ18d8 $^{-0.050}_{-0.077}$	Φ18e7 $^{-0.032}_{-0.050}$	Φ18f7 $^{-0.016}_{-0.034}$	Φ18 $^{+0.060}_{+0.042}$	Φ24 $^{+0.045}_{+0.028}$	182415		182420	182425	182430								C0.5	2.0 x 15°	2.0 x 10°	18
20	Φ30H7 $^{+0.021}_{0}$	Φ20d8 $^{-0.065}_{-0.098}$	Φ20e7 $^{-0.040}_{-0.061}$	Φ20f7 $^{-0.020}_{-0.041}$	Φ20 $^{+0.071}_{+0.050}$	Φ30 $^{+0.045}_{+0.028}$		203016	203020	203025	203030	203035	203040						C0.5	2.0 x 15°	2.0 x 10°	20
25	Φ33H7 $^{+0.025}_{0}$	Φ25d8 $^{-0.065}_{-0.098}$	Φ25e7 $^{-0.040}_{-0.061}$	Φ25f7 $^{-0.020}_{-0.041}$	Φ25 $^{+0.081}_{+0.060}$	Φ33 $^{+0.055}_{+0.034}$		253316	253320	253325	253330	253335	253340	253350					C0.5	2.5 x 15°	2.5 x 10°	25
25	Φ35H7 $^{+0.025}_{0}$	Φ25d8 $^{-0.065}_{-0.098}$	Φ25e7 $^{-0.040}_{-0.061}$	Φ25f7 $^{-0.020}_{-0.041}$	Φ25 $^{+0.081}_{+0.060}$	Φ35 $^{+0.055}_{+0.034}$		253516	253520	253525	253530	253535	253540	253550					C0.5	2.5 x 15°	2.5 x 10°	25
30	Φ38H7 $^{+0.025}_{0}$	Φ30d8 $^{-0.065}_{-0.098}$	Φ30e7 $^{-0.040}_{-0.061}$	Φ30f7 $^{-0.020}_{-0.041}$	Φ30 $^{+0.081}_{+0.060}$	Φ38 $^{+0.055}_{+0.034}$			303820	303825	303830	303835	303840	303850	303860				C0.5	3.0 x 15°	3.0 x 10°	30
30	Φ40H7 $^{+0.025}_{0}$	Φ30d8 $^{-0.065}_{-0.098}$	Φ30e7 $^{-0.040}_{-0.061}$	Φ30f7 $^{-0.020}_{-0.041}$	Φ30 $^{+0.081}_{+0.060}$	Φ40 $^{+0.055}_{+0.034}$			304020	304025	304030	304035	304040	304050	304060				C0.5	3.0 x 15°	3.0 x 10°	30
31.5	Φ40H7 $^{+0.025}_{0}$	Φ31.5d8 $^{-0.080}_{-0.119}$	Φ31.5e7 $^{-0.050}_{-0.075}$	Φ31.5f7 $^{-0.025}_{-0.050}$	Φ31.5 $^{+0.085}_{+0.060}$	Φ40 $^{+0.055}_{+0.034}$					314030		314040						C0.5	3.0 x 15°	3.0 x 10°	31.5
35	Φ44H7 $^{+0.025}_{0}$	Φ35d8 $^{-0.080}_{-0.119}$	Φ35e7 $^{-0.050}_{-0.075}$	Φ35f7 $^{-0.025}_{-0.050}$	Φ35 $^{+0.085}_{+0.060}$	Φ44 $^{+0.055}_{+0.034}$					354430	354435	354440	354450	354460				C0.5	3.0 x 15°	3.0 x 10°	35
35	Φ45H7 $^{+0.025}_{0}$	Φ35d8 $^{-0.080}_{-0.119}$	Φ35e7 $^{-0.050}_{-0.075}$	Φ35f7 $^{-0.025}_{-0.050}$	Φ35 $^{+0.085}_{+0.060}$	Φ45 $^{+0.055}_{+0.034}$			354520	354525	354530	354535	354540	354550	354560				C0.5	3.0 x 15°	3.0 x 10°	35
40	Φ50H7 $^{+0.025}_{0}$	Φ40d8 $^{-0.080}_{-0.119}$	Φ40e7 $^{-0.050}_{-0.075}$	Φ40f7 $^{-0.025}_{-0.050}$	Φ40 $^{+0.091}_{+0.066}$	Φ50 $^{+0.055}_{+0.034}$			405020	405025	405030	405035	405040	405050	405060	405070			C0.5	3.0 x 15°	3.0 x 10°	40
40	Φ55H7 $^{+0.030}_{0}$	Φ40d8 $^{-0.080}_{-0.119}$	Φ40e7 $^{-0.050}_{-0.075}$	Φ40f7 $^{-0.025}_{-0.050}$	Φ40 $^{+0.091}_{+0.066}$	Φ55 $^{+0.066}_{+0.041}$					405530	405535	405540	405550	405560				C0.5	3.0 x 15°	3.0 x 10°	40
45	Φ55H7 $^{+0.030}_{0}$	Φ45d8 $^{-0.080}_{-0.119}$	Φ45e7 $^{-0.050}_{-0.075}$	Φ45f7 $^{-0.025}_{-0.050}$	Φ45 $^{+0.091}_{+0.066}$	Φ55 $^{+0.066}_{+0.041}$					455530	455535	455540	455550	455560				C0.5	3.0 x 15°	3.0 x 10°	45
