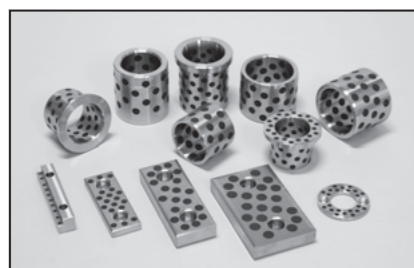


Oiles 500SP1 High-strength brass bearings with embedded solid lubricant



Feature

- Serviceable without the need for lubrication.
- Demonstrates high performance under high-load and low-speed operations.
- Demonstrates superior wear resistance in applications where oil film is seldom produced such as reciprocating motions, oscillation, frequent starts and stops, etc.
- Superior chemical resistance and corrosion resistance.
- Standard products are available in various sizes.

Service range	500SP1 SL1		500SP1 SL4
Lubrication condition	Dry	periodic lubrication	Dry
Service temperature range °C	-40~+300	-40~+150	-40~+80
Allowable max. pressure P N/mm ² [kgf/cm ²]	29 (150) {296 (1,530)}		49 (150) {500 (1,530)}
Allowable max. velocity V m/s [m/min]	0.50 {30}	1.00 {60}	0.25 {15}
Allowable max. PV value N/mm ² · m/s [kgf/cm ² · m/min]	1.65 {1,010}	3.25 {1,990}	1.65 {1,010}

The values in parentheses are static bearing pressures, which are the bearing pressures in applications with no motion or very small motion ($\leq 0.0017\text{m/s}$ [0.1m/min]).

Mechanical properties

Density	—	g/cm ³	7.8
Tensile strength	JIS Z 2241	N/mm ² [kgf/mm ²]	755 {77}
Tensile elongation at break	JIS Z 2241	%	12
Compressive strength	—	N/mm ² [kgf/mm ²]	345 {35} (Note)
Impact strength	JIS Z 2242	J/cm ² [kgfm/cm ²]	19 {1.9}
Hardness	JIS Z 2243	HBW	210
Modulus of longitudinal elasticity	—	N/mm ² [kgf/mm ²]	105,000 {10,700}
Co-efficient of linear expansion	—	$\times 10^{-5} \text{ } ^\circ\text{C}^{-1}$	2.12
Thermal conductivity	—	W/m ² [cal/sec ² Ccm]	87.8 {0.21}

※ The values shown above are typical values, not the standard values.

(Note) Compressive strength is 0.1%

▲ When you use standard 500SP1 seires in the temperature of 150°C and over, contact us for more information.

▲ Refer to page 36 for the suitable solid lubricant for made-to-order bearings.

▲ Please indicate the type of motion (rotation, reciprocating, rotation & reciprocating) for custom-made products.

▲ Solid lubricant, SL401 and SL403 are not lead-free.

Lathe turning

		carbide tool (JIS)	
Cutting tool	Relief angle	5~10°	
	Rake angle	2~5°	
	Nose radius (mm)	0.40~0.80	
Condition	Speed (m/min)	100~200	
	Cut depth (mm)	0.05~0.30	
	Feed (mm/rev)	0.08~0.30	

Some products require application of solid lubricants on the sliding surface after processing.

※ Contact us for grinding and milling information.

Machining accuracy (bushing)

I.D.	O.D.	Length
class 7 to 8	class 6 to 7	class 8 to 9

Classes here are in JIS standard.

This product demonstrates satisfactory performance at the slide surface roughness of Rz6.3 to 12.5 μm .

Test data

Journal rotation test 500SP1-SL1

<Testing conditions>

Bearing dimension : $\phi 40 \times \phi 50 \times l 30$

Mating material : S45C high frequency quenched

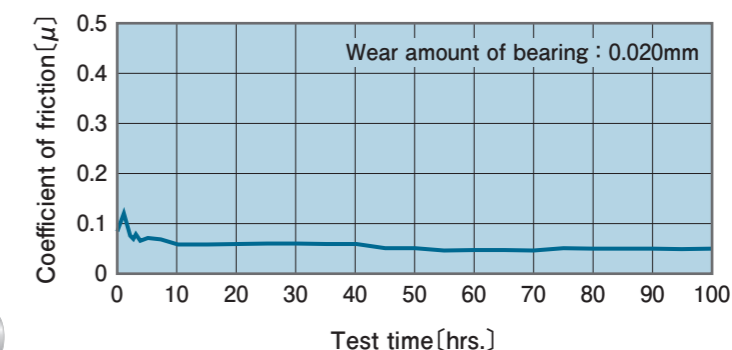
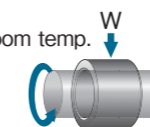
Pressure : 24.5N/mm² {250.0kgf/cm²}

Velocity : 0.033m/s {2.0m/min}

Test time : 100hrs.

Ambience : in the atmosphere, room temp.

Lubrication : dry



Journal oscillation test 500SP1-SL1

<Testing conditions>

Bearing dimension : $\phi 40 \times \phi 50 \times l 30$

Mating material : S45C

Pressure : 19.6N/mm² {200.0kgf/cm²}

Velocity : 0.025m/s {1.5m/min}

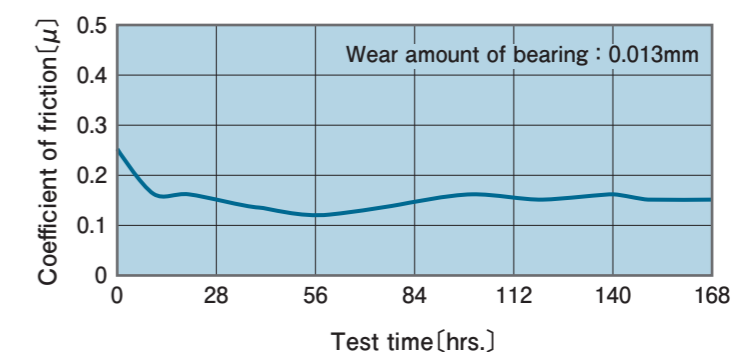
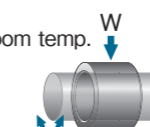
Oscillating cycle : 24cpm

Oscillating angle : $\pm 45^\circ$

Test time : 168hrs.

Ambience : in the atmosphere, room temp.

Lubrication : dry



Journal oscillation test 500SP1-SL4

<Testing conditions>

Bearing dimension : $\phi 40 \times \phi 50 \times l 30$

Mating material : SUS304

Pressure : 29.4N/mm² {300kgf/cm²}

Velocity : 0.012m/s {0.75m/min}

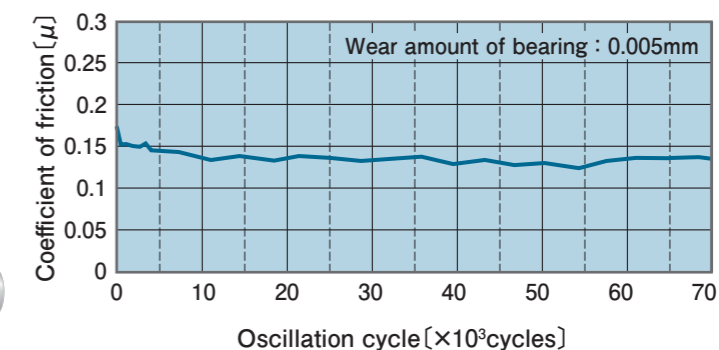
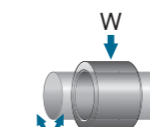
Oscillating cycle : 12cpm

Oscillating angle : $\pm 45^\circ$

Test cycle : 70,000cycle (97.2h)

Ambience : in the atmosphere, room temp.

Lubrication : initial grease SL464g coating



Journal oscillation test 500SP1-SL4

<Testing conditions>

Bearing dimension : $\phi 60 \times \phi 75 \times l 50$

Mating material : SUS403

Pressure : 24.5N/mm² {250kgf/cm²}

Velocity : 0.018m/s {1.13m/min}

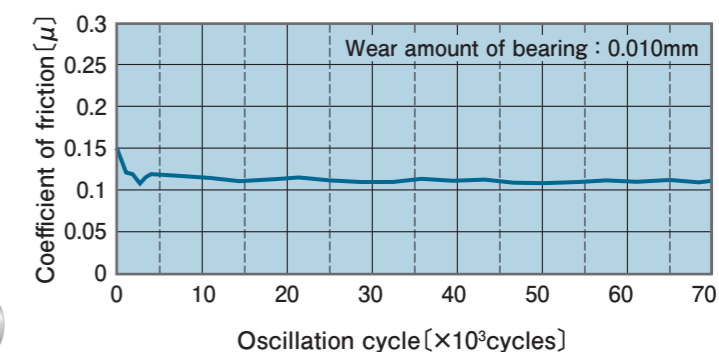
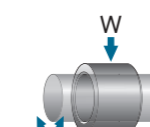
Oscillating cycle : 12cpm

Oscillating angle : $\pm 45^\circ$

Test cycle : 70,000cycle (97.2h)

Ambience : in the purified water

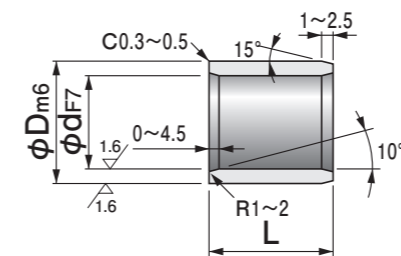
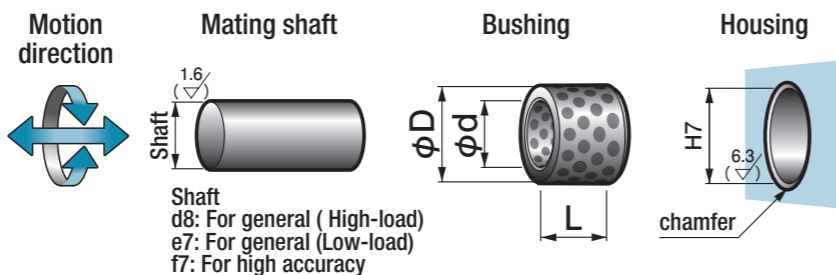
Lubrication : initial grease SL464g coating





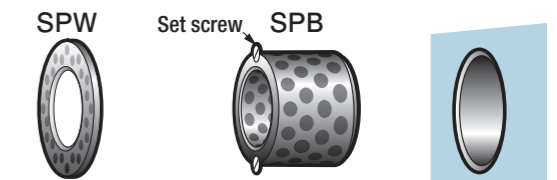
Specify Part No. by required I.D., O.D. and Length.
 (e.g.) I.D. is 25mm, O.D. is 33mm, and length is 20mm.

SPB - 253320
 Part No.



It is recommended to use a set screw to prevent dislocation.
 Set screw

Use this product together with the Oiles #500SP washer (SPW shown on page 197) in a position where thrust loads are applied.



※ Be sure to determine the position with a countersunk head screw and fix when the SPW with ★ shown in the table below is used, since the inner diameter is larger than the shaft diameter.

- Applicable to rotation, oscillation, and reciprocating motion.
- Do not use this under water.
- 31.5mm I.D. bushing can be used as an intermediate trunnion bushing for hydraulic cylinders.

