


Height Adjusting Pins (Threaded)

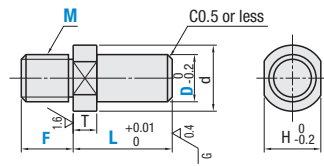
with Shoulder

Locating Pins/Bushings for Locating Pins



Height Adjusting Pins (Threaded) – with Shoulder

Material	Surface Treatment	Hardness	Type	
			F Dimension Standard	F Dimension Configurable
O1 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.

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	10.00–50.00	12		12	16	5		12


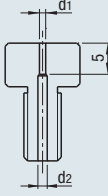
*The tightening torque (ref. value) for hardened products is strength class 8.8. (See technical data on MISUMI 2019 catalog P.4015). Not applicable when using locking agents or spring washers.

Part Number Example

Part Number	L	B	D	W	F
JPRA4	10.00	—	—	—	—
JPRAM8	15.00	—	—	—	F12
JPRFA6	20.00	8	—	—	—
JPHAF3	5.21	—	6	—	—
JPHAFM3	15.21	—	D6	—	F9
HJPHAW10	20.00	—	15	W11	—
HJPHAWM10	20.00	—	D15	W11	F15
JPHA8	14.00	—	—	—	—
JPHAM8	14.00	—	—	—	F10

Part Number Alterations


Part Number	L	B	D	W	F	(CRC, EAT)
JPRA10	20.5	—	—	—	—	CRC
HJPHAWM10	15.00	—	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. Ordering Code: CRC Ⓢ 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	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 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>d1</td> <td>d2</td> <td>F+L ≤ 20</td> </tr> <tr> <td>8</td> <td>d1</td> <td>d2</td> <td>F+L ≤ 30</td> </tr> <tr> <td>10</td> <td>d1</td> <td>d2</td> <td>F+L ≤ 40</td> </tr> <tr> <td>12</td> <td>d1</td> <td>d2</td> <td>F+L ≤ 50</td> </tr> </tbody> </table> 	M	Narrow Hole Dia.	Through Hole Dia.	Applicable Overall Length Conditions	6	d1	d2	F+L ≤ 20	8	d1	d2	F+L ≤ 30	10	d1	d2	F+L ≤ 40	12	d1	d2	F+L ≤ 50
B	R																																	
10	2																																	
12, 13	2.5																																	
14	3																																	
17, 19	4																																	
M	Narrow Hole Dia.	Through Hole Dia.	Applicable Overall Length Conditions																															
6	d1	d2	F+L ≤ 20																															
8	d1	d2	F+L ≤ 30																															
10	d1	d2	F+L ≤ 40																															
12	d1	d2	F+L ≤ 50																															

Height Adjusting Pins

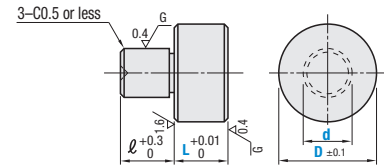
Press-Fit / Counterbore

Locating Pins/Bushings for Locating Pins



Height Adjusting Pins – Press Fit Type

Type				Material	Surface Treatment	Hardness	
L Configurable	D and L Configurable		D Tolerance m6				
d Tolerance p6	d Tolerance m6	d Tolerance p6	d Tolerance m6	O1 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.	

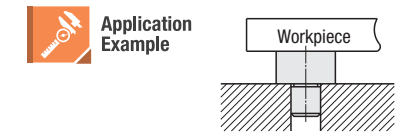


Ⓢ 304 Stainless Steel may not be polished and may have no centering hole.

RoHS 10

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 +0.004		8	6
BJPAT	BJPAM	5	+0.012 +0.004	5.00–30.00	10	8
HJPAT	HJPAM	6	+0.015 +0.006		12	10
SJPAT	SJPAM	8	+0.018 +0.007	10.00–50.00	16	10
CJPAT	CJPAM	10	+0.029 +0.018		18	12
		12			20	15



D & L Configurable

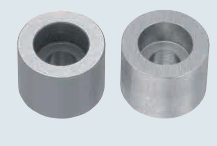
Part Number	Type	D Tolerance		L	D	ℓ
		m6	p6			
d Tolerance p6	d Tolerance m6	3	+0.008 +0.002	2.00–10.00	5–30 (d < D < 5d)	5
JPATF	JPAMF	4	+0.012 +0.004			6
BJPATF	BJPAMF	5	+0.012 +0.004	5.00–30.00	5–30 (d < D < 5d)	8
HJPATF	HJPAMF	6	+0.015 +0.006			10
SJPATF	SJPAMF	8	+0.018 +0.007	10.00–50.00	5–30 (d < D < 5d)	12
CJPATF	CJPAMF	10	+0.029 +0.018			15

Part Number Example

Part Number - L
JPAT8 - 15.00 Press Fit, L Configurable

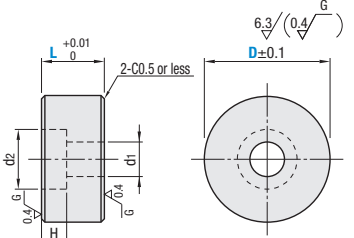
Part Number - L - D
JPATF8 - 15.00 - 12 Press Fit, D and L Configurable

Ⓢ 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	O1 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	304 Stainless Steel	—	—
CJPHU	CJPHUZ	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	d ₁	d ₂	H	Applicable Screw
			0.01 mm Increment	1 mm Increment					
JPHU	JPHUZ	3	6.00–15.00	12	3.5	6.5	4	M3	
BJPHU	BJPHUZ	4	7.00–20.00	13	4.5	8	5	M4	
HJPHU	HJPHUZ	5	8.00–20.00	15	5.5	9.5	6	M5	
SJPHU	SJPHUZ	6	9.00–25.00	20	6.5	11	7	M6	
CJPHU	CJPHUZ	8	11.00–30.00	30	9	14	9	M8	

D & L Configurable

Part Number	Type	No.	L		D	d ₁	d ₂	H	Applicable Screw
			0.01 mm Increment	1 mm Increment					
JPHUZ	JPHUZ	3	6.00–15.00	10–15	3.5	6.5	4	M3	
BJPHUZ	BJPHUZ	4	7.00–20.00	12–20	4.5	8	5	M4	
HJPHUZ	HJPHUZ	5	8.00–20.00	15–20	5.5	9.5	6	M5	
SJPHUZ	SJPHUZ	6	9.00–25.00	15–25	6.5	11	7	M6	
CJPHUZ	CJPHUZ	8	11.00–30.00	18–30	9	14	9	M8	

Part Number Example

Part Number - L
JPHU3 - 10.00 Counterbored, L Configurable

Part Number - L - D
JPHUZ5 - 10.00 - 20 Counterbored, D and L Configurable