

(inch)

I.D.		O.D.		L		+.000 -.012											
d	D	1/2	5/8	3/4	7/8	1	1-1/4	1-1/2	1-3/4	2	2-1/2	3	3-1/2	4	5		
1/2	.5033 .5026	3/4	.7518 .7513	SPBN-081208	SPBN-081210	SPBN-081212	SPBN-081214	SPBN-081216									
5/8	.6283 .6276	7/8	.8768 .8763		SPBN-101410	SPBN-101412		SPBN-101416									
3/4	.7536 .7528	1-1/8	1.1268 1.1263		SPBN-121810	SPBN-121812		SPBN-121816									
7/8	.8788 .8780	1-1/4	1.2520 1.2513			SPBN-142012		SPBN-142016	SPBN-142020	SPBN-142024							
1	1.0042 1.0034	1-3/8	1.3772 1.3765			SPBN-162212		SPBN-162216	SPBN-162020	SPBN-162224	SPBN-162228	SPBN-162232					
1	1.0042 1.0034	1-1/2	1.5022 1.5015			SPBN-162412		SPBN-162416		SPBN-162424		SPBN-162432					
1-1/4	1.2546 1.2536	1-5/8	1.6272 1.6265					SPBN-202616	SPBN-202620	SPBN-202624	SPBN-202628	SPBN-202632					
1-1/2	1.5049 1.5039	2	2.0023 2.0015					SPBN-243216	SPBN-243220	SPBN-243224	SPBN-243228	SPBN-243232					
1-3/4	1.7551 1.7541	2-1/4	2.2523 2.2515					SPBN-283620	SPBN-283624	SPBN-283628	SPBN-283632	SPBN-283640	SPBN-283648	SPBN-283656	SPBN-283664		
2	2.0062 2.0050	2-1/2	2.503 2.5022					SPBN-324020	SPBN-324024		SPBN-324032	SPBN-324040	SPBN-324048				
2-1/4	2.2564 2.2552	2-3/4	2.7530 2.7522						SPBN-364424		SPBN-364432	SPBN-364440	SPBN-364448				
2-1/2	2.5066 2.5054	3	3.0030 3.0022						SPBN-404824		SPBN-404832		SPBN-404848				
2-3/4	2.7569 2.7557	3-3/8	3.3781 3.3772						SPBN-445424		SPBN-445432	SPBN-445440	SPBN-445448				
3	3.0073 3.0061	3-5/8	3.6283 3.6274								SPBN-485832	SPBN-485840	SPBN-485848	SPBN-485856			
3-1/2	3.5077 3.5063	4-1/8	4.1283 4.1274								SPBN-566632		SPBN-566648		SPBN-566664		
4	4.0083 4.0069	4-3/4	4.7535 4.7526								SPBN-647632		SPBN-647648		SPBN-647664		
4-1/2	4.5086 4.5072	5-3/8	5.3786 5.3776										SPBN-728648		SPBN-728664	SPBN-728680	
5	5.0096 5.008	6	6.0040 6.003										SPBN-809648		SPBN-809664	SPBN-809680	

