Add. Spec. Printed in Red

Locating Pins (Large Head)

Round / Diamond Shape

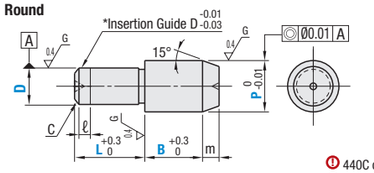
Tapping alteration (NTK) is now available.

Locating Pins – Large Head
Round / Diamond Shape

Materials No.	Material	Surface Treatment	Hardness	P Selectable Type	P Selectable D Tolerance & Shape	P Configurable Type	P Configurable D Tolerance & Shape	P, L & B Configurable Type	P, L & B Configurable D Tolerance & Shape
1)	01 Tool Steel Equivalent	—	Treated Hardness: 60~63 HRC min.	JP	Round BB m6 BPB p6	JP	Round BA m6 BPA p6	FP	Round BA m6 BPA p6 BG g6
2)	01 Tool Steel Equivalent	Hard Chrome Plating	Hardness: 50~55 HRC min. Plating Hardness: 750 HV min.	GJP		GJP		GFP	
3)	SKS3 Tool Steel or Equiv.	—	—	BJP	Diamond DB m6 DPB p6	BJP	Diamond BD m6 BPD p6	BFP	Diamond BD m6 BPD p6 DG g6
4)	304 Stainless Steel Equivalent	—	—	SJP		SJP		SFP	
5)	304 Stainless Steel Equivalent	Hard Chrome Plating	Plating Hardness: 750 HV min.	HJP		HJP		HFP	
6)	440C or 420 Stainless Steel	—	Treated Hardness: 50~55 HRC min.	CJP		CJP		CFP	

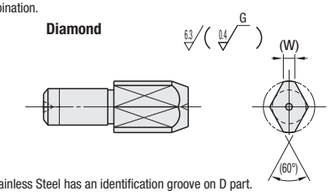
Some combinations are not available. Refer to the price list to select the available combination.

Round



*Insertion Guide is applicable to tolerance p6 only.

Diamond



440C or 420 Stainless Steel has an identification groove on D part.
Polished, centering hole is sometimes not available for 304 Stainless Steel

P Selectable

Part Number Type	D Tolerance & Shape	D	D Tolerance m6	D Tolerance p6	P	L	B	C	m	ℓ	(W)
JP GJP BJP SJP HJP CJP	Round BB m6 BPB p6	1	+0.008 +0.002	+0.012 +0.006	2	3	3	0.1	0.5	0	—
		2			3 4	4		0.5	1		1.2
		3			4 5 6	5	5		2	1	1.5
		4	+0.012 +0.004	+0.020 +0.012	5 6		6	1	3		1.8
		5			6 8	10					2.2
		6			8 10		8				3
	Diamond DB m6 DPB p6	8	+0.015 +0.006	+0.024 +0.015	10 12 13	15		1.5	4		3.5
		10			12 13 15		10	2			4
		12	+0.018 +0.007	+0.029 +0.018	13 15 16						5
		13			15 16	22				2	5.5
		16			20 25			3	5		7
		20	+0.021 +0.008	+0.035 +0.022	25 30	30	15				9

Applicable when D≥2

P Configurable

Part Number Type	D Tolerance / Shape	D	D Dimension Tolerance m6	D Dimension Tolerance p6	P 0.01 mm Increment	L	B	C	m	ℓ	(W)
JP GJP BJP SJP HJP CJP	Round BA m6 BPA p6	1	+0.008 +0.002	+0.012 +0.006	1.20–2.50	3	3	0.1	0.5	0	—
		2			2.50–4.00	4		0.5	1		1.2
		3			3.50–6.00	5	5		2	1	1.5
		4	+0.012 +0.004	+0.020 +0.012	4.50–7.00		6	1	3		1.8
		5			5.50–8.00	10					2.2
		6			6.50–10.00		8				3
	Diamond BD m6 BPD p6	8	+0.015 +0.006	+0.024 +0.015	9.00–13.00	15		1.5	4		3.5
		10			11.00–15.00		10	2			4
		12	+0.018 +0.007	+0.029 +0.018	13.00–16.00						5
		13			14.00–18.00	22				2	5.5
		16			17.00–25.00			3	5		7
		20	+0.021 +0.008	+0.035 +0.022	22.00–30.00	30	15				9