45	Φ60H7 $^{+0.030}_{0}$	Φ45d8 $^{-0.080}_{-0.119}$	Φ45e7 $^{-0.050}_{-0.075}$	Φ45f7 $^{-0.025}_{-0.050}$	Φ45 $^{+0.091}_{+0.066}$	Φ60 $^{+0.066}_{+0.041}$					456030	456035	456040	456050	456060	456070			C0.5	3.0 x 15°	3.0 x 10°	45
50	Φ60H7 $^{+0.030}_{0}$	Φ50d8 $^{-0.080}_{-0.119}$	Φ50e7 $^{-0.050}_{-0.075}$	Φ50f7 $^{-0.025}_{-0.050}$	Φ50 $^{+0.091}_{+0.066}$	Φ60 $^{+0.066}_{+0.041}$					506030	506035	506040	506050	506060				C0.5	4.0 x 15°	4.0 x 10°	50
50	Φ65H7 $^{+0.030}_{0}$	Φ50d8 $^{-0.080}_{-0.119}$	Φ50e7 $^{-0.050}_{-0.075}$	Φ50f7 $^{-0.025}_{-0.050}$	Φ50 $^{+0.091}_{+0.066}$	Φ65 $^{+0.066}_{+0.041}$					506530		506540	506550	506560	506570	506580	5065100	C0.5	4.0 x 15°	4.0 x 10°	50
55	Φ70H7 $^{+0.030}_{0}$	Φ55d8 $^{-0.100}_{-0.146}$	Φ55e7 $^{-0.060}_{-0.090}$	Φ55f7 $^{-0.030}_{-0.060}$	Φ55 $^{+0.100}_{+0.070}$	Φ70 $^{+0.068}_{+0.043}$							557040	557050	557060	557070			C0.5	4.0 x 15°	4.0 x 10°	55
60	Φ75H7 $^{+0.030}_{0}$	Φ60d8 $^{-0.100}_{-0.146}$	Φ60e7 $^{-0.060}_{-0.090}$	Φ60f7 $^{-0.030}_{-0.060}$	Φ60 $^{+0.100}_{+0.070}$	Φ75 $^{+0.068}_{+0.043}$					607530	607535	607540	607550	607560	607570	607580	6075100	C0.5	4.0 x 15°	4.0 x 10°	60
65	Φ80H7 $^{+0.030}_{0}$	Φ65d8 $^{-0.100}_{-0.146}$	Φ65e7 $^{-0.060}_{-0.090}$	Φ65f7 $^{-0.030}_{-0.060}$	Φ65 $^{+0.100}_{+0.070}$	Φ80 $^{+0.068}_{+0.043}$								658050	658060	658070	658080		C0.5	4.0 x 15°	4.0 x 10°	65
70	Φ85H7 $^{+0.035}_{0}$	Φ70d8 $^{-0.100}_{-0.146}$	Φ70e7 $^{-0.060}_{-0.090}$	Φ70f7 $^{-0.030}_{-0.060}$	Φ70 $^{+0.111}_{+0.081}$	Φ85 $^{+0.080}_{+0.051}$						708535	708540	708550	708560	708570	708580	7085100	C0.5	4.0 x 15°	4.0 x 10°	70
75	Φ90H7 $^{+0.035}_{0}$	Φ75d8 $^{-0.100}_{-0.146}$	Φ75e7 $^{-0.060}_{-0.090}$	Φ75f7 $^{-0.030}_{-0.060}$	Φ75 $^{+0.111}_{+0.081}$	Φ90 $^{+0.080}_{+0.051}$									759060	759070	759080	7590100	C0.5	4.0 x 15°	4.0 x 10°	75
80	Φ100H7 $^{+0.035}_{0}$	Φ80d8 $^{-0.100}_{-0.146}$	Φ80e7 $^{-0.060}_{-0.090}$	Φ80f7 $^{-0.030}_{-0.060}$	Φ80 $^{+0.111}_{+0.081}$	Φ100 $^{+0.080}_{+0.051}$							8010040	8010050	8010060	8010070	8010080	80100100	C0.5	4.0 x 15°	4.0 x 10°	80
90	Φ110H7 $^{+0.035}_{0}$	Φ90d8 $^{-0.120}_{-0.174}$	Φ90e7 $^{-0.072}_{-0.107}$	Φ90f7 $^{-0.036}_{-0.071}$	Φ90 $^{+0.117}_{+0.082}$	Φ110 $^{+0.083}_{+0.054}$									9011060		9011080	90110100	C1	5.0 x 15°	5.0 x 10°	90
100	Φ120H7 $^{+0.035}_{0}$	Φ100d8 $^{-0.120}_{-0.174}$	Φ100e7 $^{-0.072}_{-0.107}$	Φ100f7 $^{-0.036}_{-0.071}$	Φ100 $^{+0.117}_{+0.082}$	Φ120 $^{+0.083}_{+0.054}$									10012060	10012070	10012080	100120100	C1	5.0 x 15°	5.0 x 10°	100

