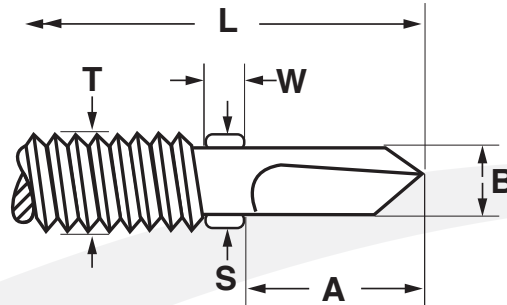


# Self-Tapping Screws

# Self-Drilling

Machine Screw Thread  
w/Wings--#4 Point



## #4 POINT SELF-DRILLING SCREWS WITH REAMING WINGS, MACHINE-SCREW THREAD

Nominal Screw Size & Threads per Inch	A		B		S		W		K		T		Drill Point Size
	Point Length		Point Diameter		Wing Span		Wing Width		Wing Thickness		Major Diameter		
	Ref		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	
12-24	0.433		.197	.190	.276	.255	.158	.118	.0157	.0118	.216	.209	4
1/4-20	0.491		.228	.222	.315	.294	.158	.118	.0157	.0118	.248	.242	4

	Steel	Stainless
<b>Description</b>	A thread forming screw with a countersunk head, machine screw thread pitch and an extended drill point which drills its own hole. The fastener also has two reaming wings located at opposite sides of the shank, below the threads and above the drill point.	
<b>Applications/Advantages</b>	The unified thread pitch reduces friction and driving torques. Drill screws with this style thread are normally used with thicker materials, particularly when the materials being joined are thicker than a single spaced thread pitch. The reaming wings drill out a clearance hole in wood or other soft materials, then snap off when in contact with the metal surface to be drilled. The #4 point typically will drill through sheet metal from .145 to .312 inches thick.	Offers similar advantages as the steel screw of the same design but with better corrosion resistance. It is important to remember that the hardness of the material to be drilled should be a minimum of 10-20 Rockwell hardness points LESS than the hardness of the drill screw.
<b>Material</b>	AISI 1022 or equivalent steel	410 stainless steel
<b>Heat Treatment</b>	Screws shall be quenched in liquid and then tempered by reheating to 625°F minimum.	410 stainless screws shall be hardened and tempered by heating to 1800°-1900°F sufficient for austenitization, held for at least 1/2 hour and rapid air or oil-quenched then reheating to 500°-600°F for at least 1 hour and air cooled to provide the specified hardness.
<b>Case Hardness</b>	Rockwell C50 - 56	410 SS: Rockwell C55 minimum
<b>Case Depth</b>	<b>No. 12 diameter:</b> .004 - .009 <b>1/4" diameter and larger:</b> .005 - .011	-
<b>Core Hardness</b>	Rockwell C32 - 40 (after tempering)	<b>410 SS:</b> Rockwell C38 - 42 (after tempering)
<b>Plating</b>	See Appendix-A for plating information.	Stainless drill screws are usually supplied plain.