


# Height Adjusting Pins (Threaded)

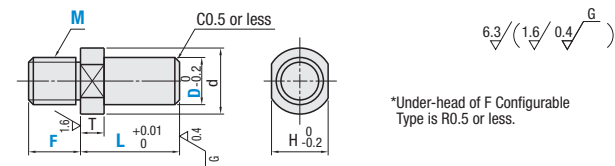
with Shoulder

**Height Adjusting Pins (Threaded) – with Shoulder**



Material	Surface Treatment	Hardness	Type	
			F Dimension Standard	F Dimension Configurable
01 Tool Steel or Equivalent	—	Treated Hardness: 60–63 HRC min.	JPHA	JPHAM
	Black Oxide	Treated Hardness: 60–63 HRC min.	BJPHA	BJPHAM
	Hard Chrome Plating	Treated Hardness: 60–63 HRC min. Plating Hardness: 750 HV min.	HJPHA	HJPHAM
304 Stainless Steel	—	—	SJPHA	SJPHAM
440C or 420 Stainless Steel	—	Treated Hardness: 50–55 HRC min.	CJPHA	CJPHAM
SCM415 Alloy Steel (JIS)	—	Carburized Treated Hardness: 55 HRC min. (Depth 0.7–0.8)	—	TJPHAM

Ⓢ 304 Stainless Steel may not be polished.



\*Under-head of F Configurable Type is R0.5 or less.

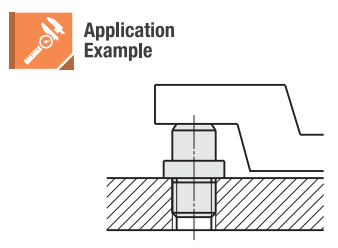
RoHS 10

Part Number	Type	M (Coarse)	L		Standard	F	D	d	T	H
			0.01 mm Increment	1 mm Increment						
F Fixed	F Configurable	3	5.00–10.00	5	3–36 (M≤F≤Mx3)	3	5	3	—	3
JPHA	JPHAM	4		6		4	6			4
BJPHA	BJPHAM	5	8	5		8	5			
HJPHA	HJPHAM	6	10	6		10	8			
SJPHA	SJPHAM	8	12	8		12	10			
CJPHA	CJPHAM	10	15	10		14	12			
		12	15	12	16	14				

\* The tightening torque (ref. value) for hardened products is strength class 8.8. (See technical data on MISUMI 2019 catalog P.4015). Not applicable when using locking agents or spring washers.


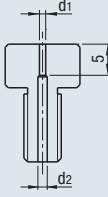
**Part Number Example**

Part Number	L	B	D	W	F
JPRA4	- 10.00				
JPRAM8	- L15.00				- F12
JPRFA6	- 20.00	- 8			
JPHAF3	- 5.21		- 6		
JPHAFM3	- L5.21		- D6		- F9
HJPHAW10	- 20.00		- 15	- W11	
HJPHAWM10	- L20.00		- D15	- W11	- F15
JPHA8	- 14.00				
JPHAM8	- L14.00				- F10



**Part Number Alterations**


Part Number	L	B	D	W	F	(CRC, EAT)
JPRA10	- 20.5					- CRC
HJPHAWM10	- L15.00		- D20	- W20	- F15	- EAT

Alterations	Radius to End Face		Seating Sensor Holes																				
	Code	CRC	Code	EAT																			
Spec.	Chamfering of workpiece receiving-surface is changed to R1. Hex is R size in the right table. <b>Ordering Code: CRC</b>  Ⓢ No addition of radius to wrench flats Ⓢ Applicable when L≥15. Ⓢ Hex is applicable to B≥10.	<table border="1"> <thead> <tr> <th>B</th> <th>R</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>2</td> </tr> <tr> <td>12, 13</td> <td>2.5</td> </tr> <tr> <td>14</td> <td>3</td> </tr> <tr> <td>17, 19</td> <td>4</td> </tr> </tbody> </table>	B	R	10	2	12, 13	2.5	14	3	17, 19	4	Enlarged Photo of Receiving Surface 	Machines seating sensor holes on the work-receiving surface. Hole diameters are shown in the table below. <b>Ordering Code: EAT</b> Ⓢ Applicable when D≥6. Ⓢ Application conditions vary depending on F and L dimensions.									
		B	R																				
10	2																						
12, 13	2.5																						
14	3																						
17, 19	4																						
<table border="1"> <thead> <tr> <th>M</th> <th>Narrow Hole Dia.</th> <th>Through Hole Dia.</th> <th>Applicable Overall Length Conditions</th> </tr> </thead> <tbody> <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> </tbody> </table>	M	Narrow Hole Dia.	Through Hole Dia.	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			
M	Narrow Hole Dia.	Through Hole Dia.	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																				

