


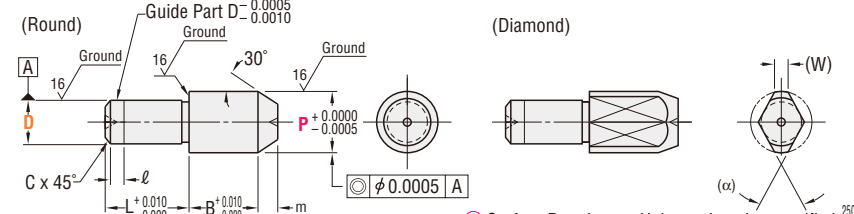
Locating Pins –Large Head–

The Locating Pins in this section are provided in: Head O.D. selectable, Head O.D. Specifiable (0.0005" inc.), and Head / Height / Shank Length, all user specifiable groupings. Available in hardened A2 tool steel and 304 stainless steel. See modifications for more customized options. Use diamond pins with slight dimensional misalignment (P.326).



Material	Hardness	Type			
		Standard P Dimension		Configurable P Dimension	
		Round	Diamond	Round	Diamond
A2 Tool Steel	60-63HRC	U-JPBB	U-JPDB	U-JPBA	U-JPBD
304 Stainless Steel	-	U-SJPBB	U-SJPDB	U-SJPBA	U-SJPBD
316 Stainless Steel	-	-	-	U-GJPBA	U-GJPBD

Material Characteristics



From	To	Tolerance
		0.000
5.001	16.000	+0.02
16.001	60.000	+0.05

⊕ Thread or hole location tolerance: +0.005" non-cumulative.

Standard P Dimension

Type	Part No.			Selection (Callout)							L	B	C	m	l	(W)	(α)	
	Callout	Nominal	Tolerance	3/16	1/4	5/16	3/8	7/16	1/2	9/16								5/8
U-JPBB	0.13	1/8	0.1255 ±0.1252	0.19	0.25	-	-	-	-	-	-	0.188	0.188	0.020	0.094	0.06	0.063	60°
U-JPBD	0.19	3/16	0.1880 ±0.1877	0.25	0.31	-	-	-	-	-	-	0.375	0.250	0.050	0.125	0.06	0.078	60°
U-SJPBB	0.25	1/4	0.2506 ±0.2502	0.31	0.38	-	-	-	-	-	-	0.375	0.313	0.050	0.125	0.06	0.125	60°
U-SJPBD	0.31	5/16	0.3131 ±0.3127	-	-	0.44	0.50	-	-	-	-	0.594	0.313	0.063	0.156	0.06	0.141	60°
U-GJPBA	0.38	3/8	0.3756 ±0.3752	-	-	0.50	0.56	-	-	-	-	0.594	0.375	0.080	0.156	0.06	0.156	60°
U-GJPBD	0.50	1/2	0.5007 ±0.5003	-	-	0.56	0.63	-	-	-	-	0.875	0.375	0.080	0.156	0.08	0.203	60°

Technical Information

Callout	Nominal	Actual
0.19	3/16	0.1875
0.25	1/4	0.2500
0.31	5/16	0.3125
0.38	3/8	0.3750
0.44	7/16	0.4375
0.50	1/2	0.5000
0.56	9/16	0.5625
0.63	5/8	0.6250

Please refer to the table below for technical information.



Price

D	\$ Unit Price (Qty. 1~4)			
	Round		Diamond	
	U-JPBB	U-SJPBB	U-JPBD	U-SJPBD
0.13	3.20	5.30	4.20	7.50
0.19	3.80	5.70	4.90	8.10
0.25	4.00	6.00	5.20	8.60
0.31	4.20	6.30	5.50	9.00
0.38	4.40	6.60	5.70	9.50
0.50	4.80	7.20	6.20	10.30

Configurable P Dimension

Type	Part No.			P Choose in 0.0005" Increments	L	B	C	m	l	(W)	(α)	\$ Unit Price (Qty. 1~4)			
	Callout	Nominal	Tolerance									Round		Diamond	
												U-JPBA	U-SJPBA	U-JPBD	U-SJPBD
U-JPBA	0.13	1/8	0.1255 ±0.1252	0.1875 ~ 0.2500	0.188	0.188	0.020	0.094	0.06	0.063	60°	7.00	10.60	9.20	15.00
U-JPBD	0.19	3/16	0.1880 ±0.1877	0.2500 ~ 0.3125	0.375	0.250	0.050	0.125	0.06	0.078	60°	8.40	12.50	10.80	17.80
U-SJPBA	0.25	1/4	0.2506 ±0.2502	0.3125 ~ 0.3750	0.375	0.313	0.050	0.125	0.06	0.125	60°	8.80	13.10	11.40	18.80
U-SJPBD	0.31	5/16	0.3131 ±0.3127	0.3750 ~ 0.4375	0.594	0.313	0.063	0.156	0.06	0.141	60°	9.20	13.90	12.00	19.70
U-GJPBA	0.38	3/8	0.3756 ±0.3752	0.4375 ~ 0.5620	0.594	0.375	0.080	0.156	0.06	0.156	60°	9.70	14.50	12.50	20.70
U-GJPBD	0.50	1/2	0.5007 ±0.5003	0.5620 ~ 0.6250	0.875	0.375	0.080	0.156	0.08	0.203	60°	10.60	15.80	13.60	22.70

