

Locating Pins (Large Head)

Configurable Pilot Angle / D, P Tolerance Selectable

ⓘ D=5 is now available for Tapped Type.

Locating Pins – Configurable Pilot Angle / D, P Tolerance Selectable

RoHS10



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			
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			
30.00	+0.008	+0.022	-0.020	-0.021			

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

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

ⓘ P-2EtanA≥0.73 (Tip dia. Ø0.73 or more)
Reference: tan15°=0.267 tan30°=0.577
tan45°= 1 tan60°= 1.732

Materials No.

Material

Surface Treatment

Hardness

Type

Shape Code

				Standard	Tapped	Threaded	
(1)	O1 Tool Steel Equivalent	—	60–63 HRC min.	KF	KFT	KFN	A Round
(2)	O1 Tool Steel Equivalent	Chrome Plating Plating Thickness 3 μm or More	50–55 HRC min. Plating Hardness 750 HV min.	GKF	GKFT	GKFN	
(3)	O1 Tool Steel Equivalent	—	—	BKF	BKFT	BKFN	
(4)	304 Stainless Steel Equivalent	—	—	SKF	SKFT	SKFN	
(5)	304 Stainless Steel Equivalent	Chrome Plating Plating Thickness 3 μm or More	Plating Hardness 750 HV min.	HKF	HKFT	HKFN	D Diamond
(6)	440C Stainless Steel Equivalent	—	50–55 HRC min.	CKF	CKFT	—	

ⓘ Refer to the price list to select the available combination.

ⓘ When D=P,
(1) Round Shape has no relief.
(i) When D=P and tolerances are different

Standard

Threaded

Tapped

Round

Diamond

ⓘ When D=P,
(1) Round Shape has no relief.
(i) When D=P and tolerances are different

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

(L+B) is the general tolerance.
(2) Diamond-shape end has a relief.

ⓘ Round type with the same diameter for which D=P is standardized is available.
P.1612

Standard

Type		Part Number		D	P 0.01 mm Increment	L 1 mm Increment	B 0.1 mm Increment	E 0.1 mm Increment	A Selection	C	(W)
		Shape	P Tolerance Selection								
KF GKF* BKF SKF HKF* CKF	A Round	M P G H *A *B	S M P G H *A *B	1	1.00–2.50 (1.50–2.00)	2, 3	2.0–5.0	0.5–10.0	15	0.1	0.6
				2	2.00–4.00	2–6	2.0–10.0			0.5	1.2
				3	3.00–6.00	3–6	2.0–10.0			1	1.5
				4	4.00–7.00	4–8	2.0–10.0				1.8
				5	5.00–8.00	5–10	2.0–10.0				2.2
				6	6.00–10.00	6–12	2.0–12.0				3
				8	8.00–13.00	8–16	2.0–15.0			1.5	3.5
				10	10.00–15.00	10–20	3.0–20.0				4
	D Diamond	M P G H *A *B	S M P G H *A *B	12	12.00–16.00	12–24	3.0–20.0			2	5
				13	13.00–18.00	13–26	5.0–20.0				5.5
				16	16.00–25.00	16–32	5.0–20.0			3	7
				20	20.00–30.00	20–40	5.0–20.0				9

ⓘ P dimension in () is for Diamond Shape. ⊗ Chrome plated is not available for Precision Grade *(Precision Grade A and B).

Tapped

Type		Part Number		D	P 0.01 mm Increment	L 1 mm Increment	B 0.1 mm Increment	E 0.1 mm Increment	A Selection	(W)	M (Coarse)	ℓ
		Shape	P Tolerance Selection									
KFT GKFT BKFT SKFT HKFT CKFT	A Round	M P G H	S M P G H	5	5.00–8.00	5 (9)–10	2.0–10.0	0.5–10.0	15	2.2	M2	3
				6	6.00–10.00	6 (9)–12	2.0–12.0			3	M3	5
				6T						3.5	M2.6	4
				8	8.00–13.00	8 (12)–16	2.0–15.0				M5	8
				8T		6 (12)–16				4	M4	6
				10	10.00–15.00	10 (12)–20	3.0–20.0				M5	8
				10T		6 (12)–16				5	M4	6
				12	12.00–16.00	12–24	3.0–20.0				M5	8
	D Diamond	M P G H	S M P G H	12T	12.00–16.00	8 (12)–18	3.0–20.0			5.5	M4	6
				13	13.00–18.00	13 (14)–26	5.0–20.0			7	M8	10
				13T	13.00–18.00	8 (14)–20				9	M6	9
				16	16.00–25.00	16–32	5.0–20.0				M8	12
				16T	16.00–25.00	10 (14)–24				9	M6	9
				20	20.00–30.00	20–40	5.0–20.0			9	M8	12
				20T	20.00–30.00	12 (18)–30					M6	9

- ⓘ Pins with D values ending in T (ex. 8T) diameter 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
- ⓘ L dimension in () is for Diamond Shape.
- ⓘ Please confirm pilot hole depth on P.1542. Holes may go through.

