


# Locating Pins

## Small Diameter, Small Head

Ⓛ Dimension Selectable Type is now available.

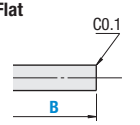


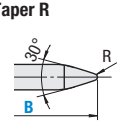
RoHS10

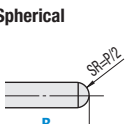
- Ⓛ Chamfering of mounting portion and change of tolerance are available as alterations.
- Ⓛ Material code SG and DG are applicable to L Configurable Type of Sphere only.
- Ⓛ L Selectable Type is applicable to Sphere only.
- Ⓛ Features of W1-9 Tool Steel P.1542

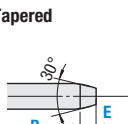
Part Number		Material Code	Material	Hardness
Insertion Guide Shape	Type			
SF Flat SP Sphere ST Taper R SX Taper	KH L Selectable SH L Configurable PH L Configurable & Tolerance Selectable	T	W1-9 Tool Steel Equivalent	Treated Hardness: 50-58HRC min.
		S	304 Stainless Steel Equivalent	—
		SG	304 Stainless Steel Equivalent (SR Parts Polished)	—
		DG	H13 Tool Steel (SR Parts Polished)	Treated Hardness: 40-52HRC min.
		C	440C or 420 Stainless Steel	Treated Hardness: 50-55 HRC min.

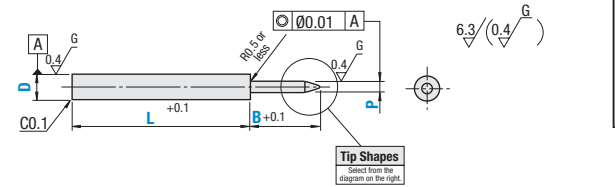
**Tip Shape Selectable**

**Flat** 

**Taper R** 

**Spherical** 

**Tapered** 



Tip Shapes  
Select from the diagram on the right.

### L Selectable

Part Number		Material Code	D	D Dimension Tolerance	L Selection			P	P Dimension Tolerance	B	Available Types	
Insertion Guide Shape	Type				3	5	10				SPKHT	SPKHS
SP Sphere	KH	S	2	0	3	5	10	0.95	0	2	•	•
			3	-0.005	3	8	10	1.95	-0.01	4	•	•

### L Configurable

Part Number		Material Code	D	D Dimension Tolerance	L	P	P Dimension Tolerance	B	E	R
Insertion Guide Shape	Type									
SF Flat SP Sphere	ST Taper R SX Taper	SH	2	0	3.0-20.0	0.9-1.9 (D>P)	0	1.5-10.0 (B-P/2≥1.0)	0.5-2.5	0.2

Ⓛ For Taper R: B-1≥1.85P-2.75R Ⓛ For Tapered Type: B≥E+1, P≥E

### L Configurable & Tolerance Selectable Type

Part Number		Material Code	D	D Tolerance	P	P Tolerance	D	L	P	B	E	R						
Insertion Guide Shape	Type																	
SF Flat SP Sphere	ST Taper R SX Taper	PH	2	0	0	0	0.01 mm Increment	0.1 mm Increment	0.01 mm Increment	0.1 mm Increment	0.5 mm Increment	—						
													T	P	0.51-1.00	3.0-20.0	0.50-0.99 (D>P)	1.5-5.0 (B-P/2≥1.0)
													S	Q	1.01-2.00	3.0-20.0	0.50-1.99 (D>P)	1.5-10.0 (B-P/2≥1.0)
		C	3	-0.005	0	0	2.01-3.00	3.0-20.0	1.00-2.99 (D>P)	1.5-10.0 (B-P/2≥1.0)	0.5-2.5	0.4						

Ⓛ For Taper R: D≥1.01, B-1≥1.85P-2.75R Ⓛ For Tapered Type: D≥1.01, B≥E+1, P≥E

### L Configurable

D	Available Types													
	Flat Type			Sphere			Taper R Type			Tapered Type				
	SFSHT	SFSHS	SFSHC	SPSHT	SPSHS	SPSHSG	SPSHDG	SPSHC	STSHT	STSHS	STSHC	SXSHT	SXSHS	SXSHC
1.0-2.0	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2.1-3.0	•	•	•	•	•	•	•	•	•	•	•	•	•	•

### L Configurable & Tolerance Selectable Type

D	Available Types											
	Flat Type			Sphere			Taper R Type			Tapered Type		
	SFPHT	SFPHS	SFPHC	SPPHT	SPPHS	SPPHC	STPHT	STPHS	STPHC	SXPHT	SXPHS	SXPHC
0.51-1.00	•	•	•	•	•	•	•	•	•	•	•	•
1.01-2.00	•	•	•	•	•	•	•	•	•	•	•	•
2.01-3.00	•	•	•	•	•	•	•	•	•	•	•	•

