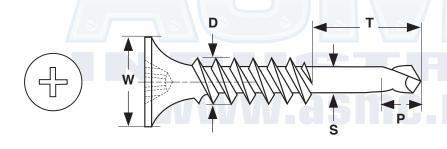
## **SELF-DRILLING**

## Bugle Phillips with Pilot Point



		Bugle	PHILLIPS	SELF-DRI	LLING SCF	REW WITH P	ILOT POIN	т		
Nominal Diameter	Threads per Inch	W Head Diameter		D Major Thread Diameter		s	т	Р	Recess Size	
						Unthreaded Shank Diam	Total Length of Pilot Point	Drill Point Length		
		Max	Min	Max	Min	Ref	Ref	Ref		
8	18	.363	.315	.166	.161	.128	.763	.270	2	
				W						
Tolerance on Length					-0.06					

Description	An externally threaded fastener that has a countersunk head with a flat top surface, cross-shaped recess, a concave bearing surface on the underside of the head, spaced thread and self drilling point.					
Applications/ Advantages	Common usage is to attach lumber 3/4" or less in thickness to steel					
Material	AISI 1016 - 1022 or equivalent steel.					
Heat Treatment	Screws shall be quenched in liquid and then tempered by reheating to 625°F minimum.					
Surface Hardness	Rockwell C 52 - 58					
Case Depth	#8 & #10 diameters: .004009					
Core Hardness (after tempering)	Rockwell C 32 - 40					
Average Pullout*	20 gauge steel: 292 Lbs.; 18 gauge: 479 Lbs.; 16 gauge: 685 Lbs.; 14 gauge: 933 Lbs.					
Average Shear*	20 gauge steel: 721 Lbs.; 18 gauge: 1031 Lbs.; 16 gauge: 1049 Lbs.					
Plating	Screws are commonly available in zinc or black phosphate coatings. See Appendix-A for details.					

<sup>\*</sup> NOTE: Pullout and Shear values listed were achieved under laboratory conditions. They should be used as a guide and safety factors should be used when designing applications.