



# Locating Pins (Shoulder)

Set Screw Mounting Shank



- RoHS 10
- ℓ3 is the recommended dimension of the position of set screw tip.
- Select set screw position X or Y for Notched Diamond Type and Set Screw Flat Diamond Type.
- A slight machined step will remain on the Diamond Shape.
- L > A + G + 1

Material No.	Material	Surface Treatment	Hardness	Type			Shape Code
				Circumference Groove	Notch	Set Screw Flat	
(1)	O1 Tool Steel Equivalent	—	Treated Hardness: 60-63 HRC min.	JPGJ	JPCJ	JPDJ	S (Round) D (Diamond)

### Circumference Groove Shape

### Notch Shape

### Set Screw Flat Shape

## Circumference Groove Shape

Part Number	Shape Code	D	D Tolerance g6	P 0.01 mm Increment	L 1 mm Increment	B 0.1 mm Increment	d	ℓ <sub>1</sub>	ℓ <sub>2</sub>	C <sub>1</sub>	m	H	(W)	
													When D < P	When D ≥ P
JPGJ	S Round D Diamond	6	-0.004 -0.012	2.00-6.00	3-12	2.0-20.0	4.5	5	5	1	3	8	3	1.5
		6S												
		8	-0.005 -0.014	3.00-8.00	4-16	3.0-20.0	6.5	6	6	0.5	4	11	3.5	1.8
		8S												
		10	-0.006 -0.017	3.00-12.00	5-20	3.0-25.0	8	8	2	0.5	4	13	4	2.2
		10S												
		12	-0.006 -0.017	5.00-12.00	6-24	3.0-25.0	10	8	2	0.5	4	15	5	2.5
		12S												
		16	-0.007 -0.020	10.00-16.00	8-32	5.0-25.0	14	8	3	0.5	5	19	7	4
		16S												
20														

Ⓢ Pins of D dimension with S are for Limited Space with shorter mounting shaft (L and ℓ1). Actual D dimension is the number without "s"

## Notch Shape / Set Screw Flat Shape

Part Number	Shape Code	D	D Dim. Tolerance g6	P 0.01 mm Increment	L 1 mm Increment	B 0.1 mm Increment	G 1 mm Increment	A 0.1 mm Increment	Flat Position	ℓ <sub>3</sub>	ℓ <sub>4</sub>	h	c	m	H	Applicable Set Screws	(W)		
																	When D < P	When D ≥ P	
Notched Set Screw Flat	JPCJ JPDJ	S Round D Diamond	6	-0.004 -0.012	5.00-7.00	12-20	5.0-20.0	3-9	2.0-8.0	X Y Diamond	5.5	2.5	1.0	1	3	8	M4	3	1.5
			8	-0.005 -0.014	5.00-9.00	14-22	5.0-30.0 (15.0)		2.0-12.0		7.5	3.5	1.2	1.5	4	11	M5	3.5	1.8
			10	-0.005 -0.014	5.00-12.00	15-25	5.0-30.0 (25.0)		2.0-16.0		7.5	3.5	1.2	2	4	13	M6	4	2.2
			12	-0.006 -0.017	5.00-12.00	15-25	5.0-30.0 (25.0)		2.0-20.0		7.5	3.5	1.2	2	4	15	M6	5	2.5
			16	-0.007 -0.020	10.00-16.00	24-35	5.0-30.0 (30.0)		2.0-28.0		10.5	5.5	2.0	3	5	19	M8	7	4
			20	-0.007 -0.020	13.00-20.00	27-40	5.0-30.0 (30.0)		2.0-36.0		13.5	8.5	2.0	3	5	23	M8	9	5

Ⓢ B dimensions in ( ) are applicable to Diamond shape.  
Ⓢ Applicable set screws in the table are the recommended sizes for Notch Shape.

Part Number Example: **JPGJS10 - P9.05 - L6 - B3.5**  
**JPDJD8 - P5.05 - L20 - B10.1 - G5 - A8.2 - X**

# Locating Pins

Selectable Pilot & Mounting Shape / Configurable Shoulder Thickness / Tip Shape Selectable

Feature: Useable for lifting work objects that require isolation from metal contacts.

### Locating Pins - Selectable Pilot & Mounting Shape / Configurable Shoulder Thickness

Type	Type			Material	
	L Selectable	L Configurable	L, B Configurable	Main Body	Tip
—	LPCE	LPFC	LPFCE	304 Stainless Steel	Ceramic (Alumina 99)
LPEPK	LPPK	LFPFK			PEEK
—	LPMC	LPFMC			MC Nylon

### L Selectable Type

Part Number	Type	D	L	B	M (Coarse)	H	W	SR
LPEPK	3	3	25	4.5	3	6	5	1.2
	4	4	50	6	4	8	7	1.2
	5	5	75	7.5	5	9	7	2
	6	6	100	9	6	10	8	2
6	6	120	9	6	10	8	3.2	

