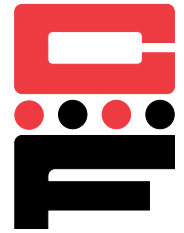




Self-Clinching Studs

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!

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

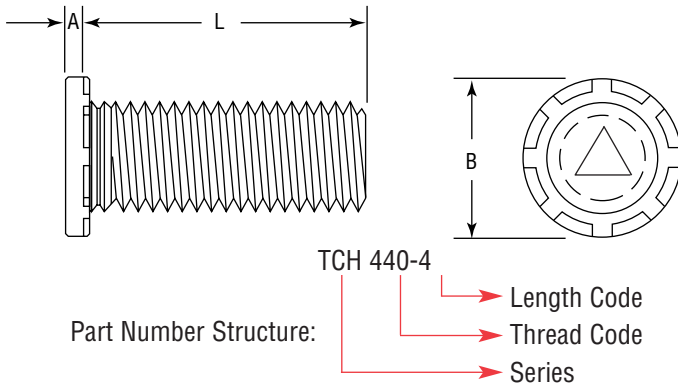
*Spec. ASTM B633-85

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

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



Dimensions & Specifications

INCH (in.)	Thread Size	Thread Code	L Length $\pm .015$ in.										Min.	+0.03 -0.000	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 [†]	.020	.137	.025	.203	.250
	#8-32	832	-4	-5	-6	-8	-10	-12	-14	-16	-20	-24 [†]	.020	.163	.025	.234	.281
	#10-24	1024		-5 [†]	-6	-8	-10	-12	-14	-16	-20	-24 [†]	.020	.189	.025	.250	.281
	#10-32	1032		-5 [†]	-6	-8	-10	-12	-14	-16	-20	-24 [†]	.020	.189	.025	.250	.281

[†]Not stocked, available on special order.

Dimensions & Specifications

METRIC (mm)	Thread Size	Thread Code	L Length ± 0.4 mm											Min.	+0.08 -0.00	A Max.	B ± 0.4	Min.		
			6	8	10	12	15	18	20	22	25	28	30						35	38
	M3X0.5	M3	-6	-8	-10	-12	-15	-18							0.51	3.0	0.64	4.5	5.6	
	M4X0.7	M4			-10	-12	-15	-18	-20	-22	-25	-28	-30	-35	-38	0.51	4.0	0.64	5.8	7.2
	M5X0.8	M5			-10	-12	-15	-18	-20	-22	-25	-28	-30	-35	-38	0.51	5.0	0.64	6.4	7.2

Continued on next page.



Self-Clinching Studs

Series TCH & TCHS


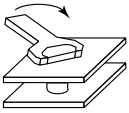
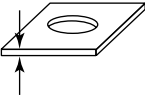
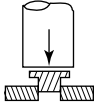

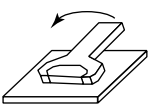
Non-Flush Studs



Continued from previous page.

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

Installation & Performance Data

							
	Thread Code	Max. Nut Tight. Torque (in-lbs.)	Sheet Material & Thickness	Sheet Hardness HRB	Installation Force (lbs.)	Pushout (lbs.)	Torque-out (in-lbs.)
INCH (in.)	440	5	.020 Aluminum	28	1300	40	6.9
			.025 Steel	52	2800	95	7.8
	632	9	.020 Aluminum	28	2100	45	7.9
			.025 Steel	52	2500	105	15.8
	832	17	.020 Aluminum	28	2100	55	9.8
			.025 Steel	52	3100	115	25.7
024	24	.020 Aluminum	28	2300	60	13.8	
032	27	.025 Steel	52	3700	145	29.7	
	Thread Code	Max. Nut Tight. Torque (N•m)	Sheet Material & Thickness	Sheet Hardness HRB	Installation Force (kN)	Pushout (N)	Torque-out (N•m)
METRIC (mm)	M3	0.74	.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