

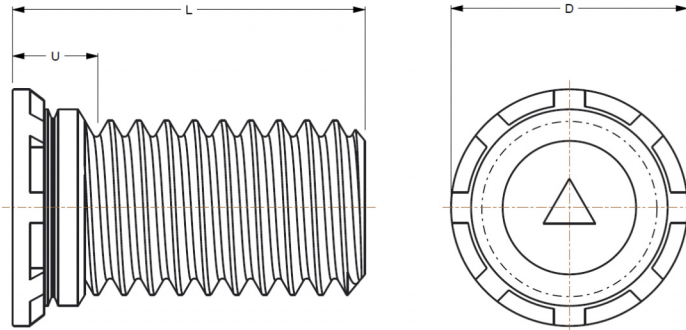


Self-Clinching Studs Close Edge

Series CHE & CHES



CHE studs allow installation closer to material edge than standard studs without distortion of sheet edge. Provides flush-head assembly in material thickness of .040 in. (1 mm) or more.



Series	Material	Finish
CHE	Heat-treated Carbon Steel	Zinc* Clear
CHES	300 Series Stainless Steel	Passivated ASTM A967

* See Finish Spec. on Page 6

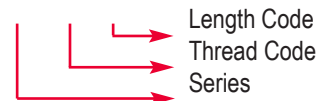
Thread: External 2A, ANSI B1.1 (6g ANSI/ASME B1.13M).**

Use in: CHE - Material with HRB=80 or less.

CHES - Material with HRB=70 or less.

Part Number Structure:

CHE 256 - 4



**See Note 3 on Page 6 for Gauging Spec.

Dimensions & Specifications

Note: Min Sheet Thickness .040 in.

INCH (in.)	Thread Size	Series		Thread Code	L Length ± 0.015 in.										+0.003 -0.000	D ± 0.015	U Max	Min
		Steel	SS		.250	.312	.375	.500	.625	.750	.875	1.00	1.25	1.50				
#2-56	CHE	CHES	256	-4	-5	-6	-8	-10	-12						.085	.122	.080	.098
#4-40	CHE	CHES	440	-4	-5	-6	-8	-10	-12	-14	-16			.111	.138	.085	.124	
#6-32	CHE	CHES	632	-4	-5	-6	-8	-10	-12	-14	-16	-20	-24	.137	.164	.090	.150	
#8-32	CHE	CHES	832	-4	-5	-6	-8	-10	-12	-14	-16	-20	-24	.163	.190	.090	.176	
#10-32	CHE	CHES	1032	-4	-5	-6	-8	-10	-12	-14	-16	-20	-24	.189	.225	.100	.210	

Dimensions & Specifications

Note: Min Sheet Thickness 1 mm

METRIC (mm)	Thread Size	Series		Thread Code	L Length ± 0.4 mm										+0.08 -0.00	D ± 0.4	U Max	Min
		Steel	SS		6	8	10	12	15	18	20	25	30	35				
M2.5 X 0.45	CHE	CHES	M2.5	-6	-8	-10	-12	-15	-18						2.5	3.15	2.1	2.8
M3 X 0.5	CHE	CHES	M3	-6	-8	-10	-12	-15	-18	-20					3	3.65	2.1	3.3
M3.5 X 0.6	CHE	CHES	M3.5	-6	-8	-10	-12	-15	-18	-20	-25	-30		3.5	4.15	2.3	3.8	
M4 X 0.7	CHE	CHES	M4	-6	-8	-10	-12	-15	-18	-20	-25	-30	-35	4	4.65	2.4	4.3	
M5 X 0.8	CHE	CHES	M5	-6	-8	-10	-12	-15	-18	-20	-25	-30	-35	5	5.9	2.7	5.6	

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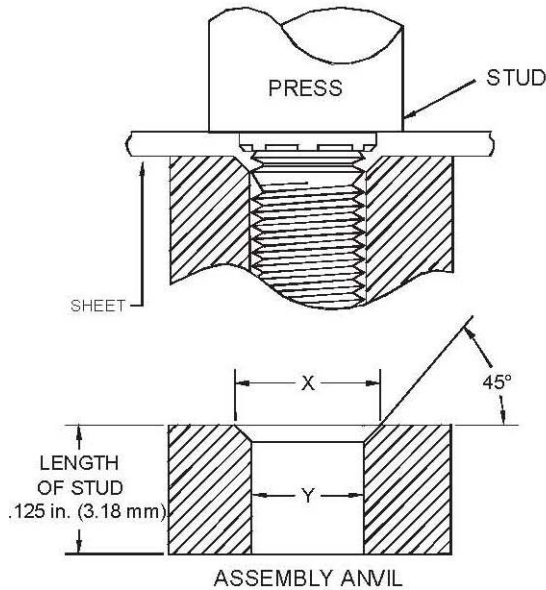


