



Self-Clinching Concealed-Head Standoffs

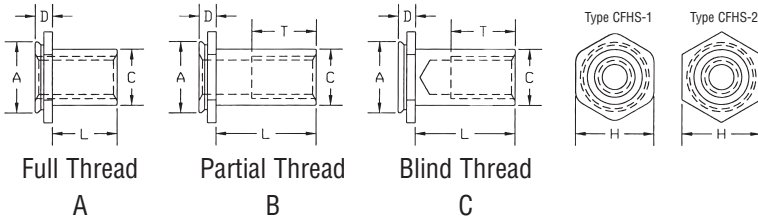
Series CFHS



CFHS concealed head standoffs allow permanent mounting in thin metal sheets, using a hollow punch and solid anvil. The standoff is pressed permanently into a blind milled hole, with no marring of the exterior surface.

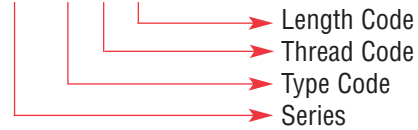
Series	Material	Finish
CFHS	300 Series Stainless Steel	Passivated ASTM A967

Thread: Internal 2B, ANSI B1.1 (6H ANSI/ASME B1.13M)
Use in: Materials with HRB-70 or less.



Part Number Structure:

CFHS-1-440-4



Dimensions & Specifications

INCH (in.)	Thread Size	Type Code	Thread Code	L Length +.002 - .005 (in.)							Min. Sheet Thickness	Blind Mounting Hole Dia. +.003 -.000	Min. Depth Of Blind Hole	T Min. Depth Full Thread	D Max.	C Max.	A Max.	H Nom.	Min. Dist. Hole C/L To Edge	
				.187	.250	.312	.375	.500	.525	.750										1.00
				3 ^A	4 ^B	5 ^B	6 ^B	8 ^C	10 ^C	12 ^C										16 ^C
	.112-40 (#4-40)	CFHS-1	440	3 ^A	4 ^B	5 ^B	6 ^B	8 ^C	10 ^C	12 ^C	16 ^C	.062	.213	.043	.188	.041	.165	.212	.250	.188
		CFHS-2		.093	.075	.072														
	.138-32 (#6-32)	CFHS-1	632	3 ^A	4 ^A	5 ^B	6 ^B	8 ^C	10 ^C	12 ^C	16 ^C	.062	.290	.043	.250	.041	.213	.289	.312	.219
		CFHS-2		.093	.075	.072														
	.164-32 (#8-32)	CFHS-1	832 [†]	3 ^A	4 ^A	5 ^B	6 ^B	8 ^C	10 ^C	12 ^C	16 ^C	.062	.312	.043	.250	.041	.245	.311	.344	.250
		CFHS-2		.093	.075	.072														
.190-32 (#10-32)	CFHS-1	1032 [†]	3 ^A	4 ^A	5 ^A	6 ^A	8 ^B	10 ^C	12 ^C	16 ^C	.062	.344	.043	.375	.041	.290	.343	.375	.281	
	CFHS-2		.093	.075	.072															
.250-20 (1/4-20)		CFHS-2	420 [†]	3 ^A	4 ^A	5 ^A	6 ^A	8 ^B	10 ^B	12 ^C	16 ^C	.093	.390	.075	.375	.072	.354	.389	.438	.375
METRIC (mm)	Thread Size	Type Code	Thread Code	L Length +.05 - .13 (mm)							Min. Sheet Thickness	Blind Mounting Hole Dia. +.08 -.00	Min. Depth Of Blind Hole	T Min. Depth Full Thread	D Max.	C Max.	A Max.	H Nom.	Min. Dist. Hole C/L To Edge	
				4	6	8	10	12	16	20										25
				4 ^A	6 ^A	8 ^B	10 ^B	12 ^B	16 ^C	20 ^C										25 ^C
	M3x0.5	CFHS-1	M3	4 ^A	6 ^A	8 ^B	10 ^C	12 ^C	16 ^C	20 ^C	25 ^C	1.6	5.41	1.1	5	1.04	4.2	5.39	6.35	4.8
		CFHS-2		2.4	1.91	1.83														
	M4x0.7	CFHS-1	M4	4 ^A	6 ^A	8 ^B	10 ^B	12 ^C	16 ^C	20 ^C	25 ^C	1.6	7.92	1.1	6.5	1.04	6.23	7.9	8.74	6.4
		CFHS-2		2.4	1.91	1.83														
M5x0.8	CFHS-1	M5 [†]	4 ^A	6 ^A	8 ^B	10 ^B	12 ^B	16 ^C	20 ^C	25 ^C	1.6	8.74	1.1	9.6	1.04	7.37	8.72	9.53	7.2	
	CFHS-2		2.4	1.91	1.83															
M6x1		CFHS-2	M6 [†]	4 ^A	6 ^A	8 ^A	10 ^B	12 ^B	16 ^C	20 ^C	25 ^C	2.4	9.9	1.91	9.6	1.83	9	9.89	11.11	9.5

