



# Locating Pins - Hardened Stainless Steel Large Head, Tapered

## Press Fit / Tapped / Threaded

**Features:** Large Head Tapered with each dimension configurable. We reduced the price drastically compared to the conventional products.

Material	Hardness	Pin Shape	Press Fit				Tapped		Threaded	
			m6	p6	g6	h7	g6	h7	g6	h7
Hardened Stainless Steel	35HRC~	Round	AFPBA	AFPBA	AFPBA	AFPBA	AFPBT	AFPBT	AFPNA	AFPNA
		Diamond	AFPBD	AFPBD	AFPBD	AFPBD	AFPBT	AFPBT	AFPND	AFPND

When the dia. exceeds Ø10, the center hardness may become 30HR or more.

**Press Fit**

**Threaded**

**Tapped**

(Round) (Diamond)

When B+E>20mm, the P dim. tolerance is 0-0.02.  
P-2EtanA=0.73 (Tip dia. Ø0.73 or more)  
Reference: tan15°=0.267 tan30°=0.577 tan45°=1 tan60°=1.732  
\* For D Tolerance g6, h7, no Insertion Guide is provided.

**Press Fit**

Part Number	Type	D	P		L	B		E		C	ℓ1	(W)
			0.01mm Increment	1mm Increment		0.1mm Increment	Fixed	0.1mm Increment				
<Round> AFPBA(m6) AFPBA(p6) AFPBA(g6) AFPBA(h7)	2	2.50-8.00	2	1.0-20.0	1	0.5	0	1.2				
	3	3.50-8.00	3	1.8	2	1.5						
	4	4.50-8.00	4	2.2	3	2.2						
	5	5.50-8.00	5	3	3	3						
	6	6.50-12.00	6	3	3	3						
	7	7.50-13.00	7	3	3	3						
	8	8.50-15.00	8	4	4	4						
	9	9.50-15.00	9	4	4	4						
	10	10.50-16.00	10	4	4	4						
	11	11.50-16.50	11	4	4	4						
<Diamond> AFPBD(m6) AFPBD(p6) AFPBD(g6) AFPBD(h7)	12	12.50-18.00	12	5-10.0	4	4	4					
	13	14.00-20.00	13	5-10.0	4	4	5					
	14	14.00-20.00	14	5-10.0	4	4	5					
	15	16.00-22.50	15	5-10.0	4	4	5					
	16	17.00-25.50	16	5-10.0	5	5	7					
	17	17.00-25.50	17	5-10.0	5	5	7					
	18	19.00-25.50	18	5-10.0	5	5	7					
	19	19.00-25.50	19	5-10.0	5	5	7					
	20	22.00-25.50	20	5-10.0	5	5	9					

**Tapped**

Part Number	Type	D	P		L	B		E		M1 (Coarse)	* Tightening Torque N-cm	ℓ2	(W)
			0.01mm Increment	1mm Increment		0.1mm Increment	Fixed	0.1mm Increment					
<Round> AFPBT(g6) AFPBT(h7)	6	6.50-12.00	6	6(9)-16	3	0.5-10.0	M3	147	5	3			
	8	8.50-15.00	8	8(12)-16	3	0.5-10.0	M4	333	6	3.5			
	10	10.50-16.00	10	10(12)-20	4	0.5-10.0	M5	676	8	4			
	12	12.50-17.50	12	12-25	4	0.5-10.0	M6	1156	9	5.5			
	13	13.50-20.00	13	12-25	4	0.5-10.0	M8	2803	3.5				
	14	14.00-20.00	14	12-25	4	0.5-10.0	M10	5557	4				
<Diamond> AFPBD(g6) AFPBD(h7)	15	16.00-22.50	15	17-24	5	0.5-10.0	M12	9702	5				
	16	17.00-25.50	16	17-24	5	0.5-10.0	M16	24108	7				
	17	17.00-25.50	17	17-24	5	0.5-10.0	M20	46942	9				
	18	19.00-25.50	18	17(19)-30	5	0.5-10.0							
	19	19.00-25.50	19	17(19)-30	5	0.5-10.0							
	20	22.00-25.50	20	17(19)-30	5	0.5-10.0							

