

# Locating Pins (Small Head)

Round Shape (with R)

RoHS10

Buffed Product

Materials No.	Materials	Surface Treatment	Hardness	Type	Shape Code
(1)	O1 Tool Steel Equivalent	—	60–63 HRC min.	JPRS	B Standard, m6 PB Standard, p6 TB Tapped
(2)	O1 Tool Steel Equivalent	Chrome Plating Plating Thickness: 3 μm or More	Hardness: 50–55 HRC min. Plating Hardness: 750 HV min.	GJPRS	
(3)	304 Stainless Steel Equivalent	—	—	SJPRS	
(4)	440C Stainless Steel Equivalent	—	Treated Hardness: 50–55 HRC min.	CJPRS	
(5)	O1 Tool Steel Equivalent	Buffed Surface	Treated Hardness: 60–63 HRC min.	MJPRS	
(6)	O1 Tool Steel Equivalent	Chrome Plating + Buffed Surface Plating Thickness: 3 μm or More	Treated Hardness: 60–63 HRC min. Plating Hardness: 750 HV min.	MGJPRS	
(7)	440C Stainless Steel Equivalent	Buffed Surface	Treated Hardness: 50–55 HRC min.	MCJPRS	

**Standard**

**Tapped**

When P<3  
a=0.5  
d=P-0.1

When P≥3  
a=1.0  
d=P-0.2

Relief dimension is reference value.

\*The insertion guide is applicable to tolerance m6 and p6 type only.

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

Polished, centering hole may not be on all 304 Stainless Pins.

## Standard

Type	Shape Code	D	D Dimension Tolerance		P Selection	L	B	C	ℓ	E	Available Types											
			m6	p6							1	2	3	4	5	6	7					
JPRS	B (m6) PB (p6)	3	+0.008 +0.002	+0.012 +0.006	2 3	5	3	0.5	1	3	JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS					
GJPRS		4	+0.012 +0.004	+0.020 +0.012	2 3 4	10	5	1			JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS					
SJPRS		5			2 3 4 5	15	6	1.5			JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS					
CJPRS		6			3 4 5 6	22	8	2			JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS					
Buff Finished		8	+0.015 +0.006	+0.024 +0.015	4 5 6 8	30	10	3			JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS					
MJPRS		10			6 8 10						JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS					
MGJPRS		12			8 10 12						JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS					
MCJPRS		13	+0.018 +0.007	+0.029 +0.018	12 13						JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS					
Applicable when D≥5 and P≥5.		16			12 13 14 15 16						JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS					
		20	+0.021 +0.008	+0.035 +0.022	15 16 20						JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS					

## Tapped

Type	Shape Code	D	D Dim. Tol. g6	L	B	E	M (Coarse)	*Tightening Torque N·cm	ℓ	Available Types									
										1	2	3	4	5	6	7			
JPRS	TB	6T	-0.004 -0.012	4 5 6	10	5	M3	147	5	JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS			
SJPRS		8T	-0.005 -0.014	6 8	15	6	M4	333	6	JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS			
Buff Finished		10T		8 10	22	6	M5	636	8	JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS			
MJPRS		12T	-0.006 -0.017	8 10 12	30	7	M8	2803	12	JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS			
MGJPRS		13T		12 13						JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS			
MCJPRS		16T	-0.007 -0.020	12 13 14 15 16						JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS			
Applicable when D≥5 and P≥5.		20T		15 16 20						JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS			

- Pins with D value ending in T will have one size smaller thread compared to the standard D size. (Example: D=10T it will have a M4, D=10 standard is M5)
- Consult the following page for technical information regarding the maximum torque applicable. P.1542
- Please confirm pilot hole depth on P.1542. Holes may go through.
- \*Tightening torque (reference) will be within Strength Class of 10.9 as indicated in the Technical Data P.4016
- \*Not applicable when using locking adhesives or lock washers.

**Part Number Example**

Type	Shape	D	P
JPRS	B	10	6
JPRST	B	10	8

**Part Number Alterations**

Alterations Code	Radius
RC	Changes the relief to R0.5. Ordering Code: RC
Spec.	<p>Applicable when D-P≥2.</p>

# Locating Pins (Small Head)

Round Shape (with R), D & P Tolerance Selectable

RoHS10

(Buffed Product)

Materials No.	Material	Surface Treatment	Hardness	Type	Shape Code
(1)	O1 Tool Steel Equivalent	—	60–63 HRC min.	KFPS	A Standard Tapped
(2)	O1 Tool Steel Equivalent	Chrome Plating Plating Thickness 3 μm or More	50–55 HRC min. Plating Hardness 750 HV min.	GKFPS	
(3)	304 Stainless Steel Equivalent	—	—	SKFPS	
(4)	440C Stainless Steel Equivalent	—	50–55 HRC min.	CKFPS	
(5)	O1 Tool Steel Equivalent	Buffed Surface	60–63 HRC min.	MKFPS	
(6)	O1 Tool Steel Equivalent	Chrome Plating + Buffed Surface Plating Thickness 3 μm or More	50–55 HRC min. Plating Hardness 750 HV min.	MGKFPS	
(7)	440C Stainless Steel Equivalent	Buffed Surface	50–55 HRC min.	MCKFPS	

