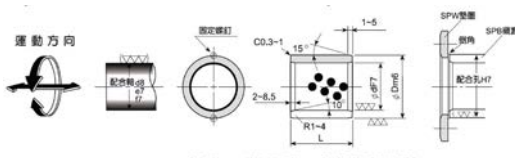




# 銅自潤軸承







●配合軸φ：一般用（高負荷） ●芯承受軸向負荷時請配合  
 φ7：一般用（輕負荷） SPW組合使用、  
 φ7：高轉速用、

Length									Tolerance <sup>-0.1</sup> <sub>-0.3</sub>		ID	OD	Mating washer SPW
50	60	70	80	100	120	130	140	150					
SPB	SPB	SPB	SPB	SPB	SPB	SPB	SPB	SPB					
									8	12	-----		
									10	14	-1003		
									12	18	-1203		
									13	19	-1303		
									14	20	-1403		
									15	21	-1503		
									16	22	-1603		
									18	24	-1803		
-202850									20	28	-2005		
									20	30	"		
-253350	-253360								25	33	-2505		
-253550									25	35	"		
-303850	-303860								30	38	-3005		
-304050	-304060								30	40	"		
									31.5	40	-----		
-354450	-354460								35	44	-3505		
-354550	-354560								35	45	"		
-405050	-405060	-405070	-405080						40	50	-4007		
-405550	-405560								40	55	"		
-455550	-455560								45	55	-4507		
-455650	-455660								45	56	"		
-456050	-456060	-456070	-456080						45	60	"		
-506050	-506060	-506070	-506080						50	60	-5008		
-506250	-506260	-506270							50	62	"		
-506550	-506560	-506570	-506580	-5065100					50	65	"		
-557050	-557060	-557070							55	70	-5508		
-607450	-607460	-607470	-607480						60	74	-6008		
-607550	-607560	-607570	-607580	-6075100					60	75	"		
	-637560	-637570	-637580						63	75	-----		
-658050	-658060	-658070	-658080						65	80	-6508		
-708550	-708560	-708570	-708580	-7085100					70	85	-7010		
-709050	-709060	-709070	-709080						70	90	"		
-759050	-759060	-759070	-759080	-7090100					75	90	-7510		
	-759560	-759570	-759580	-7595100					75	95	"		
-809650	-809660	-809670	-809680	-8096100	-8096120				80	96	-8010		
-8010050	-8010060	-8010070	-8010080	-80100100	-80100120		-80100140		80	100	"		
-9011050	-9011060		-9011080	-90110100	-90110120				90	110	-9010		
-10012050	-10012060	-10012070	-10012080	-100120100	-100120120		-100120140		100	120	-10010		
-11013050		-11013070	-11013080	-110130100	-110130120				110	130	-----		
		-12014070	-12014080	-120140100	-120140120		-120140140		120	140	-12010		
				-125140100	-125145120				125	145	-----		
			-13015080	-130150100		-130150130			130	150	-----		
				-140160100			-140160140		140	160	-----		
			-15017080	-150170100				-150170150	150	170	-----		
			-16018080	-160180100				-160180150	160	180	-----		

## SPF

- Self-lubricated Brass Alloy Bushings #500SP (SPF) can be used in rotation, swing and reciprocating motion
- Attention: There is no solid lubricant on the flange.
- Please avoid using in water
- The inner diameter of 31.5mm is in the middle of the hydraulic cylinder trunnion bushing.

Self-lubricated Bushings #500SP (SPF)  
For rotation, swing and reciprocating motion

Item No: SPF-XX XX

ID Length

Shaft Diameter	Dimension (mm)							Length			Tolerance	
	ID		OD		Flange			10	15	20	25	30
	Ød	TOL	ØD	TOL	ØF	Thickness	TOL	SPF	SPF	SPF	SPF	SPF
10	10	+0.04	14	+0.034	22	2	0	-1010	-1015	-1020		
		+0.025		+0.023			-0.1					
12	12	+0.05	18	+0.034	25	3	"	-1210	-1215	-1220	-1225	-1230
		+0.032		+0.023								
13	13	+0.05	19	+0.041	26	3	"		-1315	-1320		
		+0.032		+0.028								
14	14	+0.05	20	+0.041	27	3	"		-1415	-1420	-1425	
		+0.032		+0.028								
15	15	+0.05	21	+0.041	28	3	"	-1510	-1515	-1520	-1525	-1530
		+0.032		+0.028								
16	16	+0.05	22	+0.041	29	3	"		-1615	-1620	-1625	-1630
		+0.032		+0.028								
20	20	+0.061	30	+0.041	40	5	"		-2015	-2020	-2025	-2030
		+0.04		+0.028								
25	25	+0.061	35	+0.05	45	5	"		-2515	-2520	-2525	-2530
		+0.04		+0.034								
30	30	+0.061	40	+0.05	50	5	"			-3020	-3025	-3030
		+0.04		+0.034								
31.5	31.5	+0.075	40	+0.05	50	5	"			-3120		-3130
		+0.05		+0.034								
35	35	+0.075	45	+0.05	60	5	"			-3520	-3525	-3530
		+0.05		+0.034								
40	40	+0.075	50	+0.05	65	5	"			-4020	-4025	-4030
		+0.05		+0.034								
45	45	+0.075	55	+0.073	70	5	"					-4530
		+0.05		+0.041								
50	50	+0.075	60	+0.073	75	5	"					-5030
		+0.05		+0.041								
55	55	+0.09	65	+0.073	80	5	"					
		+0.06		+0.041								
60	60	+0.09	75	+0.062	90	7.5	"					
		+0.06		+0.043								
63	63	+0.09	75	+0.062	85	7.5	"					
		+0.06		+0.043								
70	70	+0.09	85	+0.083	105	7.5	"					
		+0.06		+0.051								
75	75	+0.09	90	+0.083	110	7.5	"					
		+0.06		+0.051								
80	80	+0.09	100	+0.083	120	10	"					
		+0.06		+0.051								
90	90	+0.107	110	+0.076	130	10	"					
		+0.072		+0.054								
100	100	+0.107	120	+0.076	150	10	"					
		+0.072		+0.054								
120	120	+0.107	140	+0.088	170	10	"					
		+0.072		+0.063								

