

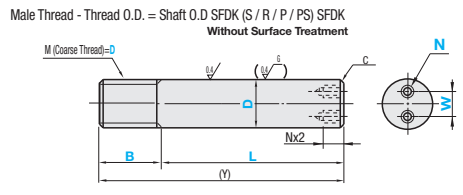
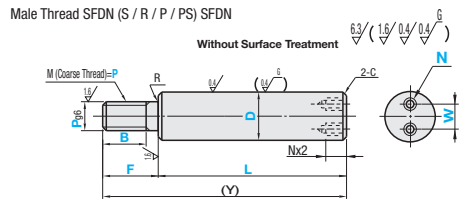
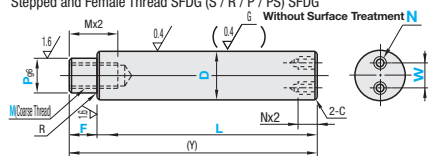
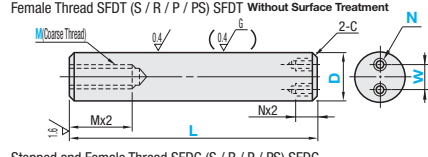
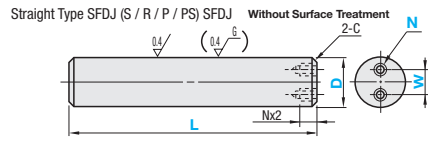
# Shafts

## -One End Two Female Thread Holes Type-



- Annealing required for machining wrench flats and shaft end threading (effective thread length + approx. 10mm) may lower hardness. **P.104**
- Circularity, Straightness, Perpendicularity. **P.103**
- Features of Raydent **P.118**

Straight Type	Type			Male Thread - Thread O.D. = Shaft O.D.	D Tolerance	Material	Hardness	Surface Treatment
	Female Thread Type	Stopped and Female Thread Type	Male Thread Type					
SFDJ	SFDT	SFDG	SFDN	SFDK	g6	SUJ2 SUS440C equivalent	Induction Hardening Effective Hardening Depth <b>P.104</b> SUJ2 SUS440C equivalent	- Hard Chrome Plating Plating Hardness: HV750 ~ Plating Thickness 5µ or more Raydent
SSFJDJ	SSFDT	SSFJDG	SSFJDN	SSFJDK				
PSFDJ	PSFDT	PSFDG	PSFDN	PSFDK				
PSSFJDJ	PSSFDT	PSSFJDG	PSSFJDN	PSSFJDK				
RSFDJ	RSFDT	RSFDG	RSFDN	RSFDK				



L does not include incomplete threads.

### Straight Type One End Female Thread - One End Stepped and Female Thread

Part Number	Type	1mm increments				Selection			W	N	(Y) Max.	R	C
		D	L (Straight - Female Thread)	L (Stepped and Female Thread)	F	P	M (Female Thread)	M (Stepped and Female Thread)					
Straight Type SFDJ SSFJDJ PSFDJ PSSFJDJ RSFDJ (D≤30, L≤500)	Female Thread Type	15	25-750	25-750		6-13	4 5 6 8 10	3 4 5 6 8 10	D-W-N≥4 W-N≥3	4 5 6 8 10 12	802 856 964 1068 1200 1500 1500 1500	0.5 or less 0.3 or less 1.0 or less 0.5 or less 1500	0.5 or less
	Stepped and Female Thread	16	30-800	25-800		6-14	4 5 6 8 10	3 4 5 6 8 10					
	SFDT	20	30-1000	25-1000	2.5F≤P×4	8-16	4 5 6 8 10 12	4 5 6 8 10 12					
	SSFDT	25	35-1200	25-1198		8-22	4 5 6 8 10 12 16	4 5 6 8 10 12 16					
	PSFDT	30	35-1500	25-1498		9-27	6 8 10 12 16 20	5 6 8 10 12 16 20 24					
	PSSFDT	35	35-1500	25-1498		9-32	8 10 12 16 20 24	5 6 8 10 12 16 20 24					
	RSFDT	40	50-1500	25-1498		11-37	10 12 16 20 24 30	6 8 10 12 16 20 24 30					
	RSFDG	50	50-1500	25-1498		11-47	12 16 20 24 30	6 8 10 12 16 20 24 30					

- Female Thread Type: Not applicable when Mx2.5+4+Nk2.5+4≤L. - Stepped and Female Thread: P≥M+3. Not applicable when Mx2.5+4+Nk2.5+4≤L.

### Male Thread - Thread O.D. = Shaft O.D.

Part Number	Type	1mm increments				P Selection			W	N	(Y) Max.	R	C
		D	L	F	B (Male Thread)	B (Male Thread - Thread O.D. = Shaft O.D.)	P	M					
Male Thread type. SFDN SSFJDN PSFDN PSSFJDN RSFDN (D≤30, L≤500)	Male Thread - Thread O.D. = Shaft O.D. Type	15	25-750			2≤B≤Mx5	5 6 8 10 12	5 6 8 10 12	D-W-N≥4 W-N≥3	4 5 6 8 10 12	825 880 990 1100 1200 1500 1500 1500	0.3 or less 1.0 or less 0.5 or less 1500	0.5 or less
	SFDK	*16	25-800		(When P=5 and 6) B≤F-2	5 6 8 10 12	5 6 8 10 12						
	SSFJDK	18	25-900			5 6 8 10 12 16	5 6 8 10 12 16						
	PSFDK	*20	25-1000		(When P=8 / 10) B≤F-3	6 8 10 12 16	8 10 12 16 20 24						
	PSSFJDK	25	25-1198	2.5F≤P×5		8 10 12 16 20 24	8 10 12 16 20 24						
	RSFDK	*30	25-1498		(When P≤12) B≤F-5	10 12 16 20 24 30	10 12 16 20 24 30						
	RSFDG	35	25-1498			12 16 20 24 30	12 16 20 24 30						
	RSFDK	40	25-1498		B≥Pitchx3	16 20 24 30	16 20 24 30						
	RSFDG	50	25-1498			16 20 24 30	16 20 24 30						

\* Thread O.D. = Shaft O.D. Type are available for \* sizes only. For B dimensions "Thread O.D. = Shaft O.D." Type, effective thread length is Pitchx3≤B≤Mx5. D > P except "Thread O.D. same as Shaft O.D." type.