Applicable when D≥2

P, L, B Configurable

Part Number Type	D Tolerance / Shape	D	D Dimension Tolerance m6	D Dimension Tolerance p6	D Dimension Tolerance g6	P 0.01 mm Increment	L 1 mm Increment	B 0.1 mm Increment	C	m	ℓ	(W)
FP GFP BFP SFP HFP CFP	Round BA m6 BPA p6 BG g6	1	+0.008 +0.002	+0.012 +0.006	-0.002 -0.008	1.20 (1.50)–2.50	2, 3	1.0–5.0	0.1	0.5	0	0.6
		2				2.50–6.00 (4.00)	2–6	1.0–10.0	0.5	1		1.2
		3				3.50–6.00	3–6	1.0–10.0		2	1	1.5
		4	+0.012 +0.004	+0.020 +0.012	-0.004 -0.012	4.50–7.00	4–8	1.0–10.0	1	3		1.8
		5				5.50–8.00	5–10	1.0–10.0				2.2
		6				6.50–10.00	6–12	1.0–12.0				3
	Diamond BD m6 BPD p6 DG g6	8	+0.015 +0.006	+0.024 +0.015	-0.005 -0.014	9.00–13.00	8–16	1.0–15.0	1.5	4		3.5
		10				11.00–15.00	10–20	3.0–20.0	2			4
		12	+0.018 +0.007	+0.029 +0.018	-0.006 -0.017	13.00–16.00	12–24	3.0–20.0				5
		13				14.00–18.00	13–26	5.0–20.0			2	5.5
		16				17.00–25.00	16–32	5.0–20.0	3	5		7
		20	+0.021 +0.008	+0.035 +0.022	-0.007 -0.020	22.00–30.00	20–40	5.0–20.0				9

P dimension in ( ) is applicable to Diamond Shape.

Locating Pins (Large Head)

Round / Diamond Shape, *continued*

P Selectable

D	Available Types for Round Shape: (1) 01 Tool Steel Hardened JPBB JPBPB	(2) Hard 01 Tool Steel GJPBB GJPBPB	(3) 01 Tool Steel BJPBB BJPBPB	(4) 304 Stainless Steel SJPBB SJPBPB	(5) 304 Stainless Steel Hard HJPBB HJPBPB	(6) 440C or 420 Stainless Steel CJPBB CJPBPB	Available Types for Diamond Shape: (1) 01 Tool Steel Hardened JPDB JPDPB	(2) Hard 01 Tool Steel GJPDB GJPDPB	(3) 01 Tool Steel BJPDB BJPDPB	(4) 304 Stainless Steel SJPDB SJPDPB	(5) 304 Stainless Steel Hard HJPDB HJPDPB	(6) 440C or 420 Stainless Steel CJPDB CJPDPB
1	•	•	•	•	•	•	—	—	—	—	—	—
2	•	•	•	•	•	•	•	•	•	•	•	•
3	•	•	•	•	•	•	•	•	•	•	•	•
4	•	•	•	•	•	•	•	•	•	•	•	•
5	•	•	•	•	•	•	•	•	•	•	•	•
6	•	•	•	•	•	•	•	•	•	•	•	•
8	•	•	•	•	•	•	•	•	•	•	•	•
10	•	•	•	•	•	•	•	•	•	•	•	•
12	•	•	•	•	•	•	•	•	•	•	•	•
13	•	•	•	•	•	•	•	•	•	•	•	•
16	•	•	•	•	•	•	•	•	•	•	•	•
20	•	•	•	•	•	•	•	•	•	•	•	•

P Configurable

D	Available Types for Round Shape: (1) 01 Tool Steel Hardened JPBA JPBPA	(2) Hard 01 Tool Steel GJPBA GJPBPA	(3) 01 Tool Steel BJPBA BJPBPA	(4) 304 Stainless Steel SJPBA SJPBPA	(5) 304 Stainless Steel Hard HJPBA HJPBPA	(6) 440C or 420 Stainless Steel CJPBA CJPBPA	Available Types for Diamond Shape: (1) 01 Tool Steel Hardened JPBD JPBPD	(2) Hard 01 Tool Steel GJPBD GJPBPD	(3) 01 Tool Steel BJPBD BJPBPD	(4) 304 Stainless Steel SJPBD SJPBPD	(5) 304 Stainless Steel Hard HJPBD HJPBPD	(6) 440C or 420 Stainless Steel CJPBD CJPBPD
1	•	•	•	•	•	•	—	—	—	—	—	—
2	•	•	•	•	•	•	•	•	•	•	—	•
3	•	•	•	•	•	•	•	•	•	•	—	•
4	•	•	•	•	•	•	•	•	•	•	—	•
5	•	•	•	•	•	•	•	•	•	•	—	•
6	•	•	•	•	•	•	•	•	•	•	—	•
8	•	•	•	•	•	•	•	•	•	•	—	•
10	•	•	•	•	•	•	•	•	•	•	—	•
12	•	•	•	•	•	•	•	•	•	•	—	•
13	•	•	•	•	•	•	•	•	•	•	—	•
16	•	•	•	•	•	•	•	•	•	•	—	•
20	•	•	•	•	•	•	•	•	•	•	—	•