**Tolerance Selection**

D or P	Standard Grade				Precision Grade		
	M	P	G	H	S	A	B
2.00	+0.008	+0.012	-0.002	0			
3.00	+0.002	+0.006	-0.008	-0.010			
3.01	+0.012	+0.020	-0.004	0			
6.00	+0.004	+0.012	-0.012	-0.012			
6.01	+0.015	+0.024	-0.005	0	0	+0.005	0
10.00	+0.006	+0.015	-0.014	-0.015	-0.01	0	-0.005
10.01	+0.018	+0.029	-0.006	0			
18.00	+0.007	+0.018	-0.017	-0.018			
18.01	+0.021	+0.035	-0.007	0			
20.00	+0.008	+0.022	-0.020	-0.021			

Precision Grade Tolerance is not available for Chrome Plated and Buffed Product Types

**Standard**

**Tapped**

When D=P, no relief is applied.

(i) When D = P and tolerances are different

(ii) When D = P and tolerances are the same

Buff Finishing is at part only.

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

The boundary between B and E dimension is indistinct.

## Standard

Type	Shape Code	D Tol. Sel.	P Tol. Sel.	D	P 0.01 mm Increment	L 1 mm Increment	B 0.5 mm Increment	E 0.5 mm Increment	R Selection	C	Available Types						
											(1)	(2)	(3)	(4)	(5)	(6)	(7)
KFPS	A	M	P	3	2.00–3.00	3–8	2.0–10.0	1.0–15.0	5	0.5	KFPS	GKFPS	SKFPS	CKFPS	MKFPS	MGKFPS	MCKFPS
GKFPS				4	2.00–4.00	4–12	2.0–10.0		10		GKFPS	SKFPS	CKFPS	MKFPS	MGKFPS	MCKFPS	
SKFPS				5	2.00–5.00	5–12	2.0–10.0		15		SKFPS	CKFPS	MKFPS	MGKFPS	MCKFPS		
CKFPS				6	2.00–6.00	5–12	3.0–12.0		20		CKFPS	MKFPS	MGKFPS	MCKFPS			
Buffed Product				8	3.00–8.00	8–15	3.0–14.0		25		MKFPS	MGKFPS	MCKFPS				
MKFPS				10	3.00–10.00	8–15	3.0–16.0		30		MGKFPS	MCKFPS					
MGKFPS				12	5.00–12.00	10–18	3.0–18.0				MCKFPS						
MCKFPS				13	6.00–13.00	12–20	3.0–20.0										
Applicable when D≥5 and P≥5.				16	10.00–16.00	14–25	3.0–20.0										
				20	13.00–20.00	18–32	3.0–20.0										

Precision Grade Tolerance is not available for Chrome Plated and Buffed Product Types

## Tapped

Type	Shape Code	D Tol. Sel.	P Tol. Sel.	D	P 0.01 mm Increment	L 1 mm Increment	B 0.5 mm Increment	E 0.5 mm Increment	R Selection	M (Coarse)	ℓ	Available Types						
												(1)	(2)	(3)	(4)	(5)	(6)	(7)
KFPS	T	M	P	6	4.00–6.00	8–12	3.0–12.0	1.0–15.0	5	M3	5	KFPS	GKFPS	SKFPS	CKFPS	MKFPS	MGKFPS	MCKFPS
GKFPS				8	6.00–8.00	11–16	3.0–14.0					8	GKFPS	SKFPS	CKFPS	MKFPS	MGKFPS	MCKFPS
SKFPS				10	7.00–10.00	11–20	3.0–16.0					10	SKFPS	CKFPS	MKFPS	MGKFPS	MCKFPS	
CKFPS				12	7.00–12.00	12–24	3.0–18.0					15	CKFPS	MKFPS	MGKFPS	MCKFPS		
Buffed Product				14	8.00–13.00	13–26	3.0–20.0					20	MKFPS	MGKFPS	MCKFPS			
MKFPS				16	10.00–16.00	16–32	3.0–20.0					25	MGKFPS	MCKFPS				
MGKFPS				18	13.00–20.00	20–40	3.0–20.0					30	MCKFPS					
MCKFPS				20		20–40												
Applicable when D≥5 and P≥5.				20T		12–30												

- 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 part. P.1542 Please confirm pilot hole depth on P.1542.

**Part Number Example**

Type	Shape	D Tolerance	P Tolerance	D	P	L	B	E	R
MKFPS	A	M	S	16	P12.00	L14	B4.0	E5.0	R15

**Part Number Alterations**

Part Number	P	L	B	E	R	(GDC / RC / AC)
KFPSAMA12	P7.00	L10	B30	E3.0	R10	RC

Alterations Code	Insertion Guide Machining	Radius	Air Vent
	GDC	RC	AC
Spec.	Adds Insertion Guide. Ordering Code: GDC	Changes the relief to R0.5. Ordering Code: RC	Adds an air vent. Ordering Code: AC

## Details of E Dimension & R Dimension Range

P 0.01 mm Increment	E 0.5 mm Increment	R Selection
2.00–4.00	1.0–2.0	5 10
4.01–8.00	2.5–4.0	10 15 20
8.01–12.00	4.5–7.0	10 15 20
12.01–16.00	5.0–10.0	15 20 25
16.01–20.00	5.0–15.0	20 25 30