

Locating Pins (Large Head)

Round Shape (with R)

Feature: Small boundary between insertion guide and locating parts ("No Edge" in diagram) prevents damage of locating target.
Buff finished products with enhanced appearance and slide are also available.

Locating Pins - Large Head, Round Shape (with R)

RoHS10

Materials No.	Material	Surface Treatment	Hardness	Type	D Tolerance & Shape Code
(1)	O1 Tool Steel	—	Treated Hardness: 60~63 HRC min.	JPRB	B (Standard, m6) PB (Standard, p6) TB (Tapped) NB (Threaded)
(2)	O1 Tool Steel	Hard Chrome Plating Plating Thickness: 3 μm or more	Hardness: 50~55 HRC min. Plating Hardness: 750 HV min.	GJPRB	
(3)	304 Stainless Steel	—	—	SJPRB	
(4)	440C Stainless Steel	—	Treated Hardness: 50~55 HRC min.	CJPRB	
(5)	O1 Tool Steel	Buffed Surface	Treated Hardness: 60~63 HRC min.	MJPRB	
(6)	O1 Tool Steel	Hard Chrome Plating Plating Thickness: 3 μm or more	Hardness: 50~55 HRC min. Plating Hardness: 750 HV min.	MGJPRB	
(7)	440C Stainless Steel	Buffed Surface	Treated Hardness: 50~55 HRC min.	MCJPRB	

Press Fit

* Insertion Guide D -0.03

Tapped

Threaded

Notes:

- An insertion guide will only be machined on p6 tolerance components.
- 440C Stainless Steel has an identification groove on D mounting section.
- Polished, centering hole may not be on all 304 Stainless Pins.
- Buffed at part only. The boundary between B and E dimension is indistinct.
- When D(P)≥3 a=1.0 d=D(P)-0.2
- When D(P)<3 a=0.5 d=D(P)-0.1
- Relief dimension is reference value.

Press Fit

Type	Shape Code	D Dimension Tolerance		P Selection	L	B	C	E	ℓ	
		D	m6							
JPRB GJPRB SJPRB CJPRB Buffed Product MJPRB MGJPRB MCJPRB	B m6 PB p6	2	+0.008	+0.012	3 4	4	3	0.5	3	0
		3	+0.002	+0.006	4 5 6	5	5			
		4	+0.012	+0.020	5 6	6	6	1	4	1
		5	+0.004	+0.012	6 8	10	8	1.5	5	1
		6	+0.015	+0.024	8 10	10	8	1.5	5	1
		8	+0.015	+0.024	10 12 13	15	10	2	6	2
		10	+0.006	+0.015	12 13 15	15	10	2	6	2
		12	+0.018	+0.029	13 15 16	22	10	2	6	2
		13	+0.007	+0.018	15 16	22	10	2	6	2
		16	+0.021	+0.035	20 25	30	15	3	7	2
20	+0.008	+0.022	25 30	30	15	3	7	2		

* Tightening torque will be within Strength Class of 10.9 as indicated in the Technical Data P.4016 (10.9). Not applicable when using locking materials or lock washers.

Tapped

Type	Shape Code	D	D Dimension Tolerance g6	P Selection	L	B	E	M (Coarse)	* Tightening Torque N·cm	ℓ
		6T	-0.012	8 10	10	8	5	M2.6	—	4
		8	-0.005	10 12 13	15	8	5	M5	676	8
		8T	-0.014	10 12 13	15	8	5	M4	333	6
		10	-0.014	12 13 15	15	8	5	M5	676	8
		12	-0.006	13 15 16	22	10	6	M8	2803	12
		13	-0.017	15 16	22	10	6	M8	2803	12
		16	-0.007	20 25	22	10	6	M16	24108	12
		20	-0.020	25 30	30	15	7	M20	46942	12

Ⓢ Pins with D value ending in T (ex. 8T) have one size smaller thread diameter and larger wall thickness. (Actual D dimension is the number without "T".)

* Note the strength of under-head portion, P.1542 Ⓢ Please confirm pilot hole depth on P.1542. Holes may go through.

Ⓢ Tightening torque (reference) will be within Strength Class of Tightening Torque on Technical Data, P.4016 (10.9). Not applicable when using locking materials or lock washers.

Threaded

Type	Shape Code	D	D Dimension Tolerance g6	P Selection	L	B	E	M (Coarse)	* Tightening Torque N·cm
		4	-0.008	5 6	5	5	3	M4	333
		5	-0.004	6 8	10	6	4	M5	676
		6	-0.012	8 10	10	6	4	M6	1156
		8	-0.005	10 12 13	15	8	5	M8	2803
		10	-0.014	12 13 15	15	8	5	M10	5557
		12	-0.006	13 15 16	22	10	6	M12	9702
		16	-0.017	20 25	22	10	6	M16	24108
		20	-0.020	25 30	30	15	7	M20	46942

Ⓢ Applicable when D≥5.

