

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 the press fit type.

Material No.	Material	Surface Treatment	Hardness	P Selectable Type	Shape Code	P Configurable Type	Shape Code	P, L, B Configurable Type	Shape Code
①	EN 1.2510 Equiv.	-	Treated Hardness: 60 ~ 63HRC	JP		JP		FP	
②	EN 1.2510 Equiv.	Hard Chrome Plating	Treated Hardness: 50 ~ 55HRC Plating Hardness: 750HV ~	GJP		GJP		GFP	
③	EN 1.2510 Equiv.	-	-	-	BTB (Round) DTB (Diamond)	BJP (Round only)	BTA (Round) BTD (Diamond)	-	BTA (Round) BTD (Diamond)
④	EN 1.4301 Equiv.*	-	-	SJP		SJP		SFP	
⑤	EN 1.4301 Equiv.	Hard Chrome Plating	Plating Hardness: 750HV ~	HJP		-		HFP	
⑥	EN 1.4037 Equiv.	-	Treated Hardness: 50 ~ 55HRC	CJP		CJP		CFP	

* For P Selectable Type, it is EN 1.4301 Equiv. equivalent.

(Round)

(Diamond)

RoHS 10

① EN 1.4037 Equiv. has an identification groove at any position on D part.

② Relief dimension is a reference value.

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	98	5
		6T	-0.012	8 10						M2.6	-	4
		8	-	10 12 13					3.5	M5	461	8
		8T	-0.005	10 12 13						M4	225	6
		10	-0.014	12 13 15		15	4	4		M5	461	8
		12	-0.006	13 15 16				5				
		13	-0.017	15 16				5.5				
		16	-			22	5	7		M8	1911	12
		20	-0.007			25 30		9				
		20T	-0.020			30	15					

P Configurable		Part Number		P 0.01mm Increment		L	B	m	(W)	M (Coarse)	*Tightening Torque N·cm	ℓ
Type	Shape	D	D dim. Tolerance g6									
JP GJP BJP SJP CJP	BTA (Round) BTD (Diamond)	5	-	5.50~8.00		10	6	3	2.2	M2	-	3
		6	-0.004	6.50~10.00						M3	98	5
		6T	-0.012	6.50~10.00						M2.6	-	4
		8	-	9.00~13.00			8		3.5	M5	461	8
		8T	-0.005	9.00~13.00						M4	225	6
		10	-0.014	11.00~15.00		15	4	4		M5	461	8
		12	-	13.00~16.00				5				
		13	-0.006	14.00~18.00			10	5.5				
		16	-0.017	17.00~25.00		22		7		M8	1911	12
		20	-0.007	22.00~30.00		30	15	9				

P, L, B Configurable		Part Number		P 0.01mm Increment		L 1mm Increment	B 0.1mm Increment	m	(W)	M (Coarse)	*Tightening Torque N·cm	ℓ
Type	Shape	D	D dim. Tolerance g6									
FP GFP SFP HFP CFP	BTA (Round) BTD (Diamond)	5	-	5.50~8.00	5(9)~10			3	2.2	M2	-	3
		6	-0.004	6.50~10.00	6(9)~12	2.0~12.0			3	M3	98	5
		6T	-0.012	6.50~10.00	6(12)~16	2.0~15.0				M2.6	-	4
		8	-	9.00~13.00	8(12)~16	3.0~20.0			3.5	M5	461	8
		8T	-0.005	9.00~13.00	8(12)~16					M4	225	6
		10	-0.014	11.00~15.00	10(12)~20	3.0~20.0			4	M5	461	8
		10T	-	11.00~15.00	10(12)~20					M4	225	6
		12	-	13.00~16.00	12~24	3.0~20.0			5	M5	461	8
		12T	-	13.00~16.00	12~24					M4	225	6
		13	-0.006	14.00~18.00	13(14)~26	5.0~20.0			5.5	M6	784	9
		13T	-0.017	14.00~18.00	13(14)~26					M8	1911	12
		16	-	17.00~25.00	16~32	5.0~20.0			7	M6	784	9
		16T	-	17.00~25.00	16~32					M8	1911	12
		20	-0.007	22.00~30.00	20~40	5.0~20.0			9	M6	784	9
		20T	-0.020	22.00~30.00	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 dimension in () is applicable to Diamond Shape. ③ Note the strength of under-head part. ④ Please confirm pilot hole depth on P1566. Holes may go through.
* The tightening torque (ref. value) for hardened products is strength class 8.8. (See technical data on P. 2297.) Not applicable when using locking materials or lock washers.

Ordering Example

Part Number

Type

Shape

D

-

P

-

L

-

B

JP BTB 6 - 8

JP BTA 10 - 12.10

FP BTA 10 - P11.01 - L12 - B6.4

P Selectable		Unit Price Round Shape					Unit Price Diamond Shape				
D		① EN 1.2510 Equiv. Hardened JPBTB	② Hard EN 1.2510 Equiv. GJPBTB	④ EN 1.4301 Equiv. SJPBTB	⑤ Hard EN 1.4301 Equiv. HJPBTB	⑥ EN 1.4037 Equiv. CJPBTB	① EN 1.2510 Equiv. Hardened JPDTB	② Hard EN 1.2510 Equiv. GJPDTB	④ EN 1.4301 Equiv. SJPDTB	⑤ Hard EN 1.4301 Equiv. HJPDTB	⑥ EN 1.4037 Equiv. CJPDTB
6											
6T											
8											
8T											
10											
12											
13											
16											
20											