**Threaded**

Part Number	Type	D	P		L	B		E		M2 (Coarse)	* Tightening Torque N-cm	(W)
			0.01mm Increment	1mm Increment		0.1mm Increment	Fixed	0.1mm Increment				
<Round> AFPNA(g6) AFPNA(h7)	3	3.50-8.00	3	3-10	1	1.0-20.0	M3	147	1.5			
	4	4.50-8.00	4	3-10	1	1.0-20.0	M4	333	1.8			
	5	5.50-8.00	5	3-10	2	1.0-20.0	M5	676	2.2			
	6	6.50-12.00	6	3-10	3	1.0-20.0	M6	1156	3			
	8	8.50-15.00	8	3-10	3	1.0-20.0	M8	2803	3.5			
	10	10.50-16.00	10	3-10	4	1.0-20.0	M10	5557	4			
	12	12.50-17.50	12	3-10	4	1.0-20.0	M12	9702	5			
	16	17.00-25.50	16	3-10	5	1.0-20.0	M16	24108	7			
	20	22.00-25.50	20	3-10	5	1.0-20.0	M20	46942	9			

\* Tightening torque (reference) will be within Strength Class of Tightening Torque on Technical Data P.2297 (10.9). Not applicable when using locking materials or lock washers.

When L-Pitchx2, the incomplete threaded portion (Pitch x 2) is included in M2. B dimension in ( ) is applicable to Diamond Shape. To have fully threaded, specify L=0 and apply NNC alteration.

Ordering Example: Part Number - P - L - B - E - A (MH, NTK, LAC) Days to Ship Configure Online

Standard AFPBA 8 - P9.02 - L10 - B3.2  
Threaded AFPNA 6 - P8.00 - L5 - B4.0  
Tapped AFPBT 8 - P9.01 - L12 - B6.4

Alterations	Tapping	Air Vent	Wrench Hole	Hex Socket Machining	Screwdriver Slot	Relief	P Dimension Tolerance	Taper Angle
Code	MH	AC	LAC	RAC	DRC	NNC	PM/PP/PG/PH	A
Spec.	Adds a tapped hole. Ordering Code: MH	Adds an air vent. Ordering Code: AC	Machines wrench holes. Ordering Code: LAC	Machines hex sockets. Ordering Code: RAC	Width 0.6mm Depth 1mm	Adds a relief at the thread end. Ordering Code: NNC	Changes the P dim. tolerance. Ordering Code: PM	Changes the taper angle. Ordering Code: A
	Applicable when D≥6 B≥2+4 Applicable to Press Fit only Combination with NTK is not available.	Not applicable to Threaded Type. It has a relief groove.	Diamond Shape Hole is drilled on the diamond head vertically but with arbitrary orientation of its diamond surfaces against those of the diamond head. Applicable Dimension Wrench Hole Dimensions	S=3~P-2xExtanA* Values in ( ) are applicable to Tapped Type.	Applicable to Threaded Type only.	Applicable when L=0.	Not applicable when B+E>20. Ordering Code Tolerance PM m6 PP p6 PG g6 PH h7	Ordering Code Angle A30 30° A45 45° A60 60°
	D (Coarse) ℓ2 6 M3 4 8 M4 6		P B Q -9.99 5.0- 9.9 2 10.0- 30.0 2.5 5.0- 7.9 2 8.0-11.9 2.5 12.0-30.0 3.5	D Applicable Dimension Hex Hole Dimensions P B S ℓ 6 6.5(11.0)- 3 2 8 7.0(12.0)- 4 2.5 10 8.0(13.0)- 5 3 12 9.0(13.0)- 6 4		3 Days Volume discount rate is applicable.	3 Days Volume discount rate is applicable.	

