



Locating Pins - Hardened Stainless Steel Sphere Large Head

Press Fit / Tapped / Threaded

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

RoHS 10

Material	Hardness	Pin Shape	Press Fit				Tapped		Threaded	
			m6	p6	g6	h7	g6	h7	g6	h7
Hardened Stainless Steel	35HRC~	Round	AFPQA	AFPQA	AFPQA	AFPQA	AFPQA	AFPQA	AFPQA	AFPQNA
		Diamond	AFPQD	AFPQD	AFPQD	AFPQD	AFPQD	AFPQD	AFPQD	AFPQND

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

Press Fit
Insertion Guide D-0.02

Threaded
Insertion Guide D-0.02

Tolerance Selection

D or P	m6	p6	g6	h7
1-3	+0.008 -0.002	+0.012 -0.006	-0.002 -0.008	0 -0.010
3.01-6	+0.012 +0.004	+0.020 +0.012	-0.004 -0.012	0 -0.012
6.01-10	+0.015 +0.006	+0.024 +0.015	-0.005 -0.014	0 -0.015
10.01-18	+0.018 +0.007	+0.029 +0.018	-0.006 -0.017	0 -0.018
18.01-25.5	+0.021 +0.009	+0.035 +0.022	-0.007 -0.020	0 -0.021

Tapped

Round **Diamond**

When B > 20mm, the P dim. tolerance is 0-0.02.
For D Tolerance g6, h7, no Insertion Guide is provided.

Press Fit

Part Number	D	P	L	B	C	Ø1	(W)
Type	D	0.01mm Increment	1mm Increment	0.1mm Increment			
2	2.50-8.00			1.0-2.0	0.5	0	1.2
3	3.50-8.00						1.5
4	4.50-8.00		3(4)-16				1.8
5	5.50-8.00						2.2
6	6.50-12.00				1		3
7	7.50-13.00						
8	8.50-15.00		4(5)-16		1.5	1	3.5
9	9.50-15.00						
10	10.50-16.00			1.0-30.0(20.0)	2		4
11	11.50-17.00		5-25				
12	12.50-17.50						
13	14.00-20.00		7(12)-20				5
15	16.00-22.50		8(14)-23				
16	17.00-25.50		8(15)-24				7
18	19.00-25.50		8(15)-27		3	2	
20	22.00-25.50		10(15)-30				9

When L and B dimensions in () are applicable to Diamond Shape. 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.

Tapped

Part Number	D	P	L	B	M1	* Tightening Torque	Ø2	(W)
Type	D	0.01mm Increment	1mm Increment	0.1mm Increment	(Coarse)	N-cm		
6	6.50-12.00		6(9)-16		M3	147	5	3
8	8.50-15.00		8(12)-16		M4	333	6	3.5
10	10.50-16.00		10(12)-20	1.0-30.0(20.0)	M5	676	8	5
12	12.50-18.00		12-25					
13	14.00-20.00		12-25	1.0-30.0(20.0)				5.5
16	17.00-25.50		17-24		M6	1156	9	7
20	22.00-25.50		17(18)-30	5.0-30.0(27.0)				9

Please confirm pilot hole depth on P.1566. Holes may go through. L and B dimensions in () are applicable to Diamond Shape. Note the strength of under-head part. P.1566. Holes may go through. 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.

Threaded

Part Number	D	P	L	B	M2	* Tightening Torque	(W)
Type	D	0.01mm Increment	1mm Increment	0.1mm Increment	(Coarse)	N-cm	
3	3.50-8.00			1.0-2.0	M3	147	1.5
4	4.50-8.00				M4	333	1.8
5	5.50-8.00		0-10		M5	676	2.2
6	6.50-12.00				M6	1156	3
8	8.50-15.00				M8	2803	3.5
10	10.50-16.00		0-20	1.0-30.0(20.0)	M10	5557	4
12	12.50-17.50				M12	9702	5
16	17.00-25.50		0-24		M16	24108	7
20	22.00-25.50		0-30		M20	46942	9

When L < Pitch x 2, 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. When L=3, C=0.5, Ø1=1. 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: **Type** - **D** - **P** - **L** - **B**

Press Fit: AFPQA 4 - P5.00 - L5 - B2.5

Tapped: AFPQTA 6 - P10.00 - L10 - B5.0

Threaded: AFPQNA 8 - P10.00 - L8 - B7.5

Alterations

Part Number: **Type** - **P** - **L** - **B** - **(LAC)**

AFPQTA6 - P10.00 - L10 - B5 - LAC

[Configure Online](#)

