

Height Adjusting Pins - Round, Wrench Flats / Shouldered Threaded, Tapped

■ **Features:** Locating Pins for the height direction. O.D. and Height Configurable.

■ Round, Wrench Flats Threaded

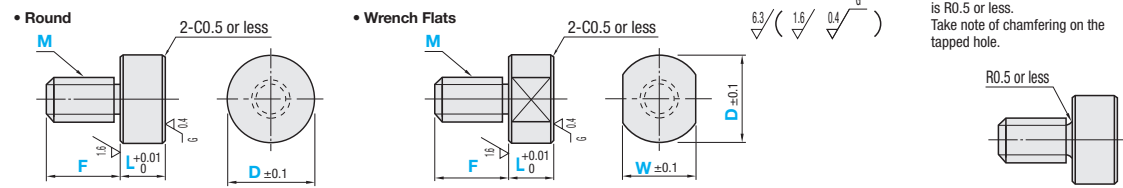


RoHS 10

M Material	S Surface Treatment	H Hardness	Type	Ordering Code, Shape Code
SKS3 Equivalent	-	Treated Hardness: 60 ~ 63HRC	JPH	AF (Round) AFM (Round)
	Black Oxide	Treated Hardness: 60 ~ 63HRC	BJPH	
	Hard Chrome Plating Plating Thickness: 3µm or more	Treated Hardness: 50 ~ 55HRC Plating Hardness: 750HV ~	HJPH	
SUS304	-	-	SJPH	AW (Wrench Flats) AWM (Wrench Flats)
SUS440C Equivalent	-	Treated Hardness: 50 ~ 55HRC	CJPH	
SCM415	-	Carburized Treated Hardness: 55HRC~ (Depth: 0.7 ~ 0.8)	TJPH	

Some combinations are not available. Refer to the price list to select the available combination.

* Under-head of F Configurable Type is R0.5 or less. Take note of chamfering on the tapped hole.



Part Number		M (Coarse)		L		D		W		F	
Type	Shape Code	M (Coarse)	* Tightening Torque N·cm	0.01mm Increment	1mm Increment	1mm Increment	Standard	1mm Increment	Standard	1mm Increment	
JPH	<Round> AF (F Fixed) AFM (F Configurable)	3	147	2.00~10.00	5~30 (M<D<Mx5)	4~13	5	4~13	8	3~36 (M≤F≤Mx3)	
BJPH		4	333			5~18	6	5~18			
HJPH		5	676			6~23	8	6~23			
SJPH	<Wrench Flats> AW (F Fixed) AWM (F Configurable)	6	1156	5.00~30.00		7~28	10	7~28	12		
CJPH		8	2803			9~29	12	9~29			
TJPH		10	5557			11~29	15	11~29			
		12	9702	10.00~50.00		13~29		13~29			

M<W<D

* 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.

■ Round

Unit Price		F Fixed		F Configurable	
M (Coarse)	JPHAF	BJPHAF	HJPHAF	SJPHAF	TJPHAF
3					
4					
5					
6					
8					
10					
12					

■ Wrench Flats

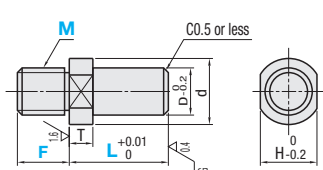
Unit Price		F Fixed		F Configurable	
M (Coarse)	JPHAW	BJPHAW	HJPHAW	SJPHAW	TJPHAW
3					
4					
5					
6					
8					
10					
12					

■ Shouldered, Threaded



RoHS 10

M Material	S Surface Treatment	H Hardness	Type	
			F Fixed	F Configurable
SKS3 Equivalent	-	Treated Hardness: 60 ~ 63HRC	JPHA	JPHAM
	Black Oxide	Treated Hardness: 60 ~ 63HRC	BJPHA	BJPHAM
	Hard Chrome Plating Plating Thickness: 3µm or more	Treated Hardness: 50 ~ 55HRC Plating Hardness: 750HV ~	HJPHA	HJPHAM
SUS304	-	-	SJPHA	SJPHAM
SUS440C Equivalent	-	Treated Hardness: 50 ~ 55HRC	CJPHA	CJPHAM
SCM415	-	Carburized Treated Hardness: 55HRC~ (Depth: 0.7 ~ 0.8)	-	TJPHAM



* Under-head of F Configurable Type is R0.5 or less. Take note of chamfering on the tapped hole.

Part Number		M (Coarse)		L		F		D		T		H	
Type	Shape Code	M (Coarse)	* Tightening Torque N·cm	0.01mm Increment	Standard	1mm Increment		Standard	1mm Increment	Standard	1mm Increment	Standard	1mm Increment
<F Fixed> JPHA BJPHA HJPHA SJPHA CJPHA	<F Configurable> JPHAM BJPHAM HJPHAM SJPHAM CJPHAM	3	147	5.00~10.00	5	3~36 (M≤F≤Mx3)	3	5	3	3	5	3	5
		4	333		6		4	6	4	6	4	6	6
		5	676		8		5	8	5	8	5	8	8
		6	1156	5.00~30.00	10		6	10	6	10	6	10	10
		8	2803		12		8	12	8	12	8	12	12
		10	5557		15		10	14	10	14	10	14	14
		12	9702	10.00~50.00			12	16	12	16	12	16	16

* 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.