Shaft Diameter	Length							Tolerance e -0.1 -0.3	ID	OD
	35	40	50	60	67.5	80	100			
	SPF	SPF	SPF	SPF	SPF	SPF	SPF			
10								10	14	
12								12	18	
13								13	19	
14								14	20	
15								15	21	
16	-1635	-1640						16	22	
20		-2040						20	30	
25	-2535	-2540	-2550					25	35	
30	-3035	-3040	-3050					30	40	
31.5	-3135	-3140						31.5	40	
35	-3535	-3540	-3550					35	45	
40	-4035	-4040	-4050					40	50	
45	-4535	-4540	-4550	-4560				45	55	
50	-5035	-5040	-5050	-5060				50	60	
55		-5540		-5560				55	65	
60		-6040	-6050	-6060		-6080		60	75	
63					-6367			63	75	
70			-7050			-7080		70	85	
75				-7560				75	90	
80				-8060		-8080	-80100	80	100	
90				-9060		-9080		90	110	
100						-10080	-100100	100	120	
120						-12080	-120100	120	140	

# SPW

## Self-lubricated Bushings #500SP Thrust Washers (SPW)

\*Please refer to SPB configuration

\*Can be combined with SPB product

ITEM NO=SPW-XX XX  
ID Thickness

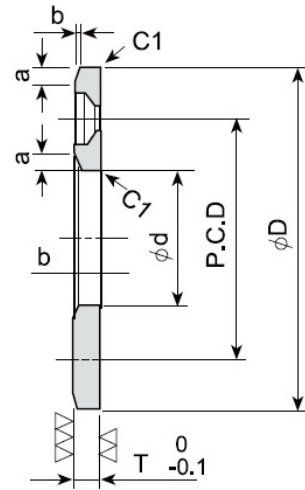
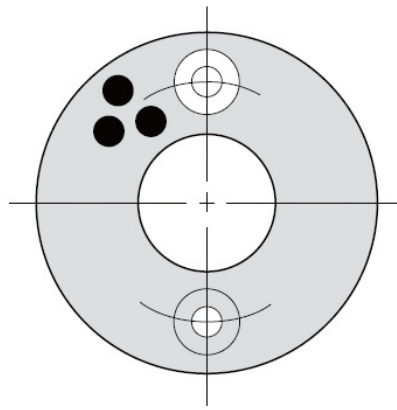


Dimension (mm)		Thickness		Tolerance <sup>-0</sup> / <sub>-0.1</sub>	
ID	OD	3	5	7	8
Ød	ØD	SPW	SPW	SPW	SPW
10.2	30	-1003			
12.2	40	-1203			
12.2	40	-1203N			
13.2	40	-1303			
14.2	40	-1403			
15.2	50	-1503			
16.2	50	-1603			
16.2	50	-1603N			
18.2	50	-1803			
20.2	50		-2005		
25.2	55		-2505		
30.2	60		-3005		
35.2	70		-3505		
40.2	80			-4007	
45.2	90			-4507	
50.3	100				-5008
55.3	110				-5508
60.3	120				-6008
65.3	125				-6508
70.3	130				
75.3	140				
80.3	150				
90.5	170				
100.5	190				
120.5	200				

**Self-lubricated Bushings #500SP  
Thrust Washers (SPW)**

\*Please refer to SPB configuration  
\*Can be combined with SPB product

**ITEM NO=SPW-XX XX  
ID Thickness**



10	Mounting hole			Chamfer	
	SPW	P.C.D	Q'ty countersunk bolt screw	a	b
	20	2	M3	1.5	0.3
	28	2	M3	2	0.4
		no countersunk bolt hole		2	0.4
	28	2	M3	2	0.4
	28	2	M3	2	0.4
	35	2	M3	2	0.4
	35	2	M3	2	0.4
		no countersunk bolt hole		2	0.4
	35	2	M3	2	0.4
	35	2	M5	2.5	0.4
	40	2	M5	2.5	0.4
	45	2	M5	2.5	0.4
	50	2	M5	2.5	0.4
	60	2	M6	3	0.5
	70	2	M6	3	0.5
	75	4	M6	4	0.6
	85	4	M6	4	0.6
	90	4	M8	5	0.8
	95	4	M8	5	0.8
-7010	100	4	M8	5	0.8
-7510	110	4	M8	5	0.8
-8010	120	4	M8	5	0.8
-9010	140	4	M10	5	0.8
-10010	160	4	M10	5	0.8
-12010	175	4	M10	5	0.8