

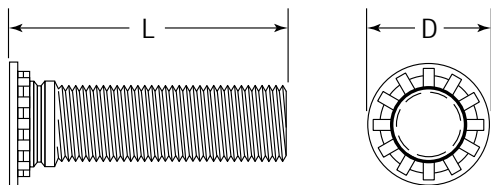


Self-Clinching Studs

Series CH, CHS & CHA



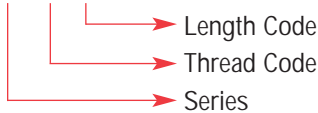
CH studs provide a strong flush-head assembly in material as thin as .040 in. (1.0 mm) with high torque-out and pushout performance.



Series	Material	Finish
CH	Heat-treated Carbon Steel	Zinc* Clear
CHS	300 Series Stainless Steel	Passivated ASTM A380
CHA	2024-T4 Aluminum	None

Part Number Structure:

CH 256-4



*Spec. ASTM B633-85

Thread: Class 2A, MIL-S-7742; (6g ISO Metric).

Use in: CH- Materials with HRB-80 or less.

CHS- Materials with HRB-70 or less.

CHA- Materials with HRB-50 or less.

Dimensions & Specifications

INCH (in.)	Thread Size	Thread Code	L Lengths ±.015 in.										D ± .015	Max. Rec. Nut Tight. Torque in.-lbs	Min.	Min.	
			.250	.3125	.375	.500	.625	.750	.875	1.00	1.25	1.50					
			+003	-000	Min.	Min.											
#2-56	256	-4	-5	-6	-8	-10							.144	.085	2.5	.187	.040
#4-40	440	-4	-5	-6	-8	-10	-12	-14					.176	.111	5	.219	.040
#6-32	632	-4	-5	-6	-8	-10	-12	-14	-16	-20	-24		.206	.137	10	.250	.040
#8-32	832	-4	-5	-6	-8	-10	-12	-14	-16	-20	-24		.237	.163	15	.281	.040
#10-24	1024	-4	-5*	-6	-8	-10	-12	-14	-16	-20	-24*		.256	.189	25	.281	.040
#10-32	1032	-4	-5	-6	-8	-10	-12	-14	-16	-20	-24		.256	.189	30	.281	.040
1/4-20	420			-6	-8	-10	-12	-14	-16	-20	-24		.337	.249	55	.312	.062
5/16-18	518			-6	-8	-10	-12	-14	-16	-20	-24		.376	.311	115	.375	.093

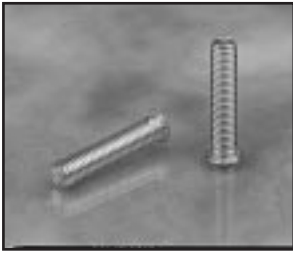
*Not stocked, available on special order.

Dimensions & Specifications

METRIC (mm)	Thread Size	Thread Code	L Lengths ± 0.4 mm												D ± 0.4	Max. Rec. Nut Tight. Torque in.-lbs	Min.	Min.	
			6	8	10	12	15	18	20	22	25	28	30	35					38
			+0.08	-0.00	Min.	Min.													
M2.5X0.45	M2.5	-6	-8	-10	-12	-15	-18								4.1	2.5	5.4	1.0	
M3X0.5	M3	-6	-8	-10	-12	-15	-18	-20	-22	-25					4.6	3.0	5.6	1.0	
M3.5X0.6	M3.5		-8	-10	-12	-15	-18	-20	-22	-25	-28	-30			5.3	3.5	6.4	1.0	
M4X0.7	M4		-8	-10	-12	-15	-18	-20	-22	-25	-28	-30	-35	-38	5.9	4.0	7.2	1.0	
M5X0.8	M5		-8	-10	-12	-15	-18	-20	-22	-25	-28	-30	-35	-38	6.5	5.0	7.2	1.0	
M6X1.0	M6		-8	-10	-12	-15	-18	-20	-22	-25	-28	-30	-35	-38	8.2	6.0	7.9	1.6	
M8X1.25	M8		-8	-10	-12	-15	-18	-20	-22	-25	-28	-30	-35	-38	9.6	8.0	9.6	2.4	

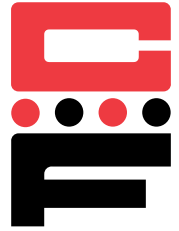
Note: Studs are available in lengths up to 3 in. (76.2 mm) upon special order for 1/4-20/M6 and larger.

