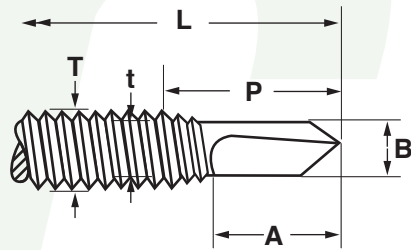


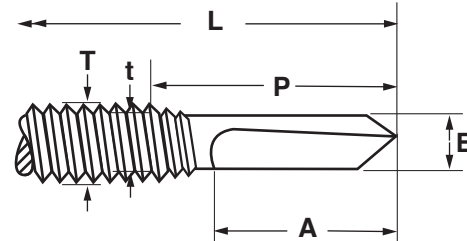
SELF-TAPPING SCREWS

SELF-DRILLING

#4 & #5 Point with Unified Thread



#4 Point



#5 Point

#4 & #5 POINT SELF DRILLING SCREWS W/FORMED POINT, UNIFIED THREAD PITCH

Diameter & Thread Pitch	Point Size	T		P	A		B		Drilling Capacity		Performance Info--STEEL Screws only		
		Major Thread Diameter		Protrusion Allowance	Drill Point Length		Drill Point Diameter		Max	Min	Steel Gauge	Shear Strength (lapped steel) (lbs.)	Pullout Strength (lbs.)
		Max	Min	Ref	Max	Min	Max	Min					
10-24	#5	.189		-	.413	.373	.173	.165	.250	.125	-	-	-
12-24	#4	.216	.2078	.500	.523	.495	.202	.190	.312	.145	12	2000	1500
12-24	#5	.216	.2078	.650	.640	.603	.202	.190	.500	.250	1/8	2700	2200
											1/4	2760	4000
1/4-20	#4	.250	.2428	.515	.511	.471	.227	.215	.312	.145	12	1800	-
1/4-20	#5	.250	.2428	.650	.629	.569	.227	.222	.500	.250	12	1800	-

Description	A tapping screw with an integrally formed hex washer head, unified threads, and a drill point significantly longer than that of a #2 or #3 point drill screw.	
Applications/ Advantages	Designed to drill through a greater thickness of steel than a standard self drilling screw. Although it can assist in attaching metal deck to structural steel, the #4 & #5 point self drilling screws are not structural bolts and should not be used as such.	Will drill through thicker sheets of stainless than a #2 or #3 drill point. In the absence of industry test results, each user should carefully test to see if parts will work in desired application. The hardness of the material to be drilled should be a minimum of 10-20 Rockwell hardness points less than the hardness of the fastener.
Material	AISI 1022 or equivalent steel	18-8 or 410 Stainless
Heat Treatment	Screws shall be quenched in liquid and then tempered by reheating to 625°F minimum.	410 SS: An ideal method of hardening 410 stainless screws is a bright hardening process, which typically involves a vacuum furnace. Another key factor affecting hardness is the chemistry of the fastener--most elements have maximum values but not minimums. This fact can contribute to hardness variance. 18-8 is only hardenable by cold-working.
Case Hardness	Rockwell C52 -58.	-
Case Depth	<i>No. 10 & 12 diameter:</i> .004 - .009 <i>1/4 and larger:</i> .005 - .011	-
Hardness	Core: Rockwell C32 - 40 (after tempering)	410 SS: Rockwell C38 - 46 (approx.) 18-8 & 316 SS: Rockwell B100 (approx.)
*Shear Strength	The average ultimate values for shear strength are listed in the above table. Safety factors should be used when designing final applications.	-
*Pull-out Strength	The average ultimate values for pull-out strength are listed in the above table. Safety factors should be used when designing final applications.	-
Plating	See Appendix-A for plating information.	Stainless drill screws are usually supplied without additional finish.

* Shear and Pull-out strength values are provided for those sizes where this information is available. The fastener industry does not have a recognized governing standard for #4 & #5 drill point screws.