Order Example - -

Type

U-JPBB 0.13 - P 0.25



Price

Quantity	\$ Unit Price (Qty. 1~4)			
	1~4	5~19	20~49	50~
Rate(1day)	-	2%	3%	5%
Rate(Others)	-	5%	10%	15%

For larger quantity orders "Days to Ship" may differ from published catalog term.

Standard P Dimension

Days to Ship Day

Configurable P Dimension

Days to Ship Days Day (Specify Express A) \$5.00/piece

Optional Modifications - -

Type

U-JPBA 0.31 - P 0.3750 - TH




Price

A flat charge of \$13.50 for 3 or more identical pieces.

Optional Modifications available only with "Configurable P Dimension"

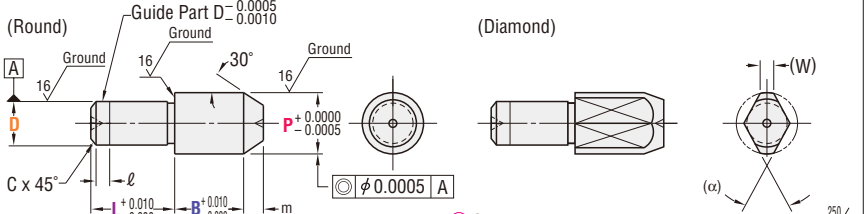
Optional Modifications	Tapped Head Modification	Head Taper Modification	Radius Modification																																
	TH	TC	RC																																
Ordering Code	TH	TC	RC																																
Details	Adds a tapped hole for easy removal. Example TH <table border="1"> <thead> <tr> <th>D</th> <th>TH</th> <th>TH Dia.</th> <th>l/2</th> </tr> </thead> <tbody> <tr> <td>0.25</td> <td>#6-32</td> <td>0.138</td> <td>0.156</td> </tr> <tr> <td>0.31</td> <td>#6-32</td> <td>0.138</td> <td>0.156</td> </tr> <tr> <td>0.38</td> <td>#8-32</td> <td>0.164</td> <td>0.219</td> </tr> <tr> <td>0.50</td> <td>1/4-20</td> <td>0.250</td> <td>0.219</td> </tr> </tbody> </table> <p>⊕ Available only for D ≥ 0.25 ⊕ B ≥ l/2 + 0.156</p>	D	TH	TH Dia.	l/2	0.25	#6-32	0.138	0.156	0.31	#6-32	0.138	0.156	0.38	#8-32	0.164	0.219	0.50	1/4-20	0.250	0.219	Changes the length of tapered portion. Example TCO.188 (0.001" Increments) <table border="1"> <thead> <tr> <th>D</th> <th>TC</th> <th>D</th> <th>TC</th> </tr> </thead> <tbody> <tr> <td>0.25</td> <td>0.125 ~ 0.344</td> <td>0.38</td> <td>0.156 ~ 0.438</td> </tr> <tr> <td>0.31</td> <td>0.156 ~ 0.375</td> <td>0.50</td> <td>0.156 ~ 0.438</td> </tr> </tbody> </table> <p>⊕ Applicable only for D ≥ 0.25 ⊕ B + m ≥ TC + 0.08 (B₁ ≥ 0.08) ⊕ P/2 - TC (tan30°) > 0.02 (The top dia ≥ 0.040) ⊕ When TC is selected, dimension B will be changed.</p>	D	TC	D	TC	0.25	0.125 ~ 0.344	0.38	0.156 ~ 0.438	0.31	0.156 ~ 0.375	0.50	0.156 ~ 0.438	Increases structural strength against side impact. Example RC ⊕ Changes the undercut on shank to R0.02 radius. ⊕ Applicable for P-D ≥ 0.08
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\$ Price Adder	3.00	3.00	3.00																																

When using Optional Modifications, add the "Price Adder" to the standard "Unit Price".



Material	Hardness	Type	
		Configurable P, L, B Dimension	
		Round	Diamond
A2 Tool Steel	60-63HRC	U-FPBA	U-FPBD
304 Stainless Steel	-	U-SFPBA	U-SFPBD
316 Stainless Steel	-	U-GFPBA	U-GFPBD

Material Characteristics



From	To	Tolerance
		0.000
5.001	16.000	+0.02
16.001	60.000	+0.05

⊕ Thread or hole location tolerance: +0.005" non-cumulative.