Locating Pins (Large Head)

Configurable Pilot Angle / D, P Tolerance Selectable, *continued*

Threaded

Part Number				P	L	B	E	A	M	(W)	
Type	Shape	D Tolerance Selection	P Tolerance Selection	D	0.01 mm Increment	1 mm Increment	0.1 mm Increment	0.1 mm Increment	A Selection	(Coarse)	
KFN GKFN* BKFN SKFN HKFN*	A Round	M P G H *A *B	S M P G H *A *B	3	3.50–6.00	2–6	2.0–10.0	0.5–10.0	15	M3	1.5
				4	4.50–7.00	2–8	2.0–10.0			M4	1.8
				5	5.50–8.00	3–10	2.0–10.0			M5	2.2
				6	6.50–10.00	3–10	2.0–12.0			M6	3
				8	9.00–13.00	5–10	2.0–15.0			M8	3.5
	D Diamond			10	11.00–15.00	5–15	3.0–20.0		45	M10	4
				12	13.00–18.00	8–15	3.0–20.0			M12	5
				16	17.00–25.00	8–20	5.0–20.0			M16	7
				20	22.00–30.00	10–20	5.0–20.0			M20	9

⊗ Chrome plated is not available for Precision Grade *(Precision Grade A and B).

Standard

D	Available Types for Round Shape						Available Types for Diamond Shape					
	(1) O1 Tool Steel Hardened KFA	(2) Hard O1 Tool Steel GKFA	(3) O1 Tool Steel BKFA	(4) 304 Stainless Steel SKFA	(5) 304 Stainless Steel Hard HKFA	(6) 440C Stainless Steel CKFA	(1) O1 Tool Steel Hardened KFD	(2) Hard O1 Tool Steel GKFD	(3) O1 Tool Steel BKFD	(4) 304 Stainless Steel SKFD	(5) 304 Stainless Steel Hard HKFD	(6) 440C Stainless Steel CKFD
1	•	•	•	•	•	•	•	•	•	•	•	•
2	•	•	•	•	•	•	•	•	•	•	•	•
3	•	•	•	•	•	•	•	•	•	•	•	•
4	•	•	•	•	•	•	•	•	•	•	•	•
5	•	•	•	•	•	•	•	•	•	•	•	•
6	•	•	•	•	•	•	•	•	•	•	•	•
8	•	•	•	•	•	•	•	•	•	•	•	•
10	•	•	•	•	•	•	•	•	•	•	•	•
12	•	•	•	•	•	•	•	•	•	•	•	•
13	•	•	•	•	•	•	•	•	•	•	•	•
16	•	•	•	•	•	•	•	•	•	•	•	•
20	•	•	•	•	•	•	•	•	•	•	•	•

Tapped

D	Available Types for Round Shape						Available Types for Diamond Shape					
	(1) O1 Tool Steel Hardened KFTA	(2) Hard O1 Tool Steel GKFTA	(3) O1 Tool Steel BKFTA	(4) 304 Stainless Steel SKFTA	(5) 304 Stainless Steel Hard HKFTA	(6) 440C Stainless Steel CKFTA	(1) O1 Tool Steel Hardened KFTD	(2) Hard O1 Tool Steel GKFTD	(3) O1 Tool Steel BKFTD	(4) 304 Stainless Steel SKFTD	(5) 304 Stainless Steel Hard HKFTD	(6) 440C Stainless Steel CKFTD
5	•	•	•	•	•	•	•	•	—	•	•	•
6	•	•	•	•	•	•	•	•	—	•	•	•
6T	•	•	•	•	•	•	•	•	—	•	•	•
8	•	•	•	•	•	•	•	•	—	•	•	•
8T	•	•	•	•	•	•	•	•	—	•	•	•
10	•	•	•	•	•	•	•	•	—	•	•	•
10T	•	•	•	•	•	•	•	•	—	•	•	•
12	•	•	•	•	•	•	•	•	—	•	•	•
12T	•	•	•	•	•	•	•	•	—	•	•	•
13	•	•	•	•	•	•	•	•	—	•	•	•
13T	•	•	•	•	•	•	•	•	—	•	•	•
16	•	•	•	•	•	•	•	•	—	•	•	•
16T	•	•	•	•	•	•	•	•	—	•	•	•
20	•	•	•	•	•	•	•	•	—	•	•	•
20T	•	•	•	•	•	•	•	•	—	•	•	•

Threaded

D	Available Types for Round Shape					Available Types for Diamond Shape				
	(1) O1 Tool Steel Hardened KFNA	(2) Hard O1 Tool Steel GKFNA	(3) O1 Tool Steel BKFN	(4) 304 Stainless Steel SKFNA	(5) 304 Stainless Steel Hard HKFNA	(1) O1 Tool Steel Hardened KFND	(2) Hard O1 Tool Steel GKFND	(3) O1 Tool Steel BKFND	(4) 304 Stainless Steel SKFND	(5) 304 Stainless Steel Hard HKFND
3	•	•	•	•	•	•	•	—	•	—
4	•	•	•	•	•	•	•	—	•	—
5	•	•	•	•	•	•	•	—	•	—
6	•	•	•	•	•	•	•	—	•	—
8	•	•	•	•	•	•	•	—	•	—
10	•	•	•	•	•	•	•	—	•	—
12	•	•	•	•	•	•	•	—	•	—
16	•	•	•	•	•	•	•	—	•	—
20	•	•	•	•	•	•	•	—	•	—

