

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	Effective Hardened Depth of Induction Hardening P112 58HRC~ SUJ2 SUS440C Equivalent 56HRC~	Hard Chrome Plating Plating Hardness: HV750 ~ Plating Thickness: 5μ or More Low Temp. Black Chrome Plating
SSFBT	SSFBH	SSFBN		SUS440C Equivalent		
PSFBT	PSFBH	PSFBN		SUJ2		
PSSFBT	PSSFBH	PSSFBN		SUS440C Equivalent		
RSFBT	RSFBH	RSFBN		SUJ2		

Tapped Type

M (Coarse)

Threaded Type

M (Parallel)=P

Stepped and Tapped Type

M (Coarse)

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		1mm Increment			Selection		(Y) Max.	R	C
Type	D	L (Tapped)	L (Stepped and Tapped)	F	P	M (Tapped)	M (Stepped and Tapped)		
Tapped Type	Stepped and Tapped Type	*6	20~ 300	-	-	3	-	-	
SFBT	SFBH	8	20~ 400	25~ 400	6	3 4 5	3	424	
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	RSFBH	15	25~ 750	25~ 750	6~ 13	4 5 6 8 10	3 4 5 6 8 10	802	
(L≤500)	(L≤500)	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	
D=6 is available for Tapped Type only.									

- Tapped Type $M \times 2.5 + 4 + \phi \leq L$ When $M \times 2.5 + 4 + \phi \times 1.5 \leq L$, 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		1mm Increment		P Selection		(Y) Max.	R	C
Type	D	L	F	B (Threaded)				
Threaded Type	6	25~ 300	2≤F≤Px5	(When P≤6)	3 4 5	330	0.3 or Less	0.5 or Less
SFBN	8	25~ 400		B≤F-2	3 4 5 6	440		
SSFBN	10	25~ 500		(When P=8, 10)	4 5 6 8	550		
PSFBN	12	25~ 600		B≤F-3	5 6 8 10	660		
PSSFBN	13	25~ 650		(When P=12, 16)	5 6 8 10 12	715		
RSFBN (L≤500)	15	25~ 750		B≤F-5	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≥Pitchx3	6 8 10 12 16	1100		

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 MSC (Fine)	Fine Thread PMC, PMS (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 The 0.35 0.5 0.75 1.0 1.5 1.75 1.5

Tapped Type

Part Number		Unit Price									
Type	D	Min. L	L51	L101	L151	L201	L301	L401	L501	L601	L801
SFBT	6										
	8										
	10										
	12										
	13										
SSFBT	15, 16										
	18, 20										
	6										
	8										
	10										
PSFBT	12										
	13										
	15, 16										
	18, 20										
	6										
PSSFBT	8										
	10										
	12										
	13										
	15, 16										
RSFBT	18, 20										
	6										
	8										
	10										
	12										

Threaded Type

Part Number		Unit Price									
Type	D	Min. L	L51	L101	L151	L201	L301	L401	L501	L601	L801
SFBN	6										
	8										
	10										
	12										
	13										
SSFBN	15, 16										
	18, 20										
	6										
	8										
	10										
PSFBN	12										
	13										
	15, 16										
	18, 20										
	6										
PSSFBN	8										
	10										
	12										
	13										
	15, 16										
RSFBN	18, 20										
	6										
	8										
	10										
	12										

Stepped and Tapped Type

Part Number		Unit Price									
Type	D	Min. L	L51	L101	L151	L201	L301	L401	L501	L601	L801
SFBH	8										
	10										
	12										
	13										
	15, 16										
SSFBH	18, 20										
	8										
	10										
	12										
	13										
PSFBH	15, 16										
	18, 20										
	8										
	10										
	12										
PSSFBH	13										
	15, 16										
	18, 20										
	8										
	10										
RSFBH	12										
	13										
	15										
	16										
	18, 20										