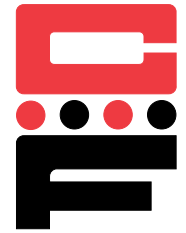
[†]Not stocked, available on special order.

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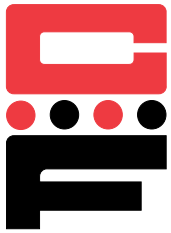
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Installation & Performance Data

	Type Code	Thread Code	Tightening Torque Max (in.-lbs.)	Test Sheet Material			
				Cold-rolled Steel		5052-H34 Aluminum	
				Installation Force (lbs.)	Pullout (lbs.)	Installation Force (lbs.)	Pullout (lbs.)
INCH (in.)	CFHS-1	440	4.75	4000	300	2800	200
		632	8.75	4500	350	3000	240
		832	18	4800	400	4000	270
		1032	32	5500	450	5000	290
	CFHS-2	440	4.75	4300	330	2900	220
		632	8.75	5000	360	3200	240
		832	18	5300	440	4000	300
		1032	32	6000	600	5000	400
		420	64	6500	650	5500	430

Installation & Performance Data

	Type Code	Thread Code	Tightening Torque Max (N•m)	Test Sheet Material			
				Cold-rolled Steel		5052-H34 Aluminum	
				Installation Force (kN)	Pullout (N)	Installation Force (kN)	Pullout (N)
METRIC (mm)	CFHS-1	M3	.55	17.8	1330	12.5	890
		M4	2	21.3	1775	17.8	1200
		M5	3.6	24.5	2000	22.2	1290
	CFHS-2	M3	.55	19.2	1465	12.9	975
		M4	2	23.6	1955	17.8	1335
		M5	3.6	26.7	2665	22.2	1775
		M6	7.2	28.9	2860	24.4	1915



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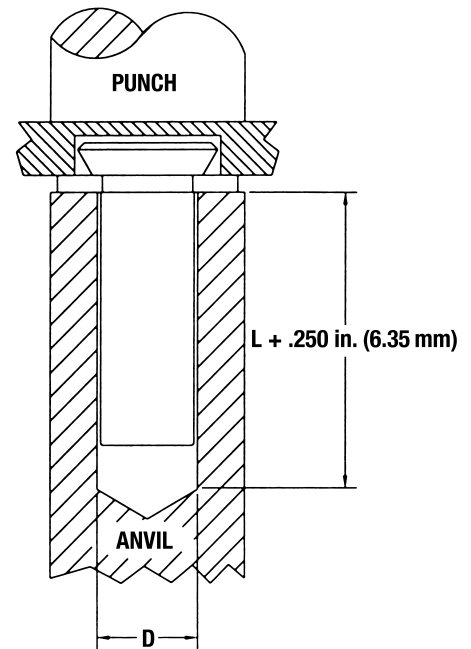
Typical Installation Method



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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

	Series	Thread Code	D Dia. (in.)
INCH (in.)	CFHS	440	.170
		632	.218
		832	.250
		1032	.295
		420	.358

	Series	Thread Code	D Dia. (mm)
METRIC (mm)	CFHS	M3	4.33
		M4	6.36
		M5	7.5
		M6	9.13