


# Fulcrum Pins

—Low Profile Hex Socket Head—

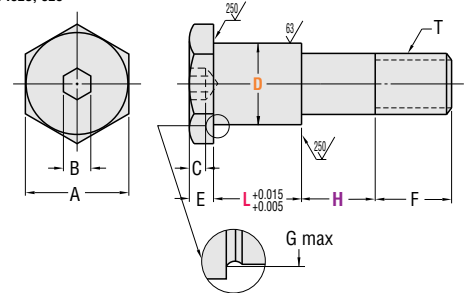


The Fulcrum Pins are designed to facilitate unimpeded rotation of arms and joints. The journals are machined to high precision tolerance so the bores can be produced to create desired fit conditions depending on any application requirements. We provide various modification options to accommodate your application specific variables.



Material	Hardness	Surface Treatment	Type
4137 Steel	33-38HRC	Black Oxide	<b>U-CMSG</b>
304 Stainless Steel	-	-	<b>U-SCMSG</b>

Material Characteristics **P.628, 629**



General Tolerance  
Unless otherwise specified use the table below.

From	To	Tolerance
0.000	5.000	+0.01
5.001	16.000	+0.02
16.001	60.000	+0.05

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

A and B hexagons may not be aligned.  
Note: Use the external hexagon A for final tightening.

Surface Roughness: Unless otherwise specified  $1000\sqrt{\text{in}}$

Part No.	Type	D	L Selection (Callout)								H Choose in 0.001" Increments	\$ Unit Price	
			Callout	Nominal	3/16	1/4	5/16	3/8	1/2	5/8		3/4	1"
<b>U-CMSG</b> <b>U-SCMSG</b>		<b>0.25</b>	1/4	<b>0.19</b>	<b>0.25</b>	<b>0.31</b>	<b>0.38</b>	<b>0.50</b>			<b>0.125 ~ 1.750</b>	8.80	17.20
		<b>0.31</b>	5/16	<b>0.19</b>	<b>0.25</b>	<b>0.31</b>	<b>0.38</b>	<b>0.50</b>			<b>0.125 ~ 1.750</b>	10.40	20.20
		<b>0.38</b>	3/8			<b>0.38</b>	<b>0.50</b>	<b>0.63</b>	<b>0.75</b>	<b>1.00</b>	<b>0.125 ~ 2.500</b>	11.20	21.80
		<b>0.50</b>	1/2			<b>0.38</b>	<b>0.50</b>	<b>0.63</b>	<b>0.75</b>	<b>1.00</b>	<b>0.125 ~ 2.500</b>	14.80	28.80
		<b>0.63</b>	5/8				<b>0.63</b>	<b>0.75</b>	<b>1.00</b>		<b>0.188 ~ 3.000</b>	15.60	30.40
		<b>0.75</b>	3/4				<b>0.63</b>	<b>0.75</b>	<b>1.00</b>		<b>0.188 ~ 3.750</b>	20.80	40.40

**Order Example** The part number consists only of the fields with blue characters. Please refer to the table below for technical information.

Part No. — **L** — **H**

Type **D**

**U-CMSG 0.50 — L 1.00 — H 1.375**

### Technical Information

Callout	D			A	B	C	E	F	T (Thread)		G max	L		
	Nominal	Tolerance							Size	Major Dia.		Callout	Nominal	Actual
<b>0.25</b>	1/4	0.2498	0.2494	0.438	0.125	0.13	0.125	0.25	#8-32	0.164	0.270	<b>0.19</b>	3/16	0.188
<b>0.31</b>	5/16	0.3123	0.3119	0.500	0.156	0.16	0.125	0.29	#10-32	0.190	0.343	<b>0.25</b>	1/4	0.250
<b>0.38</b>	3/8	0.3748	0.3744	0.563	0.188	0.19	0.188	0.38	1/4-20	0.250	0.405	<b>0.31</b>	5/16	0.313
<b>0.50</b>	1/2	0.4998	0.4994	0.750	0.250	0.25	0.250	0.56	3/8-16	0.375	0.550	<b>0.38</b>	3/8	0.375
<b>0.63</b>	5/8	0.6248	0.6244	0.938	0.313	0.31	0.250	0.75	1/2-13	0.500	0.675	<b>0.50</b>	1/2	0.500
<b>0.75</b>	3/4	0.7497	0.7492	1.125	0.375	0.38	0.313	0.94	5/8-11	0.625	0.800	<b>0.63</b>	5/8	0.625
												<b>0.75</b>	3/4	0.750
												<b>1.00</b>	1"	1.000



**Days to Ship**

**Standard** 6 Days  
**Express** 4 Days (Specify Express A) \$ 3.00/piece **P.30**

Non-Returnable **P.30** A flat charge of \$8.10 for 3 or more identical pieces.



