

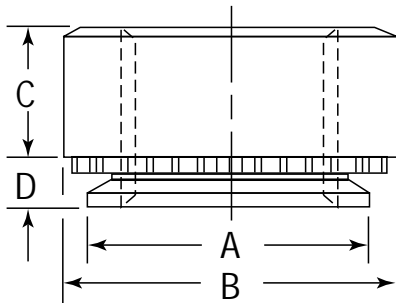


Self-Clinching Nuts

Series C & CS



C & CS nuts provide strong load-bearing threads in sheet metal and other thin section assemblies. C & CS nuts meet spec. features of MIL-N-45938/1.



Series	Material	Finish
C	Heat-treated Carbon Steel	Zinc* Clear
CS	Series 300 Stainless Steel	Passivated ASTM A380

*Spec. ASTM B633-85

Thread: Class 2B, MIL-S-7742; (6H ISO metric).

Use In: C – Materials with HRB-80 or less.

CS – Materials with HRB-70 or less.

Dimensions & Specifications

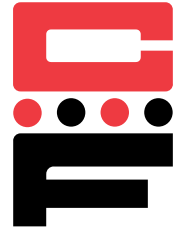
Thread Size	Part Number		D Max.	Min.	+.003 in. -.000	A Max.	B ± .01 in. ± .01 in.	C ± .01 in. Max.	Min.
	Carbon Steel	Stainless Steel							
#2-56	C256-0	CS256-0	.030	.030	.166	.165	.250	.070	.19
	C256-1	CS256-1	.038	.040					
	C256-2	CS256-2	.054	.056					
	C256-3	CS256-3	.087	.091					
#3-48	C348-0	CS348-0	.030	.030	.166	.165	.250	.070	.19
	C348-1	CS348-1	.038	.040					
	C348-2	CS348-2	.054	.056					
	C348-3	CS348-3	.087	.091					
#4-40	C440-0	CS440-0	.030	.030	.166	.165	.250	.070	.19
	C440-1	CS440-1	.038	.040					
	C440-2	CS440-2	.054	.056					
	C440-3	CS440-3	.087	.091					
#6-32	C632-0	CS632-0	.030	.030	.1875	.187	.281	.070	.22
	C632-1	CS632-1	.038	.040					
	C632-2	CS632-2	.054	.056					
	C632-3	CS632-3	.087	.091					
#8-32	C832-0	CS832-0	.030	.030	.213	.212	.312	.090	.27
	C832-1	CS832-1	.038	.040					
	C832-2	CS832-2	.054	.056					
	C832-3	CS832-3	.087	.091					

Continued on next page.

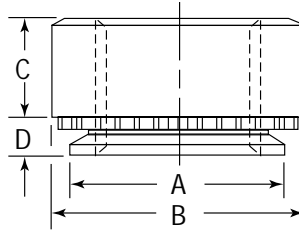


Self-Clinching Nuts

Series C & CS



Continued from previous page.



