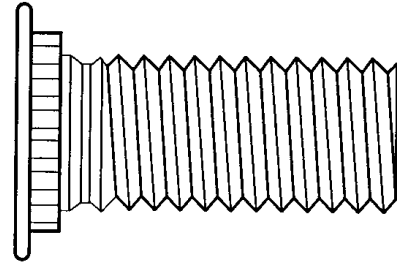


SELF-CLINCHING STUDS



Thread Size	A		B	Minimum Sheet Thickness	Hole in Sheet (+.003, -.000)	Distance to Center of Hole in Panel	Push-Out (lbs.)	Torque-Out (In.-lbs.)	Estimate of Installation Force in Steel
	Head Diameter		Unthreaded Length			Min			Tons Approx.
	Max	Min	Max			#4 thru #10 diam. based on .060 steel plates. 1/4 & 5/16 diam. based on .088 steel			
4-40	.204	.172	.085	.040	.111	.22	280	11	
6-32	.219	.187	.090	.040	.137	.25	350	30	2.5
8-32	.250	.218	.090	.040	.163	.28	400	65	
10-24	.266	.234	.100	.040	.189	.28	500	100	3.25
10-32	.266	.234	.100	.040	.189	28	500	100	3.5
1/4-20	.344	.312	.135	.062	.249	.31	700	120	4.75
5/16-18	.391	.361	.160	.093	.311	.38	850	200	
Tolerance on Length				±.015					

Description	A fastener with unified thread pitch and a cylindrical, low profile head with small, rectangular ribs protruding from the underside of the head. The top of the head is flat and is flush with the mating surface when installation is complete. Below the ribs and above the first thread is an annular groove which helps to hold the fastener in position.	
Applications/ Advantages	Intended for metal panel-to-panel applications and well-suited for use in printed circuit boards. A hole is pierced into the circuit board and the unit it is attached to. The stud is inserted using a hand press or by hand, applying parallel squeezing forces. A hex nut is twisted onto the stud, securing it from the back. As the nut is tightened, the ribbed stud head grips the front panel to secure the application from the front as well, eliminating the need for welding. As the application force is applied, part of the sheet cold flows into an undercut under the head, making the fastener an integral part of the sheet.	
Material	<i>Steel</i>	<i>Stainless</i>
	Low carbon steel	300 series stainless
Heat Treatment	Clinch studs shall be case hardened, oil quenched and tempered.	-
Case Hardness	Rockwell C 45 minimum	Not required to test for hardness
Core Hardness	Rockwell C 29 - 38	Not required to test for hardness
For Use In...	...materials with a hardness of Rockwell B80 or less.	...materials with a hardness of Rockwell B70 or less.
Finish	Steel clinch studs are usually furnished with a zinc plating.	Stainless clinch studs are commercially passivated.