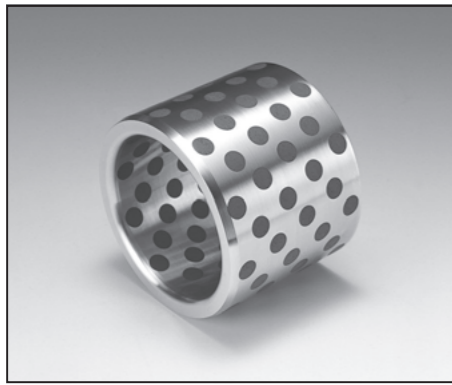
All SPB bushings have engraved **OILES** mark.

I.D.		O.D.		Length L							Tolerance $\begin{matrix} -0.1 \\ -0.3 \end{matrix}$		
φd	Tolerance	φD	Tolerance	8	10	12	15	16	19	20	25		
6	+0.022 +0.010	10	+0.015 +0.006	061008	061010	061012							
8	+0.028 +0.013	12	+0.018 +0.007	081208	081210	081212	081215						
10	+0.028 +0.013	14	+0.018 +0.007	101408	101410	101412	101415			101420			
12	+0.034 +0.016	18	+0.018 +0.007	121808	121810	121812	121815	121816	121819	121820	121825		
13	+0.034 +0.016	19	+0.021 +0.008		131910	131912	131915			131920	131925		
14	+0.034 +0.016	20	+0.021 +0.008		142010	142012	142015			142020	142025		
15	+0.034 +0.016	21	+0.021 +0.008		152110	152112	152115	152116		152120	152125		
16	+0.034 +0.016	22	+0.021 +0.008		162210	162212	162215	162216	162219	162220	162225		
17	+0.034 +0.016	23	+0.021 +0.008				172315						
18	+0.034 +0.016	24	+0.021 +0.008		182410	182412	182415	182416		182420	182425		
19	+0.041 +0.020	26	+0.021 +0.008				192615			192620			
20	+0.041 +0.020	28	+0.021 +0.008		202810	202812	202815	202816	202819	202820	202825		
20	+0.041 +0.020	30	+0.021 +0.008		203010	203012	203015	203016		203020	203025		
22	+0.041 +0.020	32	+0.025 +0.009			223212	223215			223220	223225		
25	+0.041 +0.020	33	+0.025 +0.009			253312	253315	253316		253320	253325		
25	+0.041 +0.020	35	+0.025 +0.009			253512	253515	253516		253520	253525		
28	+0.041 +0.020	38	+0.025 +0.009							283820	283825		
30	+0.041 +0.020	38	+0.025 +0.009			303812	303815			303820	303825		
30	+0.041 +0.020	40	+0.025 +0.009			304012	304015			304020	304025		
31.5	+0.050 +0.025	40	+0.025 +0.009										
32	+0.050 +0.025	42	+0.025 +0.009							324220			
35	+0.050 +0.025	44	+0.025 +0.009							354420	354425		
35	+0.050 +0.025	45	+0.025 +0.009							354520	354525		
38	+0.050 +0.025	48	+0.025 +0.009										
40	+0.050 +0.025	50	+0.025 +0.009				405015			405020	405025		
40	+0.050 +0.025	55	+0.030 +0.011				405515						
45	+0.050 +0.025	55	+0.030 +0.011										
45	+0.050 +0.025	56	+0.030 +0.011										
45	+0.050 +0.025	60	+0.030 +0.011										

※ The I.D. tolerance after press fitting is for reference only.
 ※ I.D. φ50~φ200 are shown on pages 189 to 190.

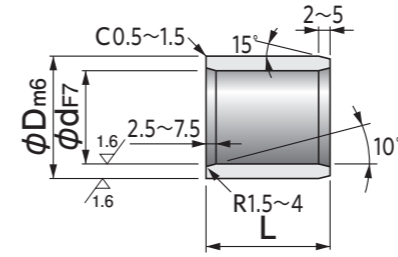
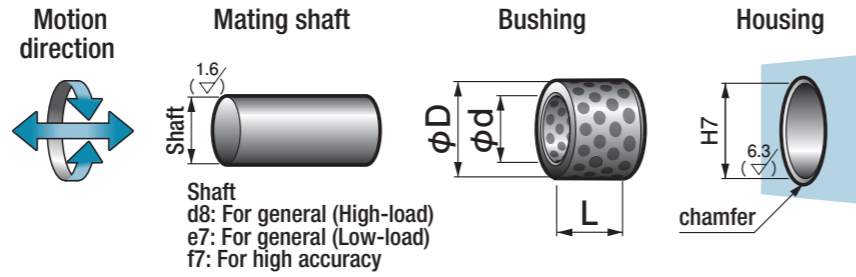
▲ The dimensional tolerances are the values measured at +25°C.

Length L							Tolerance $\begin{matrix} -0.1 \\ -0.3 \end{matrix}$		I.D. tolerance after press fitting (reference)		Washer SPW		I.D. φd
30	35	40	50	60	70	80							
								+0.019 +0.007	0603	6			
								+0.025 +0.010	0803	8			
								+0.025 +0.010	1003	10			
121830								+0.031 +0.013	1203	12			
131930								+0.030 +0.012	1303	13			
142030								+0.030 +0.012	1403	14			
152130	152135	152140						+0.030 +0.012	1503	15			
162230	162235	162240						+0.030 +0.012	1603	16			
								+0.030 +0.012	1803★	17			
182430	182435	182440						+0.030 +0.012	1803	18			
								+0.037 +0.016	2005★	19			
202830	202835	202840	202850					+0.037 +0.016	2005	20			
203030	203035	203040	203050					+0.037 +0.016	2505★	20			
								+0.037 +0.016	2505★	22			
253330	253335	253340	253350	253360				+0.037 +0.016	2505	25			
253530	253535	253540	253550	253560				+0.037 +0.016	3005★	25			
283830		283840						+0.037 +0.016	3005★	28			
303830	303835	303840	303850	303860				+0.037 +0.016	3005	30			
304030	304035	304040	304050	304060				+0.037 +0.016	3505★	30			
314030		314040						+0.046 +0.021	3505★	31.5			
324230		324240						+0.046 +0.021	3505★	32			
354430	354435	354440	354450	354460				+0.046 +0.021	3505	35			
354530	354535	354540	354550	354560				+0.046 +0.021	4007★	35			
		384840						+0.046 +0.021	4007★	38			
405030	405035	405040	405050	405060	405070	405080		+0.046 +0.021	4007	40			
405530	405535	405540	405550	405560				+0.045 +0.020	4507★	40			
455530	455535	455540	455550	455560				+0.045 +0.020	4507	45			
455630	455635	455640	455650	455660				+0.045 +0.020	4507	45			
456030	456035	456040	456050	456060	456070	456080		+0.045 +0.020	4507	45			

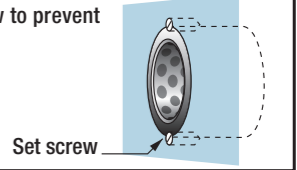


Specify Part No. by required I.D., O.D. and Length.
(e.g.) I.D. is 80mm, O.D. is 96mm, and length is 70mm.

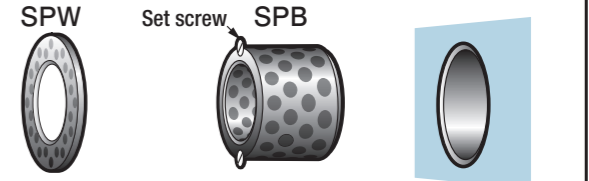
SPB - 809670
Part No.



It is recommended to use a set screw to prevent dislocation.



Use this product together with the Oiles #500SP washer (SPW shown on page 197) in a position where thrust loads are applied.



※Be sure to determine the position with a countersunk head screw and fix when the SPW with ★ shown in the table below is used, since the inner diameter is larger than the shaft diameter.

- Applicable to rotation, oscillation, and reciprocating motion.
- Do not use this under water.
- 63mm I.D bushing can be used as an intermediate trunnion bushing for hydraulic cylinders.

All SPB bushings have engraved **OILES** mark.

ϕ d	Tolerance	ϕ D	Tolerance	Length L Tolerance $\begin{matrix} -0.1 \\ -0.3 \end{matrix}$							
				20	30	35	40	50	60	70	80
50	+0.050/+0.025	60	+0.030/+0.011	506020	506030	506035	506040	506050	506060	506070	506080
50	+0.050/+0.025	62	+0.030/+0.011		506230	506235	506240	506250	506260	506270	506280
50	+0.050/+0.025	65	+0.030/+0.011		506530		506540	506550	506560	506570	506580
55	+0.060/+0.030	70	+0.030/+0.011		557030	557035	557040	557050	557060	557070	
60	+0.060/+0.030	74	+0.030/+0.011		607430	607435	607440	607450	607460	607470	607480
60	+0.060/+0.030	75	+0.030/+0.011		607530	607535	607540	607550	607560	607570	607580
63	+0.060/+0.030	75	+0.030/+0.011						637560	637570	637580
65	+0.060/+0.030	80	+0.030/+0.011				658040	658050	658060	658070	658080
70	+0.060/+0.030	85	+0.035/+0.013		708530	708535	708540	708550	708560	708570	708580
70	+0.060/+0.030	90	+0.035/+0.013					709050	709060	709070	709080
75	+0.060/+0.030	90	+0.035/+0.013					759050	759060	759070	759080
75	+0.060/+0.030	95	+0.035/+0.013						759560	759570	759580
80	+0.060/+0.030	96	+0.035/+0.013				809640	809650	809660	809670	809680
80	+0.060/+0.030	100	+0.035/+0.013				8010040	8010050	8010060	8010070	8010080
85	+0.071/+0.036	100	+0.035/+0.013						8510060		8510080
90	+0.071/+0.036	110	+0.035/+0.013					9011050	9011060		9011080
100	+0.071/+0.036	120	+0.035/+0.013					10012050	10012060	10012070	10012080
110	+0.071/+0.036	130	+0.040/+0.015					11013050		11013070	11013080
120	+0.071/+0.036	140	+0.040/+0.015							12014070	12014080
125	+0.083/+0.043	145	+0.040/+0.015								
130	+0.083/+0.043	150	+0.040/+0.015								13015080
140	+0.083/+0.043	160	+0.040/+0.015								
150	+0.083/+0.043	170	+0.040/+0.015								15017080
160	+0.083/+0.043	180	+0.040/+0.015								16018080
170	+0.083/+0.043	190	+0.046/+0.017								
180	+0.083/+0.043	200	+0.046/+0.017								
190	+0.096/+0.050	210	+0.046/+0.017								
200	+0.096/+0.050	230	+0.046/+0.017								

※Part No. with * are custom-made.

※The I.D. tolerance after press fitting is for reference only.

※I.D. ϕ 6~ ϕ 45 are shown on pages 187 to 188.

▲ The dimensional tolerances are the values measured at +25°C.

