



SELF LUBRICATING BRASS BUSHING



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

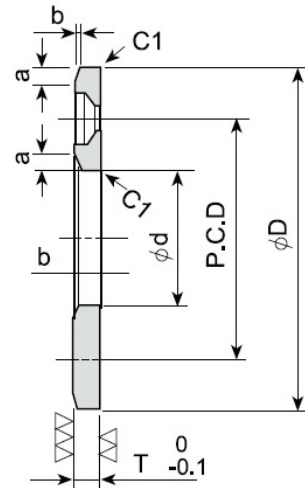
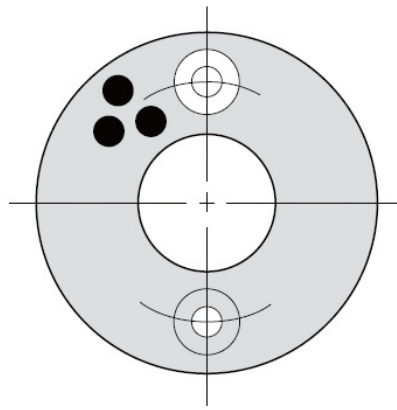


Dimension (mm)		Thickness		Tolerance ⁻⁰ / _{-0.1}	
ID	OD	3	5	7	8
∅d	∅D	SPW	SPW	SPW	SPW
10.2	30	-1003			
12.2	40	-1203			
12.2	40	-1203N			
13.2	40	-1303			
14.2	40	-1403			
15.2	50	-1503			
16.2	50	-1603			
16.2	50	-1603N			
18.2	50	-1803			
20.2	50		-2005		
25.2	55		-2505		
30.2	60		-3005		
35.2	70		-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