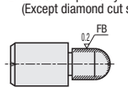
Locating Pins (Spherical Small Head)

Locating Pins – Spherical Small Head

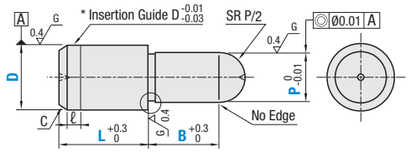
Material No.	Material	Surface Treatment	Hardness	P Selectable Type	P Selectable D Tol. & Shape	P Configurable Type	P Configurable D Tol. & Shape	P, L, B Configurable Type	P, L, B Configurable D Tol. & Shape
(1)	01 Tool Steel Equivalent	—	Treated Hardness: 60~63 HRC min.	JPQ	SB m6 / SPB p6	JPQ	SA m6 / SPA p6	FPQ	SA m6 / SPA p6
(2)	01 Tool Steel Equivalent	Chrome Plating	Hardness: 50~55 HRC min. Plating Hardness: 750 HV min.	—		GJPQ		GFPQ	
(3)	304 Stainless Steel Equivalent	—	—	SJPQ		SJPQ		SFPQ	
(4)	304 Stainless Steel Equivalent	Chrome Plating	Plating Hardness :750 HV min.	—		HJPQ		HFPQ	
(5)	440C or 420 Stainless Steel	—	Treated Hardness: 50~55 HRC min.	CJPQ		CJPQ	SD m6 / SPD p6	CFPQ	SD m6 / SPD p6
(6)	01 Tool Steel Equivalent	Buffed Surface	Treated Hardness: 60~63 HRC min.	—		MJPQ		MFPQ	
(7)	01 Tool Steel Equivalent	Chrome Plating + Buffed Surface	Treated Hardness: 50~55 HRC min.	—		MGJPQ		MGFPQ	
(8)	440C or 420 Stainless Steel	Buffed Surface	Treated Hardness: 50~55 HRC min.	—		MCJPQ		MCFPQ	

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

Buff at ⁄⁄⁄ part only. (Except diamond cut surface)



Round



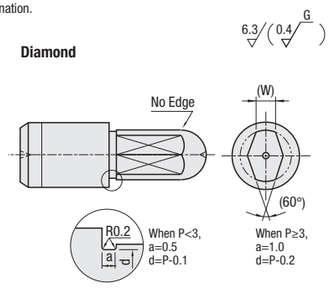
*The insertion guide is applicable to tolerance m6 and p6 only.

440C or 420 Stainless Steel has an identification groove insertion guide.

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

When the P dimension is small, a centering hole will cause the spherical section to become small.

Diamond



Locating Pins for Height Adjusting with shorter B fixed dimension is also available. **P.1616**

P Selectable

Part Number Type	D Tolerance & Shape	D	D Tolerance m6	D Tolerance p6	P	L	B	C	ℓ	Available Types for Round Shape (1) 01 Tool Steel Hardened JPQSB JPQSPB	(3) 304 Stainless Steel SJPQSB SJPQSPB	(5) 440C or 420 Stainless Steel CJPQSB CJPQSPB
JPQ SJPQ CJPQ	SB m6 / SPB p6	2	+0.008 +0.002	+0.012 +0.006	1 1.5	4	2	0.3	0	•	•	•
		3			2	5	3	0.5	1	•	•	•
		4	+0.012 +0.004	+0.020 +0.012	2 3			1		•	•	•
		5			2 3 4	10	5			•	•	•
		6			2 3 4 5					•	•	•

P Configurable

Part Number Type	D Tolerance & Shape	D	D Tolerance m6	D Tolerance p6	P 0.01 mm Increment	L	B	C	ℓ	(W)
JPQ GJPQ SJPQ HJPQ CJPQ Buff Finished MJPQ MGJPQ MCJPQ	SA m6 / SPA p6	2	+0.008 +0.002	+0.012 +0.006	1.00–2.00	4	2	0.3	0	—
		3			1.00–3.00	5	3	0.5	1	
		4	+0.012 +0.004	+0.020 +0.012	2.00–4.00			1		1.0
		5			2.00–5.00	10	5			1.2
		6			2.00–6.00					1.5
	SD m6 / SPD p6	8	+0.015 +0.006	+0.024 +0.015	3.00–8.00	15	6	1.5	2	1.8
		10			3.00–10.00		8	2		2.2
		12	+0.018 +0.007	+0.029 +0.018	5.00–12.00					2.5
		13			6.00–13.00	22				3
		16			10.00–16.00		10	3		4
		20	+0.021 +0.008	+0.035 +0.022	13.00–20.00	30				5

Applicable when D≥5 and P≥5.

Applicable when D≥4.

