

Locating Pins - Large Head, Tapered

Tapped

■ **Features:** Large Head, Tapered with the shape designed to be mounted from back using bolts. Improved maintainability compared to Press Fit Type.

Material No.	Material	Surface Treatment	Hardness	P Selectable		P, L, B Configurable	
				Type	Shape Code	Type	Shape Code
(1)	SKS3 Equivalent	-	Treated Hardness: 60~63HRC	JP	BTB (Round) DTB (Diamond)	FP	BTA (Round) BTD (Diamond)
(2)	SKS3 Equivalent	Hard Chrome Plating Plating Thickness: 3µm or more	Treated Hardness: 50~55HRC Plating Hardness: 750HV~	GJP		GFP	
(3)	SKS3 Equivalent	-	-	-		-	
(4)	SUS304*	-	-	SJP		SFP	
(5)	SUS304	Hard Chrome Plating Plating Thickness: 3µm or more	Plating Hardness: 750HV~	HJP		HFP	
(6)	SUS440C Equivalent	-	Treated Hardness: 50~55HRC	CJP		CFP	

* For P Selectable Type, it is SUS304 equivalent.

(Round) (Diamond)

Polished, centering hole is sometimes not available for SUS304.
SUS440C Equivalent has an identification groove at any position on D part.

RoHS 10

P Selectable		Part Number		P Selection		L	B	m	(W)	M (Coarse)	* Tightening Torque N·cm	ℓ
Type	Shape	D	D dim. Tolerance g6									
JP GJP SJP HJP CJP	BTB (Round) DTB (Diamond)	6	-0.004	8 10		10	8	3	3	M3	147	5
		6T	-0.012	8 10						M2.6	-	4
		8	-0.005 -0.014	10 12 13		15	4	3.5	4	M5	676	8
		8T		10 12 13								
		10		12 13 15								
		12	-0.006 -0.017	13 15 16		22	10	5	5.5	M8	2803	12
		13		15 16								
		16		20 25								
		20		25 30								
			-0.007 -0.020			30	15	5	9			

P, L, B Configurable		Part Number		P		L	B	m	(W)	M (Coarse)	* Tightening Torque N·cm	ℓ
Type	Shape	D	D dim. Tolerance g6	0.01mm Increment	1mm Increment	0.1mm Increment						
FP GFP SFP HFP CFP	BTA (Round) BTD (Diamond)	5	-0.004	5.50~8.00	5(9)~10	1.5~15.0(12.0)	3	2.2	3	M2	-	3
		6	-0.012	6.50~10.00	6(9)~12							
		6T										
		8	-0.005 -0.014	8.50~15.00	8(12)~16	1.5~30.0(15.0)	4	3.5	4	M5	676	8
		8T			6(12)~16							
		10		11.00~17.00	10(12)~20							
		10T	-0.006 -0.017	13.00~18.00	6(12)~16	3.0~30.0(20.0)	5	5	5	M4	333	6
		12			12~24							
		12T		13.00~18.00	8(12)~18							
		13		14.00~20.00	13(14)~26	5.0~30.0(20.0)	5.5	5.5	5.5	M8	2803	10
		13T			8(14)~20							
		16		17.00~27.00	16~32	5.0~30.0(27.0)	7	7	7	M6	1156	9
		16T	-0.007 -0.020		10(14)~24							
		20		22.00~30.00	20~40	5.0~30.0	9	9	9	M8	2803	12
		20T			12(18)~30							

① Pins of D dimension with T have one size smaller thread diameter and larger wall thickness. (Actual D dimension is the number without "T".)
② L, B dimensions in () are applicable to Diamond Shape. ③ Note the strength of under-head part. P1618 ④ Please confirm pilot hole depth on P1618. Holes may go through.
* Tightening torque (reference) is of Tightening Torque Strength Class (10.9) indicated on Technical Data P2365. Not applicable when using locking materials or lock washers.

