

Fulcrum Pins

Low Head Stepped, with Lock Nut

Fulcrum Pins – Low Head Stepped, with Lock Nut

RoHS10

Type		Material	Surface Treatment	Hardness
Standard	Configurable			
CMSG	FCMSG	4137 Alloy Steel Equivalent	Black Oxide	33~38 HRC min.
SCMSG	FSCMSG	304 Stainless Steel	—	—

$25 / (6.3 / 1.6 /)$

D Tolerance	
6	-0.004 -0.012
8, 10	-0.005 -0.014
12-18	-0.006 -0.017
20	-0.007 -0.020

⊕ Hex head A and B are not aligned.
⊕ Precaution for Use: Tighten the external Hex (A) for final installation.

Standard

Part Number	Type	Dg ₆	L	H 0.1 mm Increment	A	B	C	E	F	M x P (Coarse Thread)	T
6	CMSG	6	5	2.0	10	3	2	5	7	4 x 0.7	6.5
8	CMSG	8	5	2.0	13	5	3	5	9	6 x 1.0	8.7
10	CMSG	10	10	3.0	17	6	4	5	12	8 x 1.25	10.8
12	SCMSG	12	10	3.0	19	8	5	6	16	10 x 1.5	12.8
13	SCMSG	13	10	3.0	19	8	5	6	16	10 x 1.5	14
15	SCMSG	15	16	4.0	24	10	6	7	18	12 x 1.75	17
16	SCMSG	16	16	4.0	24	10	6	7	18	12 x 1.75	17
18	SCMSG	18	19	4.0	27	14	7	8	24	16 x 2.0	19
20	SCMSG	20	19	4.0	27	14	7	8	24	16 x 2.0	19

Configurable

Part Number	Type	Dg ₆	L 1 mm Increment	H 0.1 mm Increment	F 1 mm Increment	A	B	C	E	M x P (Coarse Thread)	T
6	FCMSG	6	5-12	2.0	4-7	10	3	2	5	4 x 0.7	6.5
8	FCMSG	8	5-16	2.0	6-9	13	5	3	5	6 x 1.0	8.7
10	FSCMSG	10	10-25	3.0	8-12	17	6	4	5	8 x 1.25	10.8
12	FSCMSG	12	10-25	3.0	10-16	19	8	5	6	10 x 1.5	12.8
13	FSCMSG	13	10-25	3.0	10-16	19	8	5	6	10 x 1.5	14
15	FSCMSG	15	10-25	4.0	12-18	24	10	6	7	12 x 1.75	17
16	FSCMSG	16	10-25	4.0	12-18	24	10	6	7	12 x 1.75	17
18	FSCMSG	18	10-25	4.0	16-24	27	14	7	8	16 x 2.0	19
20	FSCMSG	20	10-25	4.0	16-24	27	14	7	8	16 x 2.0	19

Part Number Example

Part Number - L - H - F

CMSG15 - 16 - 20.5

FSCMSG12 - 13 - 8 - 10

Application Example

Fixed

0.1-0.2

Flat Bar

Part Number Alterations

Part Number - L - H - F - (HKC)

CMSG10 - 12 - 15.2 - HKC

Alterations	Code	Spec.										
	HKC	Dimension H will have an outer diameter tolerance of g6. ⊕ Dimension H Applicable Range <table border="1" style="margin-top: 5px;"> <thead> <tr> <th>D</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>6, 8</td> <td>10-50</td> </tr> <tr> <td>10, 12-13</td> <td>15-70</td> </tr> <tr> <td>15-16, 18</td> <td>20-80</td> </tr> <tr> <td>20</td> <td>20-100</td> </tr> </tbody> </table>	D	H	6, 8	10-50	10, 12-13	15-70	15-16, 18	20-80	20	20-100
D	H											
6, 8	10-50											
10, 12-13	15-70											
15-16, 18	20-80											
20	20-100											

Precision Pivot Pins

Retaining Rings / Tapped Ends

Precision Pivot Pins – Retaining Rings

RoHS10

Type	Material	Surface Treatment	Accessory
CNPR	1045 Carbon Steel or Equivalent	Black Oxide	Retaining Rings 4 Pcs. Material Spring Steel
SCNPR	304 Stainless Steel	—	Material 304 Stainless Steel

$25 / (1.6 /)$

D Tolerance (g6)	
3	-0.002 -0.008
4-6	-0.004 -0.012
8, 10	-0.005 -0.014
12-16	-0.006 -0.017
20, 25	-0.007 -0.020