# Locating Pins - Hardened Stainless Steel Large Head, Tapered

## Configurable Taper Angle, D and P Selectable Tolerance

**Features:** Stainless Steel Large Head Tapered excellent in corrosion resistance and hardness. Selectable tolerance on both ends and tapered dimensions.

Material	Hardness	Pin Shape	Press Fit	Tapped	Threaded
			Round	AKFA	AKFTA
Hardened Stainless Steel	35HRC~	Diamond	AKFD	AKFTD	AKFND

When the dia. exceeds Ø10, the center hardness may become 30HR or more.

**Press Fit**

**Threaded**

**Tapped**

(Round) (Diamond)

When B+E>20mm, the P dim. tolerance is 0-0.02.  
P-2EtanA=0.73 (Tip dia. Ø0.73 or more)  
Reference: tan15°=0.267 tan30°=0.577 tan45°=1 tan60°=1.732  
\* For D Tolerance g6, h7, no Insertion Guide is provided.

**Press Fit**

Part Number	Type	D Tol. Selection	P Tolerance Selection	D	P		L	B	E	A Selection	C	(W)	ℓ1	Unit Price Round Shape	Unit Price Diamond Shape
					0.01mm Increment	1mm Increment								0.1mm Increment	0.1mm Increment
AKFA (Round) AKFD (Diamond)	M	P	S	2	2.50- 8.00	3(4)-16	1.0-10.0	0.5-5.0	15 30 45 60	15	0.5	1.2 1.5 1.8 2.2 3 3.5	0		
	P	G	H	3	3.50- 8.00										
	G	H	4	4.50- 8.00											
	H	H	5	5.50- 8.00											
	H	H	6	6.50-10.00											
	H	H	8	8.50-10.00											

**Tapped**

Part Number	Type	D Tol. Selection	P Tolerance Selection	D	P		L	B	E	A Selection	(W)	M (Coarse)	* Recommended Tightening Torque N-cm	ℓ2	Unit Price Round Shape	Unit Price Diamond Shape
					0.01mm Increment	1mm Increment									0.1mm Increment	0.1mm Increment
AKFTA (Round) AKFTD (Diamond)	M	P	S	6	6.50-10.00	6(9)-16	1.0-10.0	0.5-5.0	15 30 45 60	15	3	M3	147	5		
	P	G	H	3	3											
	G	H	8	8	3.5											

**Threaded**

Part Number	Type	D Tol. Selection	P Tolerance Selection	D	P		L	B	E	A Selection	M (Coarse)	* Recommended Tightening Torque N-cm	(W)	Unit Price Round Shape	Unit Price Diamond Shape
					0.01mm Increment	1mm Increment								0.1mm Increment	0.1mm Increment
AKFNA (Round) AKFND (Diamond)	M	P	S	3	3.50- 8.00	3-10	1.0-10.0	0.5-5.0	15 30 45 60	15	M3	147	1.5		
	P	G	H	4	4.50- 8.00										
	G	H	5	5.50- 8.00											
	H	H	6	6.50-10.00											
				8	8.50-10.00	4-10					M6	2803	3.5		

\* Tightening torque (reference) will be within Strength Class of Tightening Torque on Technical Data P.2297 (10.9). Not applicable when using locking materials or lock washers.

Ordering Example: Part Number - P - L - B - E - A Days to Ship Configure Online

AKFA M S 6 - P10.00 - L6 - B3.0 - E5.0 - A30

Price Configure Online

Alterations Part Number - P - L - B - E - A - (MH, AC) Days to Ship Configure Online

AKFAM56 - P10.00 - L6 - B3.0 - E5.0 - A30 - MH

Alterations	Tapping	Air Vent
Code	MH	AC
Spec.	Adds a tapped hole. Ordering Code: MH	Adds an air vent. Ordering Code: AC
	Applicable when D≥6 B≥2+4 Applicable to Press Fit only Combination with NTK is not available.	Not applicable to Threaded. It has a relief groove.
	D (Coarse) ℓ2 6 M3 4 8 M4 6	