TA DAISLIDE TA Thrust Washer (Bushing Inner Diameter: 10.2 to 120.5 mm)

Designation of Part Number

TA ○○ ○○

- Thickness (t)
- Nominal inner diameter
- Product symbol

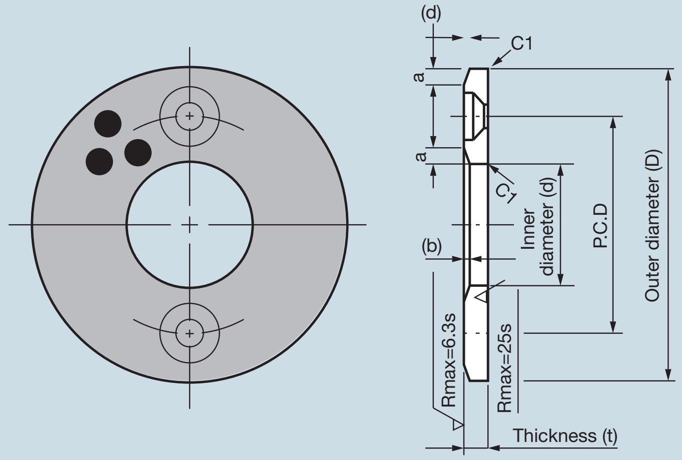
TA 1003

Please specify by part number.

Pb Free

RoHS

ELV



(Unit: mm)

Dimensions(mm)		Thickness (t) $^{0}_{-0.1}$						Attachment hole			Chamfer	
Inner diameter (d)	Outer diameter (D)	3	5	7	8	10		P.C.D	Qty.	Countersunk bolt	a	b
10.2	30	TA1003						20	2	M3	1.5	0.3
12.2	40	TA1203						28	2	M3	2	0.4
12.2	40	TA1203N						No countersunk hole			2	0.4
13.2	40	TA1303						28	2	M3	2	0.4
14.2	40	TA1403						28	2	M3	2	0.4
15.2	50	TA1503						35	2	M3	2	0.4
16.2	50	TA1603						35	2	M3	2	0.4
16.2	50	TA1603N						No countersunk hole			2	0.4
18.2	50	TA1803						35	2	M3	2	0.4
20.2	50		TA2005					35	2	M5	2.5	0.4
25.2	55		TA2505					40	2	M5	2.5	0.4
30.2	60		TA3005					45	2	M5	2.5	0.4
35.2	70		TA3505					50	2	M5	2.5	0.4
40.2	80			TA4007				60	2	M6	3	0.5
45.2	90			TA4507				70	2	M6	3	0.5
50.3	100				TA5008			75	4	M6	4	0.7
55.3	110				TA5508			85	4	M6	4	0.7
60.3	120				TA6008			90	4	M8	5	0.9
65.3	125				TA6508			95	4	M8	5	0.9
70.3	130					TA7010		100	4	M8	5	0.9
75.3	140					TA7510		110	4	M8	5	0.9
80.3	150					TA8010		120	4	M8	5	0.9
90.5	170					TA9010		140	4	M10	5	0.9
100.5	190					TA10010		160	4	M10	5	0.9
120.5	200					TA12010		175	4	M10	5	0.9

*Base metal is high-strength phosphor bronze.

