

Shafts

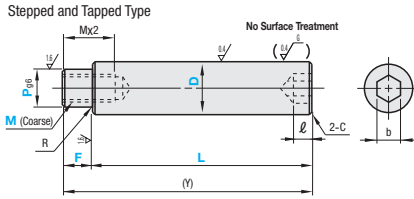
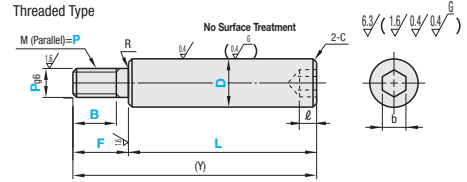
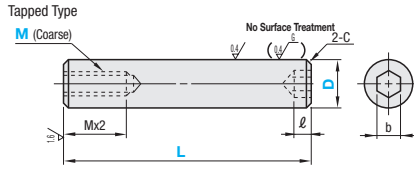
Hex Socket



RoHS 10

- Features of Low Temp. Black Chrome Plating **P128**
- L Dimension Tolerance, Circularity, Straightness, Perpendicularity, Concentricity and Changes in Hardness **P111**
- Annealing may lower hardness at shaft end machined areas (effective thread length + approx. 10mm).

Type			D Tol.	Material	Hardness	Surface Treatment
Tapped Type	Stepped and Tapped Type	Threaded Type				
SFBT	SFBH	SFBN	g6	SUJ2 Equivalent SUS440C or 13Cr stainless	Effective Hardened Depth of Induction Hardening P112 SUJ2 Equivalent SUS440C or 13Cr stainless	Hard Chrome Plating Plating Hardness: H7/50 - Plating Thickness: 5μ or More Low Temp. Black Chrome Plating
SSFBT	SSFBH	SSFBN				
PSFBT	PSFBH	PSFBN				
PSSFBT	PSSFBH	PSSFBN				
RSFBT	RSFBH	RSFBN				



Hex Socket Dimensions

D	b	Hex Socket Depth
6	2.5	3.5
8	3	4.5
10	4	6
12, 13, 15	5	7.5
16, 18	6	9
20	8	12

Tapped Type, Stepped and Tapped Type

Part Number	Type	1mm Increment			F	P	Selection		(Y) Max.	R	C
		D	L (Tapped)	L (Stepped and Tapped)			M (Tapped)	M (Stepped and Tapped)			
Tapped Type	Stepped and Tapped Type	*6	20~ 300	-	-	3	-	-	-	-	-
SFBT	SFBH	8	20~ 400	25~ 400	2≤F≤P×4	6	3 4 5	3	424	0.3 or Less	0.5 or Less
SSFBT	SSFBH	10	20~ 500	25~ 500		6~ 8	3 4 5 6	3 4 5	532		
PSFBT	PSFBH	12	20~ 600	25~ 600		6~ 10	4 5 6 8	3 4 5 6	640		
PSSFBT	PSSFBH	13	25~ 650	25~ 650		6~ 11	4 5 6 8	3 4 5 6 8	694		
RSFBT (L≤500)	RSFBH (L≤500)	15	25~ 750	25~ 750		6~ 13	4 5 6 8 10	3 4 5 6 8 10	802		
		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		
		20	30~ 1000	25~ 1000		8~ 17	4 5 6 8 10 12	4 5 6 8 10 12	1068		

- Tapped Type $M \times 2.5 + 4 + \phi \leq L$ When $M \times 2.5 + 4 + \phi \times 1.5 \geq L$, tap pilot holes may go through.
- Stepped and Tapped Type $P \geq M + 3$ When $M \times 2.5 + 4 + \phi \leq Y$ When $M \times 2.5 + 4 + \phi \times 1.5 \geq Y$, tap pilot holes may go through.

Threaded Type

Part Number	Type	D	L	1mm Increment		B (Threaded)	P Selection		(Y) Max.	R	C
				F	B (Threaded)		P Selection	(Y) Max.			
Threaded Type		6	25~ 300			(When P≤6) B≤F-2	3 4 5	330			
SFBN		8	25~ 400			(When P=8, 10) B≤F-3	3 4 5 6	440			
SSFBN		10	25~ 500			(When P=12, 16) B≤F-5	4 5 6 8	550			
PSFBN		12	25~ 600				5 6 8 10	660			
PSSFBN		13	25~ 650				5 6 8 10 12	715			
RSFBN (L≤500)		15	25~ 750				5 6 8 10 12	825			
		16	25~ 800				5 6 8 10 12	880			
		18	25~ 900				5 6 8 10 12 16	990			
		20	25~ 1000			$B_2 \geq \text{Pitch} \times 3$	6 8 10 12 16	1100			1.0 or Less

D>P

Ordering Example	Part Number	L	F	B	P	M
	SFBT20	- 525	-	-	-	M8
	SFBH20	- 400	- F25	-	- P16	M10
	SFBN20	- 500	- F25	- B20	-	P16

Alterations	Part Number	L	F	B	P (PMC, PMS)	M (MSC)	(LKC-etc.)
	SFBN20	- 250	- F40	- B30	- P10	-	LKC

Alterations may lower hardness. See **P112**

Coarse Thread Dimension	
M	pitch
3	0.5
4	0.7
5	0.8
6	1.0
8	1.25
10	1.5
12	1.75
16	2.0

Alterations	Alteration to L dimension tolerance	Fine Tap	Fine Thread
		LKC	MSC (Fine)
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 For use of LKC L dimensions can be specified in 0.1mm increment. 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) D MSC 12, 13 8 15, 16 8 10 18 8 10 12 20 8 10 12 14 Pitch 1.0 1.25 1.5 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→Applicable to bearing nut fine thread pitches.) (PMS→Applicable to cylinder fine thread pitches.) Ordering Code) PMC17 (Applicable to Threaded Type only.) D PMC PMS 6 3 4 5 8 3 4 5 6 10 4 5 6 8 12 5 6 8 10 13 5 6 8 10 12 15 5 6 8 10 12 16 5 6 8 10 12 15 18 5 6 8 10 12 15 17 20 6 8 10 12 15 17 Pitch 0.35 0.5 0.75 1.0 1.5 1.25 1.5 Specify P dimensions with PMC (PMS). P dimension is equal to that of PMC(PMS).