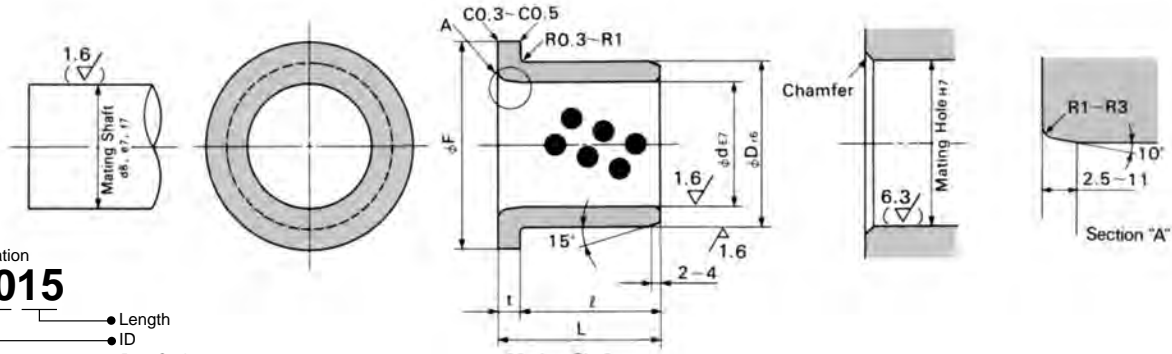
SPBN Limits and Fits

Inside Dia.	Outside Dia.	Tolerances		Clearance Max. Min.	Pressfit Max. Min.	Recommended Shaft Dia.	Recommended Bore Dia.
		I.D. d	O.D. D				
1/2	3/4	.5033 .5026	.7518 .7513	.0030 .0008	.0018 .0008	.5000 .4995	.7505 .7500
5/8	7/8	.6283 .6276	.8768 .8763	.0030 .0008	.0018 .0008	.6250 .6245	.8755 .8750
3/4	1-1/8	.7536 .7528	1.1268 1.1263	.0033 .0010	.0018 .0008	.7500 .7495	1.1255 1.1250
7/8	1-1/4	.8788 .8780	1.2520 1.2513	.0035 .0010	.0020 .0008	.8750 .8745	1.2505 1.2500
1	1-3/8	1.0042 1.0034	1.3772 1.3765	.0037 .0012	.0022 .0010	1.0000 .9995	1.3755 1.3750
1	1-1/2	1.0042 1.0034	1.5022 1.5015	.0037 .0012	.0022 .0010	1.0000 .9995	1.5005 1.5000
1-1/4	1-5/8	1.2546 1.2536	1.6272 1.6265	.0041 .0014	.0022 .0010	1.2500 1.2495	1.6255 1.6250
1-1/2	2	1.5049 1.5039	2.0023 2.0015	.0044 .0016	.0023 .0010	2.0005 1.9995	2.0005 2.0000
1-3/4	2-1/4	1.7551 1.7541	2.2523 2.2515	.0046 .0018	.0023 .0010	1.7500 1.7495	2.2505 2.2500

Inside Dia.	Outside Dia.	Tolerances		Clearance Max. Min.	Pressfit Max. Min.	Recommended Shaft Dia.	Recommended Bore Dia.
		I.D. d	O.D. D				
2	2-1/2	2.0062 2.0050	2.5030 2.5022	.0060 .0020	.0030 .0012	2.0000 1.9990	2.5010 2.5000
2-1/4	2-3/4	2.2564 2.2552	2.7530 2.7522	.0062 .0022	.0030 .0012	2.2500 2.2490	2.7510 2.7500
2-1/2	3	2.5066 2.5054	3.0030 3.0022	.0064 .0024	.0030 .0012	2.5000 2.4990	3.0010 3.0000
2-3/4	3-3/8	2.7569 2.7557	3.3781 3.3772	.0067 .0026	.0031 .0012	2.7500 2.7490	3.3760 3.3750
3	3-5/8	3.0073 3.0061	3.6283 3.6274	.0069 .0028	.0033 .0014	3.0000 2.9990	3.6260 3.6250
3-1/2	4-1/8	3.5077 3.5063	4.1283 4.1274	.0073 .0030	.0033 .0014	3.5000 2.4990	4.1260 4.1250
4	4-3/8	4.0083 4.0069	4.7535 4.7526	.0077 .0034	.0035 .0016	4.0000 3.9990	4.7510 4.7500
4-1/2	5-3/8	4.5086 4.5072	5.3786 5.3776	.0080 .0036	.0036 .0016	4.5000 4.4990	5.3760 5.3750
5	6	5.0096 5.0080	6.0040 6.0030	.0086 .0040	.0040 .0020	5.0000 4.9990	6.0010 6.0000



OILES 500SP Flanged Bushings (SPF)