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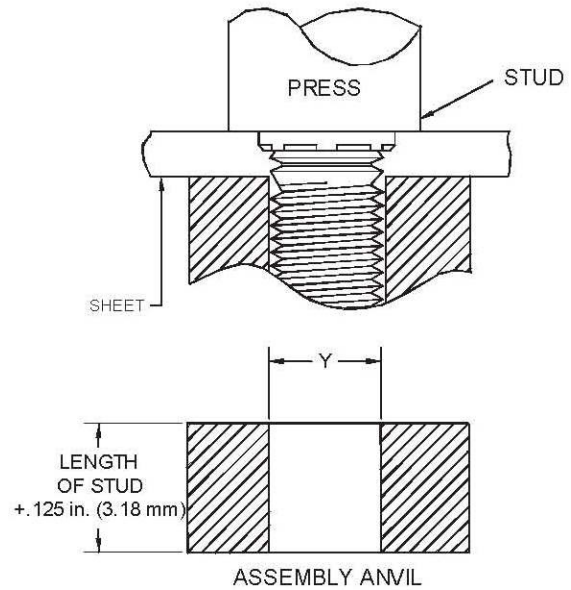
Installation Procedure

- 1) Prepare the correct size hole in the base material by punching or drilling. Do not deburr hole.
- 2) Place the stud through the base material and insert into the support anvil.
- 3) Apply sufficient squeezing force with a shop press until the head of the fastener is flush with the sheet material.

Tooling for panel thickness
.059 in. (1.5 mm) and less



Tooling for panel thickness
.060 in. (1.51 mm) and greater



INCH (in.)	SERIES	Anvil Dimensions (in)	
		X + .004	Y + .003
	256	.110	.087
440	.136	.113	
632	.163	.139	
832	.188	.165	
1032	.216	.191	

METRIC (mm)	SERIES	Anvil Dimensions (mm)	
		X + .01	Y + .08
	M2.5	3.1	2.53
M3	3.6	3.03	
M3.5	4.1	3.53	
M4	4.6	5.03	
M5	5.6	5.03	

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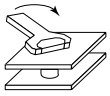
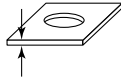


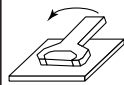
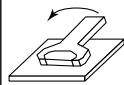


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Installation & Performance Data

INCH (in.)									
	Thread Code	Max. Nut Tightening Torque (in. lbs.)	Sheet Thickness And Material	Sheet Hardness HRB	Installation Force (lbs.)	Pushout (lbs.)	Torque Out (in.-lbs.)	Pull Thru (lbs.)	Test Bushing Hole Size
256		2.3	.047 Aluminum	33	700	55	4	230	.106
		2.3	.045 Cold Rolled Steel	54	1200	85	8	425	.106
440		4.0	.047 Aluminum	33	1000	60	5	300	.132
		5.0	.045 Cold Rolled Steel	54	1200	105	11	580	.132
632		5.4	.047 Aluminum	33	1000	65	6.5	325	.158
		9.0	.045 Cold Rolled Steel	54	1500	110	15	650	.158
832		6.9	.047 Aluminum	33	1200	80	9	350	.184
		15.2	.045 Cold Rolled Steel	54	1500	125	18	740	.184
1032		9.7	.047 Aluminum	33	2500	115	18	395	.210
		19.4	.045 Cold Rolled Steel	54	4500	210	38	800	.210

METRIC (mm)	Thread Code	Max. Nut Tightening Torque (N.m.)	Sheet Thickness And Material	Sheet Hardness HRB	Installation Force (kN)	Pushout (N)	Torque Out (N•m)	Pull Thru (N)	Test Bushing Hole Size
	M2.5		.41	1.2mm Aluminum	33	3.1	285	.55	1200
		.41	1.1mm Cold Rolled Steel	54	5.3	450	1.1	2250	3
M3		.46	1.2mm Aluminum	33	4.4	285	.65	1300	3.5
		.74	1.1mm Cold Rolled Steel	54	5.3	475	1.25	2500	3.5
M3.5		.58	1.2mm Aluminum	33	4.4	290	.76	1400	4
		1.15	1.1mm Cold Rolled Steel	54	6.6	500	1.75	2800	4
M4		.75	1.2mm Aluminum	33	5.3	365	1.1	1550	4.5
		1.7	1.1mm Cold Rolled Steel	54	6.6	550	2.1	3300	4.5
M5		1.11	1.2mm Aluminum	33	11.1	530	2.2	1850	5.5
		2.25	1.1mm Cold Rolled Steel	54	20	1000	4.4	3750	5.5