

Locating Pins (Large Head)

with Threaded Shank / Hex Socket / Wrench Hole

Locating Pins – Threaded Shank / Hex Socket / Wrench Hole

RoHS10

Materials No.	Material	Surface Treatment	Hardness	Type	Shape Code
(1)	O1 Tool Steel	—	Treated Hardness: 60–63 HRC min.	FPNS	A Round D Diamond
(2)	O1 Tool Steel	Hard Chrome Plating Plating Thickness: 3 μm or more	Hardness: 50–55 HRC min. Plating Hardness: 750 HV min.	GFPNS	
(3)	SKS3 Tool Steel or Equiv.	—	—	BFPNS	
(4)	304 Stainless Steel	—	—	SFPNS	
(5)	304 Stainless Steel	Hard Chrome Plating Plating Thickness: 3 μm or more	Plating Hardness 750 HV min.	HFPNS	
(6)	440C Stainless Steel	—	Treated Hardness: 50–55 HRC min.	CFPNS	

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

Ⓛ 440C Stainless Steel has an identification groove on D part.

Ⓛ When M < D, Mx1.5, the incomplete threaded portion (Pitchx2) is included in Mx1.5.

Type	Part Number		D Tolerance g6	P 0.01 mm Increment	L 1 mm Increment	B 0.1 mm Increment	M (Coarse)	m	(W)	S ₁	S ₂	E	
	Shape	D											
FPNS GFPNS BFPNS SFPNS HFPNS CFPNS	A Round	3	-0.002 -0.008	6.00–6.50	2–6	3.5–10.0	3	2	—	3	—	2	
		4	-0.004 -0.012	6.50–7.00	2–8	2.5–10.0	3 4	—					
	D Diamond	5	-0.005 -0.014	6.50 (8.00)–10.00	3–10	2.5–12.0	4 5 6	3	—	3.5	4	4	2.5
		8	-0.005 -0.014	9.00 (10.00)–13.00	5–10	3.0–15.0	4 5 6 8	4	—				
		10	-0.006 -0.017	11.00 (12.00)–15.00	5–15	4.5–20.0	5 6 8 10	4	5				
		12	-0.007 -0.020	13.00–18.00	8–15	6.0–20.0	6 8 10 12	5	6				
		16	-0.007 -0.020	17.00–25.00	8–20	8.0–20.0	8 10 12 16	7	6				
		20	-0.007 -0.020	22.00–30.00	10–20	8.0–20.0	10 12 16 20	9	8				

Ⓛ P dimension in () is applicable to Diamond Shape. Ⓛ When M dimension is not specified, D=M.

D	Available Types for Round Shape						Available Types for Diamond Shape					
	(1) O1 Tool Steel Hardened	(2) Hard O1 Tool Steel	(3) O1 Tool Steel	(4) 304 Stainless Steel	(5) 304 Stainless Steel Hard	(6) 440C Stainless Steel	(1) O1 Tool Steel Hardened	(2) Hard O1 Tool Steel	(3) O1 Tool Steel	(4) 304 Stainless Steel	(5) 304 Stainless Steel Hard	(6) 440C Stainless Steel
3	•	•	•	•	•	•	—	—	—	—	—	—
4	•	•	•	•	•	•	—	—	—	—	—	—
5	•	•	•	•	•	•	•	•	•	•	•	•
8	•	•	•	•	•	•	•	•	•	•	•	•
10	•	•	•	•	•	•	•	•	•	•	•	•
12	•	•	•	•	•	•	•	•	•	•	•	•
16	•	•	•	•	•	•	•	•	•	•	•	•
20	•	•	•	•	•	•	•	•	•	•	•	•

Part Number Example

Part Number: [Type] [Shape] [D] - [P] - [L] - [B] - [M] - (NNC)

FPNS A 10 - P12.00 - L5 - B5.0

GFPNS D 16 - P19.50 - L14 - B10.0 - M12

Part Number Alterations

Part Number: [Type] - [P] - [L] - [B] - [M] - (NNC)

FPNSA8 - P10.00 - L10 - B10.0 - M6 - NNC

Alterations

Code: NNC

Spec: Adds a relief at the thread end. Undercut length is approx. Pitch x 2.