APPLICATION
MANUFACTURE
MATERIALS AND SIZE Polymer Metallic
PLANNING
CORPORATE PROFILE
SPECIFICATION SHEET

PA DAISLIDE PA plate

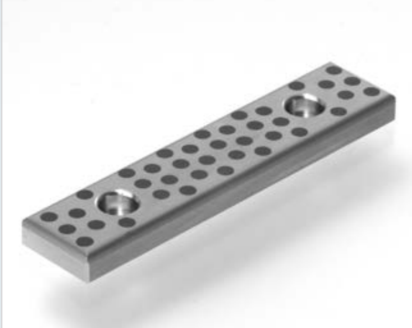
Designation of Part Number

PA ○○ ○○

- Length
- Width
- Product Symbol

PA 1875

Please specify by part number.



Part Number	Width W	Length L	Mounting-Hole Pitch a	b	c	d	e	Mounting-Hole Bolt Bolt Type	Quantity
PA1875	$18^{0}_{-0.2}$	$75^{0}_{-0.2}$	15	45				M6 Hexagon-Socket Head Cap	2
PA18100		$100^{0}_{-0.2}$	25	50				M6 Hexagon-Socket Head Cap	2
PA18125		$125^{0}_{-0.2}$	25	75				M6 Hexagon-Socket Head Cap	2
PA18150		$150^{0}_{-0.2}$	25	100				M6 Hexagon-Socket Head Cap	2
PA2875	$28^{0}_{-0.2}$	$75^{0}_{-0.2}$	15	45				M6 Hexagon-Socket Head Cap	2
PA28100		$100^{0}_{-0.2}$	25	50				M6 Hexagon-Socket Head Cap	2
PA28125		$125^{0}_{-0.2}$	25	75				M6 Hexagon-Socket Head Cap	2
PA28150		$150^{0}_{-0.2}$	25	100				M6 Hexagon-Socket Head Cap	2
PA35100	$35^{0}_{-0.2}$	$100^{0}_{-0.2}$	20	60				M8 Machine Screw	2
PA35150		$150^{0}_{-0.2}$	20	55	55			M8 Machine Screw	3
PA35200		$200^{0}_{-0.3}$	20	55	50	55		M8 Machine Screw	4
PA35250		$250^{0}_{-0.3}$	20	70	70	70		M8 Machine Screw	4
PA35300		$300^{0}_{-0.3}$	20	65	65	65	65	M8 Machine Screw	5
PA35350		$350^{0}_{-0.3}$	20	80	75	75	80	M8 Machine Screw	5
PA3875	$38^{0}_{-0.2}$	$75^{0}_{-0.2}$	15	45				M6 Hexagon-Socket Head Cap	2
PA38100		$100^{0}_{-0.2}$	25	50				M6 Hexagon-Socket Head Cap	2
PA38125		$125^{0}_{-0.2}$	25	75				M6 Hexagon-Socket Head Cap	2
PA38150		$150^{0}_{-0.2}$	25	100				M6 Hexagon-Socket Head Cap	2
PA4875	$48^{0}_{-0.2}$	$75^{0}_{-0.2}$	15	45				M6 Hexagon-Socket Head Cap	2
PA48100		$100^{0}_{-0.2}$	25	50				M6 Hexagon-Socket Head Cap	2
PA48125		$125^{0}_{-0.2}$	25	75				M6 Hexagon-Socket Head Cap	2
PA48150		$150^{0}_{-0.2}$	25	100				M6 Hexagon-Socket Head Cap	2
PA50100	$50^{0}_{-0.2}$	$100^{0}_{-0.2}$	20	60				M8 Machine Screw	2
PA50150		$150^{0}_{-0.2}$	20	55	55			M8 Machine Screw	3
PA50200		$200^{0}_{-0.3}$	20	55	50	55		M8 Machine Screw	4
PA50250		$250^{0}_{-0.3}$	20	70	70	70		M8 Machine Screw	4
PA50300		$300^{0}_{-0.3}$	20	65	65	65	65	M8 Machine Screw	5
PA50400		$400^{0}_{-0.5}$	20	90	90	90	90	M8 Machine Screw	5