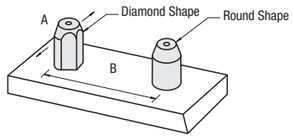
P, L & B Configurable

D	Available Types for Round Shape: (1) 01 Tool Steel Hardened FPBA FPBPA FPBG	(2) Hard 01 Tool Steel GFPBA GFPBPA GFPBG	(3) 01 Tool Steel BFPBA BFPBPA BFPBG	(4) 304 Stainless Steel SFPBA SFPBPA SFPBG	(5) 304 Stainless Steel Hard HFPBA HFPBPA HFPBG	(6) 440C or 420 Stainless Steel CFPBA CFPBPA CFPBG	Available Types for Diamond Shape: (1) 01 Tool Steel Hardened FPBD FPBPD FPDG	(2) Hard 01 Tool Steel GFPBD GFPBPD GFPDG	(3) 01 Tool Steel BFPBD BFPBPD BFPDG	(4) 304 Stainless Steel SFPBD SFPBPD SFPDG	(5) 304 Stainless Steel Hard HFPBD HFPBPD HFPDG	(6) 440C or 420 Stainless Steel CFPBD CFPBPD CFPDG
1	•	•	•	•	•	•	•	•	•	•	•	•
2	•	•	•	•	•	•	•	•	•	•	•	•
3	•	•	•	•	•	•	•	•	•	•	•	•
4	•	•	•	•	•	•	•	•	•	•	•	•
5	•	•	•	•	•	•	•	•	•	•	•	•
6	•	•	•	•	•	•	•	•	•	•	•	•
8	•	•	•	•	•	•	•	•	•	•	•	•
10	•	•	•	•	•	•	•	•	•	•	•	•
12	•	•	•	•	•	•	•	•	•	•	•	•
13	•	•	•	•	•	•	•	•	•	•	•	•
16	•	•	•	•	•	•	•	•	•	•	•	•
20	•	•	•	•	•	•	•	•	•	•	•	•

Part Number Example

Part Number					
Type	D Tolerance Shape	D	- P	- L	- B
JP	BB	6	- 10		
JP	BD	8	- 11.98		
FP	BA	10	- P12.02	- L10	- B3.2
FP	BD	12	- P13.97	- L12	- B5

Application Example

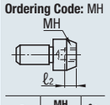
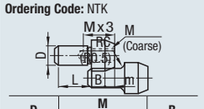
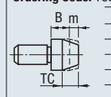


The combination of Round and Diamond Shapes enables the mating workpiece to locate accurately in the A direction. Any error in the pitch of mounting holes is absorbed in the B direction.

Part Number Example

Part Number	- P	- L	- B	- (MH, NTK, TC, RC)
FPBPA10	- P11.01	- L12	- B6.4	- TC6

Alterations are not available for P Selectable Type.

Alterations	Tapping	Tapping	Length of Tapered Point	Radius
Code	MH	NTK	TC	RC
Spec.	Adds tapped hole. **Ordering Code:** MH  D / MH (Coarse) / ℓ2 6 / M3 / 4 8–13 / M4 / 6 16, 20 / M6 / 9 Applicable when D≥6 B≥ℓ2+4 Combination with NTK is not available.	Adds a tapped hole. **Ordering Code:** NTK  D / M (Coarse Thread) / B 6 / 3 / 1.0–4.5 8 / 4 / 1.0–5.9 10, 12 / 5 / 3.0–8.6 13–20 / 8 / 5.0–15.2 P, L and B Dimension Configurable Applicable to D≥6 only. Combination with MH and TC is not available. Effective tap length of D depends on B dimension specifiable range. When L+B+m≤Mx3, the tapped holes go through. When L+B+m≤Mx5, the pilot holes for tapping may go through.	Changes the m dimension. **Ordering Code:** TC8 (1 mm Increment)  D / TC / D / TC 1 / 1–2 / 8 / 5–16 2 / 2–5 / 10 / 5–22 3 / 3–9 / 12 / 5–22 4 / 4–11 / 13 5 / 4–11 / 16 / 6–23 6 / 4–13 / 20 B+m≥TC+2 (Straight Part min. 2 mm) Applicable when P≥2.00. P/2-TC x tan 15°(=0.27)>0.5 (Tip Ø1.0min.) B Dimension changes when TC is specified. (Changed B dimension = B+m-TC) Combination with NTK is not available.	Changes the relief to R0.5. **Ordering Code:** RC Applicable when P-D≥2.