90	100	120	130	140	150	200	I.D. tolerance after press fitting (reference)	Washer	I.D.
								SPW	ϕ d
							+0.045/+0.020	5008	50
							+0.045/+0.020	5008	50
	5065100						+0.045/+0.020	5008	50
							+0.055/+0.025	5508	55
							+0.055/+0.025	6008	60
	6075100						+0.055/+0.025	6008	60
							+0.055/+0.025	6508★	63
							+0.055/+0.025	6508	65
	7085100						+0.054/+0.024	7010	70
							+0.054/+0.024	7010	70
	7590100						+0.054/+0.024	7510	75
	7595100						+0.054/+0.024	7510	75
	8096100	8096120					+0.054/+0.024	8010	80
	80100100	80100120		80100140			+0.054/+0.024	8010	80
							+0.065/+0.030	9010★	85
9011090	90110100	90110120					+0.065/+0.030	9010	90
10012090	100120100	100120120		100120140			+0.065/+0.030	10010	100
	110130100	110130120					+0.064/+0.029	12010★	110
12014090	120140100	120140120		120140140			+0.064/+0.029	12010	120
	125145100	125145120					+0.076/+0.036	—	125
	130150100		130150130				+0.076/+0.036	—	130
	140160100			140160140			+0.076/+0.036	—	140
	150170100				150170150		+0.076/+0.036	—	150
	160180100				160180150		+0.076/+0.036	—	160
	*170190100				*170190150		+0.076/+0.036	—	170
	*180200100				*180200150		+0.076/+0.036	—	180
	*190210100				*190210150		+0.088/+0.042	—	190
					*200230150	*200230200	+0.088/+0.042	—	200

SPBL Oiles 500SP1 SL4 Bushings

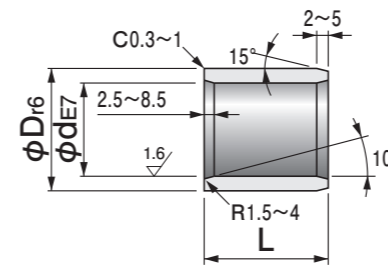
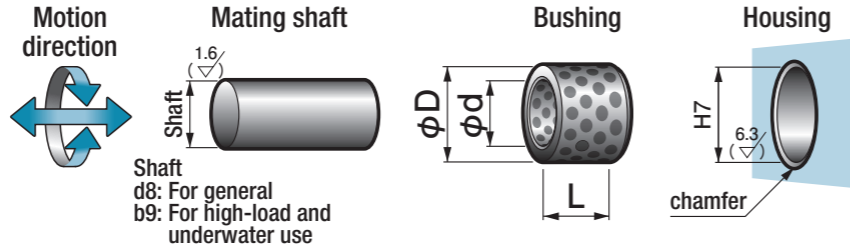
General · Underwater



Specify Part No. by required I.D., O.D. and Length.
(e.g.) I.D. is 60mm, O.D. is 75mm, and length is 80mm.

SPBL - 607580

Part No.



- Applicable to rotational, oscillating, and reciprocating motion.
- Be sure to apply grease supplied with the product to the inner sliding surface before assembling the bearing. Run in the bearing.
- May be used over the maximum allowable speed or maximum allowable PV value in short-time intermittent operations. Inquire us in such a case.
- Use a stainless steel or chrome-plated (30µm or more) mating shaft when using the product in water, in a water-splashed place, etc.
- Use a mating shaft made of high-grade stainless steel with higher corrosion resistance or plated with thicker chrome when using the product in severe corrosive conditions. Supply grease for rust prevention.
- Provide the bushing with a set screw when using the product for high loads.
- Usable without the need for lubrication in the air and water. Use lithium grease with extreme pressure additive if greasing is required.

※Operating Temperature Range: $-40 \sim +80^{\circ}\text{C}$ ($-40 \sim +176^{\circ}\text{F}$)

Solid Lubricant : SL464 (refer to page 36)

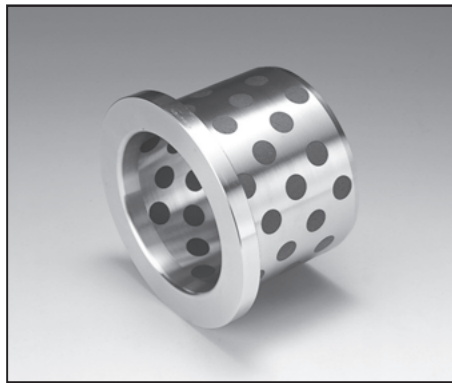
I.D.	O.D.	Length L	Tolerance $-\frac{0.1}{-0.3}$															
			20	25	30	35	40	50	60	70	80							
ϕd	Tolerance	ϕD	Tolerance															
12	$+\frac{0.050}{+0.032}$	18	$+\frac{0.034}{+0.023}$	121820													$+\frac{0.031}{+0.013}$	12
15	$+\frac{0.050}{+0.032}$	21	$+\frac{0.041}{+0.028}$	152120													$+\frac{0.026}{+0.008}$	15
16	$+\frac{0.050}{+0.032}$	22	$+\frac{0.041}{+0.028}$	162220		162230											$+\frac{0.026}{+0.008}$	16
18	$+\frac{0.050}{+0.032}$	24	$+\frac{0.041}{+0.028}$	182420													$+\frac{0.026}{+0.008}$	18
20	$+\frac{0.061}{+0.040}$	30	$+\frac{0.041}{+0.028}$	203020		203030		203040									$+\frac{0.037}{+0.016}$	20
25	$+\frac{0.061}{+0.040}$	35	$+\frac{0.050}{+0.034}$	253520	253525	253530		253540	253550								$+\frac{0.032}{+0.011}$	25
30	$+\frac{0.061}{+0.040}$	40	$+\frac{0.050}{+0.034}$	304020	304025	304030		304040	304050								$+\frac{0.032}{+0.011}$	30
35	$+\frac{0.075}{+0.050}$	45	$+\frac{0.050}{+0.034}$	354520		354530	354535	354540	354550	354560							$+\frac{0.046}{+0.021}$	35
40	$+\frac{0.075}{+0.050}$	50	$+\frac{0.050}{+0.034}$			405030		405040	405050	405060							$+\frac{0.046}{+0.021}$	40
40	$+\frac{0.075}{+0.050}$	55	$+\frac{0.060}{+0.041}$					405540	405550	405560							$+\frac{0.040}{+0.015}$	40
45	$+\frac{0.075}{+0.050}$	60	$+\frac{0.060}{+0.041}$			456030			456050	456060							$+\frac{0.040}{+0.015}$	45
50	$+\frac{0.075}{+0.050}$	60	$+\frac{0.060}{+0.041}$					506040	506050	506060							$+\frac{0.040}{+0.015}$	50
50	$+\frac{0.075}{+0.050}$	65	$+\frac{0.060}{+0.041}$					506540	506550	506560	506570						$+\frac{0.040}{+0.015}$	50
55	$+\frac{0.090}{+0.060}$	70	$+\frac{0.062}{+0.043}$					557040		557060	557070						$+\frac{0.053}{+0.023}$	55
60	$+\frac{0.090}{+0.060}$	75	$+\frac{0.062}{+0.043}$						607550	607560	607570	607580					$+\frac{0.053}{+0.023}$	60
65	$+\frac{0.090}{+0.060}$	80	$+\frac{0.062}{+0.043}$							658060	658070	658080					$+\frac{0.053}{+0.023}$	65
70	$+\frac{0.090}{+0.060}$	90	$+\frac{0.073}{+0.051}$							709060	709070	709080					$+\frac{0.046}{+0.016}$	70
75	$+\frac{0.090}{+0.060}$	95	$+\frac{0.073}{+0.051}$								759570						$+\frac{0.046}{+0.016}$	75
80	$+\frac{0.090}{+0.060}$	100	$+\frac{0.073}{+0.051}$							801060		801080					$+\frac{0.046}{+0.016}$	80
90	$+\frac{0.107}{+0.072}$	110	$+\frac{0.076}{+0.054}$							901160		901180					$+\frac{0.060}{+0.025}$	90
100	$+\frac{0.107}{+0.072}$	120	$+\frac{0.076}{+0.054}$							1001260		1001280					$+\frac{0.060}{+0.025}$	100
110	$+\frac{0.107}{+0.072}$	130	$+\frac{0.088}{+0.063}$														$+\frac{0.052}{+0.017}$	110
120	$+\frac{0.107}{+0.072}$	140	$+\frac{0.088}{+0.063}$									1201480					$+\frac{0.052}{+0.017}$	120
130	$+\frac{0.125}{+0.085}$	150	$+\frac{0.090}{+0.065}$														$+\frac{0.068}{+0.028}$	130
140	$+\frac{0.125}{+0.085}$	160	$+\frac{0.090}{+0.065}$														$+\frac{0.068}{+0.028}$	140
150	$+\frac{0.125}{+0.085}$	170	$+\frac{0.093}{+0.068}$														$+\frac{0.065}{+0.025}$	150
160	$+\frac{0.125}{+0.085}$	180	$+\frac{0.093}{+0.068}$														$+\frac{0.065}{+0.025}$	160
170	$+\frac{0.125}{+0.085}$	190	$+\frac{0.106}{+0.077}$														$+\frac{0.065}{+0.025}$	170
180	$+\frac{0.125}{+0.085}$	200	$+\frac{0.106}{+0.077}$														$+\frac{0.065}{+0.025}$	180
190	$+\frac{0.146}{+0.100}$	210	$+\frac{0.109}{+0.080}$														$+\frac{0.078}{+0.032}$	190
200	$+\frac{0.146}{+0.100}$	230	$+\frac{0.113}{+0.084}$														$+\frac{0.078}{+0.032}$	200

※Part No. with * are made-to-order.

※The I.D. tolerance after press fitting is for reference only.

▲The dimensional tolerances are the values measured at +25°C.

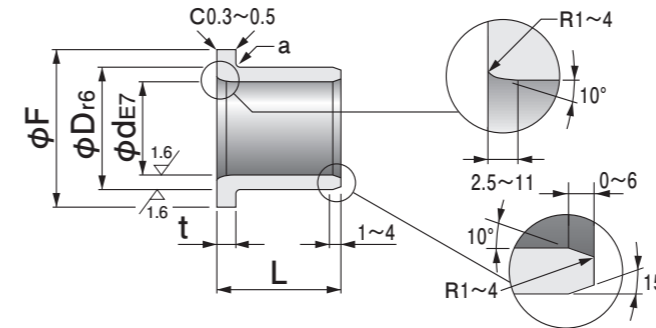
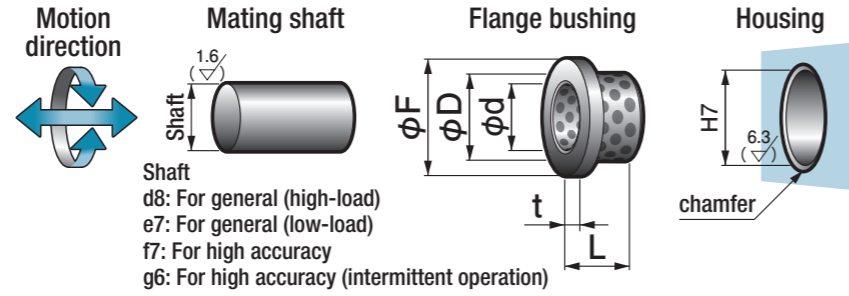
I.D.	O.D.	Length L	Tolerance $-\frac{0.1}{-0.3}$									I.D. tolerance after press fitting (reference)	I.D. ϕd							
			90	100	110	120	130	140	150	200										



Specify Part No. by required I.D. and Length.
(e.g.) I.D. is 50mm and length is 30mm.

