



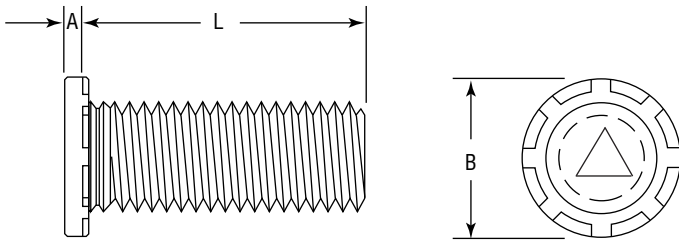
# Self-Clinching Studs

## Series TCH & TCHS

### Non-Flush Studs



TCH non-flush studs are manufactured for use in sheets as thin as .020 inches (.5 mm) thick. The pushout and torque-out values are excellent for most applications. The head of the stud will project above the panel surface when installed properly. Do not over squeeze!



Part Number Structure:

TCH 440-4

- Length Code
- Thread Code
- Series

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

\*See Finish Spec. on Page 6.

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

Use in: Cold-rolled Steel or 5052-H34 Aluminum with Rockwell Hardness as follows:

TCH - Materials with HRB 80 or less.

TCHS - Materials with HRB 70 or less.

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

### Dimensions & Specifications

INCH (in.)	Thread Size	Thread Code	L Length $\pm .015$ in.										Min.	+ .003 - .000	A Max.	B $\pm .015$	Min.
			.250	.3125	.375	.500	.625	.750	.875	1.00	1.25	1.50					
#4-40	440	-4	-5	-6	-8	-10	-12						.020	.111	.025	.176	.219
#6-32	632	-4	-5	-6	-8	-10	-12	-14	-16	-20	-24 <sup>†</sup>		.020	.137	.025	.203	.250
#8-32	832	-4	-5	-6	-8	-10	-12	-14	-16	-20	-24 <sup>†</sup>		.020	.163	.025	.234	.281
#10-24	1024		-5 <sup>†</sup>	-6	-8	-10	-12	-14	-16	-20	-24 <sup>†</sup>		.020	.189	.025	.250	.281
#10-32	1032		-5 <sup>†</sup>	-6	-8	-10	-12	-14	-16	-20	-24 <sup>†</sup>		.020	.189	.025	.250	.281

<sup>†</sup>Not stocked, available on special order.

### Dimensions & Specifications

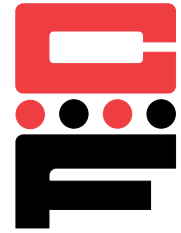
METRIC (mm)	Thread Size	Thread Code	L Length $\pm .4$ mm												Min.	+ .08 - .00	A Max.	B $\pm .4$	Min.	
			6	8	10	12	15	18	20	22	25	28	30	35						38
M3 x 0.5	M3	-6	-8	-10	-12	-15	-18							.51	3.0	.64	4.5	5.6		
M4 x 0.7	M4			-10	-12	-15	-18	-20	-22	-25	-28	-30	-35	-38	.51	4.0	.64	5.8	7.2	
M5 x 0.8	M5			-10	-12	-15	-18	-20	-22	-25	-28	-30	-35	-38	.51	5.0	.64	6.4	7.2	



# Self-Clinching Studs


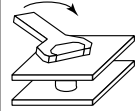
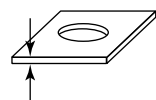

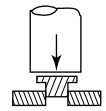
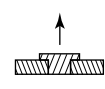
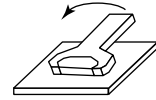
## Series TCH & TCHS

### Non-Flush Studs



Continued from previous page.

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

<b>Installation &amp; Performance Data</b>								
<b>INCH (in.)</b>								
	<b>Thread Code</b>	<b>Max. Nut Tight. Torque (in.-lbs.)</b>	<b>Sheet Thickness &amp; Material</b>	<b>Sheet Hardness HRB</b>	<b>Installation Force (lbs.)</b>	<b>Pushout (lbs.)</b>	<b>Torque-out (in.-lbs.)</b>	
<b>METRIC (mm)</b>	440	5	.020 Aluminum	28	1200	40	6.9	
			.025 Steel	52	1500	95	7.8	
	632	9	.020 Aluminum	28	1500	45	7.9	
			.025 Steel	52	2500	105	15.8	
	832	17	.020 Aluminum	28	2100	55	9.8	
			.025 Steel	52	2700	115	25.7	
	1024	24	.020 Aluminum	28	2500	60	13.8	
	1032	27	.025 Steel	52	3000	135	27.7	
	<b>INCH (in.)</b>	M3	.74	.5 Aluminum	28	5.3	190	.6
				.6 Steel	52	6.7	290	1.0
M4		1.70	.5 Aluminum	28	9.8	245	.7	
			.6 Steel	52	13.4	495	2.5	
M5		3.50	.5 Aluminum	28	13.4	265	1.2	
			.6 Steel	52	17.8	665	2.9	