Ordering Example	Part Number		P	L	B
	Type	Shape			
	JP	BTB 6	- 8		
	FP	BTA 10	- P11.01 - L12 - B6.4		

④ For products uncovered by e-Catalog Standard, see P131.

■ (4) Price List for Large Qty. Order of SUS304 (301~500 pcs.)

D	Round Shape	Diamond Shape
	SFPBTA	SFPBTD
5		
6		
6T		
8		
8T		
10		
10T		
12		
12T		
13		
13T		
16		
16T		
20		
20T		

■ P Selectable

D	Unit Price Round Shape					Unit Price Diamond Shape				
	(1)Treated SKS3 JPBTB	(2)Hard SKS3 GJPBTB	(4)SUS304 SJPBTB	(5)Hard SUS304 HJPBTB	(6)SUS440C CJPBTB	(1)Treated SKS3 JPDTB	(2)Hard SKS3 GJPDTB	(4)SUS304 SJPDTB	(5)Hard SUS304 HJPDTB	(6)SUS440C CJPDTB
6										
6T										
8										
8T										
10										
12										
13										
16										
20										

■ P, L, B Configurable

D	Unit Price Round Shape					Unit Price Diamond Shape				
	(1)Treated SKS3 FPBTA	(2)Hard SKS3 GFPBTA	(4)SUS304 SFPBTA	(5)Hard SUS304 HFPBTA	(6)SUS440C CFPBTA	(1)Treated SKS3 FPBTD	(2)Hard SKS3 GFPBTD	(4)SUS304 SFPBTD	(5)Hard SUS304 HFPBTD	(6)SUS440C CFPBTD
5										
6										
6T										
8										
8T										
10										
10T										
12										
12T										
13										
13T										
16										
16T										
20										
20T										

Alterations Part Number - P - L - B - (TC, RC, RAC, LAC)
FPBTA10 - P11.01 - L12 - B6.4 - TC6
④ Not applicable to P Selectable Type.

Alterations	Length of Tapered Point	Sphere Tip	Hex Socket Machining	Wrench Hole Machining
Code	TC	RC	RAC	LAC
Spec.	Changes the m dimension. Ordering Code TC8 (1mm increment) D TC D TC 5 4~13 12 5~22 6 4~13 13 5~22 8 5~16 16 6~23 10 5~22 20 ① B+m≥TC+2 (Straight Section min. 2mm) ② P/2 - TC x tan15° (≈0.27) > 0.5 (Tip Ø1.0min.) ③ B dimension changes when TC is specified. (Changed B dimension = B+m-TC) ④ Combination with RAC or LAC is not available.	Changes the relief to R0.5. Ordering Code RC ① Applicable when P-D≥2 ② Combination with RAC or LAC is not available.	Machines hex sockets. Ordering Code RAC D Applicable Dimension Hex Hole Dimensions P L B E S 5 6.00~ 8~ 6.0~ 2 2 6 6T 6.50(8.00)~ 10~ 6.0~ 2 3 8 8T 9.00(10.00)~ 10~ 10.0~ 2.5 4 10 10T 11.00(12.00)~ 12~ 10.0~ 3 5 12 12T 13.00~ 12~ 12.0~ 4 6 13 13T 14.00~ 15~ 15.0~ 16 16T 17.00~ 16~ 15.0~ 5 8 20 20T 22.00~ 20~ 15.0~ ① P dimension in () is applicable to Diamond Shape. ② Combination with TC, RC or LAC is not available.	Machines wrench holes. Ordering Code LAC D Applicable Dimension Wrench Hole Dimensions B P Q 5 5.50~9.99 2 6 6T 10.00~16.99 3.5 8 8T 17.00~ 5 10 10T 12 12T 13 13T 16 16T 20 20T ① Diamond Shape Hole is drilled on the diamond head vertically but with arbitrary orientation of its diamond surfaces against those of the diamond head. ② Combination with TC, RC or RAC is not available.