SPF - 5030

Part No.



a: Chamfering for under flange

φd	~18	~65	~160
a	R0.3	R0.5	R1 (mm)

★ 4 model number of SPF-6040/6050/6080/6367 is R1.

- Applicable to rotational, oscillating, and reciprocating motion.
- Flange surface is not subject to a thrust load as no lubricant is embedded.
- Do not use this under water.
- 31.5mm I.D. and 63mm I.D bushing can be used as an intermediate trunnion bushing for hydraulic cylinders.

I.D. φd	Tolerance	O.D. φD	Tolerance	Flange			Length L Tolerance $^{-0.1}_{-0.3}$										
				φF	Tolerance	t	10	12	15	17	18	20	23	25			
6	+0.032/+0.020	10	+0.028/+0.019	16	$^0_{-0.3}$	2	$^0_{-0.1}$	0610	0612								
8	+0.040/+0.025	12	+0.034/+0.023	20	$^0_{-0.3}$	2	$^0_{-0.1}$	0810	0812	0815							
10	+0.040/+0.025	14	+0.034/+0.023	22	$^0_{-0.3}$	2	$^0_{-0.1}$	1010	1012	1015	1017			1020			
12	+0.050/+0.032	18	+0.034/+0.023	25	$^0_{-0.3}$	3	$^0_{-0.1}$	1210	1212	1215				1220		1225	
13	+0.050/+0.032	19	+0.041/+0.028	26	$^0_{-0.3}$	3	$^0_{-0.1}$	1310	1312	1315				1320		1325	
14	+0.050/+0.032	20	+0.041/+0.028	27	$^0_{-0.3}$	3	$^0_{-0.1}$			1415				1420		1425	
15	+0.050/+0.032	21	+0.041/+0.028	28	$^0_{-0.3}$	3	$^0_{-0.1}$	1510	1512	1515				1520		1525	
16	+0.050/+0.032	22	+0.041/+0.028	29	$^0_{-0.3}$	3	$^0_{-0.1}$		1612	1615		1618	1620	1623	1625		
18	+0.050/+0.032	24	+0.041/+0.028	32	$^0_{-0.3}$	3	$^0_{-0.1}$			1815			1820		1825		
20	+0.061/+0.040	30	+0.041/+0.028	40	$^0_{-0.3}$	5	$^0_{-0.1}$			2015			2020		2025		
25	+0.061/+0.040	35	+0.050/+0.034	45	$^0_{-0.3}$	5	$^0_{-0.1}$			2515			2520		2525		
30	+0.061/+0.040	40	+0.050/+0.034	50	$^0_{-0.3}$	5	$^0_{-0.1}$						3020		3025		
31.5	+0.075/+0.050	40	+0.050/+0.034	50	$^0_{-0.3}$	5	$^0_{-0.1}$						3120				
35	+0.075/+0.050	45	+0.050/+0.034	60	$^0_{-0.3}$	5	$^0_{-0.1}$						3520		3525		
40	+0.075/+0.050	50	+0.050/+0.034	65	$^0_{-0.3}$	5	$^0_{-0.1}$						4020		4025		
45	+0.075/+0.050	55	+0.060/+0.041	70	$^0_{-0.3}$	5	$^0_{-0.1}$										
50	+0.075/+0.050	60	+0.060/+0.041	75	$^0_{-0.3}$	5	$^0_{-0.1}$										
55	+0.090/+0.060	65	+0.060/+0.041	80	$^0_{-0.3}$	5	$^0_{-0.1}$										
60	+0.090/+0.060	75	+0.062/+0.043	90	$^0_{-0.3}$	7.5	$^0_{-0.1}$										
63	+0.090/+0.060	75	+0.062/+0.043	85	$^0_{-0.3}$	7.5	$^0_{-0.1}$										
65	+0.090/+0.060	80	+0.062/+0.043	95	$^0_{-0.3}$	7.5	$^0_{-0.1}$										
70	+0.090/+0.060	85	+0.073/+0.051	105	$^0_{-0.3}$	7.5	$^0_{-0.1}$										
75	+0.090/+0.060	90	+0.073/+0.051	110	$^0_{-0.3}$	7.5	$^0_{-0.1}$										
80	+0.090/+0.060	100	+0.073/+0.051	120	$^0_{-0.3}$	10	$^0_{-0.1}$										
90	+0.107/+0.072	110	+0.076/+0.054	130	$^0_{-0.3}$	10	$^0_{-0.1}$										
100	+0.107/+0.072	120	+0.076/+0.054	150	$^0_{-0.3}$	10	$^0_{-0.1}$										
120	+0.107/+0.072	140	+0.088/+0.063	170	$^0_{-0.3}$	10	$^0_{-0.1}$										
130	+0.125/+0.085	150	+0.090/+0.065	180	$^0_{-0.3}$	10	$^0_{-0.1}$										
140	+0.125/+0.085	160	+0.090/+0.065	190	$^0_{-0.3}$	10	$^0_{-0.1}$										
150	+0.125/+0.085	170	+0.093/+0.068	200	$^0_{-0.3}$	10	$^0_{-0.1}$										
160	+0.125/+0.085	180	+0.093/+0.068	210	$^0_{-0.3}$	10	$^0_{-0.1}$										

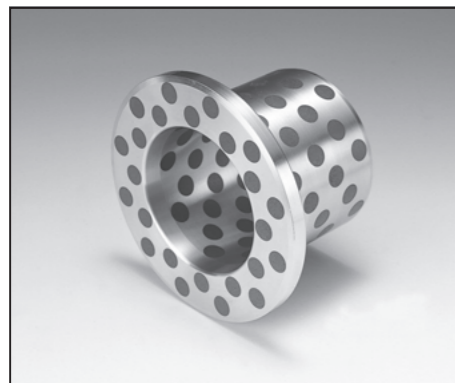
※Part No. with * are made-to-order.

※The I.D. tolerance after press fitting is for reference only.

▲ The dimensional tolerances are the values measured at +25°C.

Length L	Tolerance $^{-0.1}_{-0.3}$	I.D. tolerance after press fitting (reference)							I.D. φd
		30	35	40	50	60	67.5	80	
								+0.016/+0.004	6
								+0.021/+0.006	8
								+0.021/+0.006	10
								+0.031/+0.013	12
								+0.026/+0.008	13
								+0.026/+0.008	14
								+0.026/+0.008	15
								+0.026/+0.008	16
								+0.026/+0.008	18
								+0.037/+0.016	20
								+0.032/+0.011	25
								+0.032/+0.011	30
								+0.046/+0.021	31.5
								+0.046/+0.021	35
								+0.046/+0.021	40
								+0.040/+0.015	45
								+0.040/+0.015	50
								+0.055/+0.025	55
				★ 6040	★ 6050	6060		+0.053/+0.023	60
							★ 6367	+0.053/+0.023	63
								+0.053/+0.023	65
								+0.046/+0.016	70
								+0.046/+0.016	75
								+0.046/+0.016	80
								+0.060/+0.025	90
								+0.060/+0.025	100
								+0.052/+0.017	120
								+0.068/+0.028	130
								+0.068/+0.028	140
								+0.065/+0.025	150
								+0.065/+0.025	160

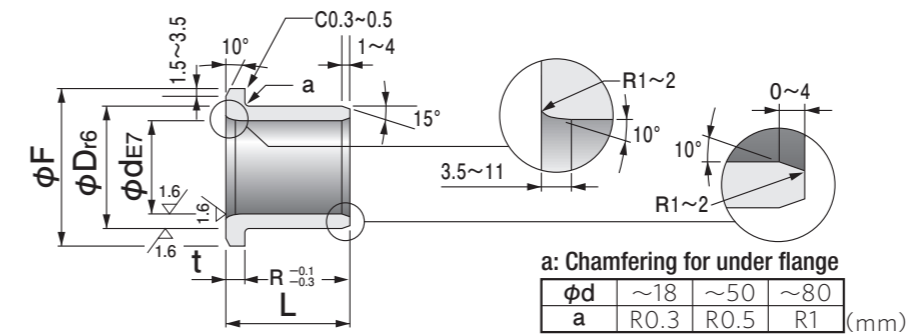
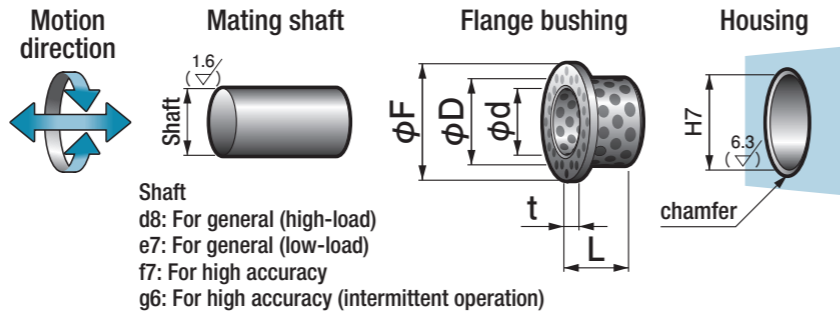
SPFG Oiles 500SP1 SL1 Thrust Bushings



Specify Part No. by required I.D. and Length.
(e.g.) I.D. is 35mm and length is 25mm.

SPFG - 3525

Part No.



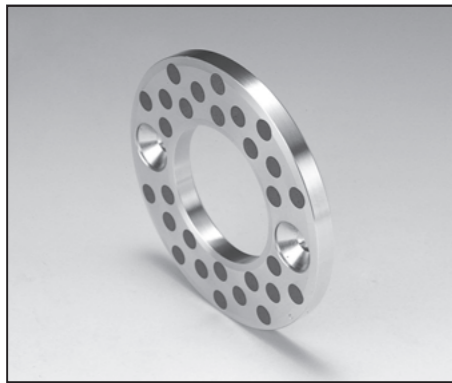
- Applicable to rotational, oscillating, and reciprocating motion.
- This bushing can be subject to both radial-journal and thrust load.
- Improve machining by more accurate flange thickness.