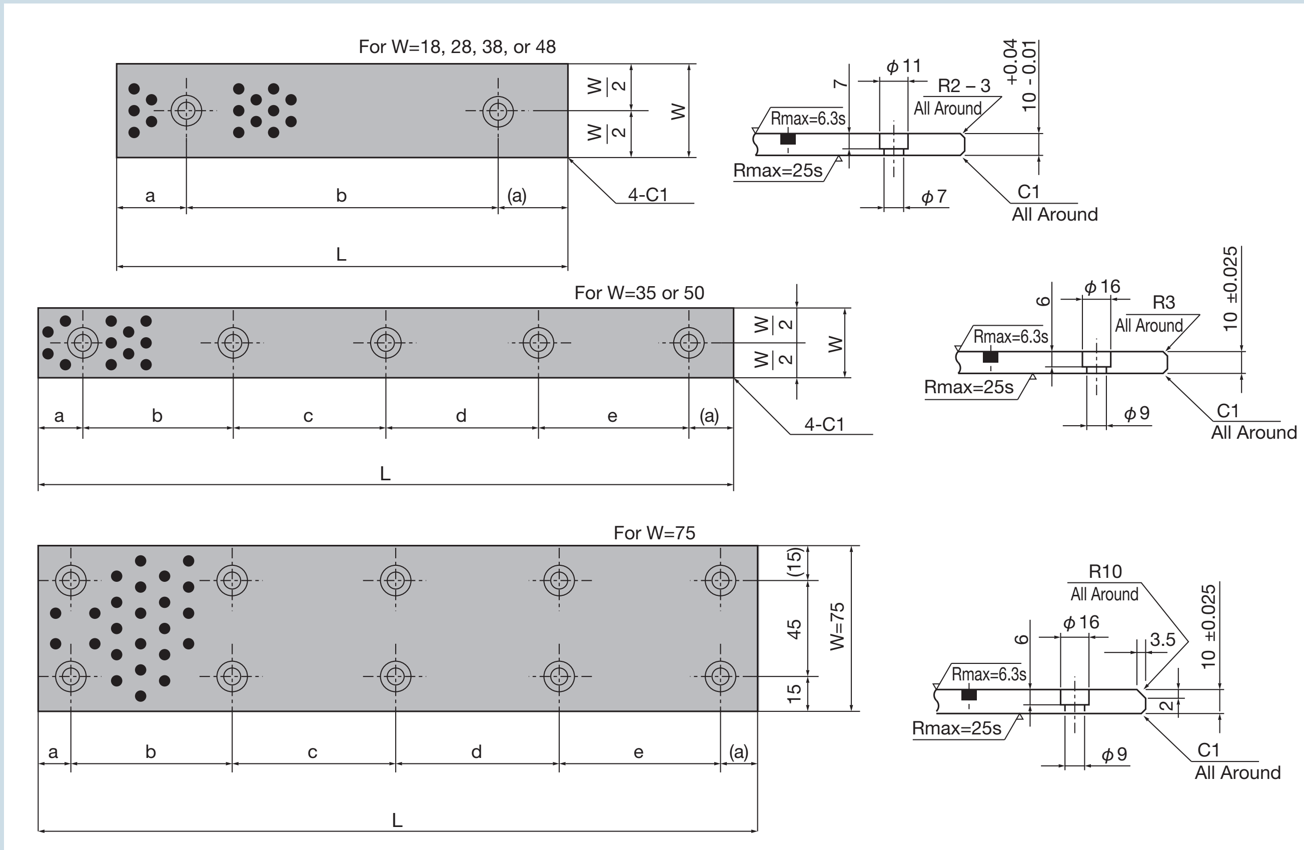
*Base metal is high-strength phosphor bronze.

(Unit: mm)

Part Number	Width W	Length L	Mounting-Hole Pitch a	b	c	d	e	Mounting-Hole Bolt Bolt Type	Quantity
PA75150	$75^{0}_{-0.2}$	$150^{0}_{-0.2}$	20	110				M8 Machine Screw	4
PA75200		$200^{0}_{-0.3}$	20	80	80			M8 Machine Screw	6
PA75250		$250^{0}_{-0.3}$	20	105	105			M8 Machine Screw	6
PA75300		$300^{0}_{-0.5}$	20	85	90	85		M8 Machine Screw	8
PA75400		$400^{0}_{-0.5}$	20	120	120	120		M8 Machine Screw	8
PA75500		$500^{0}_{-0.5}$	20	115	115	115	115	M8 Machine Screw	10

*Base metal is high-strength phosphor bronze.