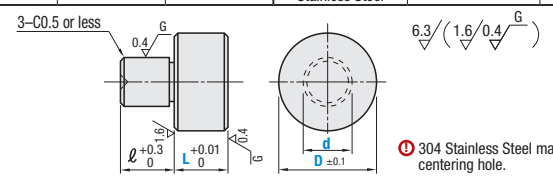
# Height Adjusting Pins

Press-Fit / Counterbore

**Height Adjusting Pins – Press Fit Type**



Type				Material	Surface Treatment	Hardness	
L Configurable		D and L Configurable					
d Tolerance p6	d Tolerance m6	d Tolerance p6	d Tolerance m6	01 Tool Steel or Equivalent	—	Treated Hardness: 60–63 HRC min.	
JPAT	JPAM	JPATF	JPAMF			Black Oxide	Treated Hardness: 60–63 HRC min.
BJPAT	BJPAM	BJPATF	BJPAMF			Hard Chrome Plating	Treated Hardness: 60–63 HRC min. Plating Hardness 750 HV min.
HJPAT	HJPAM	HJPATF	HJPAMF			—	—
SJPAT	SJPAM	SJPATF	SJPAMF	304 Stainless Steel	—	—	
CJPAT	CJPAM	CJPATF	CJPAMF	440C or 420 Stainless Steel	—	Treated Hardness: 50–55 HRC min.	

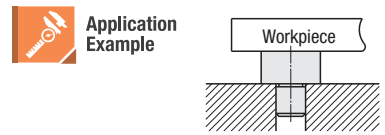


Ⓢ 304 Stainless Steel may not be polished and may have no centering hole.

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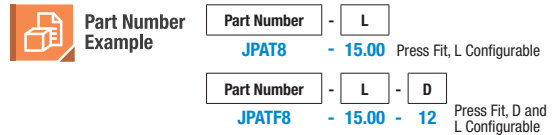
**L Configurable**

Part Number	Type	D Dimension Tolerance		L	D	ℓ
		m6	p6			
d Tolerance p6	d Tolerance m6	3	+0.008 +0.002	2.00–10.00	6	5
JPAT	JPAM	4	+0.012 +0.020		8	6
BJPAT	BJPAM	5	+0.004 +0.012	5.00–30.00	10	8
HJPAT	HJPAM	6	+0.015 +0.024		12	10
SJPAT	SJPAM	8	+0.006 +0.015	10.00–50.00	16	10
CJPAT	CJPAM	10	+0.018 +0.029		18	12
		12	+0.007 +0.018		20	15



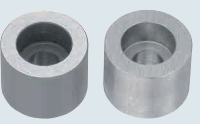
**D & L Configurable**

Part Number	Type	D Tolerance		L	D	ℓ
		m6	p6			
d Tolerance p6	d Tolerance m6	3	+0.008 +0.002	2.00–10.00	5–30 (d<D<5d)	5
JPATF	JPAMF	4	+0.012 +0.020			6
BJPATF	BJPAMF	5	+0.004 +0.012	5.00–30.00	5–30 (d<D<5d)	8
HJPATF	HJPAMF	6	+0.015 +0.024			10
SJPATF	SJPAMF	8	+0.006 +0.015	10.00–50.00	5–30 (d<D<5d)	12
CJPATF	CJPAMF	10	+0.018 +0.029			15

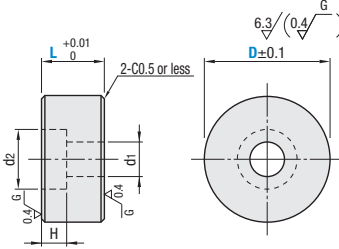


Ⓢ By standardizing the D dim., a type "L Configurable" 20% more economical than conventional products is now available.

**Height Adjusting Pins – Counterbored**



Type		Material	Surface Treatment	Hardness
L Configurable	D and L Configurable			
JPHU	JPHUZ	01 Tool Steel or Equivalent	—	Treated Hardness: 60–63 HRC min.
BJPHU	BJPHUZ		Black Oxide	Treated Hardness: 60–63 HRC min.
HJPHU	HJPHUZ		Hard Chrome Plating	Treated Hardness: 60–63 HRC min. Plating Hardness: 750 HV min.
SJPHU	SJPHUZ		—	—
CJPHU	CJPHUZ	304 Stainless Steel	—	—
		440C or 420 Stainless Steel	—	Treated Hardness: 50–55 HRC min.



Ⓢ 304 Stainless Steel may not be polished.

RoHS 10

**L Configurable**

Part Number	Type	No.	L		D	d1	d2	H	Applicable Screw
			0.01 mm Increment	1 mm Increment					
JPHU		3	6.00–15.00	12	3.5	6.5	4	M3	
BJPHU		4	7.00–20.00	13	4.5	8	5	M4	
HJPHU		5	8.00–20.00	15	5.5	9.5	6	M5	
SJPHU		6	9.00–25.00	20	6.5	11	7	M6	
CJPHU		8	11.00–30.00	30	9	14	9	M8	

**D & L Configurable**

Part Number	Type	No.	L		D	d1	d2	H	Applicable Screw
			0.01 mm Increment	1 mm Increment					
JPHUZ		3	6.00–15.00	10–15	3.5	6.5	4	M3	
BJPHUZ		4	7.00–20.00	12–20	4.5	8	5	M4	
HJPHUZ		5	8.00–20.00	15–20	5.5	9.5	6	M5	
SJPHUZ		6	9.00–25.00	15–25	6.5	11	7	M6	
CJPHUZ		8	11.00–30.00	18–30	9	14	9	M8	

