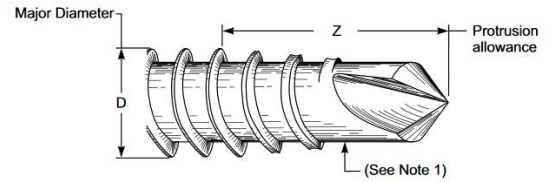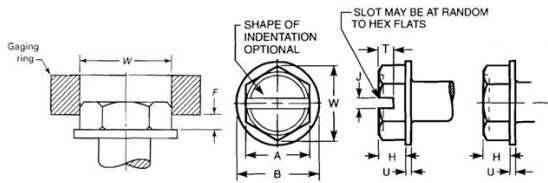# Hex Washer Head - Unslotted and Sltd - Self-drilling Screw - Type BSD, Style 3 Point

Typical Self-Drilling Tapping Screw Point

THREAD DATA

Size: #12	**Threads per in.:** 14	**Thread Class or Type:** BSD
Major Diameter: 0.2150 - 0.2080	**Standard:** ASME B18.6.3-2013	

DIMENSIONAL DATA

Type: Hex Washer Head - Unslotted and Sltd - Self-drilling Screw - Type BSD, Style 3 Point	**Standard:** IFI - 113	**Nominal Diameter:** 0.216
H - Head Height: 0.155 - 0.139	**J - Slot Width:** 0.067 - 0.056	**T - Slot Depth:** 0.103 - 0.077
F - Protrusion Height: 0.083 Min	**G - Gage Diameter:** 0.340	**A - Hex AF:** 0.312 - 0.305
W - Hex AC: 0.340 Min	**B - Washer Diameter:** 0.432 - 0.398	**U - Washer Thickness:** 0.039 - 0.022
Z - Min. Point Protrusion: 0.353	**L - Minimum Practical Length:** 1/2	**L - Length:** 1
Length Tolerance: ± 0.03		

PHYSICAL REQUIREMENTS

Nominal: 0.216	**Standard:** IFI - 113/SAE J78 / ASTM C1513	**Typical Materials:** carbon steel: 1018-1022
Test Plate Thickness in.: 0.060 - 0.064	**Torsional Strength, Min. (in.lbf):** 92	**Core Hardness:** HRC 32 - 40
Case Hardness: HRC 52 - 58	**Case Depth (in.):** .009-.004	**Ductility Test Angle:** 5˚
Axial Test Load +/- 5% (0.0003 in. max. finish): 45	**Axial Test Load +/- 5% (over 0.0003 in. finish):** 50	**Max. time to drill & form thread (seconds):** 4
Test Drill Speed (RPM): 1800 - 2500	**Straightness Factor:** N/A	

FINISH DATA

Finish: Zinc & Clear, non-hexavalent/Cr(VI) free - .0001"/ 3µm	**K factor (ref. DIN 946):** 0.22	**Standard:** ASTM F1941/F1941M-2016, Fe/Zn 3AN

[1] These torque values are based on K factors determined using DIN 946, tightening tension of 75% of the yield strength, and the calculation formula T=KDP. These values are advisory only. The torque for assembling critical joints should be determined and/or verified through actual experimentation by the user. The IFI is not responsible for any losses or claims resulting from the use of these values. [2] Calculated Pretension is equal to 75% of the bolt's yield strength achieved when using the indicated Tightening Torque.