I.D.		O.D.		Flange				Length L					
φd	Tolerance	φD	Tolerance	φF	Tolerance	t	Tolerance	11	13	18	20	23	25
6	+0.032 +0.020	10	+0.028 +0.019	20	0 -0.3	3	0 -0.03	0611					
8	+0.040 +0.025	12	+0.034 +0.023	25	0 -0.3	3	0 -0.03		0813				
10	+0.040 +0.025	14	+0.034 +0.023	25	0 -0.3	3	0 -0.03		1013	1018			
12	+0.050 +0.032	18	+0.034 +0.023	30	0 -0.3	3	0 -0.03	1211		1218		1223	
13	+0.050 +0.032	19	+0.041 +0.028	30	0 -0.3	3	0 -0.03		1313	1318		1323	
15	+0.050 +0.032	21	+0.041 +0.028	35	0 -0.3	3	0 -0.03		1513	1518		1523	
16	+0.050 +0.032	22	+0.041 +0.028	35	0 -0.3	3	0 -0.03		1613	1618		1623	
18	+0.050 +0.032	24	+0.041 +0.028	40	0 -0.3	3	0 -0.03			1818		1823	
20	+0.061 +0.040	28	+0.041 +0.028	45	0 -0.3	5	0 -0.03				2020		2025
25	+0.061 +0.040	33	+0.050 +0.034	50	0 -0.3	5	0 -0.03				2520		2525
30	+0.061 +0.040	38	+0.050 +0.034	55	0 -0.3	5	0 -0.03				3020		3025
35	+0.075 +0.050	44	+0.050 +0.034	65	0 -0.3	5	0 -0.03				3520		3525
40	+0.075 +0.050	50	+0.050 +0.034	70	0 -0.3	7	0 -0.03						
50	+0.075 +0.050	62	+0.060 +0.041	90	0 -0.3	8	0 -0.04						
60	+0.090 +0.060	74	+0.062 +0.043	110	0 -0.3	8	0 -0.04						
70	+0.090 +0.060	85	+0.073 +0.051	120	0 -0.3	10	0 -0.04						
80	+0.090 +0.060	96	+0.073 +0.051	140	0 -0.3	10	0 -0.04						

※The I.D. tolerance after press fitting is for reference only.

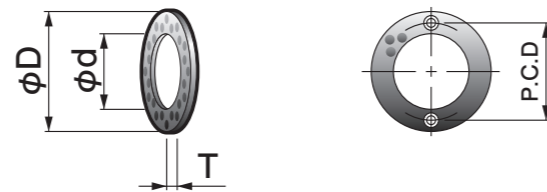
▲The dimensional tolerances are the values measured at +25°C.

Length L												I.D. tolerance after press fitting (reference)	I.D. φd
27	35	37	38	47	48	50	58	60	68	80	90		
												+0.016 +0.004	6
												+0.021 +0.006	8
												+0.021 +0.006	10
												+0.031 +0.013	12
												+0.026 +0.008	13
												+0.026 +0.008	15
												+0.026 +0.008	16
												+0.026 +0.008	18
												+0.037 +0.016	20
												+0.032 +0.011	25
	3035											+0.032 +0.011	30
	3535											+0.046 +0.021	35
4027		4037		4047								+0.046 +0.021	40
				5038		5048		5058				+0.040 +0.015	50
				6038		6048		6058		6068		+0.053 +0.023	60
						7050				7080		+0.046 +0.016	70
								8060			8090	+0.046 +0.016	80

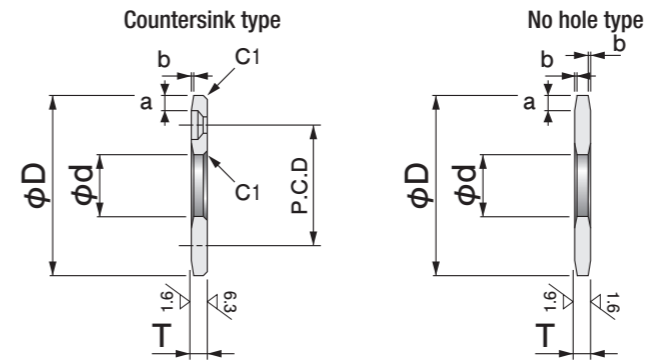


Specify Part No. by required I.D. and thickness.
(e.g.) I.D. is 30.2mm and thickness is 5mm.

SPW - 3005
Part No.



- May be combined with the SPB.
- See the description of the SPB for combination. (Pages 187 to 190)
- The products with the N marks at the end of the part numbers have no mounting holes.



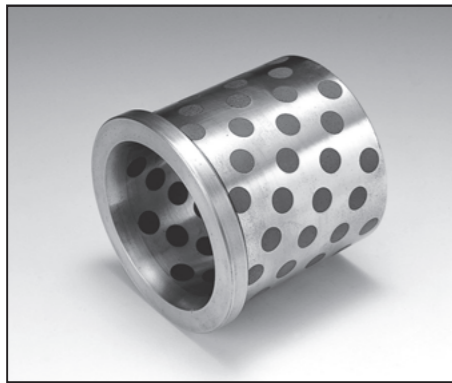
a b: Chamfering for I.D. and O.D.

φd	~10.2	~18.2	~35.2	~45.2	~55.3	~100.5	120.5
a	1.5	2	2.5	3	4	5	4
b	0.3	0.4	0.4	0.5	0.6	0.8	0.8

(mm)

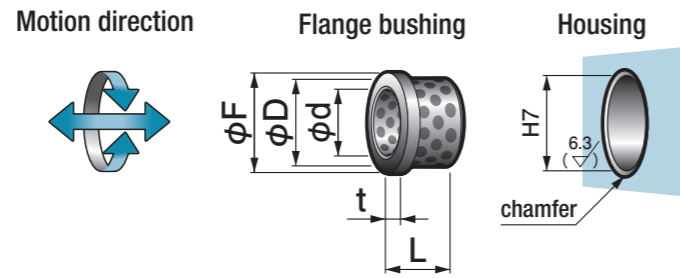
Part No.	I.D.		O.D.	Thickness		Mounting hole		
	φd	Tolerance		φD	T	Tolerance	P.C.D.	No. of holes
SPW-0603	6.2	+0.2 +0.1	25	3	0 -0.1	15	2	M3
SPW-0803	8.2	+0.2 +0.1	28	3	0 -0.1	18	2	M3
SPW-1003	10.2	+0.2 +0.1	30	3	0 -0.1	20	2	M3
SPW-1203	12.2	+0.2 +0.1	40	3	0 -0.1	28	2	M3
SPW-1203N	12.2	+0.2 +0.1	40	3	0 -0.1	no hole		
SPW-1303	13.2	+0.2 +0.1	40	3	0 -0.1	28	2	M3
SPW-1403	14.2	+0.2 +0.1	40	3	0 -0.1	28	2	M3
SPW-1503	15.2	+0.2 +0.1	50	3	0 -0.1	35	2	M3
SPW-1603	16.2	+0.2 +0.1	50	3	0 -0.1	35	2	M3
SPW-1603N	16.2	+0.2 +0.1	50	3	0 -0.1	no hole		
SPW-1803	18.2	+0.2 +0.1	50	3	0 -0.1	35	2	M3
SPW-2005	20.2	+0.2 +0.1	50	5	0 -0.1	35	2	M5
SPW-2505	25.2	+0.2 +0.1	55	5	0 -0.1	40	2	M5
SPW-2505N	25.2	+0.2 +0.1	55	5	0 -0.1	no hole		
SPW-3005	30.2	+0.2 +0.1	60	5	0 -0.1	45	2	M5
SPW-3005N	30.2	+0.2 +0.1	60	5	0 -0.1	no hole		
SPW-3505	35.2	+0.2 +0.1	70	5	0 -0.1	50	2	M5

Part No.	I.D.		O.D.	Thickness		Mounting hole		
	φd	Tolerance		φD	T	Tolerance	P.C.D.	No. of holes
SPW-4007	40.2	+0.2 +0.1	80	7	0 -0.1	60	2	M6
SPW-4507	45.2	+0.2 +0.1	90	7	0 -0.1	70	2	M6
SPW-5008	50.3	+0.3 +0.1	100	8	0 -0.1	75	4	M6
SPW-5508	55.3	+0.3 +0.1	110	8	0 -0.1	85	4	M6
SPW-6008	60.3	+0.3 +0.1	120	8	0 -0.1	90	4	M8
SPW-6508	65.3	+0.3 +0.1	125	8	0 -0.1	95	4	M8
SPW-7010	70.3	+0.3 +0.1	130	10	0 -0.1	100	4	M8
SPW-7510	75.3	+0.3 +0.1	140	10	0 -0.1	110	4	M8
SPW-8010	80.3	+0.3 +0.1	150	10	0 -0.1	120	4	M8
SPW-9010	90.5	+0.3 +0.1	170	10	0 -0.1	140	4	M10
SPW-10010	100.5	+0.3 +0.1	190	10	0 -0.1	160	4	M10
SPW-12010	120.5	+0.3 +0.1	200	10	0 -0.1	175	4	M10

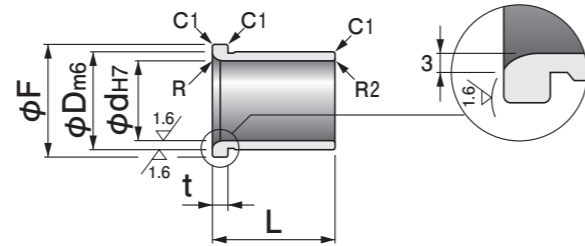


Specify Part No. by required I.D., O.D. and Length.
(e.g.) I.D. is 65mm, O.D. is 80mm, and length is 80mm.

SGF - 658080
Part No.

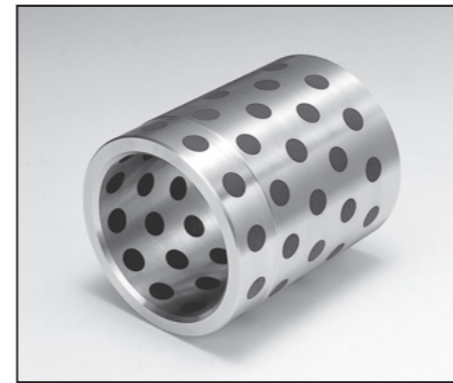


- Applicable to rotation, oscillation, and reciprocating motion.
- It is recommended to use a set screw to prevent dislocation.



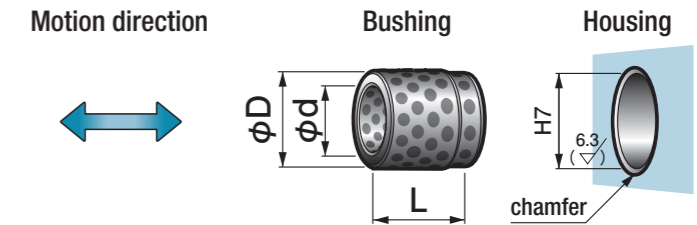
Part No.	I.D.		O.D.		Flange		Length		R
	ϕd	Tolerance	ϕD	Tolerance	ϕF	t	L	Tolerance	
SGF-253540	25	$^{+0.021}_0$	35	$^{+0.025}_{+0.009}$	45	7	40	$^0_{-0.3}$	10
SGF-304050	30	$^{+0.021}_0$	40	$^{+0.025}_{+0.009}$	50	10	50	$^0_{-0.3}$	20
SGF-405570	40	$^{+0.025}_0$	55	$^{+0.030}_{+0.011}$	65	10	70	$^0_{-0.3}$	20
SGF-506580	50	$^{+0.025}_0$	65	$^{+0.030}_{+0.011}$	75	10	80	$^0_{-0.3}$	20
SGF-607580	60	$^{+0.030}_0$	75	$^{+0.030}_{+0.011}$	85	10	80	$^0_{-0.3}$	20
SGF-658080	65	$^{+0.030}_0$	80	$^{+0.030}_{+0.011}$	90	10	80	$^0_{-0.3}$	20
SGF-6580120	65	$^{+0.030}_0$	80	$^{+0.030}_{+0.011}$	90	10	120	$^0_{-0.3}$	20
SGF-80100100	80	$^{+0.030}_0$	100	$^{+0.035}_{+0.013}$	110	10	100	$^0_{-0.3}$	20
SGF-80100140	80	$^{+0.030}_0$	100	$^{+0.035}_{+0.013}$	110	10	140	$^0_{-0.3}$	20
SGF-100120100	100	$^{+0.035}_0$	120	$^{+0.035}_{+0.013}$	130	10	100	$^0_{-0.3}$	20
SGF-100120140	100	$^{+0.035}_0$	120	$^{+0.035}_{+0.013}$	130	10	140	$^0_{-0.3}$	20

▲ The dimensional tolerances are the values measured at +25°C.

