



Locating Pins (Spherical Small Head)

D & P Tolerance Selectable

Locating Pins – Spherical Head / D & P Tolerance Selectable



RoHS10

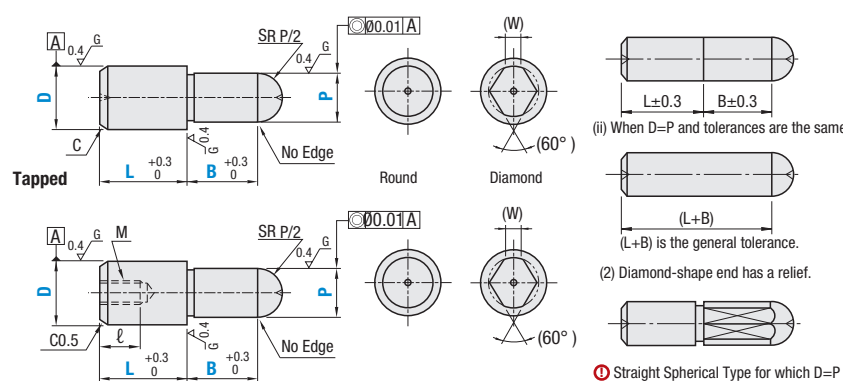
Materials No.	Materials	Surface Treatment	Hardness	Type		Shape Code
				Standard	Tapped	
(1)	O1 Tool Steel Equivalent	—	60~63 HRC min.	KFQS	KFQST	A Round
(2)	O1 Tool Steel Equivalent	Chrome Plating	60~63 HRC min. Plating Hardness 750 HV min.	GKFQS	GKFQST	
(3)	304 Stainless Steel Equivalent	—	—	SKFQS	SKFQST	D Diamond
(5)	440C or 420 Stainless Steel	—	50~55 HRC min.	CKFQS	—	

Tolerance Selection

D or P	Standard Grade				Precision Grade		
	M	P	G	H	S	A	B
1.00	+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 product types

Standard



- Ⓢ When D=P, (1) Round Shape has no relief. (i) When D=P and tolerances are different
- Ⓢ When D=P and tolerances are the same (L+B) is the general tolerance.
- Ⓢ Diamond-shape end has a relief.
- Ⓢ Straight Spherical Type for which D=P is standardized is available. P.1613
- Ⓢ 440C or 420 Stainless Steel has an identification groove on D part.
- Ⓢ The smaller the dimension P, the less the size of sphere, due to center hole.
- ⊗ Precision Grade Tolerance is not available for Chrome Plated product types.

Standard

Type	Shape	Part Number				P Specify in 0.01 mm Inc.	L Specify in 1 mm Inc.	B Specify in 0.1 mm Inc.	C	(W)	Available Types for Round Shape				Available Types for Diamond Shape			
		D Tol. Sel.	P Tol. Sel.	D	D						(1) O1 Tool Steel Hardened KFQSA	(2) Hard O1 Tool Steel GKFQSA	(3) 304 Stainless Steel SKFQSA	(5) 440C or 420 Stainless Steel CKFQSA	(1) O1 Tool Steel Hardened KFQSD	(2) Hard O1 Tool Steel GKFQSD	(3) 304 Stainless Steel SKFQSD	(5) 440C or 420 Stainless Steel CKFQSD
KFQS GKFQS+ SKFQS CKFQS	A Round	M P G H	S M P G H	A B	2	1.00-2.00	2-5	2.0-10.0	0.3	—	•	•	•	•	—	—	—	—
					3	1.00-3.00	3-10	2.0-10.0	0.5	1.0	•	•	•	•	—	—	—	—
					4	1.50(2.00)-4.00	4-10	2.0-10	1.0	1.0	•	•	•	•	—	•	—	—
					5	2.00-5.00	5-10	2.0-15.0(10.0)	1	1.2	•	•	•	•	—	•	—	—
					6	2.00-6.00	5-17	2.0-15.0	1.5	1.5	•	•	•	•	—	•	—	—
	D Diamond	*A *B	*A *B	*A *B	8	3.00-8.00	8-21	2.0-20.0(15.0)	1.5	1.8	•	•	•	•	—	•	—	—
					10	3.00-10.00	10-23	3.0-20.0	2	2.2	•	•	•	•	—	•	—	—
					12	5.00-12.00	12-24	3.0-30.0(25.0)	2	2.5	•	•	•	•	—	•	—	—
					13	6.00-13.00	13-26	5.0-30.0(25.0)	3	3	•	•	•	•	—	•	—	—
					16	10.00-16.00	16-32	5.0-30.0	4	4	•	•	•	•	—	•	—	—
20	13.00-20.00	20-40	5.0-30.0	5	5	•	•	•	•	—	•	—	—					

⊗ Precision Grade Tolerance is not available for Chrome Plated product types.

Ⓢ P dimension () and B dimension () are applied to diamond shape.

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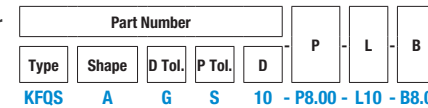
Tapped

Type	Shape	Part Number				P Specify in 0.01 mm Inc.	L Specify in 1 mm Inc.	B Specify in 0.1 mm Inc.	(W)	M (Coarse)	ℓ	Available Types for Round Shape			Available Types for Diamond Shape		
		D Tol. Sel.	P Tol. Sel.	D	D							(1) O1 Tool Steel Hardened KFQSTA	(2) Hard O1 Tool Steel GKFQSTA	(3) 304 Stainless Steel SKFQSTA	(1) O1 Tool Steel Hardened KFQSTD	(2) Hard O1 Tool Steel GKFQSTD	(3) 304 Stainless Steel SKFQSTD
KFQST GKFQST SKFQST	A Round	M P G H	S M P G H	A B	6	4.00-6.00	8 (9)-17	2.0-15.0	1.5	M3	5	•	•	•	•	—	—
					8	6.00-8.00	11 (12)-21	2.0-20.0(15.0)	1.8	M5	8	•	•	•	•	—	—
					10	7.00-10.00	11 (12)-23	3.0-20.0	2.2		8	•	•	•	•	—	—
					12	7.00-12.00	12-24	3.0-30.0(25.0)	2.5	10	•	•	•	•	—	—	
					13	8.00-13.00	13 (14)-26	5.0-30.0(25.0)	3	M8	10	•	•	•	•	—	—
	16	10.00-16.00	16-32	5.0-30.0	4	12	•	•	•		•	—	—				
	20	13.00-20.00	20-40	5.0-30.0	5	12	•	•	•		•	—	—				

Ⓢ L dimension () and B dimension () apply to diamond shape. Ⓢ Note the strength of under-head part. P.1542 Ⓢ Please confirm pilot hole depth on P.1542. Holes may go through.



Part Number Example



Part Number Alterations



Alterations	Radius	Wrench Hole	Air Vent	Insertion Guide
	RC	LAC	AC	GDC
Spec.	Changes the relief to R0.5. - Ordering Code: RC - Applicable when D-P≥2	Machines wrench hole. - Ordering Code: LAC - P dimension () applies to diamond shape - Applies to D≥8 for round shape and D≥10 for diamond shape - Applicable when Q+1.5≤B - Press fit is not applicable - The diamond shaped wrench hole is perpendicular to the diamond surface, but the direction is arbitrary.	Adds an air vent. Ordering Code: AC	Adds the insertion guide. Ordering Code: GDC - Not applicable when D≤2