Shafts

One End Two Tapped Holes

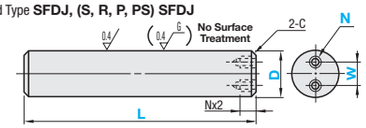
RoHS

Annealing may lower hardness at shaft end machined areas (effective thread length + approx. 10mm). ☞P.112

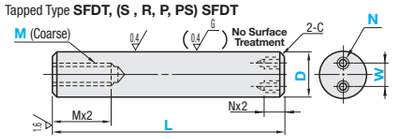
L Dimension Tolerance, Circularity, Straightness, Perpendicularity, Concentricity and Changes in Hardness ☞P.111

Type				D Tol.	M Material	H Hardness	S Surface Treatment
Solid Type	Tapped Type	Stepped and Tapped Type	Threaded Type				
SFDJ	SFDT	SFDG	SFDN	g6	SUJ2	Effective Hardened Depth of Induction Hardening ☞P.112	-
SSFDJ	SSFDT	SSFDG	SSFDN		SUS440C Equivalent		
PSFDJ	PSFDT	PSFDG	PSFDN		SUJ2	SUJ2 58HRC~ SUS440C Equivalent 56HRC~	Hard Chrome Plating Plating Hardness: HV750 ~ Plating Thickness: 5μ or More

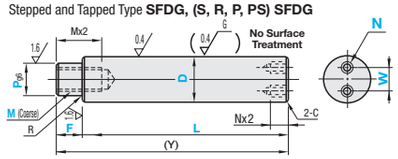
Solid Type **SFDJ, (S, R, P, PS) SFDJ**



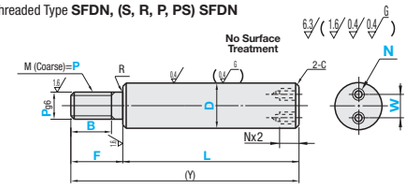
Tapped Type **SFDT, (S , R, P, PS) SFDT**



Stepped and Tapped Type **SFDG, (S, R, P, PS) SFDG**



Threaded Type **SFDN, (S, R, P, PS) SFDN**



Solid Type, One End Tapped Type, One End Stepped and Tapped Type

Part Number Type			D	1mm Increment L (Solid / Tapped)	L (Stepped and Tapped)	F	P	Selection M (Tapped)	M (Stepped and Tapped)	W specified in 1mm Increment	N Selection	(Y) Max.	R	C
Solid Type	Tapped Type	Stepped and Tapped	15	25~750	25~750	2≤F≤Px4	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	0.3 or Less	0.5 or Less
			16	30~800	25~800		6~14	4 5 6 8 10	3 4 5 6 8 10			856		
			18	30~900	25~900		8~16	4 5 6 8 10 12	4 5 6 8 10 12			964		1.0 or Less
			20	30~1000	25~1000		8~17	4 5 6 8 10 12	4 5 6 8 10 12			1068		
SFDJ	SFDT	SFDG	25	35~1200	25~1198		8~22	4 5 6 8 10 12 16	4 5 6 8 10 12 16			1200		
SSFDJ	SSFDT	SSFDG	30	35~1500	25~1498		9~27	6 8 10 12 16 20	5 6 8 10 12 16 20 24			1500	0.5 or Less	
PSFDJ	PSFDT	PSFDG	35	35~1500	25~1498		9~32	8 10 12 16 20 24	5 6 8 10 12 16 20 24			1500		
			40	50~1500	25~1498		11~37	10 12 16 20 24 30	6 8 10 12 16 20 24 30			1500		
			50	50~1500	25~1498		11~47	12 16 20 24 30	6 8 10 12 16 20 24 30			1500		

• Tapped Type ☞Not applicable when Mx2.5+4+Nx2.5+4≤L. • Stepped and Tapped Type ☞P≥M+3 ☞Not applicable when Mx2.5+4+Nx2.5+4≤L.

Threaded Type

Part Number Type		D	1mm Increment L	F	B (Threaded)	P Selection	W specified in 1mm Increment	N Selection	(Y) Max.	R	C
Threaded Type		15	25~750	2≤F≤Px5	(When P=5, 6) B≤F-2	5 6 8 10 12	D-W-N≥4 W-N≥3	4 5 6 8 10 12	825	0.3 or Less	0.5 or Less
		*16	25~800			5 6 8 10 12			880		
		18	25~900		(When P=8, 10) B≤F-3	5 6 8 10 12 16			990		1.0 or Less
		*20	25~1000			6 8 10 12 16			1100		
SFDN		25	25~1198			8 10 12 16 20 24			1200		
SSFDN		*30	25~1498		(When P≥12) B≤F-5	8 10 12 16 20 24			1500		
PSFDN		35	25~1498			10 12 16 20 24 30			1500	0.5 or Less	
		40	25~1498		B≥Pitchx3	12 16 20 24 30			1500		
		50	25~1498			16 20 24 30			1500		