Part Number	L	F	B	P	M	W	N
SFDJ20	75					W10	N4
SFDT20	525					W7	N4
SFJD20	400	F25				W12	N4
SFDN20	500	F30	B20	P16	M10	W8	N4
SFDK20	1000		B30			W10	N4

Part Number	L	F	B	P (PMC / PSC)	M (MSC)	W	N	(LKC / MSC / PMC / PMS)
SFDN30	250	F40	B30	PMC10		W10	N4	LKC

Alterations may lower hardness. **P.104**

Coarse Thread Dimensions			Coarse Thread Dimensions		
M	Pitch	P	M	Pitch	P
3	0.5	12	1.75		
4	0.7	16	2.0		
5	0.8	20	2.5		
6	1.0	24	3.0		
8	1.25	30	3.5		
10	1.5				

Alterations	Alteration to L Dimension Tolerance	Change to Fine Thread	Change to Fine Thread																																																	
	MSC (Fine Thread)	PMC, PMS (Fine Thread)																																																		
Code	LKC	MSC	PMC / PMS																																																	
Spec.	<p>Changes "L Tolerance".</p> <p>Ordering Code: LKC</p> <ul style="list-style-type: none"> <li>L&lt;200 → L±0.03</li> <li>200≤L&lt;500 → L±0.05</li> <li>L≥500 → L±0.1</li> </ul> <p>When using LKC, L dimensions can be specified in 0.1mm increments.</p> <p>Not applicable when D-P≤2</p> <p>For Male Thread - Thread O.D. = Shaft O.D.</p>	<p>Female Thread thread changed to fine thread listed in the table below.</p> <p>Ordering Code: MSC14</p> <ul style="list-style-type: none"> <li>Applicable to Female Thread Type</li> <li>Please replace M dimension with MSC to specify.</li> </ul> <p>M dimension is equal to MSC.</p> <p>Not applicable to Stepped and Female Thread.</p> <table border="1"> <thead> <tr> <th>D</th> <th>MSC</th> </tr> </thead> <tbody> <tr><td>15/16</td><td>8 10</td></tr> <tr><td>18</td><td>8 10 12</td></tr> <tr><td>20</td><td>8 10 12 14</td></tr> <tr><td>25-35</td><td>8 10 12 14 18</td></tr> <tr><td>40</td><td>10 12 14 18</td></tr> <tr><td>50</td><td>12 14 18</td></tr> <tr><td>Pitch</td><td>1.0 1.25 1.5</td></tr> </tbody> </table>	D	MSC	15/16	8 10	18	8 10 12	20	8 10 12 14	25-35	8 10 12 14 18	40	10 12 14 18	50	12 14 18	Pitch	1.0 1.25 1.5	<p>Changes the threads to Fine Threads shown in the table below.</p> <p>(PMC → Applicable to Bearing nut fine threads)</p> <p>(PMS → Applicable to Cylinder fine thread pitches)</p> <p>Ordering Code: PMC17</p> <ul style="list-style-type: none"> <li>Applicable to Male Thread type only</li> <li>Please replace P dimension with PMC (PMS) to specify.</li> </ul> <p>P dimension and PMC (PMS) are equal in measurement.</p> <table border="1"> <thead> <tr> <th>D</th> <th>PMC</th> <th>PMS</th> </tr> </thead> <tbody> <tr><td>15</td><td>5 6 8 10 12</td><td>10 12</td></tr> <tr><td>16</td><td>5 6 8 10 12 15</td><td>10 12 14</td></tr> <tr><td>18</td><td>5 6 8 10 12 15 17</td><td>10 12 14 18</td></tr> <tr><td>20</td><td>6 8 10 12 15 17</td><td>10 12 14 18</td></tr> <tr><td>25</td><td>8 10 12 15 17 20</td><td>10 12 14 18</td></tr> <tr><td>30</td><td>8 10 12 15 17 20 25</td><td>10 12 14 18</td></tr> <tr><td>35</td><td>10 12 15 17 20 25 30</td><td>10 12 14 18</td></tr> <tr><td>40</td><td>12 15 17 20 25 30</td><td>10 12 14 18</td></tr> <tr><td>50</td><td>15 17 20 25 30</td><td>10 12 14 18</td></tr> <tr><td>Pitch</td><td>0.5 0.75</td><td>1.0 1.5 1.25 1.5</td></tr> </tbody> </table>	D	PMC	PMS	15	5 6 8 10 12	10 12	16	5 6 8 10 12 15	10 12 14	18	5 6 8 10 12 15 17	10 12 14 18	20	6 8 10 12 15 17	10 12 14 18	25	8 10 12 15 17 20	10 12 14 18	30	8 10 12 15 17 20 25	10 12 14 18	35	10 12 15 17 20 25 30	10 12 14 18	40	12 15 17 20 25 30	10 12 14 18	50	15 17 20 25 30	10 12 14 18	Pitch	0.5 0.75	1.0 1.5 1.25 1.5
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