Product Identification SPF-1015

- Length
- ID
- Part Code

I.D.	O.D.	Flange		L	0												Max Load N	Max Load lbs	Max RPM						
					-0																				
d	D	F	t	10	12	15	17	18	20	23	25	30	35	40	50	60	68	80	100	120					
6	0.032 0.02	10	0.028 0.019	16	2	0 -0.1	X	X															2,784	626	1,592
8	0.04 0.025	12	0.034 0.023	20	2	0 -0.1	X	X	X														4,640	1,043"	1,194
10	0.04 0.025	14	0.034 0.023	22	2	0 -0.1	X	X	X	X		X											6,380	1,434	955
12	0.05 0.032	18	0.034 0.023	25	3	0 -0.1	X	X	X			X	X	X									8,700	1,956	796
13	0.05 0.032	19	0.041 0.028	26	3	0 -0.1	X	X	X			X	X	X									9,802	2,204	735
14	0.05 0.032	20	0.041 0.028	27	3	0 -0.1			X			X	X										10,962	2,464	682
15	0.05 0.032	21	0.041 0.028	28	3	0 -0.1	X	X	X			X	X	X									12,180	2,738	637
16	0.05 0.032	22	0.041 0.028	29	3	0 -0.1		X	X			X	X	X	X	X							13,456	3,025	597
18	0.05 0.032	24	0.041 0.028	32	3	0 -0.1			X			X	X	X	X	X							16,704	3,755	531
20	0.061 0.04	30	0.041 0.028	40	5	0 -0.1			X			X	X	X	X	X							23,200	5,216	477
25	0.061 0.04	35	0.05 0.034	45	5	0 -0.1			X			X	X	X	X	X	X						32,625	7,334	382
30	0.061 0.04	40	0.05 0.034	50	5	0 -0.1						X	X	X	X	X	X						43,500	9,779	318
31.5	0.075 0.05	40	0.05 0.034	50	5	0 -0.1						X		X	X	X							45,675	10,268	303
35	0.075 0.05	45	0.05 0.034	60	5	0 -0.1						X	X	X	X	X	X						60,900	13,691	273
40	0.075 0.05	50	0.05 0.034	65	5	0 -0.1						X	X	X	X	X	X						75,400	16,951	239
45	0.075 0.05	55	0.06 0.041	70	5	0 -0.1							X	X	X	X	X						91,350	20,536	212
50	0.075 0.05	60	0.06 0.041	75	5	0 -0.1								X	X	X	X	X					108,750	24,448	191
55	0.09 0.06	65	0.06 0.041	80	5	0 -0.1									X		X						127,600	28,686	174
60	0.09 0.06	75	0.062 0.043	90	7.5	0 -0.1									X	X	X			X			156,600	35,205	159
63	0.09 0.06	75	0.062 0.043	85	7.5	0 -0.1												X					155,295	34,912	152
65	0.09 0.06	80	0.062 0.043	95	7.5	0 -0.1											X						179,075	40,258	147
70	0.09 0.06	85	0.073 0.051	105	7.5	0 -0.1										X				X			213,150	47,918	136
75	0.09 0.06	90	0.073 0.051	110	7.5	0 -0.1											X						239,250	53,786	127
80	0.09 0.06	100	0.073 0.051	120	10	0 -0.1											X		X	X			278,400	62,587	119
90	0.107 0.072	110	0.076 0.054	130	10	0 -0.1											X		X				339,300	76,278	106
100	0.107 0.072	120	0.076 0.054	150	10	0 -0.1												X	X				435,000	97,792	95
120	0.107 0.072	140	0.088 0.063	170	10	0 -0.1													X	X			591,600	132,997	80
130	0.125 0.085	150	0.09 0.065	180	10	0 -0.1													X*	X*			678,600	152,555	73
140	0.125 0.085	160	0.09 0.065	190	10	0 -0.1													X*	X*			771,400	173,418	68
150	0.125 0.085	170	0.093 0.068	200	10	0 -0.1														X*	X*		870,000	195,584	64
160	0.125 0.085	180	0.093 0.068	210	10	0 -0.1														X*	X*		974,400	219,054	60

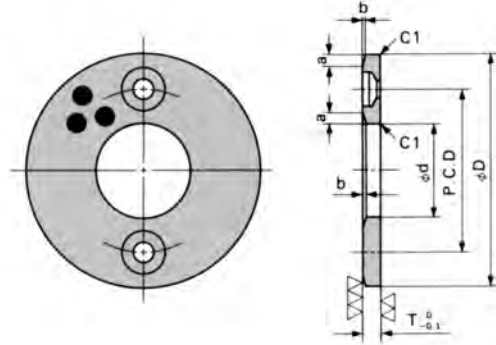
*made to order



OILES 500 SP

Washers (SPW) Washers – Inch (SPWN)

