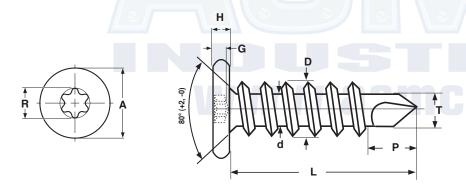
SELF-DRILLING

Pancake Hd / Six-Lobe w/ Spaced Thread



Nominal	A Head Diameter		H Head Thickness		G Recess Depth		D Major Diameter		d Minor Diameter		P Drill Point Length		T Drill point Diameter		Six- Lobe Recess
Diam & threads															
per Inch	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Size
#10 - 16	0.447	0.423	0.08	0.068	0.065	0.05	0.19	0.18	0.141	0.134	0.26	0.22	0.16	0.15	T-20
#12 - 14	0.447	0.423	0.09	0.078	0.07	0.055	0.22	0.21	0.164	0.156	0.30	0.26	0.183	0.17	T-25
1/4 - 14	0.525	0.498	0.09	0.078	0.08	0.065	0.25	0.24	0.192	0.184	0.35	0.31	0.22	0.21	T-27

Tolerance on Length 7/8 thru 1 1/2": +0, -0.05 1 5/8" & longer: +0, -0.06

Description	An externally threaded fastener with a low-profile, disk-shaped head, spaced thread and a drill point. The head is identically smooth on both the top and the bottom, bearing surface with a rounded edge. The top of the shank has a small section with an 80° countersink before it meets the bearing surface of the head. The recess is punched to accommodate a Phillips screwdriver.						
Applications/ Advantages	Popular in applications that require minimal protrusion above the mating surface, including: metal roofing, steel framing, interior metal walls, HVAC applications. The Six-Lobe recess offers a positive-engaging method of transmitting drive torque with less required downward pressure.	The 18-8 stainless drill screw offers superior corrosion resistance but is a significantly softer metal than case-hardened carbon steel. Therefore, considerably less torque should be used during installation. The 410 stainless screw will drill through harder material than the 18-8. The hardness of the material to be drilled should be a minimum of 10-20 Rockwell hardness points less than the screw's hardness.					
Material	1022 or equivalent steel	18-8 or 410 Stainless Steel					
Heat Treatment	Fasteners are heat treated in a carbonitriding or gas-carburizing system at a minimum temperature of 625°F, or in a cyaniding system (with consent of the buyer) at a minimum temperature of 450°F.	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 fastenermost elements have maximum values but not minimums. This fact can contribute to hardness variance. 18-8 is only hardenable by cold-working.					
Surface Hardness	Vickers HV 545 - 655	410 SS: Vickers HV 550 minimum					
Core Hardness	Rockwell C32 - 40	410 SS: Rockwell C32 - 42					
Plating	Steel screws are usually supplied with a clear zinc finish.	18-8 & 410 stainless screws are provided with commercial passivation.					