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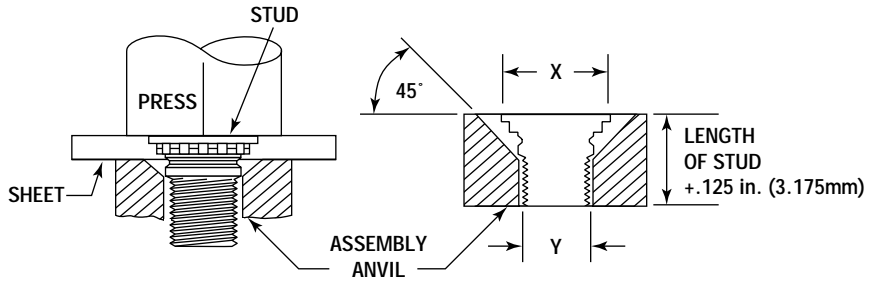
Self-Clinching Studs

Series CH, CHS & CHA

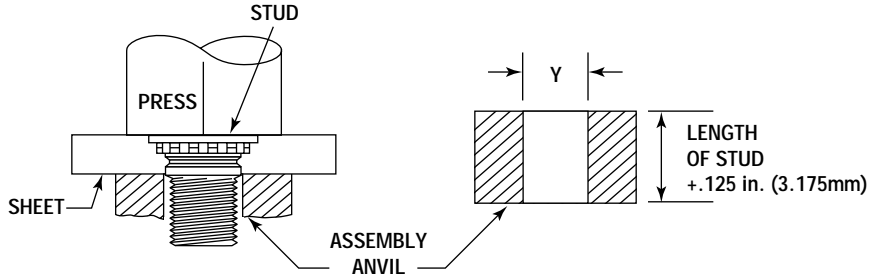


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TOOLING



Tooling for sheet thickness .059 in. (1.5mm) and less with #2 (M2.5) thru #10 (M5) thread sizes and less than .093 in. (2.3mm) for 1/4in. (M6) threads.



Tooling for sheet thickness .060 in. (1.5mm) minimum and greater with #2 (M2.5) thru #10 (M5) thread sizes and .092 in. (2.3mm) minimum and greater for 1/4in. (M6) and 5/16 in. (M8) threads.

	Thread Code	Anvil Dimensions	
		X	Y
INCH (in.)	256	.110	.087
		.114	.090
	440	.136	.113
		.140	.116
	632	.162	.139
		.166	.142
	832	.188	.165
		.192	.168
	1024	.216	.191
		.220	.194
1032	.216	.191	
	.220	.194	
420	.295	.250	
	.300	.253	
518	--	.3125	
	--	.3155	

	Thread Code	Anvil Dimensions	
		X +0.1	Y +0.08
METRIC (mm)	M2.5	3.1	2.50
	M3	3.6	3.00
	M3.5	4.1	3.50
	M4	4.6	4.00
	M5	5.6	5.00
	M6	6.6	6.00
	M8	--	8.00

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Self-Clinching Studs


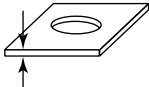
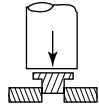

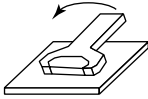
Series CH, CHS & CHA



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Note: Values based on stainless steel studs (steel stud values may be higher).

Installation & Performance Data

					
	Thread Code	Sheet Material & Thickness	Installation Force (lbs.)	Pushout (lbs.)	Torque-out (in.-lbs.)
INCH (in.)	256	.062 Aluminum	2000	145	5
		.060 Steel	2500	250	5
	440	.064 Aluminum	3200	200	10
		.060 Steel	4700	280	10
	632	.064 Aluminum	3500	220	19
		.060 Steel	5000	350	19
	832	.064 Aluminum	4500	290	30
		.060 Steel	5500	400	35
	1024	.064 Aluminum	5500	330	38
	1032	.060 Steel	6800	500	50
420	.093 Aluminum	6500	450	90	
	.088 Steel	6500	770	120	
518	.093 Aluminum	6700	550	110	
	.088 Steel	11000	850	200	
	Thread Code	Sheet Material & Thickness	Installation Force (kN)	Pushout (N)	Torque-out (N•m)
METRIC (mm)	M2.5	1.6 Aluminum	11.6	625	0.9
		1.5 Steel	13.0	1025	0.9
	M3	1.6 Aluminum	12.9	890	1.2
		1.5 Steel	14.7	1240	1.2
	M3.5	1.6 Aluminum	15.6	980	2.0
		1.5 Steel	22.3	1550	2.0
	M4	1.6 Aluminum	22.3	1290	3.4
		1.5 Steel	26.7	1780	3.9
	M5	1.6 Aluminum	24.5	1470	4.5
		1.5 Steel	32.5	2440	7.3
	M6	2.4 Aluminum	28.9	2000	8.4
		2.2 Steel	44.5	3110	12.4
	M8	2.4 Aluminum	29	2440	15.8
		2.2 Steel	49.8	3780	21.5