### L Configurable Type

Part Number	Type	D	L 1 mm Increment	B	M (Coarse)	H	W	SR
LPCE	3	3	15-120	4.5	3	6	5	1.2
	4	4	15-120	6	4	8	7	1.2
	5	5	15-120	7.5	5	9	7	2
	6	6	15-120	9	6	10	8	2
LPMC	8	8	20-120	12	8	12	10	3.2
	10	10	20-120	15	10	15	13	3.2

### L, B Configurable Type

Part Number	Type	D	L 1 mm Increment	B 0.5 mm Increment	M (Coarse)	H	W	SR
LPFCE	3	3	15-120	5.0-9.0	3	6	5	1.2
	4	4	15-120	6.5-12.0	4	8	7	1.2
	5	5	15-120	8.0-15.0	5	9	7	2
	6	6	15-120	9.5-18.0	6	10	8	2
LPFMC	8	8	20-120	12.5-24.0	8	12	10	3.2
	10	10	20-120	15.5-30.0	10	15	13	3.2

Part Number Example: **LPEK3 - 120**  
**LPCE4 - 72**  
**LPFCE5 - 75 - 89.0**

L Selectable  
L Configurable  
L, B Configurable

## Locating Pins - Tip Shape Selectable

Material No.	Round		Diamond	Material	Surface Treatment	Hardness
	d Tolerance m6	d Tolerance p6	d Tolerance m6			
(1)	LPEJ	LPPEJ	LPDEJ	O1 Tool Steel Equiv.	—	Treated Hardness: 55-60 HRC min.
(2)	LPEG	LPPEG	LPDEG	O1 Tool Steel Equiv.	Hard Chrome Plating	Hardness: 50-55 HRC min. Plating Hardness 750 HV min.
(3)	LPE	LPPE	LPDE	1045 Carbon Steel Equiv.	—	Treated Hardness: 45-50 HRC min.
(4)	LPBE	LPPEB	LPDEB	1045 Carbon Steel Equiv.	Black Oxide	Treated Hardness: 45-50 HRC min.
(5)	LPER	LPPER	LPDER	1045 Carbon Steel Equiv.	Hard Chrome Plating	Treated Hardness: 45-50 HRC min. Plating Hardness 750 HV min.
(6)	LPES	LPPEES	LPDES	304 Stainless Steel Equiv.	—	—
(7)	LPED	LPPEED	LPDED	304 Stainless Steel Equiv.	Hard Chrome Plating	Plating Hardness 750 HV min.
(8)	LPEC	LPPEC	LPDEC	440C Stainless Steel Equiv.	—	Treated Hardness: 50-55 HRC min.

- Ⓢ 440C Stainless Steel has an identification groove on D part.
- Ⓢ Polished, centering hole is sometimes not available for 304 Stainless Steel.

Part Number	Type	Tip Shape	D	D Tolerance m6	D Tolerance p6	P 0.01 mm Increment	B 0.1 mm Increment	R 1 mm Increment	G 1 mm Increment	L 1 mm Increment	C	ℓ	(W)		
														When D < P	When D ≥ P
Round Round Diamond	m6 m6 m6	A	2	+0.008 +0.002	+0.012 +0.006	2.50-4.00	2.0-25.0 (10.0)	A Shape R <sub>s</sub> P/2	B Shape Only	G <sub>s</sub> P	2-6	0.5	0	1.2	
			3			3.50-6.00	2.0-25.0 (10.0)				3-6		1.5		
			4			4.50-9.00	2.0-25.0 (10.0)				4-8		1.8		
			5	+0.012 +0.004	+0.020 +0.012	5.50-10.00	2.0-30.0 (10.0)				5-10	1	2.2		
			6			6.50-12.00	2.0-40.0 (12.0)				6-12	1	3		
			8			9.00-15.00	2.0-40.0 (15.0)				8-16	1.5	3.5		
		B	C	10	+0.015 +0.006	+0.024 +0.015	11.00-20.00	3.0-50.0 (20.0)	C Shape R <sub>s</sub> P/2	B Shape Only	G <sub>s</sub> P	10-20	2	4	4
				12			13.00-20.00	3.0-50.0 (20.0)				12-24	2	5	
				16	+0.018 +0.007	+0.029 +0.018	17.00-25.00	5.0-50.0 (20.0)				16-32	2	7	
				20	+0.021 +0.008	+0.035 +0.022	21.00-30.00	5.0-50.0 (20.0)				20-40	3	9	

Ⓢ B dimension in ( ) and L dimension in ( ) are for the Diamond Type.

Part Number Example: **LPPEJB10 - P15.00 - B27.0 - G12 - L10**

Part Number Alterations: **LPEA5 - P10.00 - B12.0 - R6 - L5 - LTE**

Alterations	Wrench Flats	Wrench Hole (Ø3.5)	Wrench Hole (Ø2.5)
	Code	SC	LAC
Spec.	SC=1 mm Increment Ⓢ When B<11, adds wrench flats on the tip Ⓢ P-3<SC<P-1, SC>D	Adds a Ø3.5 hole. Ⓢ Applicable when B≥10 and P≥8.	Adds a Ø2.5 hole. Ⓢ Applicable when B≥8 and 7≤P≤15.