Locating Pins (Spherical Small Head)

continued

P, L & B Configurable

Part Number Type	D Tolerance & Shape	D	D Tolerance m6	D Tolerance p6	P 0.01 mm Increment	L 1 mm Increment	B 0.1 mm Increment	C	ℓ	(W)
FPQ GFPQ SFPQ HFPQ CFPQ Buff Finished MFPQ MGFPQ MCFPQ	SA m6 / SPA p6	2	+0.008 +0.002	+0.012 +0.006	1.00–2.00	2–4	2.0–10.0	0.3	0	—
		3			1.00–3.00	3–6	2.0–10.0	0.5	1	
		4	+0.012 +0.004	+0.020 +0.012	2.00–4.00	4–8	2.0–10.0	1		1.0
		5			2.00–5.00	5–10	2.0–10.0			1.2
		6			2.00–6.00	6–12	2.0–12.0			1.5
	SD m6 / SPD p6	8	+0.015 +0.006	+0.024 +0.015	3.00–8.00	8–16	2.0–15.0	1.5	2	1.8
		10			3.00–10.00	10–20	3.0–20.0	2		2.2
		12	+0.018 +0.007	+0.029 +0.018	5.00–12.00	12–24	3.0–20.0			2.5
		13			6.00–13.00	13–26	5.0–20.0			3
		16			10.00–16.00	16–32	5.0–20.0	3		4
		20	+0.021 +0.008	+0.035 +0.022	13.00–20.00	20–40	5.0–20.0			5

Applicable when D≥5 and P≥5.

Applicable when D≥4.

P Configurable

D	Available Types for Round Shape (1) 01 Tool Steel Hardened JPQSA JPQSPA	(2) Hard 01 Tool Steel GJPQSA GJPQSPA	(3) 304 Stainless Steel SJPQSA SJPQSPA	(4) Hard 304 Stainless Steel HJPQSA HJPQSPA	(5) 440C or 420 Stainless Steel CJPQSA CJPQSPA	(6) 01 Tool Steel Hardened + Buffed MJPQSA MJPQSPA	(7) Hard 01 Tool Steel + Buffed MGJPQSA MGJPQSPA	(8) 440C or 420 Stainless Steel + Buffed MCJPQSA MCJPQSPA	Available Types for Diamond Shape (1) 01 Tool Steel Hardened JPQSD JPQSPD	(2) Hard 01 Tool Steel GJPQSD GJPQSPD	(3) 304 Stainless Steel SJPQSD SJPQSPD	(4) Hard 304 Stainless Steel HJPQSD HJPQSPD	(5) 440C or 420 Stainless Steel CJPQSD CJPQSPD	(6) 01 Tool Steel Hardened + Buffed MJPQSD MJPQSPD	(7) Hard 01 Tool Steel + Buffed MGJPQSD MGJPQSPD	(8) 440C or 420 Stainless Steel + Buffed MCJPQSD MCJPQSPD
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 FPQSA FPQSPA	(2) Hard 01 Tool Steel GFPQSA GFPQSPA	(3) 304 Stainless Steel SFPQSA SFPQSPA	(4) Hard 304 Stainless Steel HFPQSA HFPQSPA	(5) 440C or 420 Stainless Steel CFPQSA CFPQSPA	(6) 01 Tool Steel Hardened + Buffed MFPQSA MFPQSPA	(7) Hard 01 Tool Steel + Buffed MGFPQSA MGFPQSPA	(8) 440C or 420 Stainless Steel + Buffed MCFPQSA MCFPQSPA	Available Types for Diamond Shape (1) 01 Tool Steel Hardened FPQSD FPQSPD	(2) Hard 01 Tool Steel GFPQSD GFPQSPD	(3) 304 Stainless Steel SFPQSD SFPQSPD	(4) Hard 304 Stainless Steel HFPQSD HFPQSPD	(5) 440C or 420 Stainless Steel CFPQSD CFPQSPD	(6) 01 Tool Steel Hardened + Buffed MFPQSD MFPQSPD	(7) Hard 01 Tool Steel + Buffed MGFPQSD MGFPQSPD	(8) 440C or 420 Stainless Steel + Buffed MCFPQSD MCFPQSPD
2	•	•	•	•	•	—	—	—	—	—	—	—	—	—	—	—
3	•	•	•	•	•	—	—	—	—	—	—	—	—	—	—	—
4	•	•	•	•	•	—	—	—	•	•	—	—	•	—	—	—
5	•	•	•	•	•	•	•	•	•	•	—	—	•	•	•	•
6	•	•	•	•	•	•	•	•	•	•	—	—	•	•	•	•
8	•	•	•	•	•	•	•	•	•	•	—	—	•	•	•	•
10	•	•	•	•	•	•	•	•	•	•	—	—	•	•	•	•
12	•	•	•	•	•	•	•	•	•	•	—	—	•	•	•	•
13	•	•	•	•	•	•	•	•	•	•	—	—	•	•	•	•
16	•	•	•	•	•	•	•	•	•	•	—	—	•	•	•	•
20	•	•	•	•	•	•	•	•	•	•	—	—	•	•	•	•

Part Number Example

Part Number								
Type	Shape	D	-	P	-	L	-	B
JPQ	SA	4	-	2.01				
FPQ	SA	4	-	P2.01	-	L6	-	B5.5

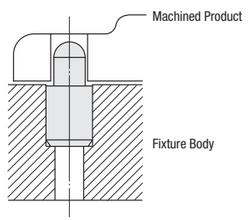
Part Number Alterations

Part Number	-	P	-	L	-	B	-	(RC)
FPQSA4	-	P2.00	-	L6	-	B5.5	-	RC

Alteration is not available for P Dimension Selectable Type.

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

Application Example



Pins with spherical head prevent damages on mating parts.