•PA Plate Standard Part Configuration



LA DAISLIDE L-Shaped

Designation of Part Number

LA ○○ ○○ ○

- Type
- Length
- Width
- Product Symbol

LA 26100C

Please specify by part number.

Pb Free

RoHS

ELV

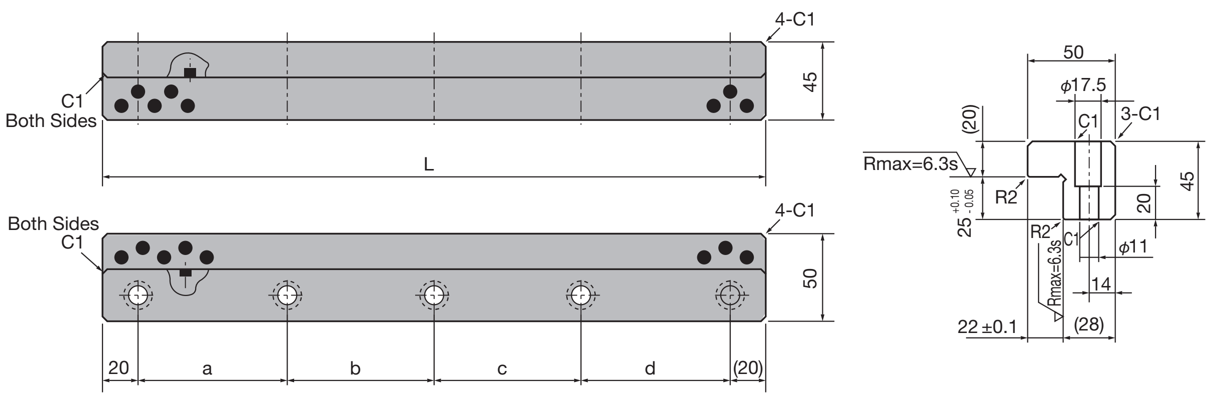
(Unit: mm)

Part Number	Type	Length	Assembling Hole Pitch				Assembling Bolt	
		L	a	b	c	d	Bolt Dia	Q'ty
LA26100C	Type C	100	60				M8	2
LA26150C	Type C	150	55	55			M8	3
LA26200C	Type C	200	55	50	55		M8	4
LA32100B	Type B	100	60				M10	2
LA32150B	Type B	150	55	55			M10	3
LA32200B	Type B	200	55	50	55		M10	4
LA32250B	Type B	250	70	70	70		M10	4
LA50200A	Type A	200	55	50	55		M10	4
LA50250A	Type A	250	70	70	70		M10	4
LA50300A	Type A	300	65	65	65	65	M10	5
LA50350A	Type A	350	80	75	75	80	M10	5

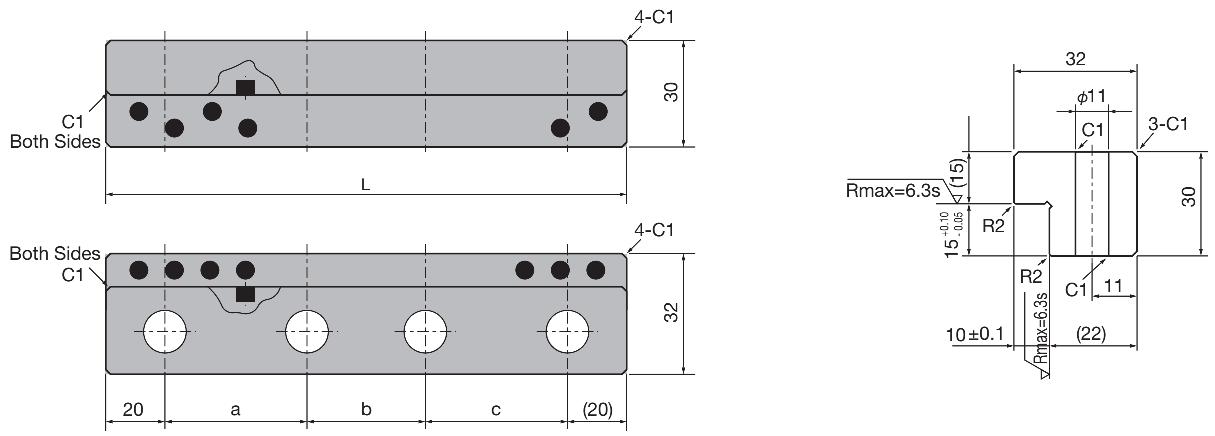
*Base metal is high-strength phosphor bronze.

•Shape of Standard LA Plate Product

Type A



Type B



Type C