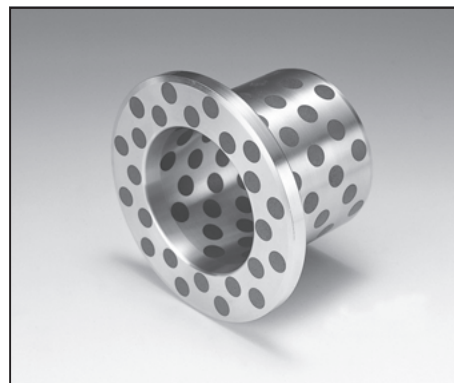


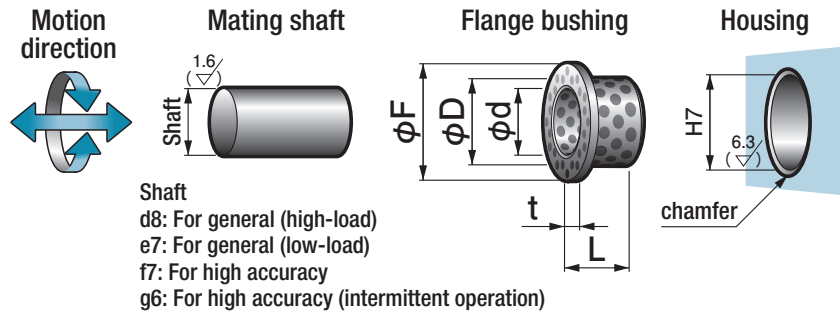
# SPFG Oiles 500SP1 SL1 Thrust Bushings



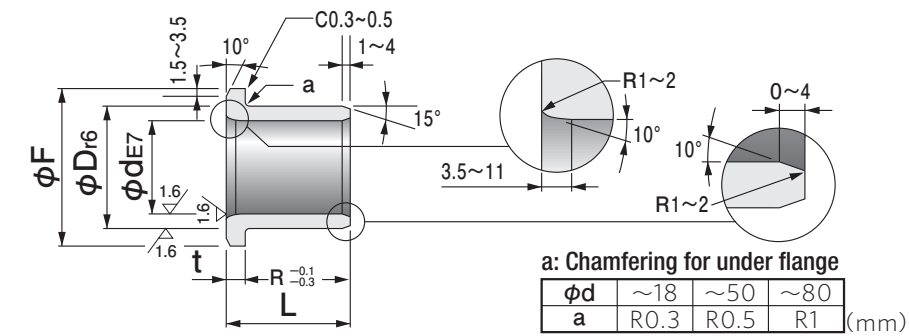
Specify Part No. by required I.D. and Length.  
(e.g.) I.D. is 35mm and length is 25mm.

## SPFG - 3525

Part No.



Shaft  
d8: For general (high-load)  
e7: For general (low-load)  
f7: For high accuracy  
g6: For high accuracy (intermittent operation)



a: Chamfering for under flange

ϕd	~18	~50	~80
a	R0.3	R0.5	R1

(mm)

- 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	<b>0611</b>					
8	+0.040 +0.025	12	+0.034 +0.023	25	0 -0.3	3	0 -0.03		<b>0813</b>				
10	+0.040 +0.025	14	+0.034 +0.023	25	0 -0.3	3	0 -0.03		<b>1013</b>	<b>1018</b>			
12	+0.050 +0.032	18	+0.034 +0.023	30	0 -0.3	3	0 -0.03	<b>1211</b>		<b>1218</b>		<b>1223</b>	
13	+0.050 +0.032	19	+0.041 +0.028	30	0 -0.3	3	0 -0.03		<b>1313</b>	<b>1318</b>		<b>1323</b>	
15	+0.050 +0.032	21	+0.041 +0.028	35	0 -0.3	3	0 -0.03		<b>1513</b>	<b>1518</b>		<b>1523</b>	
16	+0.050 +0.032	22	+0.041 +0.028	35	0 -0.3	3	0 -0.03		<b>1613</b>	<b>1618</b>		<b>1623</b>	
18	+0.050 +0.032	24	+0.041 +0.028	40	0 -0.3	3	0 -0.03			<b>1818</b>		<b>1823</b>	
20	+0.061 +0.040	28	+0.041 +0.028	45	0 -0.3	5	0 -0.03				<b>2020</b>		<b>2025</b>
25	+0.061 +0.040	33	+0.050 +0.034	50	0 -0.3	5	0 -0.03				<b>2520</b>		<b>2525</b>
30	+0.061 +0.040	38	+0.050 +0.034	55	0 -0.3	5	0 -0.03				<b>3020</b>		<b>3025</b>
35	+0.075 +0.050	44	+0.050 +0.034	65	0 -0.3	5	0 -0.03				<b>3520</b>		<b>3525</b>
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.

Length L												I.D. tolerance after press fitting (reference)	I.D. ϕd
27	35	37	38	47	48	50	58	60	68	80	90		ϕd
												+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
	<b>3035</b>											+0.032 +0.011	30
	<b>3535</b>											+0.046 +0.021	35
<b>4027</b>		<b>4037</b>		<b>4047</b>								+0.046 +0.021	40
				<b>5038</b>		<b>5048</b>		<b>5058</b>				+0.040 +0.015	50
				<b>6038</b>		<b>6048</b>		<b>6058</b>		<b>6068</b>		+0.053 +0.023	60
						<b>7050</b>				<b>7080</b>		+0.046 +0.016	70
								<b>8060</b>			<b>8090</b>	+0.046 +0.016	80