Alteration	Wrench Hole	Air Vent	Relief	P Dimension Tolerance																								
Code	LAC	AC	NNC	PM/PP/PG/PH																								
<p>Machines wrench holes. Ordering Code: LAC</p>	<p>Adds an air vent. Ordering Code: AC</p>	<p>Adds a relief at the thread end. Ordering Code: NNC</p>	<p>Changes the P dim. tolerance. Ordering Code: PM</p>	<p>Changes the P dim. tolerance.</p> <p>Not applicable when B > 20.</p> <p>3 Days</p> <p>Volume discount rate is applicable.</p>																								
<p>Spec.</p> <p>When L < Pitch x 2, 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. When L=3, C=0.5, Ø1=1. 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.</p> <p>Not applicable to Threaded Type.</p> <p>It has a relief groove.</p> <p>Applicable when L=0.</p>	<p>Applicable Dimension</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Applicable Dimension</th> <th>Wrench Hole Dimension</th> </tr> </thead> <tbody> <tr> <td>P</td> <td>B</td> </tr> <tr> <td>-9.99</td> <td>5.0-9.9</td> </tr> <tr> <td>10.0-30.0</td> <td>10.0-30.0</td> </tr> <tr> <td></td> <td>5.0-7.9</td> </tr> <tr> <td>10.00</td> <td>8.0-11.9</td> </tr> <tr> <td></td> <td>12.0-30.0</td> </tr> </tbody> </table>	Applicable Dimension	Wrench Hole Dimension	P	B	-9.99	5.0-9.9	10.0-30.0	10.0-30.0		5.0-7.9	10.00	8.0-11.9		12.0-30.0	<p>Not applicable to Threaded Type.</p> <p>It has a relief groove.</p>	<p>Applicable when L=0.</p>	<p>Changes the P dim. tolerance.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Code</th> <th>Tolerance</th> </tr> </thead> <tbody> <tr> <td>PM</td> <td>m6</td> </tr> <tr> <td>PP</td> <td>p6</td> </tr> <tr> <td>PG</td> <td>g6</td> </tr> <tr> <td>PH</td> <td>h7</td> </tr> </tbody> </table>	Code	Tolerance	PM	m6	PP	p6	PG	g6	PH	h7
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Locating Pins - Hardened Stainless Steel Sphere Large Head

D and P Selectable Tolerance

Features: Stainless Steel Sphere Large Head excellent in corrosion resistance and hardness. Selectable tolerance on both ends.

RoHS 10

Material	Hardness	Pin Shape	Press Fit	Tapped	Threaded
			Round	AKFQA	AKFQNA
Hardened Stainless Steel	35HRC~	Round	AKFQA	AKFQTA	AKFQNA
		Diamond	AKFQD	AKFQTD	AKFQND

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

Press Fit
Insertion Guide D-0.02

Threaded
Insertion Guide D-0.02

Tolerance Selection

D or P	Standard Grade				
	M	P	G	H	S
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	0 - 0.01
6.00	+0.004	+0.012	-0.012	-0.012	-
6.01	+0.015	+0.024	-0.005	0	-
10.00	+0.006	+0.015	-0.014	0	-0.015

Tapped

Round **Diamond**

When B > 20mm, the P dim. tolerance is 0-0.02.
For D Tolerance g6, h7, no Insertion Guide is provided.

Press Fit

Part Number	D	P	L	B	C	(W)	Ø1	Unit Price Round Shape	Unit Price Diamond Shape			
Type	D Tol. Selection	P Tolerance Selection	D	0.01mm Increment	1mm Increment	0.1mm Increment		AKFQA	AKFQD			
AKFOA (Round) AKFQD (Diamond)	M P G H	S M P G H	D	2	2.50-8.00		0.5	1.2				
				3	3.50-8.00							
				4	4.50-8.00	3(4)-16						
				5	5.50-8.00							
				6	6.50-10.00							
				8	8.50-10.00	4(5)-16	1.0-15.0					

L dimension in () is applicable to Diamond Shape. 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.

Tapped

Part Number	D	P	L	B	(W)	M (Coarse)	* Recommended Tightening Torque	Ø2	Unit Price Round Shape	Unit Price Diamond Shape		
Type	D Tol. Selection	P Tolerance Selection	D	0.01mm Increment	1mm Increment	0.1mm Increment	N-cm		AKFQTA	AKFQTD		
AKFQTA (Round) AKFQTD (Diamond)	M P G H	S M P G H	D	6	6.50-10.00	6(9)-16	2.0-15.0	3	M3	147	5	
				8	8.50-10.00	8(12)-16	2.0-15.0	3.5	M4	333	8	

L dimension in () is applicable to Diamond Shape. Note the strength of under-head part. P.1566. Please confirm pilot hole depth on P.1566. Holes may go through. 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.

Threaded

Part Number	D	P	L	B	(W)	M	* Recommended Tightening Torque	Unit Price Round Shape	Unit Price Diamond Shape		
Type	D Tol. Selection	P Tolerance Selection	D	0.01mm Increment	1mm Increment	0.1mm Increment	N-cm	AKFQNA	AKFQND		
AKFQNA (Round) AKFQND (Diamond)	M P G H	S M P G H	D	3	3.50-8.00		1.5	3	147		
				4	4.50-8.00		1.8	4	333		
				5	5.50-8.00	3-10	1.0-15.0(10.0)	2.2	5	676	
				6	6.50-10.00		1.0-15.0(12.0)	3	6	1156	
				8	8.50-10.00	4-10	1.0-15.0	3.5	8	2803	

PLB dimension in () is applicable to Diamond Shape. When L=3, C=0.5, Ø1=1. 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: **Type** - **D Tol.** - **P Tolerance** - **D** - **P** - **L** - **B**

AKFQA M S 6 - P8.00 - L8 - B6.0

Days to Ship [Configure Online](#)

Price [Configure Online](#)

Alterations

Part Number: **P** - **L** - **B** - **(AC)**

AKFQAMS6 - P8.0 - L8 - B6.0 - AC

[Configure Online](#)

Alterations

Air Vent

Code AC

Adds an air vent. Ordering Code: AC

Spec. Not applicable to Threaded. It has a relief groove.