Dimensions & Specifications

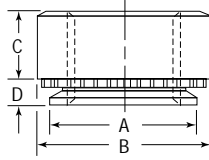
Thread Size	Part Number		D Max.	Min.	+.003 in. -.000	A Max.	B ± .01 in.	C ± .01 in.	Min.
	Carbon Steel	Stainless Steel							
#10-24	C1024-0	CS1024-0	.030	.030	.250	.249	.344	.090	.28
	C1024-1	CS1024-1	.038	.040					
	C1024-2	CS1024-2	.054	.056					
	C1024-3	CS1024-3	.087	.091					
#10-32	C1032-0	CS1032-0	.030	.030	.250	.249	.344	.090	.28
	C1032-1	CS1032-1	.038	.040					
	C1032-2	CS1032-2	.054	.056					
	C1032-3	CS1032-3	.087	.091					
#12-24	C1224-1	CS1224-1	.038	.040	.277	.276	.380	.130	.31
	C1224-2	CS1224-2	.054	.056					
	C1224-3	CS1224-3	.087	.091					
1/4-20	C420-1	CS420-1	.054	.056	.344	.343	.437	.170	.34
	C420-2	CS420-2	.087	.091					
	C420-3	CS420-3	.120	.123					
1/4-28	C428-1	CS428-1	.054	.056	.344	.343	.437	.170	.34
	C428-2	CS428-2	.087	.091					
	C428-3	CS428-3	.120	.123					
5/16-18	C518-1	CS518-1	.054	.056	.413	.411	.500	.230	.38
	C518-2	CS518-2	.087	.091					
	C518-3	CS518-3	.120	.123					
5/16-24	C524-1	CS524-1	.054	.056	.413	.411	.500	.230	.38
	C524-2	CS524-2	.087	.091					
	C524-3	CS524-3	.120	.123					
3/8-16	C616-1	CS616-1	.087	.091	.500	.498	.562	.270	.44
	C616-2	CS616-2	.120	.123					
	C616-3	CS616-3	.235	.250					
3/8-24	C624-1	CS624-1	.087	.091	.500	.498	.562	.270	.44
	C624-2	CS624-2	.120	.125					
	C624-3	CS624-3	.235	.250					

Continued on next page.



Self-Clinching Nuts

Series C & CS



Continued from previous page.

Dimensions & Specifications

Thread Size	Part Number		D Max.	Min.	+.08 mm -.000	A Max.	B ± 0.25 mm	C ± 0.25 mm	Min.
	Carbon Steel	Stainless Steel							
M2 x 0.4	CM2-0	CSM2-0	0.76	0.8	4.25	4.22	6.3	1.5	4.8
	CM2-1	CSM2-1	0.97	1.0					
	CM2-2	CSM2-2	1.37	1.4					
	CM2-3	CSM2-3	2.21	2.3					
M2.5 x 0.45	CM2.5-0	CSM2.5-0	0.76	0.8	4.25	4.22	6.3	1.5	4.8
	CM2.5-1	CSM2.5-1	0.97	1.0					
	CM2.5-2	CSM2.5-2	1.37	1.4					
	CM2.5-3	CSM2.5-3	2.21	2.3					
M3 x 0.5	CM3-0	CSM3-0	0.76	0.8	4.25	4.22	6.3	1.5	4.8
	CM3-1	CSM3-1	0.97	1.0					
	CM3-2	CSM3-2	1.37	1.4					
	CM3-3	CSM3-3	2.21	2.3					
M3.5 x 0.6	CM3.5-0	CSM3.5-0	0.76	0.8	4.75	4.73	7.1	1.5	5.6
	CM3.5-1	CSM3.5-1	0.97	1.0					
	CM3.5-2	CSM3.5-2	1.37	1.4					
	CM3.5-3	CSM3.5-3	2.21	2.3					
M4 x 0.7	CM4-0	CSM4-0	0.76	0.8	5.4	5.38	7.9	2.0	6.9
	CM4-1	CSM4-1	0.97	1.0					
	CM4-2	CSM4-2	1.37	1.4					
	CM4-3	CSM4-3	2.21	2.3					
M5 x 0.8	CM5-0	CSM5-0	0.76	0.8	6.4	6.38	8.7	2.0	7.1
	CM5-1	CSM5-1	0.97	1.0					
	CM5-2	CSM5-2	1.37	1.4					
	CM5-3	CSM5-3	2.21	2.3					
M6 x 1.0	CM6-1	CSM6-1	1.37	1.4	8.75	8.72	11.05	4.08	8.6
	CM6-2	CSM6-2	2.21	2.3					
	CM6-3	CSM6-3	3.05	3.2					
M8 x 1.25 [†]	CM8-1	CSM8-1	1.37	1.4	10.5	10.44	12.65	5.47	9.7
	CM8-2	CSM8-2	2.21	2.3					
	CM8-3	CSM8-3	3.05	3.2					
M10 x 1.5	CM10-1	CSM10-1	2.21	2.3	14.0	13.94	17.35	7.48	13.5
	CM10-2	CSM10-2	3.05	3.2					
	CM10-3 [†]	CSM10-3 [†]	6.00	6.4					

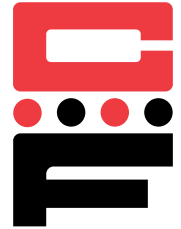
[†]Not stocked, available upon special order.

