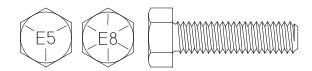


Earnest Technical Bulletin

Tap Bolts

(Threaded to the Head Hex Bolts)

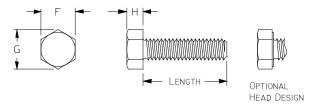


The term "Tap Bolt" refers to a Hex Head Bolt that is Threaded to the Head. Earnest Machine Product's line of Tap Bolts are made to the dimensional requirements of ANSI B18.2.1 for Hex Head Bolts and are threaded to the head within 2.5 times the thread pitch for diameters up to 1" and 3.5 times the thread pitch for sizes over 1". The threads are made to the requirement of ANSI B1.1 Class 2A.

Earnest's Tap Bolts are manufactured to the material and heat treatment requirements specified by SAE J429 for Grade 5 or Grade 8 Strength Levels.

SAE J429 Requirements	Grade 5	Grade 8
Material:	Medium Carbon Steel	Alloy Steel
Tensile Strength:		•
Diameters to 1":	120,000 psi min	150,000 psi min
Diameters >1":	105,000 psi min	150,000 psi min
Proof Load Strength:	-	•
Diameters to 1":	85,000 psi min	120,000 psi min
Diameters > 1":	74,000 psi min	120,000 psi min
Rockwell Hardness	-	-
Diameters to 1":	Rc 25 / 34	Rc 33 / 39
Diameters > 1":	Rc 19 / 30	Rc 33 / 39

Earnest Tap Bolts are available in Plain or with a Zinc Electro-Plating for corrosion resistance. Grade 5 are available with a commercially applied zinc and clear chromate and Grade 8 are available with zinc and yellow chromate.



	Width	Width Across	Thickness
Nom Dia:	Across Flats	Corners	
	F	G	Н
	Nom	Max	Nom
1/4	7/16	.484	11/64
5/16	1/2	.552	7/32
3/8	9/16	.620	1/4
7/16	5/8	.687	19/64
1/2	3/4	.826	11/32
9/16	13/16	.886	3/8
5/8	15/16	.906	27/64
3/4	1 1/8	1.088	1/2
7/8	1 5/16	1.269	37/64
1	1 1/2	1.450	43/64
1 1/8	1 11/16	1.631	3/4
1 1/4	1 7/8	1.812	27/32