**Part Number Example**

Part Number - D - L

SPKHT - D2 - L5

### L Selectable

Part Number - D - L

SPKHT - D2 - L5

### L Configurable

Part Number - D - L - P - B - E

SPSHS - D1.5 - L10.0 - P0.9 - B1.5 (Sphere)

SXSHT - D1.5 - L10.0 - P1.2 - B2.0 - E1.0 (Taper)

### L Configurable & Tolerance Selectable Type

Part Number - D - L - E

Type D Tolerance

SPPT P - D0.55 - L5.0 (Sphere)

SXFPT P - D2.82 - L5.0 - E2.5 (Taper)

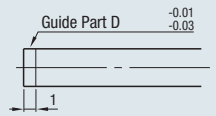
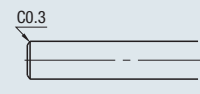
**Part Number Alterations**

Part Number - D - L - P - B - E - (GDC / CC)

SFSHT - D2.5 - L20 - P2.0 - B5.0 - GDC


Ⓛ Combination of GDC and CC is not available.

Ⓛ Alterations are not applicable to L Dimension Selectable Type.

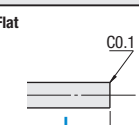
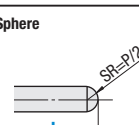
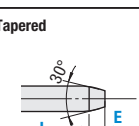
Alterations	Insertion Guide Machining	C Chamfered Size
Code	GDC	CC
TSpec.	<p>Adds Insertion Guide.</p> <p>Ordering Code: GDC</p>  <p>Ⓛ Applicable when D≥2.1 and L≥5.0 for L Configurable Type.</p> <p>Ⓛ Applicable when D≥2.01 and L≥5.0 for L Configurable and Tolerance Selectable Type.</p>	<p>D dimension C chamfering 0.1 is changed to 0.3.</p> <p>Ordering Code: CC</p>  <p>Ⓛ D≥1.5 is applicable to L Configurable Type.</p> <p>Ⓛ D≥1.50 is applicable to L Configurable and Tolerance Selectable Type.</p>

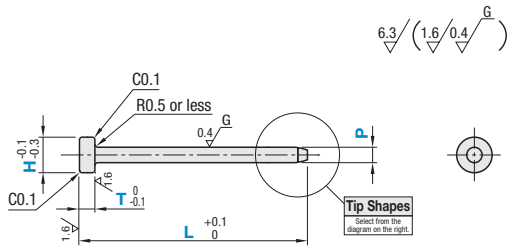
# Locating Pins

## Small Diameter with Base



RoHS10

Part Number		Material Code	Materials	Tip Shape Selection
Insertion Guide Shape	Tolerance			
SF Flat SP Sphere SX Taper	SZ Tolerance Standard	S	304 Stainless Steel	Flat 
	PZ Tolerance Selectable			Sphere 
				Tapered 



### Tolerance Standard

Part Number		Material Code	P	P Dimension Tolerance	L	T	H	E	
Insertion Guide Shape	Tolerance								
SF Flat SP Sphere SX Tapered	SZ	S	0.1 mm Increment	0	0.5 mm Increment	1 mm Increment	2	0.5	
									1.0-1.3
									1.4-2.5
			2.6-3.5	-0.01	13.0-30.0	3-5	4	0.5-1.5	
							6	0.5-2.5	

Ⓛ L-T≥10 Ⓛ For tapered type, P≥E

### Tolerance Selectable

Part Number		Material Code	P	L	T	H	E	
Insertion Guide Shape	Tolerance							
SF Flat SP Sphere SX Tapered	PZ	S	P Tolerance	0.1 mm Increment	0.1 mm Increment	0.1 mm Increment	0.1 mm Increment	
								1.00-1.40
								1.41-2.50
			2.51-3.50	13.0-30.0	3.0-5.0	2.0-3.0	0.5	
						2.0-4.0	0.5-1.5	
						3.0-8.0	0.5-2.5	

Ⓛ L-T≥10 Ⓛ P + 0.5 ≤ H Ⓛ For tapered type, P≥E

**Part Number Example**

Part Number - P - L - T - E

SPSZS - P1.5 - L18.5 - T3 (Sphere)

SXSZS - P2.5 - L20.0 - T4 - E1.5 (Taper)

**Application Example**



Pin with base for prevention from falling out.

### Tolerance Selectable

Part Number - P - L - T - H - E

Type D Tolerance

SPPZS P - P1.55 - L15.0 - T3.2 - H3.8 (Sphere)

SXPZS Q - P1.00 - L19.0 - T4.5 - H2.5 - E0.5 (Taper)