Unit Price		F Fixed		F Configurable	
M (Coarse)	JPHA	BJPHA	HJPHA	SJPHA	TJPHA
3					
4					
5					
6					
8					
10					
12					

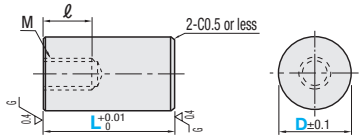
■ Round, Wrench Flats Tapped



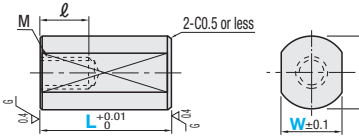
RoHS 10

M Material	S Surface Treatment	H Hardness	Round	Wrench Flats
			JPHUF	JPHUW
SKS3 Equivalent	-	Treated Hardness: 60 ~ 63HRC	BJPHUF	BJPHUW
	Black Oxide	Treated Hardness: 60 ~ 63HRC	HJPHUF	HJPHUW
	Hard Chrome Plating Plating Thickness: 3µm or more	Treated Hardness: 50 ~ 55HRC Plating Hardness: 750HV ~		

• Round



• Wrench Flats



Part Number		L		W		M (Coarse)		* Tightening Torque N·cm		ℓ	
Type	D	0.01mm Increment	1mm Increment	1mm Increment	1mm Increment	M (Coarse)	* Tightening Torque N·cm	ℓ			
<Round> JPHUF BJPHUF HJPHUF	6	12.00~30.00	-	-	-	M3	147	5			
	8	16.00~30.00	-	-	-	M5	676	8			
	10	16.00~50.00	8~9	-	-	M8	2803	12			
	12	16.00~50.00	8~11	-	-						
	16	22.00~50.00	11~15	-	-						
	20	22.00~50.00	11~19	-	-						

M+2<W<D Wrench flats is D≥10.

* 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.

D	Unit Price Round		Unit Price Wrench Flats	
	JPHUF	BJPHUF	JPHUW	BJPHUW
6			-	-
8			-	-
10				
12				
16				
20				



Ordering Example

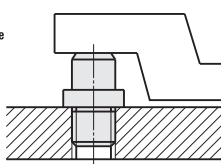
Part Number - L - D - W - F

Round, Wrench Flats Threaded
(Round, F Fixed) JPHAF3 - 5.21 - 6
(Round, F Configurable) JPHAFM3 - L5.21 - D6 - F9

(Wrench Flats, F Fixed) HJPHAW10 - 20 - 15 - W11
(Wrench Flats, F Configurable) HJPHAWM10 - L20.00 - D15 - W11 - F15

Shouldered, Threaded
(F Fixed) JPHA8 - 14
(F Configurable) JPHAM8 - L14.00 - F10

EX Example



Alterations

Part Number - L - D - W - F - (CRC, EAT)
JPHAF10 - 20.50 25 - CRC
HJPHAWM10 - L15.00 - D20 - W20 - F15 - EAT

* Alterations are applicable to Threaded only.

Radius to End Face		Seating Sensor Holes																				
CRC		EAT																				
Spec.	Chamfering of workpiece receiving-surface is changed to R1. Ordering Code CRC No addition of radius to wrench flats. Applicable when L≥15.	Machines seating sensor holes on the work-receiving surface. Hole diameters are shown in the table below. Ordering Code EAT Applicable when D≥6. Application conditions vary depending on F and L dimensions.																				
		<table><tr><th>M</th><th>Narrow Hole Dia. d1</th><th>Through Hole Dia. d2</th><th>Applicable Overall Length Conditions</th></tr><tr><td>6</td><td>1.0</td><td>1.5</td><td>F+L≤20</td></tr><tr><td>8</td><td>1.0</td><td>2.5</td><td>F+L≤30</td></tr><tr><td>10</td><td>1.5</td><td>3.5</td><td>F+L≤40</td></tr><tr><td>12</td><td>1.5</td><td>4.5</td><td>F+L≤50</td></tr></table>		M	Narrow Hole Dia. d1	Through Hole Dia. d2	Applicable Overall Length Conditions	6	1.0	1.5	F+L≤20	8	1.0	2.5	F+L≤30	10	1.5	3.5	F+L≤40	12	1.5	4.5
M	Narrow Hole Dia. d1	Through Hole Dia. d2	Applicable Overall Length Conditions																			
6	1.0	1.5	F+L≤20																			
8	1.0	2.5	F+L≤30																			
10	1.5	3.5	F+L≤40																			
12	1.5	4.5	F+L≤50																			