☞D>P

Ordering Example

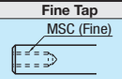
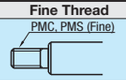
Part Number	L	F	B	P	M	W	N
SFDJ20	75					W10	N4
SFDT20	525				M8	W7	N4
SFDG20	400	F25		P16	M10	W12	N4
SFDN20	500	F30	B20	P16		W8	N4

Alterations

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

Coarse Thread Dimension M	Pitch	Coarse Thread Dimension M	Pitch
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 may lower hardness. See ☞P.112

Alterations	Alteration to L dimension tolerance	Fine Tap	Fine Thread
			
Code	LKC	MSC	PMC, PMS
Spec.	Changes L tolerance. Ordering Code LKC ☞L<200···L±0.03 200≤L<500···L±0.05 L≥500···L±0.1 ☞L dimensions can be specified in 0.1mm increment for LKC. ⊗Not applicable when D-P≤2.	Changes tapped threads to fine tapped threads shown in the table below. Ordering Code MSC14 ☞Applicable to Tapped Type ☞Specify M dimensions with MSC. ☞M dimension is equal to MSC. ⊗Not applicable to Stepped and Tapped Type.	Changes the threads to fine threads shown in the table below. (PMC is for bearing nut fine thread pitches.) (PMS is for cylinder fine thread pitches.) Ordering Code PMC17 ☞Applicable to Threaded Type only. ☞Specify P dimensions with PMC (PMS). ☞P dimension is equal to that of PMC(PMS).

D	MSC
15, 16	8 10
18	8 10 12
20	8 10 12
25~35	8 10 12 14 18
40	10 12 14 18
50	12 14 18
Pitch	1.0 1.25 1.5

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
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	12 14 18
50	15 17 20 25 30	14 18
Pitch	0.5 0.75 1.0 1.5	1.25 1.5

Solid Type

Part Number Type	D	Unit Price Min. L ~50	L51 ~100	L101 ~150	L151 ~200	L201 ~300	L301 ~400	L401 ~500	L501 ~600	L601 ~800	L801 ~1000	L1001 ~1200	L1201 ~1500
SFDJ	15, 16										-	-	-
	18, 20											-	-
	25												-
	30												
	35												
	40												
	50												
SSFDJ	15, 16										-	-	-
	18, 20											-	-
	25												-
	30												
	35												
	40												
	50												
PSFDJ	15, 16										-	-	-
	18, 20											-	-
	25												-
	30												
	35												
	40												
	50												

Stepped and Tapped Type

Part Number Type	D	Unit Price Min. L ~50	L51 ~100	L101 ~150	L151 ~200	L201 ~300	L301 ~400	L401 ~500	L501 ~600	L601 ~800	L801 ~1000	L1001 ~1200	L1201 ~1500
SFDG	15, 16										-	-	-
	18, 20											-	-
	25												-
	30												
	35												
	40												
	50												
SSFDG	15, 16										-	-	-
	18, 20											-	-
	25												-
	30												
	35												
	40												
	50												
PSFDG	15, 16										-	-	-
	18, 20											-	-
	25												-
	30												
	35												
	40												
	50												

Tapped Type

Part Number Type	D	Unit Price Min. L ~50	L51 ~100	L101 ~150	L151 ~200	L201 ~300	L301 ~400	L401 ~500	L501 ~600	L601 ~800	L801 ~1000	L1001 ~1200	L1201 ~1500
SFDT	15, 16										-	-	-
	18, 20											-	-
	25												-
	30												
	35												
	40												
	50												
SSFDT	15, 16										-	-	-
	18, 20											-	-
	25												-
	30												
	35												
	40												
	50												
PSFDT	15, 16										-	-	-
	18, 20											-	-
	25												-
	30												
	35												
	40												
	50												

Threaded Type

Part Number Type	D	Unit Price Min. L ~50	L51 ~100	L101 ~150	L151 ~200	L201 ~300	L301 ~400	L401 ~500	L501 ~600	L601 ~800	L801 ~1000	L1001 ~1200	L1201 ~1498
SFDN	15, 16										-	-	-
	18, 20											-	-
	25												-
	30												
	35												
	40												
	50												
SSFDN	15, 16										-	-	-
	18, 20											-	-
	25												-
	30												
	35												
	40												
	50												
PSFDN	15, 16										-	-	-
	18, 20											-	-
	25												-
	30												
	35												
	40												
	50												