* Tightening torque will be within Strength Class of 10.9 as indicated in the Technical Data P.4016 (10.9). Not applicable when using locking materials or lock washers.

Locating Pins (Large Head)

Round Shape (with R), continued

Part Number Example

Part Number	Part Number	P
JPRB	B	10 - 12
MJPRB	TB	12 - 16

Part Number Alterations

Part Number	P	(DRC, RC)
JPRBB10	12	RC

Alterations	Screwdriver Slot	Underhead Fillet
	Code	DRC
Spec.	Width 0.8 mm Depth 1 mm Ⓢ Applicable Threaded only.	Changes the relief to R0.5. Ordering Code: RC Ⓢ Applicable when P-D≥2.

Standard

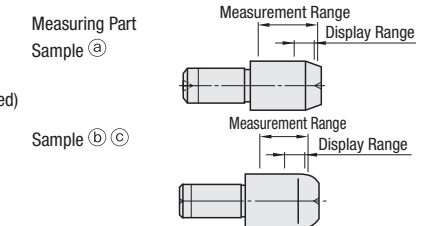
D	Available Types					
	(1) O1 Tool Steel Hardened JPRBB JPRBPB	(2) O1 Tool Steel (Hardened) GJPRBB GJPRBPB	(3) 304 Stainless Steel SJPRBB SJPRBPB	(4) 440C Stainless Steel CJPRBB CJPRBPB	(5) 501 Tool Steel Hardened + Buffed MJPRBB MJPRBPB	(5) 501 Tool Steel Hardened + Buffed MGJPRBB MGJPRBPB
3	•	•	•	•	•	•
4	•	•	•	•	•	•
5	•	•	•	•	•	•
6	•	•	•	•	•	•
8	•	•	•	•	•	•
10	•	•	•	•	•	•
12	•	•	•	•	•	•
13	•	•	•	•	•	•
16	•	•	•	•	•	•
20	•	•	•	•	•	•

Threaded

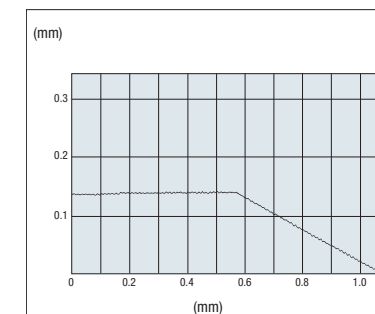
D	Available Types						
	(1) O1 Tool Steel Hardened JPRBNB	(2) O1 Tool Steel (Hardened) GJPRBNB	(3) 304 Stainless Steel SJPRBNB	(4) 440C Stainless Steel CJPRBNB	(5) 501 Tool Steel Hardened + Buffed MJPRBNB	(5) 501 Tool Steel Hardened + Buffed MGJPRBNB	(5) 501 Tool Steel Hardened + Buffed MCJPRBNB
3	•	•	•	•	•	•	•
4	•	•	•	•	•	•	•
5	•	•	•	•	•	•	•
6	•	•	•	•	•	•	•
8	•	•	•	•	•	•	•
10	•	•	•	•	•	•	•
12	•	•	•	•	•	•	•
13	•	•	•	•	•	•	•
16	•	•	•	•	•	•	•
20	•	•	•	•	•	•	•

Surface Shape Measurement Result (Reference)

Test Name: Surface Shape Measurement
 Measuring Instrument: Tokyo Seimitsu SURFCOM1800D-22
 Sample: Ⓢ JPBB8-12 (P.1544 Large Head Tapered)
 Ⓢ JPBB8-12 (P.1562 Large Head Round Tapered – Non Buff Finished)
 Ⓢ MJPRBB8-12 (P.1562 Large Head Round Tapered – Buff Finished)
 Test Conditions:
 – Measurement Length: 12 mm
 – Measurement Pitch: 0.001 mm
 – Measurement Speed: 0.6 mm/S

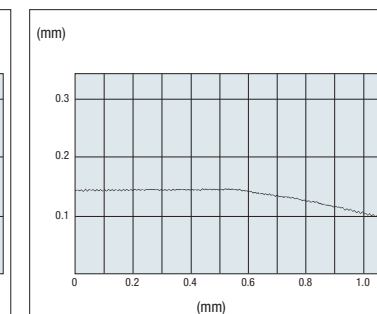


Measurement Results Sample Ⓢ



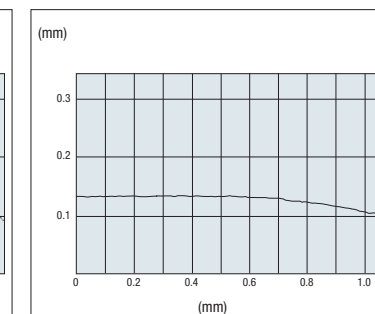
Conventional Tapered Type: The edge remains.

Measurement Results Sample Ⓢ



Round Tapered Type: No edge.

Measurement Results Sample Ⓢ



Buffed Finished: No edge and the surface is smooth.