



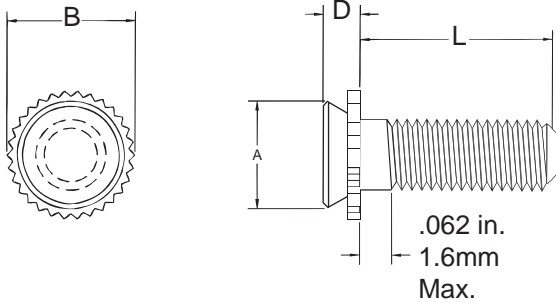
Self-Clinching Concealed-Head Studs

Series CFA & CFC

NEW



CFA & CFC concealed-head studs allow permanent mounting in thin metal sheets, using a hollow punch and solid anvil. The stud head is pressed permanently into a blind milled hole, with no marring of the exterior surface.



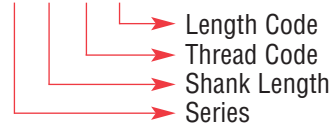
Series	Material	Finish
CFA	2024-T4 Aluminum	None
CFC	300 Series Stainless Steel	Passivated ASTM A380

Thread: External 2A, ANSI B1.1 (6g ANSI/ASME B1.13M).*

Use in: CFA - HRB-50 or less.
CFC - HRB-70 or less.

Part Number Structure:

CFA-1-440-4



*See Note 3 on Page 6 for Gauging Spec.

Dimensions & Specifications

INCH (in.)	Thread Size	Material		Thread Code	L Length $\pm .015$ (Length Code is in 16ths of an inch)					Min.	Blind Mounting Hole Dia. $+.003$ $-.000$	Min. Depth Of Blind Hole	D Max.	B $\pm .010$	A Max.	Min.	Max. Hole in Attached Parts	
		Aluminum	Stainless Steel		.250	.375	.500	.625	.750									1.00
#4-40	CFA-1	CFC-1	440	-4	-6	-8	-10	-12		.062	.172	.043	.041	.205	.171	.156	.135	
	CFA-2	CFC-2							.093									
#6-32	CFA-1	CFC-1	632	-4	-6	-8	-10	-12	-16	.062	.213	.043	.041	.250	.212	.188	.160	
	CFA-2	CFC-2							.093									
#8-32	CFA-1	CFC-1	832	-4	-6	-8	-10	-12	-16	.062	.290	.043	.041	.328	.289	.219	.185	
	CFA-2	CFC-2							.093									
#10-32	CFA-1	CFC-1	1032		-6	-8	-10	-12	-16	.062	.312	.043	.041	.350	.311	.250	.210	
	CFA-2	CFC-2							.093									

Dimensions & Specifications

METRIC (mm)	Thread Size	Material		Thread Code	L Length $\pm .4$ (Length Code is in mm)					Min.	Blind Mounting Hole Dia. $+.08$ $-.00$	Min. Depth Of Blind Hole	D Max.	B $\pm .25$	A Max.	Min.	Max. Hole in Attached Parts		
		Aluminum	Stainless Steel		6	8	10	12	16									20	25
M3x0.5	CFA-1	CFC-1	M3	-6	-8	-10	-12	-16	-20	1.6	4.4	1.09	1.04	5.21	4.35	4	3.6		
	CFA-2	CFC-2							2.4										
M4x0.7	CFA-1	CFC-1	M4	-6	-8	-10	-12	-16	-20	-25	1.6	7.4	1.09	1.04	8.33	7.35	5.6	4.6	
	CFA-2	CFC-2							2.4										
M5x0.8	CFA-1	CFC-1	M5			-10	-12	-16	-20	-25	1.6	7.95	1.09	1.04	8.89	7.9	6.4	5.6	
	CFA-2	CFC-2							2.4										

*Not stocked, available on special order.

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Installation & Performance Data

	Type	Thread Code	Tightening Torque Max. (in.-lbs.)	Sheet Material			
				Cold-rolled Steel		5052-H34 Aluminum	
				Installation Force (lbs.)	Pullout (lbs.)	Installation Force (lbs.)	Pullout (lbs.)
INCH (in.)	CFC-1	440	4.75	1800	240	1400	130
		632	9	2500	260	1800	160
		832	18	4000	270	2800	180
		1032	32	5000	290	4000	210
	CFC-2	440	4.75	2000	240	1500	200
		632	9	2700	350	2500	260
		832	18	3300	440	3000	310
		1032	32	4000	680	3500	360
	CFA-1	440	2.85	N/A	N/A	1400	125
		632	5.4	N/A	N/A	1800	135
		832	10.8	N/A	N/A	2800	145
		1032	19.2	N/A	N/A	4000	170
	CFA-2	440	2.85	N/A	N/A	1500	190
		632	5.4	N/A	N/A	2500	220
		832	10.8	N/A	N/A	3000	240
		1032	19.2	N/A	N/A	3500	300

	Type	Thread Code	Max. (N•m)				
				(kN)	(N)	(kN)	(N)
METRIC (mm)	CFC-1	M3	.5	8	1065	6.2	575
		M4	2	17.8	1200	12.5	800
		M5	3.6	22.2	1290	17.8	930
	CFC-2	M3	.5	8.9	1065	6.7	890
		M4	2	14.7	1955	13.3	1375
		M5	3.6	17.8	3020	15.6	1600
	CFA-1	M3	.3	N/A	N/A	6.2	555
		M4	1.2	N/A	N/A	12.5	645
		M5	2.16	N/A	N/A	17.8	755
	CFA-2	M3	.3	N/A	N/A	6.7	845
		M4	1.2	N/A	N/A	13.3	1065
		M5	2.16	N/A	N/A	15.6	1330



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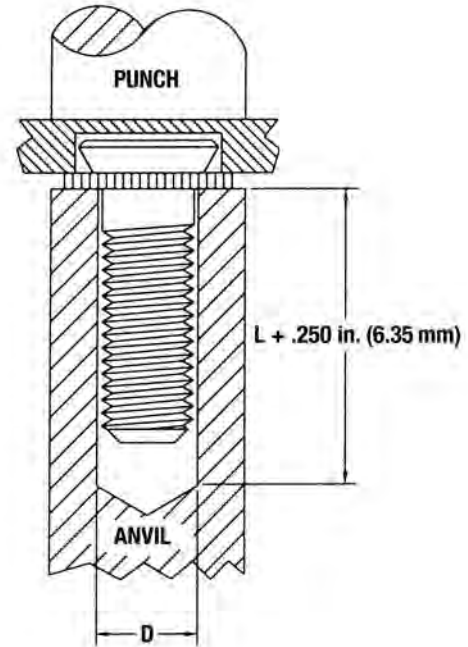
Typical Installation Method



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Installation Procedure

1. Mill a blind hole in material to specified depth.*
2. Place fastener into hole in anvil.
3. Place sheet material over head of fastener.
4. Apply a downward squeezing force with punch, pressing on sheet material until serrated collar of fastener is flush with surface.



*Depth of blind holes may be greater than minimum, if sheet thickness allows.

Anvil 'D' Diameter Dimensions for Concealed Head Studs

INCH (in.)	Series	Thread Code	D Dia. (in.)
	CFA CFC		440
		632	.152
		832	.179
		1032	.205

METRIC (mm)	Series	Thread Code	D Dia. (mm)
	CFA CFC		M3
		M4	4.4
		M5	5.4