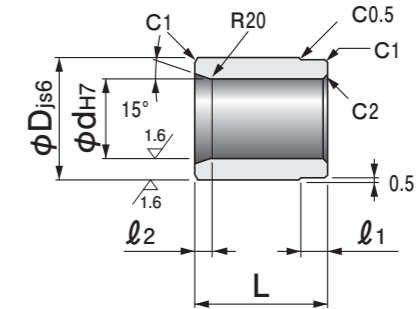


Specify Part No. by required I.D., O.D. and Length.
(e.g.) I.D. is 60mm, O.D. is 80mm, and length is 90mm.

SGB - 608090
Part No.

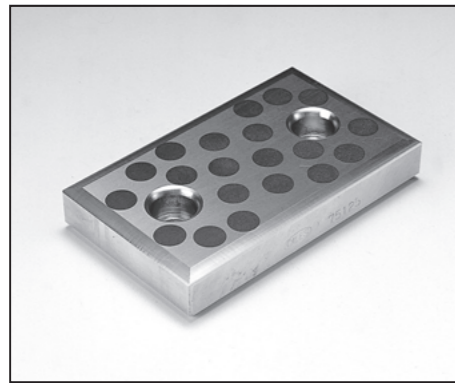


- Applicable to reciprocating motion.
- It is recommended to use a set screw to prevent dislocation.



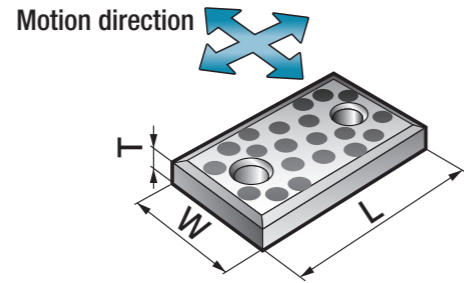
Part No.	I.D.		O.D.		Length		l_1	l_2
	ϕd	Tolerance	ϕD	Tolerance	L	Tolerance		
SGB-254040	25	$^{+0.021}_0$	40	± 0.008	40	$^0_{-0.2}$	10	5
SGB-305050	30	$^{+0.021}_0$	50	± 0.008	50	$^0_{-0.2}$	10	5
SGB-356055	35	$^{+0.025}_0$	60	± 0.0095	55	$^0_{-0.2}$	15	5
SGB-406060	40	$^{+0.025}_0$	60	± 0.0095	60	$^0_{-0.2}$	10	5
SGB-507075	50	$^{+0.025}_0$	70	± 0.0095	75	$^0_{-0.2}$	15	10
SGB-608090	60	$^{+0.030}_0$	80	± 0.0095	90	$^0_{-0.2}$	20	10
SGB-80100120	80	$^{+0.030}_0$	100	± 0.011	120	$^0_{-0.2}$	25	10
SGB-100120150	100	$^{+0.035}_0$	120	± 0.011	150	$^0_{-0.2}$	25	10
SGB-120140180	120	$^{+0.035}_0$	140	± 0.0125	180	$^0_{-0.2}$	25	10

▲ The dimensional tolerances are the values measured at +25°C.



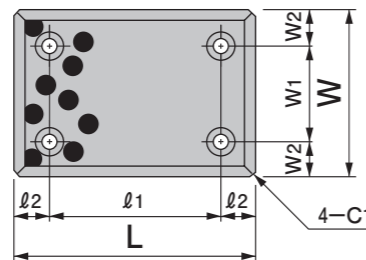
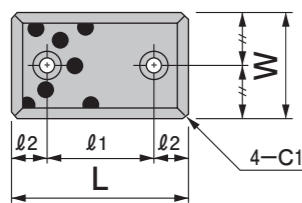
Specify Part No. by required width and length.

(e.g.) Width is 75mm and length is 200mm. **SWP - 75200**

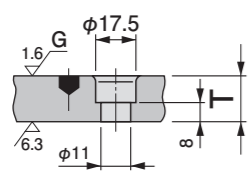


Part No.

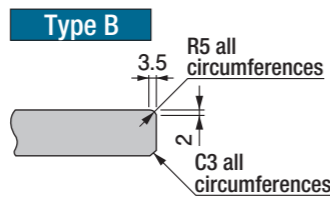
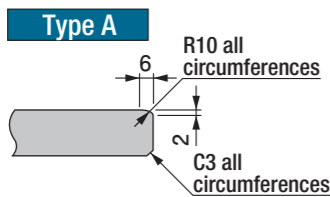
● Motion direction: width and length direction



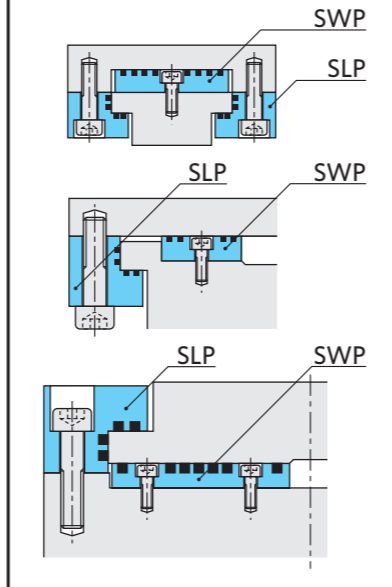
Cross-section



Chamfering



Example of combination use with SLP.

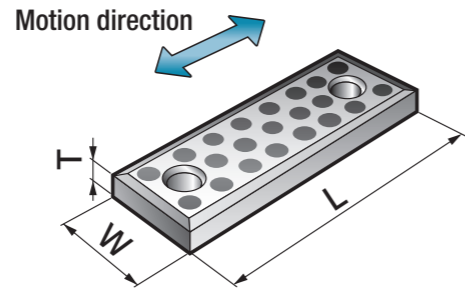


Part No.	Width		Length		Thickness		Mounting hole intervals					Attach bolts		Chamfering	
	W	Tolerance	L	Tolerance	T	Tolerance	W1	Tolerance	W2	l1	Tolerance	l2	Type		Qty
SWP-4875	48	-0.1 -0.3	75	-0.1 -0.3	20	± 0.025	—	—	—	45	± 0.2	15	M10 Hexagon socket head	2	B
SWP-48100	48	-0.1 -0.3	100	-0.1 -0.3	20	± 0.025	—	—	—	50	± 0.2	25	M10 Hexagon socket head	2	B
SWP-48125	48	-0.1 -0.3	125	-0.1 -0.3	20	± 0.025	—	—	—	75	± 0.2	25	M10 Hexagon socket head	2	B
SWP-48150	48	-0.1 -0.3	150	-0.1 -0.3	20	± 0.025	—	—	—	100	± 0.2	25	M10 Hexagon socket head	2	B
SWP-7575B	75	-0.1 -0.3	75	-0.1 -0.3	20	± 0.025	—	—	—	25	± 0.2	25	M10 Hexagon socket head	2	A
SWP-75100B	75	-0.1 -0.3	100	-0.1 -0.3	20	± 0.025	—	—	—	50	± 0.2	25	M10 Hexagon socket head	2	A
SWP-75125	75	-0.1 -0.3	125	-0.1 -0.3	20	± 0.025	—	—	—	75	± 0.2	25	M10 Hexagon socket head	2	A
SWP-75150	75	-0.1 -0.3	150	-0.1 -0.3	20	± 0.025	—	—	—	100	± 0.2	25	M10 Hexagon socket head	2	A
SWP-75200	75	-0.1 -0.3	200	-0.1 -0.3	20	± 0.025	—	—	—	150	± 0.2	25	M10 Hexagon socket head	2	A
SWP-100100	100	-0.1 -0.3	100	-0.1 -0.3	20	± 0.025	50	± 0.2	25	50	± 0.2	25	M10 Hexagon socket head	4	A
SWP-100125	100	-0.1 -0.3	125	-0.1 -0.3	20	± 0.025	50	± 0.2	25	75	± 0.2	25	M10 Hexagon socket head	4	A
SWP-100150	100	-0.1 -0.3	150	-0.1 -0.3	20	± 0.025	50	± 0.2	25	100	± 0.2	25	M10 Hexagon socket head	4	A
SWP-100200	100	-0.1 -0.3	200	-0.1 -0.3	20	± 0.025	50	± 0.2	25	150	± 0.2	25	M10 Hexagon socket head	4	A
SWP-100250	100	-0.1 -0.3	250	-0.1 -0.3	20	± 0.025	50	± 0.2	25	200	± 0.2	25	M10 Hexagon socket head	4	A
SWP-125150	125	-0.1 -0.3	150	-0.1 -0.3	20	± 0.025	50	± 0.2	37.5	100	± 0.2	25	M10 Hexagon socket head	4	A
SWP-125200	125	-0.1 -0.3	200	-0.1 -0.3	20	± 0.025	50	± 0.2	37.5	150	± 0.2	25	M10 Hexagon socket head	4	A
SWP-125250	125	-0.1 -0.3	250	-0.1 -0.3	20	± 0.025	50	± 0.2	37.5	200	± 0.2	25	M10 Hexagon socket head	4	A
SWP-150150	150	-0.1 -0.3	150	-0.1 -0.3	20	± 0.025	100	± 0.2	25	100	± 0.2	25	M10 Hexagon socket head	4	A
SWP-150200	150	-0.1 -0.3	200	-0.1 -0.3	20	± 0.025	100	± 0.2	25	150	± 0.2	25	M10 Hexagon socket head	4	A
SWP-150250	150	-0.1 -0.3	250	-0.1 -0.3	20	± 0.025	100	± 0.2	25	200	± 0.2	25	M10 Hexagon socket head	4	A

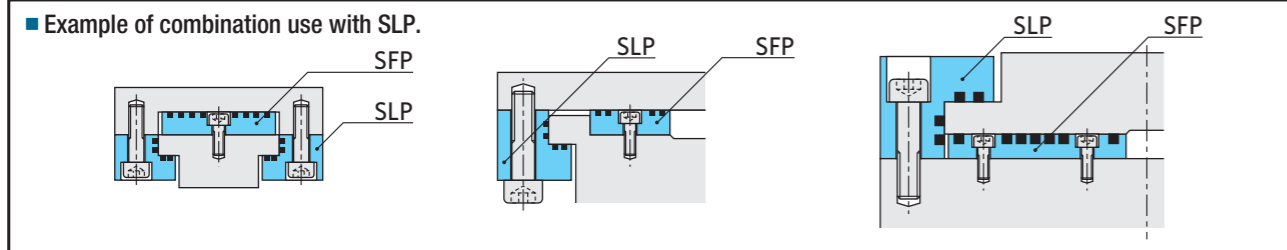


Specify Part No. by required width and length.
(e.g.) Width is 28mm and length is 150mm.

