

# Locating Pins (Small Head)

Round Shape (with R)

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	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	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**

RoHS10 Buffed Product

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	+0.015 +0.006	+0.024 +0.015	3 4 5 6	15	6	1.5			JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS
CJPRS		6	+0.018 +0.007	+0.029 +0.018	4 5 6 8	22	8	2			JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS
Buff Finished		8	+0.021 +0.008	+0.035 +0.022	6 8 10	30	10	3			JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS
MJPRS		10			8 10 12						JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS
MGJPRS		12			12 13						JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS
MCJPRS		13			12 13 14 15 16						JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS
Applicable when D≥5 and P≥5.		16			15 16 20						JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS
		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	10	5	5	M3	147	5	JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS	
SJPRS		8	-0.005 -0.014	15	6		M2.6	—	4	JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS	
Buff Finished		10	-0.006 -0.017	22	6		M4	333	6	JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS	
MJPRS		12	-0.007 -0.020	30	8		M3	147	5	JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS	
MGJPRS		13			10		5	M5	636	8	JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS
MCJPRS		16			15		6	M8	2803	12	JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS
Applicable when D≥5 and P≥5.		20			22		6				JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS
					22		6				JPRS	GJPRS	SJPRS	CJPRS	MJPRS	MGJPRS	MCJPRS
					30		7				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**

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

**Part Number Alterations**

Part Number	P	(RC)
JPRS10	6	RC

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

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	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	50–55 HRC min. Plating Hardness 750 HV min.	MGKFPS	
(7)	440C Stainless Steel Equivalent	Buffed Surface	50–55 HRC min.	MCKFPS	

RoHS10 (Buffed Product)

**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			

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.

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

## 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	S	3	2.00–3.00	3–8	2.0–10.0	1.0–15.0	5	0.5	KFPSA	GKFPSA	SKFPST	CKFPSA	MKFPSTA	MGKFPSTA	MCKFPSTA
GKFPS*					4	2.00–4.00	4–12	2.0–10.0			10	KFPSA	GKFPSA	SKFPST	CKFPSA	MKFPSTA	MGKFPSTA	MCKFPSTA
SKFPS*					5	2.00–5.00	5–12	2.0–10.0			15	KFPSA	GKFPSA	SKFPST	CKFPSA	MKFPSTA	MGKFPSTA	MCKFPSTA
CKFPS*					6	2.00–6.00	5–12	3.0–12.0			20	KFPSA	GKFPSA	SKFPST	CKFPSA	MKFPSTA	MGKFPSTA	MCKFPSTA
Buffed Product					8	3.00–8.00	8–15	3.0–14.0			25	KFPSA	GKFPSA	SKFPST	CKFPSA	MKFPSTA	MGKFPSTA	MCKFPSTA
MKFPS*					10	3.00–10.00	8–15	3.0–16.0			30	KFPSA	GKFPSA	SKFPST	CKFPSA	MKFPSTA	MGKFPSTA	MCKFPSTA
MGKFPS*					12	5.00–12.00	10–18	3.0–18.0				KFPSA	GKFPSA	SKFPST	CKFPSA	MKFPSTA	MGKFPSTA	MCKFPSTA
MCKFPS*					13	6.00–13.00	12–20	3.0–20.0				KFPSA	GKFPSA	SKFPST	CKFPSA	MKFPSTA	MGKFPSTA	MCKFPSTA
Applicable when D≥5 and P≥5.					16	10.00–16.00	14–25	3.0–20.0				KFPSA	GKFPSA	SKFPST	CKFPSA	MKFPSTA	MGKFPSTA	MCKFPSTA
					20	13.00–20.00	18–32	3.0–20.0				KFPSA	GKFPSA	SKFPST	CKFPSA	MKFPSTA	MGKFPSTA	MCKFPSTA

Specifiable range depends on P dim. Confirm "Details of E Dim. and R Dim. Range" below.

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	S	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				4	KFPS	GKFPS	SKFPS	CKFPS	MKFPS	MGKFPS	MCKFPS
SKFPS					10	7.00–10.00	11–20	3.0–16.0				6	KFPS	GKFPS	SKFPS	CKFPS	MKFPS	MGKFPS	MCKFPS
CKFPS					12	7.00–12.00	12–24	3.0–18.0				8	KFPS	GKFPS	SKFPS	CKFPS	MKFPS	MGKFPS	MCKFPS
Buffed Product					14	8.00–13.00	13–26	3.0–20.0				10	KFPS	GKFPS	SKFPS	CKFPS	MKFPS	MGKFPS	MCKFPS
MKFPS					16	10.00–16.00	16–32	3.0–20.0				12	KFPS	GKFPS	SKFPS	CKFPS	MKFPS	MGKFPS	MCKFPS
MGKFPS					18	13.00–20.00	20–40	3.0–20.0				14	KFPS	GKFPS	SKFPS	CKFPS	MKFPS	MGKFPS	MCKFPS
MCKFPS					20		12–30					16	KFPS	GKFPS	SKFPS	CKFPS	MKFPS	MGKFPS	MCKFPS
Applicable when D≥5 and P≥5.												18	KFPS	GKFPS	SKFPS	CKFPS	MKFPS	MGKFPS	MCKFPS
												20	KFPS	GKFPS	SKFPS	CKFPS	MKFPS	MGKFPS	MCKFPS

Specifiable range depends on P dimension. Confirm "Details of E Dimension and R Dimension Range" below.

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**

Part Number	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	Adds Insertion Guide. Ordering Code: GDC	Changes the relief to R0.5. Ordering Code: RC	Adds an air vent. Ordering Code: AC
Spec.		<p>Applicable when D-P≥2.</p>	

## 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
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