

Locating Pins for Fixtures - Pedestal Pins / Height Adjusting Pins

☞ The pocket is to collect dust (spatter etc.) generated during welding.

■ Pedestal Pin RoHS 10

Type		Material	Hardness
Pocket Type	No Pocket Type	SCM415	Carburized Treated Hardness: 55HRC - (Depth 0.7 - 0.8)
KMFR	MFR		

• Pocket Type

• No Pocket Type

Dh7	
12	
13	
14	
15	0
16	-0.018
17	
18	
19	0
20	-0.021

Part Number Type	H	D 1mm Increment	P 0.1mm Increment	B 1mm Increment	L 1mm Increment	T 1mm Increment	M
KMFR	18 22 25						
MFR	28 30		☞ H-2>D				

Ordering Example: **Part Number** - D - P - B - L - T - M
 KMFR30 - D15 - P8.0 - B8 - L5 - T18 - M6

Alterations: **Part Number** - D - P - B - L - T - M - (MZ)
 MFR18 - D15 - P10.0 - B8 - L5 - T20 - M6 - MZ

Alteration

Wear Groove

Code MZ

Spec. Adds a 0.25mm groove at a position of 4mm from the edge of P dimension.

Ordering Code | MZ

Example

Locating of work piece in both vertical and horizontal directions is possible. It is possible with the pocket to collect dust (spatter etc.) generated during welding. Usable as locating pins for arc welding processes, during which a large amount of spatter

■ Height Adjusting Pins RoHS 10

Type			Material	Hardness
Threaded	Set Screw	Shape	SCM435	Treated Hardness 35-40HRC
HUPNA	HUPTA	Round		
HUPND	HUPTD	Diamond	SCM415	Carburized Treated Hardness: 55HRC~ (Depth 0.7~0.8) Anti-carburizing on Threads
THUPNA	THUPTA	Round		
THUPND	THUPTD	Diamond		

Reference: $\sin 15^\circ = 0.259$ $\sin 30^\circ = 0.5$
 $\sin 45^\circ = 0.707$ $\sin 60^\circ = 0.866$
 $\tan 15^\circ = 0.267$ $\tan 30^\circ = 0.577$
 $\tan 45^\circ = 1$ $\tan 60^\circ = 1.732$

• Threaded

• Set Screw

Tip Shape

Tip Shape ☞ The center hole remains.

A Shape Tapered

$P-2E \tan(A/2) \geq 0.73$

B Shape Taper R

$e = P/2 \tan(A/2) + R - (R/\sin(A/2))$

Part Number Type	Tip Shape	Dh7	P 0.1mm Increment	B 1mm Increment	L	T 0.1mm Increment	H 1mm Increment	A	E (Shape A) 1mm Increment	Applicable Set Screw				W
										6	8	10	12	
Threaded HUPNA HUPND THUPNA THUPND	A	6	3.0-7.0 7.1-12.0	5-50 (B<Px4)	5 8 10	5.0-20.0	9-20	30	1-15	6	8	4	1	1(2)
		8	3.0-9.0 9.1-16.0							5	1.5	4	3	1(2)
		10	4.5-12.0 12.1-20.0							8	2	4	4	1-3
	B	10T	4.5-12.0 12.1-20.0		7	2	5			4	M6	1-3		
		12	9.0-14.0 14.1-25.0		5	3	5			5	4			
		16	13.0-18.0 18.1-32.0		13	4	8			8	M8	6		

☞ W Dimension D6, D8: W=2 when P>5.0, D10, D10T: W=1 when P<5.0, W=3 when P>7.0 ☞ L dimension in () is applicable to Round Shape only. ☞ P+2eH<Px5

Ordering Example: **Part Number** - P - B - L - T - H - A - E
 HUPNA A 10 - P4.8 - B10 - L10 - T20.0 - H20 - A60 - E5

Alterations: **Part Number** - P - B - L - T - H - A - E - (KC, KD, SC, MC) - KD
 HUPTA10 - P6.0 - B10 - T10.0 - H15 - A30 - KD (Set Screw Shape B)

Alterations	Flat Position	Flat Machining	Wrench Flats	Thread Dia.
Code	KC	KD	SC	MC
Spec.	Ordering Code KC Changes the flat position to 90° from the standard position 0°. ☞ Applicable to Diamond Shape Type only.	Ordering Code KD Machining on one side. For 15.0-7.0: 3mm For 17.1-20.0: 5mm ☞ Applicable to Round Shape Type only.	Ordering Code SC10 Adds wrench flats. SC=1mm Increment SC-D SC-P SC-H-2 ☞ Applicable to Round Shape Type only.	Ordering Code MC8 Changes the thread diameter. ☞ D/3<M<D Mmin3 ☞ Relief at thread end is available. ☞ Applicable to Threaded Type only.

Example

Locating of work piece in both vertical and horizontal directions is possible.