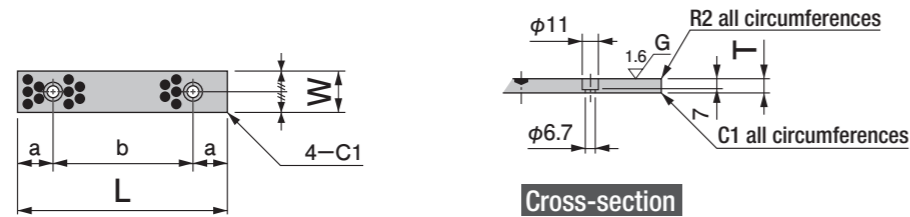
SFP - 28150
Part No.



● Motion direction: length direction

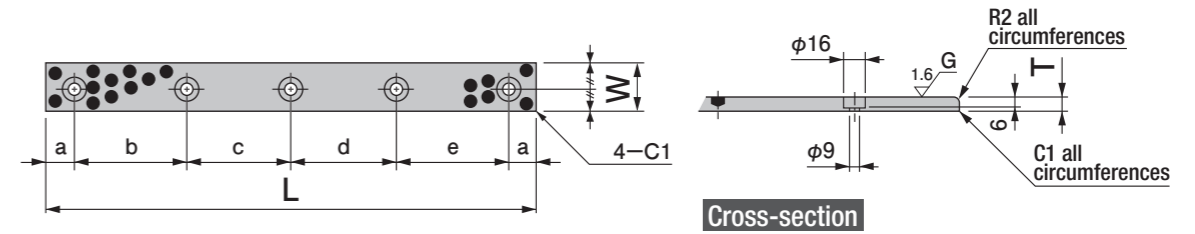


W=18, 28, 38, 48



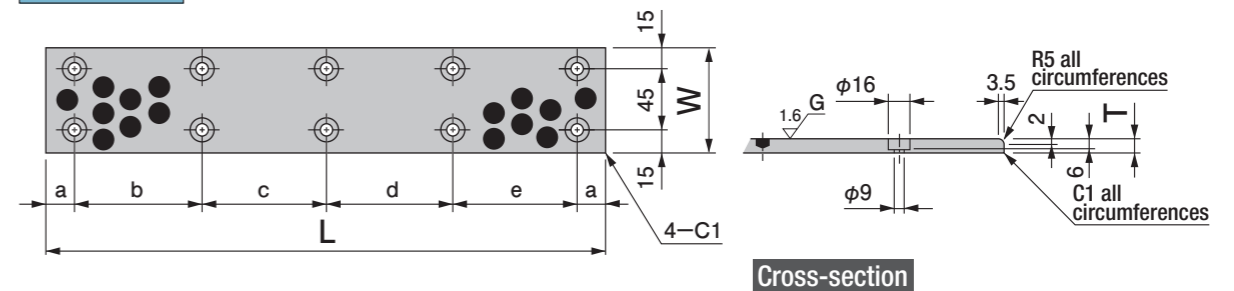
Part No.	Width		Length	Thickness	Hole intervals		Attach bolts	
	W	L			T	Tolerance	a	b
SFP-1875	18	75	10	+0.04 +0.01	15	45	M6 Hexagon socket head	2
SFP-18100	18	100	10	+0.04 +0.01	25	50	M6 Hexagon socket head	2
SFP-18125	18	125	10	+0.04 +0.01	25	75	M6 Hexagon socket head	2
SFP-18150	18	150	10	+0.04 +0.01	25	100	M6 Hexagon socket head	2
SFP-2875	28	75	10	+0.04 +0.01	15	45	M6 Hexagon socket head	2
SFP-28100	28	100	10	+0.04 +0.01	25	50	M6 Hexagon socket head	2
SFP-28125	28	125	10	+0.04 +0.01	25	75	M6 Hexagon socket head	2
SFP-28150	28	150	10	+0.04 +0.01	25	100	M6 Hexagon socket head	2
SFP-3875	38	75	10	+0.04 +0.01	15	45	M6 Hexagon socket head	2
SFP-38100	38	100	10	+0.04 +0.01	25	50	M6 Hexagon socket head	2
SFP-38125	38	125	10	+0.04 +0.01	25	75	M6 Hexagon socket head	2
SFP-38150	38	150	10	+0.04 +0.01	25	100	M6 Hexagon socket head	2
SFP-4875	48	75	10	+0.04 +0.01	15	45	M6 Hexagon socket head	2
SFP-48100	48	100	10	+0.04 +0.01	25	50	M6 Hexagon socket head	2
SFP-48125	48	125	10	+0.04 +0.01	25	75	M6 Hexagon socket head	2
SFP-48150	48	150	10	+0.04 +0.01	25	100	M6 Hexagon socket head	2

W=35, 50



Part No.	Width		Length	Thickness	Hole intervals					Attach bolts	
	W	L			T	Tolerance	a	b	c	d	e
SFP-35100	35	100	10	±0.025	20	60	—	—	—	M8 Flat head	2
SFP-35150	35	150	10	±0.025	20	55	55	—	—	M8 Flat head	3
SFP-35200	35	200	10	±0.025	20	55	50	55	—	M8 Flat head	4
SFP-35250	35	250	10	±0.025	20	70	70	70	—	M8 Flat head	4
SFP-35300	35	300	10	±0.025	20	65	65	65	65	M8 Flat head	5
SFP-35350	35	350	10	±0.025	20	80	75	75	80	M8 Flat head	5
SFP-50100	50	100	10	±0.025	20	60	—	—	—	M8 Flat head	2
SFP-50150	50	150	10	±0.025	20	55	55	—	—	M8 Flat head	3
SFP-50200	50	200	10	±0.025	20	55	50	55	—	M8 Flat head	4
SFP-50250	50	250	10	±0.025	20	70	70	70	—	M8 Flat head	4
SFP-50300	50	300	10	±0.025	20	65	65	65	65	M8 Flat head	5
SFP-50400	50	400	10	±0.025	20	90	90	90	90	M8 Flat head	5

W=75



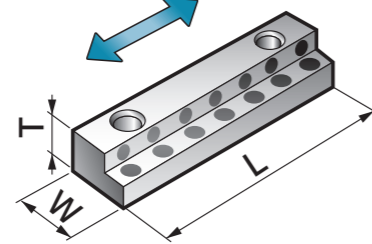
Part No.	Width		Length	Thickness	Hole intervals					Attach bolts	
	W	L			T	Tolerance	a	b	c	d	e
SFP-75150	75	150	10	±0.025	20	110	—	—	—	M8 Flat head	4
SFP-75200	75	200	10	±0.025	20	80	80	—	—	M8 Flat head	6
SFP-75250	75	250	10	±0.025	20	105	105	—	—	M8 Flat head	6
SFP-75300	75	300	10	±0.025	20	85	90	85	—	M8 Flat head	8
SFP-75400	75	400	10	±0.025	20	120	120	120	—	M8 Flat head	8
SFP-75500	75	500	10	±0.025	20	115	115	115	115	M8 Flat head	10



Specify Part No. by required width and length.
(e.g.) Width is 50mm and length is 300mm.

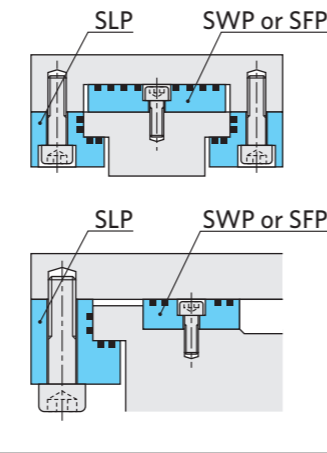
SLP - 50300A
Part No.

Motion direction

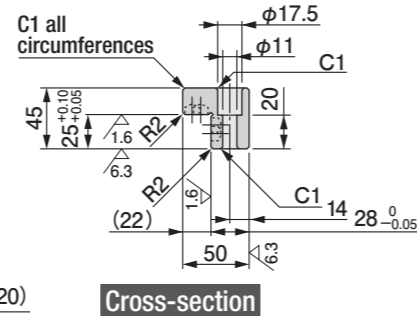
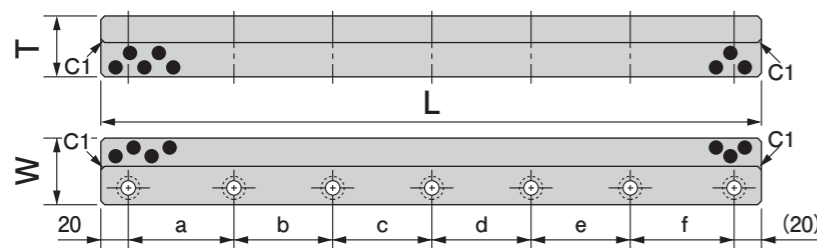


● Motion direction: length direction

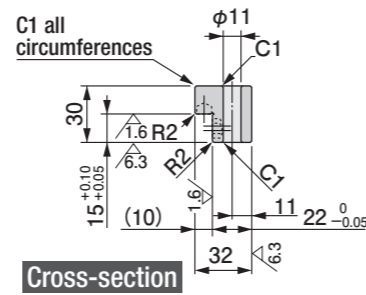
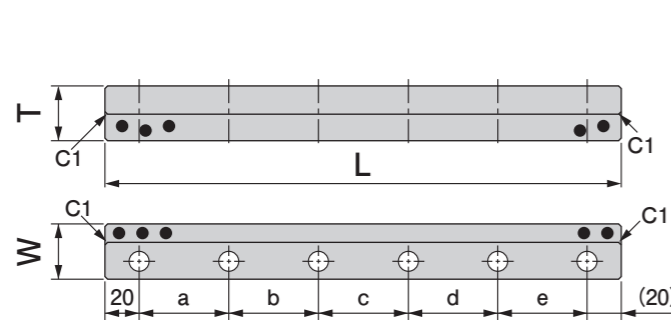
■ Example of combination use with SWP or SFP.



● Hexagonal socket head bolts are fitted.