Continued on next page.

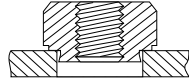


Self-Clinching Nuts

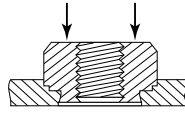
Series C & CS



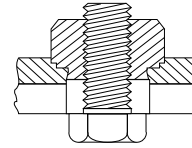
Continued from previous page.



Fastener Must Be Installed
Squarely In Hole



Squeezing Force Is Applied
To Head Of Fastener



Install Bolt Or Screw
From Opposite Side
Of Head Of Fastener

Installation & Performance Data

Thread Size	Shank Code	Cold-rolled Steel			5052-H34 Aluminum		
		Installation Force (tons)	Pushout (lbs.)	Torque-out (in.-lbs.)	Installation Force (tons)	Pushout (lbs.)	Torque-out (in.-lbs.)
#2-56 #3-48 #4-40	-0	1 - 2	100	13	0.5 - 1	60	8
	-1		120	14		89	9.5
	-2		225	17		169	12
	-3		225	18		169	12
#6-32	-0	1.5 - 3	105	15	1 - 2	60	16
	-1		125	19		90	17
	-2		270	27		185	21
	-3		270	27		185	21
#8-32	-0	2 - 3	105	25	1 - 2	65	21
	-1		140	34		100	23
	-2		280	44		215	32
	-3		280	44		215	32
#10-24 #10-32	-0	2 - 4.5	115	31	1 - 2	65	25
	-1		175	39		105	31
	-2		315	59		245	49
	-3		315	59		245	49
#12-24	-1	3 - 4	195	73	2 - 3.25	115	62
	-2		345	79		280	69
	-3		345	79		280	69
1/4-20 1/4-28	-1	3 - 4	395	145	2 - 3.5	355	85
	-2-3		395	145		355	120
5/16-18 5/16-24	-1	3 - 4	420	160	2 - 3.5	375	115
	-2-3		420	175		375	155
3/8-16 3/8-24	-1-2-3	3.5 - 5.5	455	315	2.5 - 4	395	265

Continued on next page.

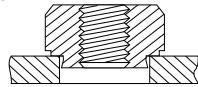


Self-Clinching Nuts

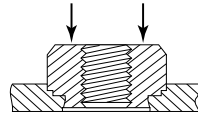
Series C & CS



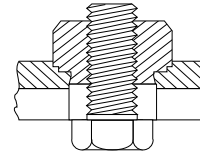
Continued from previous page.



