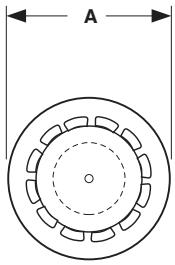

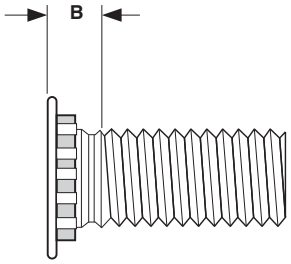

Steel Self-Clinching Studs - 12-Rib Style with Annular Groove

Nominal Diameter & Thread Size	A		B	Minimum Sheet Thickness	Hole in Sheet (+0.08)	Distance to Center of Hole in Panel	Push-Out (N)	Torque-Out (N•m)	Pull Through
	Head Diameter		Unthreaded Length						
	Max	Min	Max			Min	M2.5 thru M5 diam based on 1.5 mm steel plate; M6 diam based on 2.2 mm steel plate; M8 diam based on 2.4 mm steel plate		(N)
M2.5 x 0.45	4.5	3.7	1.95	1	2.5	5.4	740	1.0	2800
M3 x 0.5	5.0	4.2	2.1	1	3	5.6	820	1.7	3840
M4 x 0.7	6.3	5.5	2.4	1	4	7.2	1780	4.2	5650
M5 x 0.8	6.9	6.1	2.7	1	5	7.2	2000	6.5	6270
M6 x 1	8.6	7.8	3	1.6	6	7.9	2560	11.3	11,300
M8 x 1.25	10.0	9.2	3.7	2.4	8	9.6	2890	19.2	15,450

Tolerance on Length	± 0.4

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	***Steel***
	Low carbon steel
Heat Treatment	Clinch studs shall be case hardened, oil quenched and tempered.
Case Hardness	Rockwell C 45 minimum
Core Hardness	Rockwell C 29 - 38
For Use In...	...materials with a hardness of Rockwell B80 or less.
Finish	Steel clinch studs are usually furnished with a zinc plating.