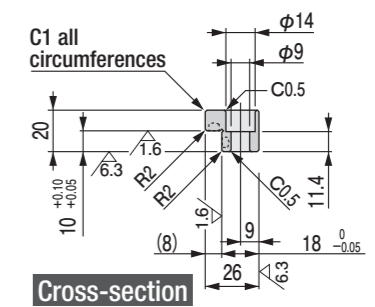
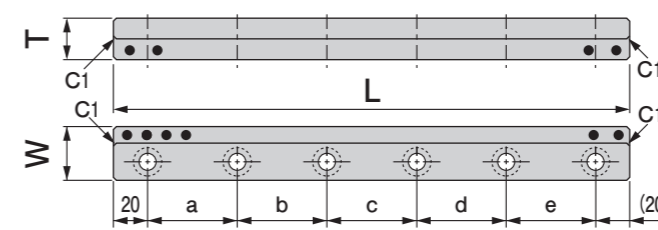


Part No.	Width		Length	Thickness	Hole intervals					Attach bolts	
	W	L			a	b	c	d	e	f	Type
SLP-50200A	50	200	45	55	50	55	—	—	—	M10 Hexagon socket head	4
SLP-50250A	50	250	45	70	70	70	—	—	—	M10 Hexagon socket head	4
SLP-50300A	50	300	45	65	65	65	65	—	—	M10 Hexagon socket head	5
SLP-50350A	50	350	45	80	75	75	80	—	—	M10 Hexagon socket head	5
SLP-50500A	50	500	45	80	75	75	75	75	80	M10 Hexagon socket head	7

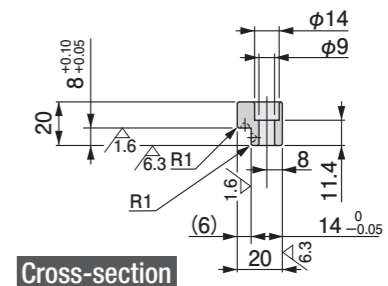
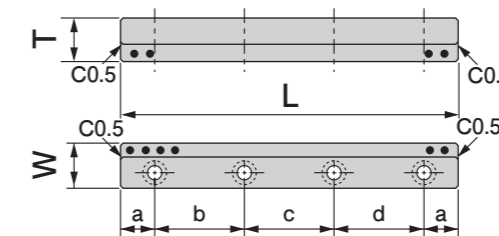


Part No.	Width		Length	Thickness	Hole intervals					Attach bolts	
	W	L			a	b	c	d	e	Type	Qty
SLP-32100B	32	100	30	60	—	—	—	—	—	M10	2
SLP-32150B	32	150	30	55	55	—	—	—	—	M10	3
SLP-32200B	32	200	30	55	50	55	—	—	—	M10	4
SLP-32250B	32	250	30	70	70	70	—	—	—	M10	4
SLP-32400B	32	400	30	75	70	70	70	75	—	M10	6

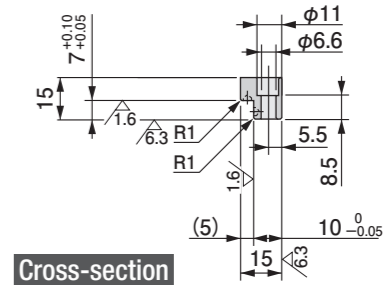
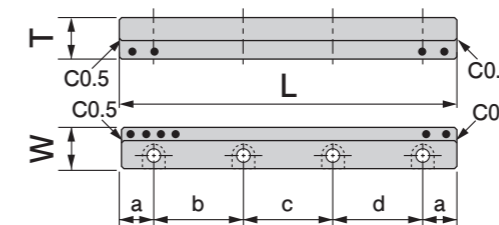
● Hexagonal socket head bolts are fitted.



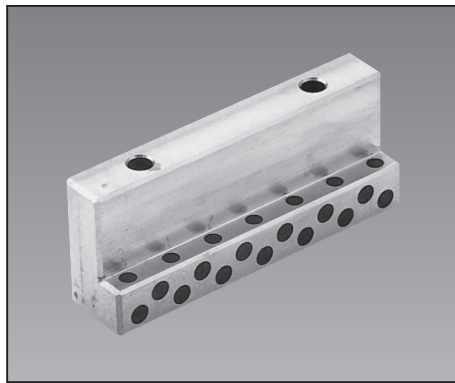
Part No.	Width		Length	Thickness	Hole intervals					Attach bolts	
	W	L			a	b	c	d	e	Type	Qty
SLP-26100C	26	100	20	60	—	—	—	—	—	M8 Hexagon socket head	2
SLP-26150C	26	150	20	55	55	—	—	—	—	M8 Hexagon socket head	3
SLP-26200C	26	200	20	55	50	55	—	—	—	M8 Hexagon socket head	4
SLP-26400C	26	400	20	75	70	70	70	75	—	M8 Hexagon socket head	6



Part No.	Width		Length	Thickness	Hole intervals				Attach bolts	
	W	L			a	b	c	d	Type	Qty
SLP-2050	20	50	20	10	30	—	—	—	M8 Hexagon socket head	2
SLP-20100	20	100	20	20	60	—	—	—	M8 Hexagon socket head	2
SLP-20150	20	150	20	20	55	55	—	—	M8 Hexagon socket head	3
SLP-20200	20	200	20	20	55	50	55	—	M8 Hexagon socket head	4

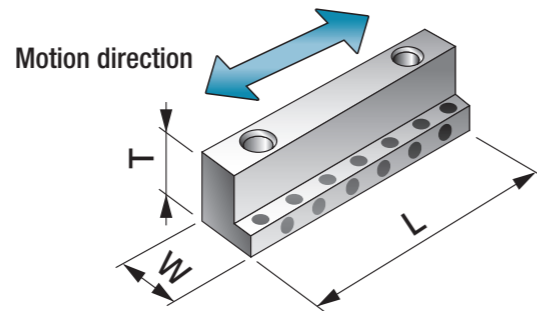


Part No.	Width		Length	Thickness	Hole intervals				Attach bolts	
	W	L			a	b	c	d	Type	Qty
SLP-1550	15	50	15	10	30	—	—	—	M6 Hexagon socket head	2
SLP-15100	15	100	15	20	60	—	—	—	M6 Hexagon socket head	2
SLP-15150	15	150	15	20	55	55	—	—	M6 Hexagon socket head	3
SLP-15200	15	200	15	20	55	50	55	—	M6 Hexagon socket head	4



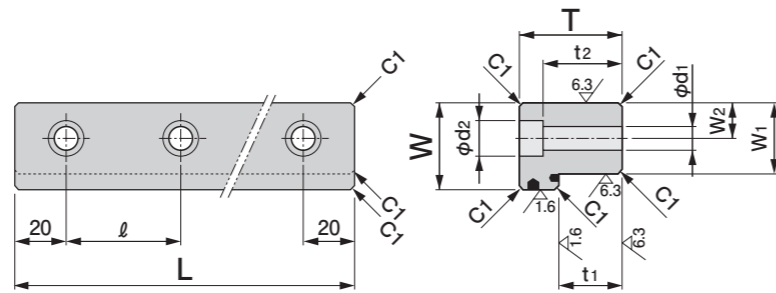
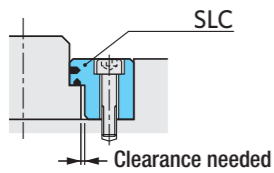
Specify Part No. by required thickness and length.
(e.g.) Thickness is 20mm and length is 100mm.

SLC - 41100
Part No.



● Motion direction: length direction

■ Example of attachment.

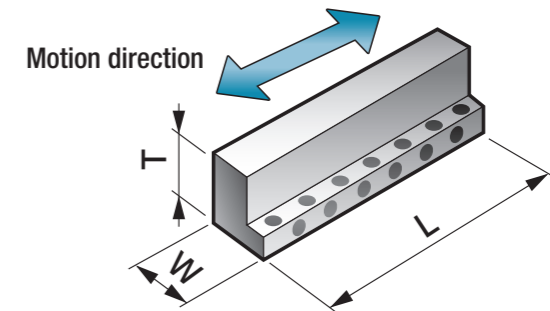


Part No.	Thickness		Length		Width				Attach bolts						
	T	L	W	Tolerance	t ₁	Tolerance	W ₁	Tolerance	ℓ	W ₂	φd ₁	φd ₂	t ₂	Type	Qty
SLC-30100	30	100	23	-0.01 -0.05	15	+0.05 +0.02	15	0 -0.05	60	7.5	7	11	23	M6 Hexagon socket head	2
SLC-30130	30	130	23	-0.01 -0.05	15	+0.05 +0.02	15	0 -0.05	90	7.5	7	11	23	M6 Hexagon socket head	2
SLC-30160	30	160	23	-0.01 -0.05	15	+0.05 +0.02	15	0 -0.05	60	7.5	7	11	23	M6 Hexagon socket head	3
SLC-30220	30	220	23	-0.01 -0.05	15	+0.05 +0.02	15	0 -0.05	60	7.5	7	11	23	M6 Hexagon socket head	4
SLC-41100	41	100	23	-0.01 -0.05	26	+0.05 +0.02	15	0 -0.05	60	7.5	7	11	34	M6 Hexagon socket head	2
SLC-41130	41	130	23	-0.01 -0.05	26	+0.05 +0.02	15	0 -0.05	90	7.5	7	11	34	M6 Hexagon socket head	2
SLC-41160	41	160	23	-0.01 -0.05	26	+0.05 +0.02	15	0 -0.05	60	7.5	7	11	34	M6 Hexagon socket head	3
SLC-41220	41	220	23	-0.01 -0.05	26	+0.05 +0.02	15	0 -0.05	60	7.5	7	11	34	M6 Hexagon socket head	4
SLC-56100	56	100	28	-0.01 -0.05	26	+0.05 +0.02	20	0 -0.05	60	10	9	14	47	M8 Hexagon socket head	2
SLC-56160	56	160	28	-0.01 -0.05	26	+0.05 +0.02	20	0 -0.05	60	10	9	14	47	M8 Hexagon socket head	3
SLC-56220	56	220	28	-0.01 -0.05	26	+0.05 +0.02	20	0 -0.05	60	10	9	14	47	M8 Hexagon socket head	4

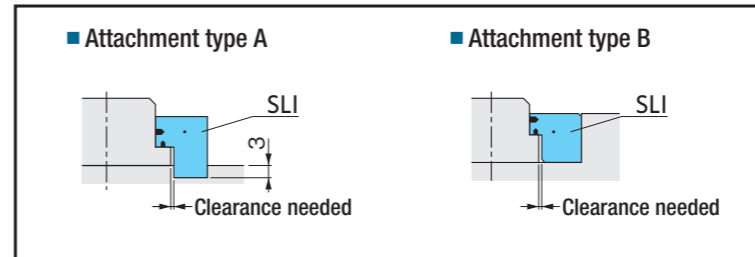
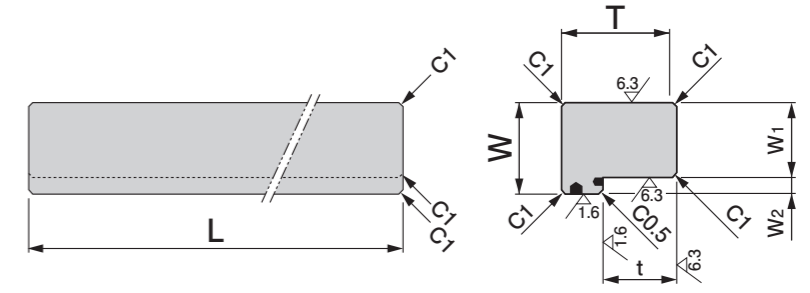


Specify Part No. by required thickness and length.
(e.g.) Thickness is 20mm.

SLI - 20300
Part No.



- This slide guide rail may be cut to the necessary dimension or bored for bolts.
- The movement direction is lengthwise.



Part No.	Thickness		Length		Width		Attachment			
	T	L	W	Tolerance	t	Tolerance	W ₁	Tolerance	W ₂	Attachment type
SLI-20300	20	300	15	-0.01 -0.05	11	+0.05 +0.02	10	0 -0.05	5	A
SLI-25300	25	300	23	-0.01 -0.05	10	+0.05 +0.02	15	0 -0.05	8	B