Part Number	Type	D	1 mm Increment			N	d	Tolerance	m	Tolerance	Shape	Attached Retaining Ring		
			L	F	M							JIS Normal	Sprint Steel	304 SS
3	CNPR	3	8-60	5-47	2	2	+0.06 0	0.5	+0.05 0	E Type	No. 2	NETW2	NETWS2	
4	CNPR	4	9-60	5-48	2	3	+0.06 0	0.5	+0.05 0	E Type	No. 3	NETW3	NETWS3	
5	CNPR	5	14-60	10-56	2	4	+0.075 0	0.7	+0.1 0	E Type	No. 4	NETW4	NETWS4	
6	CNPR	6	14-60	10-56	2	5	+0.075 0	0.7	+0.1 0	E Type	No. 5	NETW5	NETWS5	
8	CNPR	8	14-100	10-96	3	7	+0.09 0	0.9	+0.1 0	E Type	No. 7	NETW7	NETWS7	
10	SCNPR	10	20-100	15-95	3	9.6	0	1.15	+0.14 0	C Type	No. 10	STWN10	STWN10	
12	SCNPR	12	20-200	15-195	4	11.5	0	1.15	+0.14 0	C Type	No. 12	STWN12	STWN12	
13	SCNPR	13	20-200	15-195	4	12.4	0	1.15	+0.14 0	C Type	No. 13	STWN13	STWN13	
14	SCNPR	14	30-200	25-195	4	13.4	-0.11	1.15	+0.14 0	C Type	No. 14	STWN14	STWN14	
15	SCNPR	15	30-200	25-195	4	14.3	-0.11	1.15	+0.14 0	C Type	No. 15	STWN15	STWN15	
16	SCNPR	16	30-200	25-195	4	15.2	-0.11	1.15	+0.14 0	C Type	No. 16	STWN16	STWN16	
20	SCNPR	20	35-200	30-195	4	19	0	1.35	+0.14 0	C Type	No. 20	STWN20	STWN20	
25	SCNPR	25	35-200	30-195	4	23.9	-0.21	1.35	+0.14 0	C Type	No. 25	STWN25	STWN25	

⊕ F≤L-(2m+2) ⊕ For details, please refer to P.4021.

Precision Pivot Pins – Tapped Ends

RoHS10

Type	Material	Surface Treatment	Accessory
CNPP	1045 Carbon Steel or Equivalent	Black Oxide	Retaining Ring 2 Pcs. Material Spring Steel
SCNPP	304 Stainless Steel	—	Material 304 Stainless Steel

$25 / (1.6 /)$

D Tolerance (g6)	
8, 10	-0.005 -0.014
12-16	-0.006 -0.017
20, 25	-0.007 -0.020

Part Number	Type	D	1 mm Increment			M (Coarse Thread)	d	Tolerance	m	Tolerance	Shape	Attached Retaining Ring		
			L	F	M							JIS Normal	Sprint Steel	304 SS
8	CNPP	8	14-100	10-96	M4	7	+0.09 0	0.9	+0.1 0	E Type	No. 7	NETW7	NETWS7	
10	CNPP	10	20-100	15-95	M6	9.6	-0.09	1.2	+0.14 0	C Type	No. 10	STWN10	STWN10	
12	SCNPP	12	20-200	15-195	M6	11.5	0	1.2	+0.14 0	C Type	No. 12	STWN12	STWN12	
13	SCNPP	13	20-200	15-195	M6	12.4	0	1.2	+0.14 0	C Type	No. 13	STWN13	STWN13	
14	SCNPP	14	30-200	25-195	M8	13.4	-0.11	1.2	+0.14 0	C Type	No. 14	STWN14	STWN14	
15	SCNPP	15	30-200	25-195	M8	14.3	-0.11	1.2	+0.14 0	C Type	No. 15	STWN15	STWN15	
16	SCNPP	16	30-200	25-195	M8	15.2	-0.11	1.2	+0.14 0	C Type	No. 16	STWN16	STWN16	
20	SCNPP	20	35-200	30-195	M10	19	0	1.4	+0.14 0	C Type	No. 20	STWN20	STWN20	
25	SCNPP	25	35-200	30-195	M16	23.9	-0.21	1.4	+0.14 0	C Type	No. 25	STWN25	STWN25	

⊕ F≤L-(2+2m) ⊕ For details, please refer to P.4021.

Part Number Example

Part Number - L - F

CNPR15 - 120 - F100

CNPP20 - 80 - F60

Application Example

Sheet Metal

Roller

Retaining Ring