Fastener Must Be Installed
Squarely In Hole



Squeezing Force Is Applied
To Head Of Fastener



Install Bolt Or Screw
From Opposite Side
Of Head Of Fastener

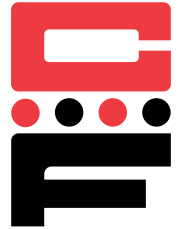
Installation & Performance Data

Thread Size	Shank Code	Cold-rolled Steel			5052-H34 Aluminum		
		Installation Force (kN)	Pushout (N)	Torque-out (N·m)	Installation Force (kN)	Pushout (N)	Torque-out (N·m)
M2 M2.5 M3	-0	11.2-15.6	465	2.1	6.7-8.9	275	0.9
	-1		545			390	1.1
	-2		1010			745	1.4
	-3		1100			850	1.4
M3.5	-0	13.4-26.7	475	1.8	11.2-13.4	290	1.8
	-1		565	1.8		465	1.9
	-2		1200	2.3		965	2.5
	-3		1300	2.5		1050	2.8
M4	-0	18-27	485	2.9	11.2-13.4	290	2.3
	-1		640	2.95		465	2.6
	-2		1245	4.2		965	4.0
	-3		1300	4.2		1100	4.0
M5	-0	18-38	525	3.6	11.2-15.6	290	3.0
	-1		790	3.6		475	3.6
	-2		1400	6.0		1180	4.7
	-3		1500	6.0		1225	5.7
M6	-1	27-36	1755	11.8	18-32	1570	11.8
	-2						
	-3						
M8	-1	27-36	1860	26.0	18-32	1560	23.7
	-2						
	-3						
M10	-1	32-50	2000	36.2	22-36	1750	32.7
	-2						
	-3						

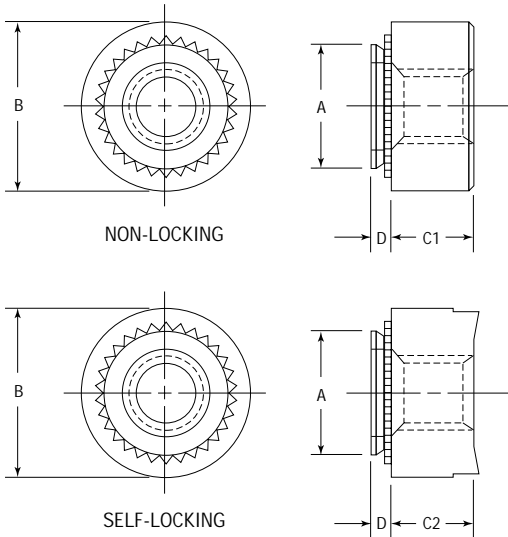


Self-Clinching Nuts

Series CFH, CFHN & CFHNL



CFH nut fasteners are available in both locking and non-locking, heat treated and non-heat treated, offering an opportunity to up-grade fastening quality with appreciable cost reduction over weld nuts.



Series	Material	Finish
CFH-X	Heat-treated	None
CFH-ZI	Carbon Steel	Zinc* Clear
CFHN-X	Non-Heat Treated Carbon Steel	None
CFHN-ZI		Zinc* Clear
CFHNL-X		None
CFHNL-ZI		Zinc* Clear

*Spec. ASTM B633-85

Thread: Class 2B, MIL-S-7742; (6H ISO metric).
 Locking Performance: Prevailing torque complies with the requirements of IFI-100/107 for Grade B (inch) and ANSI B18.161M Class 9 (metric) locknuts.
 Use in: CFH-materials with Rockwell Hardness of B-80 or less.
 CFHN & CFHNL-materials with Rockwell Hardness of B-60 or less.

Dimensions & Specifications

	Thread Size	Part Number		D Max.	Min.	+ .005 - .000	A Max.	B ±.01 in. (.25 mm)	C1 Non-Locking ±.005 in. (.012 mm)	C2 Self Locking ±.01 in. (.25 mm)	Min.
		Non-locking	Self-locking								
INCH	1/4-20	CFH420	CFHNL420	.058	.058	.344	.343	.500	.189	.189	.34
		CFHN420									
METRIC	M6 x 1.0	CFHM6	CFHNL6	1.48	1.48	8.75	8.72	12.8	5.0	5.0	10.0
		CFHNM6									

Installation & Performance Data

	Thread Size	Material	Panel Thickness	Installation Force (lbs.)	Pushout (lbs.)	Torque-out (in.-lbs.)
INCH	1/4-20	Cold-rolled Steel	.060 in.	4800 lbs.	450	120
		Aluminum	.062 in.	3500 lbs.	370	110
METRIC	M6	Cold-rolled Steel	2.24 mm	33 kN	2020 N	23.5 N•m
		Aluminum	2.29 mm	22 kN	1760 N	21.5 N•m