Configurable P, L, B Dimension

Type	Part No.			P Choose in 0.0005" Increments	L Choose in 0.001" Increments	B Choose in 0.001" Increments	C	m	l	(W)	(α)
	Callout	Nominal	Tolerance								
U-FPBA	0.13	1/8	0.1255 ±0.1252	0.1875 ~ 0.2500	0.125 ~ 0.250	0.094 ~ 0.375	0.020	0.094	0.06	0.063	60°
U-FPBD	0.19	3/16	0.1880 ±0.1877	0.2500 ~ 0.3125	0.188 ~ 0.375	0.094 ~ 0.375	0.050	0.125	0.06	0.078	60°
U-SFPBA	0.25	1/4	0.2506 ±0.2502	0.3125 ~ 0.3750	0.250 ~ 0.500	0.094 ~ 0.438	0.050	0.125	0.06	0.125	60°
U-SFPBD	0.31	5/16	0.3131 ±0.3127	0.3750 ~ 0.4375	0.313 ~ 0.625	0.094 ~ 0.594	0.063	0.156	0.06	0.141	60°
U-GFPBA	0.38	3/8	0.3756 ±0.3752	0.4375 ~ 0.5620	0.375 ~ 0.818	0.125 ~ 0.750	0.080	0.156	0.06	0.156	60°
U-GFPBD	0.50	1/2	0.5007 ±0.5003	0.5620 ~ 0.6250	0.500 ~ 1.000	0.188 ~ 0.750	0.080	0.156	0.08	0.203	60°

The part number consists only of the fields with blue characters.

Order Example

Part No. -

Type

U-FPBA 0.25 - P 0.3750 - L 0.250 - B 0.125



Days to Ship Days

Non-Returnable



Price

Quantity Discount Rate

Quantity Rate	1~4	5~19	20~49	50~
Rate	-	5%	10%	15%

For larger quantity orders "Days to Ship" may differ from published catalog term.

D	\$ Unit Price (Qty. 1~4)			
	Round		Diamond	
	U-FPBA	U-SFPBA	U-FPBD	U-SFPBD
0.13	8.30	12.40	10.90	17.60
0.19	9.90	14.70	12.70	20.90
0.25	10.30	15.50	13.40	22.10
0.31	10.90	16.30	14.20	23.20
0.38	11.30	17.10	14.70	24.40
0.50	12.40	18.60	16.00	26.60



Optional Modifications - - - (Ordering Code) (TC, RC, TH)

Type

U-FPBA 0.25 - P 0.3750 - L 0.250 - B 0.125 - RC

Optional Modifications	Tapped Head Modification	Head Taper Modification	Radius Modification																																
	TH	TC	RC																																
Ordering Code	TH	TC	RC																																
Details	Adds a tapped hole for easy removal. Example TH <table border="1"> <thead> <tr> <th>D</th> <th>TH</th> <th>TH Dia.</th> <th>l/2</th> </tr> </thead> <tbody> <tr> <td>0.25</td> <td>#6-32</td> <td>0.138</td> <td>0.156</td> </tr> <tr> <td>0.31</td> <td>#6-32</td> <td>0.138</td> <td>0.156</td> </tr> <tr> <td>0.38</td> <td>#8-32</td> <td>0.164</td> <td>0.219</td> </tr> <tr> <td>0.50</td> <td>1/4-20</td> <td>0.250</td> <td>0.219</td> </tr> </tbody> </table> <p>⊕ Available only for D ≥ 0.25 ⊕ B ≥ l/2 + 0.156</p>	D	TH	TH Dia.	l/2	0.25	#6-32	0.138	0.156	0.31	#6-32	0.138	0.156	0.38	#8-32	0.164	0.219	0.50	1/4-20	0.250	0.219	Changes the length of tapered portion. Example TCO.188 (0.001" Increments) <table border="1"> <thead> <tr> <th>D</th> <th>TC</th> <th>D</th> <th>TC</th> </tr> </thead> <tbody> <tr> <td>0.25</td> <td>0.125 ~ 0.469</td> <td>0.38</td> <td>0.156 ~ 0.813</td> </tr> <tr> <td>0.31</td> <td>0.156 ~ 0.656</td> <td>0.50</td> <td>0.156 ~ 0.813</td> </tr> </tbody> </table> <p>⊕ Applicable only for D ≥ 0.25 ⊕ B + m ≥ TC + 0.08 (B₁ ≥ 0.08) ⊕ P/2 - TC (tan30°) > 0.02 (The top dia ≥ 0.040) ⊕ When TC is selected, dimension B will be changed.</p>	D	TC	D	TC	0.25	0.125 ~ 0.469	0.38	0.156 ~ 0.813	0.31	0.156 ~ 0.656	0.50	0.156 ~ 0.813	Increases structural strength against side impact. Example RC ⊕ Changes the undercut on shank to R0.02 radius. ⊕ Applicable for P-D ≥ 0.08
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When using Optional Modifications, add the "Price Adder" to the standard "Unit Price".

Advantages of Diamond Shape Locating Pins