**Price**

**Quantity Discount Rate**

Quantity	1	2-4	5-19	20-
Rate	—	5%	10%	15%

For larger quantity orders "Days to Ship" may differ from published catalog term. **P.29**

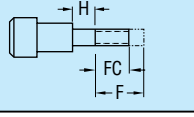
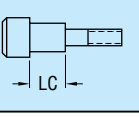
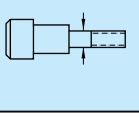


**Optional Modifications**

Part No. — **L (LC)** — **H** — (Ordering Code: **LC** (FC, HKC))

Type **D**

**U-CMSG 0.50 — LC 0.875 — H 1.375 — FC 0.50**

Optional Modifications	Shorten Thread Length	Modify L Dimension	Tolerance Change																																																														
																																																																	
<b>Ordering Code</b>	<b>FC</b>	<b>LC</b>	<b>HKC</b>																																																														
<b>Details</b>	<p>Example FC0.25 FC=0.01" Increments Thread Dia.&lt;FC&lt;F</p>	<p>Example LC0.750</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>D</th> <th>LC</th> <th colspan="2">0.001" Increments</th> </tr> </thead> <tbody> <tr> <td>0.25</td> <td>0.188 ~ 0.500</td> <td></td> <td></td> </tr> <tr> <td>0.31</td> <td>0.188 ~ 0.500</td> <td></td> <td></td> </tr> <tr> <td>0.38</td> <td>0.375 ~ 1.000</td> <td></td> <td></td> </tr> <tr> <td>0.50</td> <td>0.375 ~ 1.000</td> <td></td> <td></td> </tr> <tr> <td>0.63</td> <td>0.375 ~ 1.000</td> <td></td> <td></td> </tr> <tr> <td>0.75</td> <td>0.375 ~ 1.000</td> <td></td> <td></td> </tr> </tbody> </table> <p>Changes L to LC to specify the dimensions like order example.</p>	D	LC	0.001" Increments		0.25	0.188 ~ 0.500			0.31	0.188 ~ 0.500			0.38	0.375 ~ 1.000			0.50	0.375 ~ 1.000			0.63	0.375 ~ 1.000			0.75	0.375 ~ 1.000			<p>Example HKC Changes the OD Tolerance in H.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>D</th> <th>OD in H</th> <th>Tolerance</th> <th>Applicable H Range</th> </tr> </thead> <tbody> <tr> <td>0.25</td> <td>0.1640</td> <td>0.1639</td> <td>0.1636</td> <td>0.500-1.750</td> </tr> <tr> <td>0.31</td> <td>0.1900</td> <td>0.1899</td> <td>0.1896</td> <td>0.500-1.750</td> </tr> <tr> <td>0.38</td> <td>0.2500</td> <td>0.2498</td> <td>0.2494</td> <td>0.625-2.500</td> </tr> <tr> <td>0.50</td> <td>0.3750</td> <td>0.3748</td> <td>0.3744</td> <td>0.625-2.500</td> </tr> <tr> <td>0.63</td> <td>0.5000</td> <td>0.4998</td> <td>0.4994</td> <td>0.875-3.000</td> </tr> <tr> <td>0.75</td> <td>0.6250</td> <td>0.6248</td> <td>0.6244</td> <td>0.875-3.750</td> </tr> </tbody> </table>	D	OD in H	Tolerance	Applicable H Range	0.25	0.1640	0.1639	0.1636	0.500-1.750	0.31	0.1900	0.1899	0.1896	0.500-1.750	0.38	0.2500	0.2498	0.2494	0.625-2.500	0.50	0.3750	0.3748	0.3744	0.625-2.500	0.63	0.5000	0.4998	0.4994	0.875-3.000	0.75	0.6250	0.6248	0.6244	0.875-3.750
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<b>\$Price Adder</b>	2.00	2.00	3.00																																																														

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