P Configurable		Unit Price Round Shape					Unit Price Diamond Shape				
D		① EN 1.2510 Equiv. Hardened JPBTA	② Hard EN 1.2510 Equiv. GJPBTA	③ EN 1.2510 Equiv. BJPBTA	④ EN 1.4301 Equiv. SJPBTA	⑥ EN 1.4037 Equiv. CJPBTA	① EN 1.2510 Equiv. Hardened JPBTD	② Hard EN 1.2510 Equiv. GJPBTD	③ EN 1.2510 Equiv. BJPBTD	④ EN 1.4301 Equiv. SJPBTD	⑥ EN 1.4037 Equiv. CJPBTD
5											
6											
6T											
8											
8T											
10											
12											
13											
16											
20											

P, L, B Configurable		Unit Price Round Shape					Unit Price Diamond Shape				
D		① EN 1.2510 Equiv. Hardened FPBTA	② Hard EN 1.2510 Equiv. GFPBTA	④ EN 1.4301 Equiv. SFPBTA	⑤ Hard EN 1.4301 Equiv. HFPBTA	⑥ EN 1.4037 Equiv. CFPBTA	① EN 1.2510 Equiv. Hardened FPBTD	② Hard EN 1.2510 Equiv. GFPBTD	④ EN 1.4301 Equiv. SFPBTD	⑤ Hard EN 1.4301 Equiv. HFPBTD	⑥ EN 1.4037 Equiv. 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

	Length of Tapered Point	Sphere Tip	Hex Socket Machining	Wrench Hole Machining																																																																						
Alterations																																																																										
Code	TC	RC	RAC	LAC																																																																						
Spec.	Changes the m dimension. Ordering Code TC8 (1mm increment) <table><tr><th>D</th><th>TC</th><th>D</th><th>TC</th></tr><tr><td>5</td><td>4~13</td><td>12</td><td>5~22</td></tr><tr><td>6</td><td>4~13</td><td>13</td><td>5~22</td></tr><tr><td>8</td><td>5~16</td><td>16</td><td>6~23</td></tr><tr><td>10</td><td>5~22</td><td>20</td><td></td></tr></table>				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																																																			
	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																																																																								
	Changes the relief to R0.5. Ordering Code RC Ⓜ Applicable when P-D≥2 ⓧ Not applicable to P Selectable Type. ⓧ Combination with RAC and LAC is not available.																																																																									
	Machines hex sockets. Ordering Code RAC <table><tr><th>D</th><th colspan="4">Applicable Dimensions</th><th colspan="2">Hex Hole Dimensions</th></tr><tr><th></th><th>P</th><th>L</th><th>B</th><th>E</th><th>S</th><th></th></tr><tr><td>5</td><td>6.0~</td><td>8~</td><td>6.0~</td><td>2</td><td>2</td><td></td></tr><tr><td>6 6T</td><td>6.50 (8.00~)</td><td>10~</td><td>6.0~</td><td>2</td><td>3</td><td></td></tr><tr><td>8 8T</td><td>9.00 (10.00~)</td><td>10~</td><td>10.0~</td><td>2.5</td><td>4</td><td></td></tr><tr><td>10 10T</td><td>11.00 (12.00~)</td><td>12~</td><td>10.0~</td><td>3</td><td>5</td><td></td></tr><tr><td>12 12T</td><td>13.00~</td><td>12~</td><td>12.0~</td><td></td><td></td><td></td></tr><tr><td>13 13T</td><td>14.00~</td><td>15~</td><td>15.0~</td><td>4</td><td>6</td><td></td></tr><tr><td>16 16T</td><td>17.00~</td><td>16~</td><td>15.0~</td><td></td><td></td><td></td></tr><tr><td>20 20T</td><td>22.00~</td><td>20~</td><td>15.0~</td><td>5</td><td>8</td><td></td></tr></table> Ⓜ Dimension in () is applicable to Diamond Shape. Ⓜ Applicable to P, L, B Dimension Configurable Type only. ⓧ Combination with TC, RC, LAC is not available.				D	Applicable Dimensions				Hex Hole Dimensions			P	L	B	E	S		5	6.0~	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~				13 13T	14.00~	15~	15.0~	4	6		16 16T	17.00~	16~	15.0~				20 20T	22.00~	20~	15.0~	5	8	
D	Applicable Dimensions				Hex Hole Dimensions																																																																					
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12 12T	13.00~	12~	12.0~																																																																							
13 13T	14.00~	15~	15.0~	4	6																																																																					
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20 20T	22.00~	20~	15.0~	5	8																																																																					
	Machines wrench holes. Ordering Code LAC <table><tr><th>D</th><th>Applicable Dimensions</th><th colspan="2">Wrench Hole Dimensions</th></tr><tr><th></th><th>B</th><th>P</th><th>Q</th></tr><tr><td>5</td><td rowspan="4">5.0~</td><td>5.50~9.99</td><td>2</td></tr><tr><td>6 6T</td><td>10.00~16.99</td><td>3.5</td></tr><tr><td>8 8T</td><td>17.00~</td><td>5</td></tr><tr><td>10 10T</td><td></td><td></td></tr><tr><td>12 12T</td><td rowspan="4">10.0~</td><td></td><td></td></tr><tr><td>13 13T</td><td></td><td></td></tr><tr><td>16 16T</td><td></td><td></td></tr><tr><td>20 20T</td><td></td><td></td></tr></table> Ⓜ Orientation between Diamond Shape Head and Wrench Hole is arbitrary. ⓧ Combination with TC, RC, RAC is not available.				D	Applicable Dimensions	Wrench Hole Dimensions			B	P	Q	5	5.0~	5.50~9.99	2	6 6T	10.00~16.99	3.5	8 8T	17.00~	5	10 10T			12 12T	10.0~			13 13T			16 16T			20 20T																																						
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