Locating Pins (Large Head)

with Counterbore Hole

Locating Pins – Large Head with Counterbore Hole

RoHS10

Materials No.	Material	Surface Treatment	Hardness	Standard Type		Compact Type	Shape Code
				P Configurable	P, L, B Configurable	P, L, B Configurable	
(1)	O1 Tool Steel Equivalent	—	Treated Hardness: 60–63 HRC min.	JPT	FPT	FPTC	MA Round MD Diamond
(2)	O1 Tool Steel Equivalent	Hard Chrome Plating Plating Thickness: 3 μm or more	Hardness: 50–55 HRC min. Plating Hardness: 750 HV min.	—	GFPT	—	
(3)	SKS3 Tool Steel or Equiv.	—	—	—	BFPT	—	
(4)	304 Stainless Steel Equivalent	—	—	SJPT	SFPT	SFPTC	
(5)	304 Stainless Steel Equivalent	Hard Chrome Plating Plating Thickness: 3 μm or more	Plating Hardness 750 HV min.	HJPT	HFPT	—	
(6)	440C Stainless Steel Equivalent	—	Treated Hardness: 50–55 HRC min.	CJPT	CFPT	—	

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

Ⓛ 440C Stainless Steel has an identification groove on D part.

Ⓛ Polished, centering hole is sometimes not available for 304 Stainless Steel.

Standard – P Configurable

Type	Shape	D	P		L	B	C	m	(W)
			0.01 mm Increment	1 mm Increment					
JPT SJPT HJPT CJPT	MA Round MD Diamond	10	14.00–17.00	5–20	15	10	2	4	4
		12	15.00–18.00	6–24	22	3	5	7	5.5
		13	17.00–20.00	7–32					
		16	20.00–27.00	8–40	30	15	3	5	9
		20	23.00–30.00	8–40					

Standard – P, L & B Configurable

Type	Shape	D	P 0.01 mm Increment	L 1 mm Increment	B 0.1 mm Increment	C	m	(W)
12	15.00–18.00	6–24	7.0–20.0					
13	17.00–20.00	6–26	8.0–20.0	3	5	7	5.5	
16	20.00–27.00	7–32	8.0–20.0					
20	23.00–30.00	8–40	8.0–20.0					

Ⓛ When L-D, C dimension (chamfered) is 0.5.

Compact Type

Type	Shape	D	P 0.01 mm Increment	L 1 mm Increment	B 0.1 mm Increment	C	m	(W)
12	13.00–17.00	6–15	3.0–18.0					
13	14.00–18.00	6–16	3.0–20.0	3	7	5.5		
16	17.00–21.00	7–18	3.0–20.0					
20	21.00–25.00	8–20	3.0–20.0					

Part Number Example

Part Number: [Type] [Shape] [D] - [P] - [L] - [B]

JPT MA 10 - P14.00 - L15 - B6.0

FPT MA 10 - P14.00 - L15 - B6.0

FPTC MA 12 - P13.00 - L6 - B3.0

Application Example

Although the screw head protrudes from Compact Type pin, head diameter P and height B are configurable to even smaller dimensions.

Standard – P Configurable

D	Available Types for Round Shape				Available Types for Diamond Shape			
	(1) O1 Tool Steel Hardened	(4) 304 Stainless Steel	(5) 304 Stainless Steel Hard	(6) 440C Stainless Steel	(1) O1 Tool Steel Hardened	(4) 304 Stainless Steel	(5) 304 Stainless Steel Hard	(6) 440C Stainless Steel
10	•	•	•	•	•	•	•	•
12	•	•	•	•	•	•	•	•
13	•	•	•	•	•	•	•	•
16	•	•	•	•	•	•	•	•
20	•	•	•	•	•	•	•	•

Standard – P, L & B Configurable

D	Available Types for Round Shape					
	(1) O1 Tool Steel Hardened	(2) Hard O1 Tool Steel	(3) O1 Tool Steel	(4) 304 Stainless Steel	(5) 304 Stainless Steel Hard	(6) 440C Stainless Steel
10	•	•	•	•	•	•
12	•	•	•	•	•	•
13	•	•	•	•	•	•
16	•	•	•	•	•	•
20	•	•	•	•	•	•

Compact Type

D	Available Types for Diamond Shape			
	(1) O1 Tool Steel Hardened	(2) Hard O1 Tool Steel	(3) O1 Tool Steel	(4) 304 Stainless Steel
10	•	•	•	•
12	•	•	•	•
13	•	•	•	•
16	•	•	•	•
20	•	•	•	•

Compact Type

D	Available Types for Round Shape		Available Types for Diamond Shape	
	(1) O1 Tool Steel Hardened	(4) 304 Stainless Steel	(1) O1 Tool Steel Hardened	(4) 304 Stainless Steel
10	•	•	•	•
12	•	•	•	•
13	•	•	•	•
16	•	•	•	•
20	•	•	•	•