Part No.	I.D.		O.D.	Thickness		Screw Holes			Max RPM
	d			T	P.C.D.	Number of Holes	Flat Head Screw		
SPW-0603	6.2	0.2 0.1	25	3	0 -0.1	15	2	M3	612
SPW-0803	8.2	0.2 0.1	28	3	0 -0.1	18	2	M3	528
SPW-1003	10.2	0.2 0.1	30	3	0 -0.1	20	2	M3	475
SPW-1203	12.2	0.2 0.1	40	3	0 -0.1	28	2	M3	366
SPW-1203N	12.2	0.2 0.1	40	3	0 -0.1	Flat Head Screw without Hole			366
SPW-1303	13.2	0.2 0.1	40	3	0 -0.1	28	2	M3	359
SPW-1403	14.2	0.2 0.1	40	3	0 -0.1	28	2	M3	352
SPW-1503	15.2	0.2 0.1	50	3	0 -0.1	35	2	M3	293
SPW-1603	16.2	0.2 0.1	50	3	0 -0.1	35	2	M3	288
SPW-1603N	16.2	0.2 0.1	50	3	0 -0.1	Flat Head Screw without Hole			288
SPW-1803	18.2	0.2 0.1	50	3	0 -0.1	35	2	M3	280
SPW-2005	20.2	0.2 0.1	50	5	0 -0.1	35	2	M5	272
SPW-2505	25.2	0.2 0.1	55	5	0 -0.1	40	2	M5	238
SPW-3005	30.2	0.2 0.1	60	5	0 -0.1	45	2	M5	212
SPW-3505	35.2	0.2 0.1	70	5	0 -0.1	50	2	M5	182
SPW-4007	40.2	0.2 0.1	80	7	0 -0.1	60	2	M6	159
SPW-4507	45.2	0.2 0.1	90	7	0 -0.1	70	2	M6	141
SPW-5008	50.3	0.3 0.1	100	8	0 -0.1	75	4	M6	127
SPW-5508	55.3	0.3 0.1	110	8	0 -0.1	85	4	M6	116
SPW-6008	60.3	0.3 0.1	120	8	0 -0.1	90	4	M8	106
SPW-6508	65.3	0.3 0.1	125	8	0 -0.1	95	4	M8	100
SPW-7010	70.3	0.3 0.1	130	10	0 -0.1	100	4	M8	95
SPW-7510	75.3	0.3 0.1	140	10	0 -0.1	110	4	M8	89
SPW-8010	80.3	0.3 0.1	150	10	0 -0.1	120	4	M8	83
SPW-9010	90.5	0.3 0.1	170	10	0 -0.1	140	4	M10	73
SPW-10010	100.5	0.3 0.1	190	10	0 -0.1	160	4	M10	66
SPW-12010	120.5	0.3 0.1	200	10	0 -0.1	175	4	M10	60



(inch)

Part No.	I.D. d	O.D. D	Thickness	P.C.D.	Number of Holes	Screw Size
SPWN-0802	1/2	1-1/2	1/8	1-1/16	2	1/8
SPWN-1002	5/8	1-3/4	1/8	1-5/16	2	1/8
SPWN-1203	3/4	2	3/16	1-1/2	2	3/16
SPWN-1403	7/8	2-1/8	3/16	1-5/8	2	3/16
SPWN-1603	1	2-1/4	3/16	1-3/4	2	3/16
SPWN-2004	1-1/4	2-1/2	1/4	1-15/16	2	3/16
SPWN-2404	1-1/2	3	1/4	2-3/8	2	3/16
SPWN-2804	1-3/4	3-1/2	1/4	2-3/4	2	1/4
SPWN-3205	2	4	5/16	3-3/16	4	1/4
SPWN-3605	2-1/4	4-1/2	5/16	3-5/8	4	1/4
SPWN-4005	2-1/2	4-3/4	5/16	3-3/4	4	5/16
SPWN-4406	2-3/4	5-1/8	3/8	4-1/8	4	5/16
SPWN-4806	3	5-1/2	3/8	4-1/2	4	5/16
SPWN-5606	3-1/2	6-3/4	3/8	5-1/2	4	3/8
SPWN-6406	4	7-1/2	3/8	6-1/4	4	3/8
SPWN-7208	4-1/2	7-3/4	1/2	6-3/8	4	3/8
SPWN-8008	5	8	1/2	6-3/4	4	3/8

