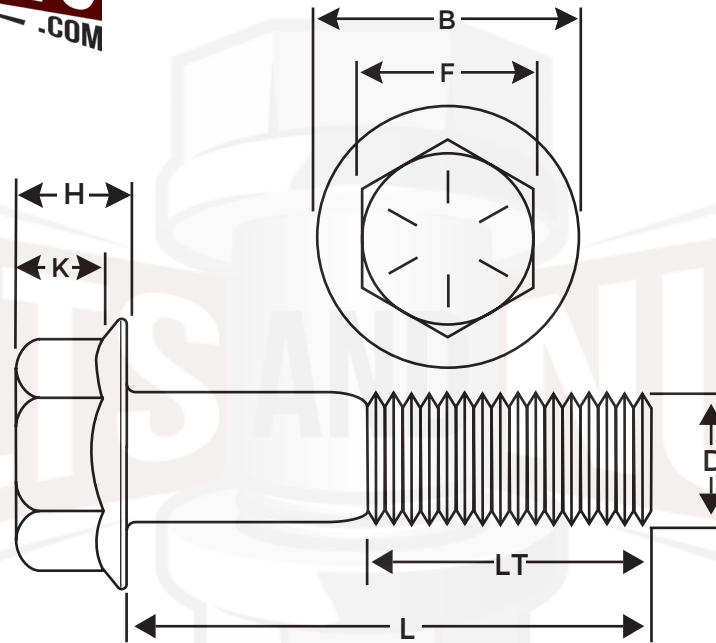




## Grade 8 Hex Flange Bolts (Frame Bolts)



Nominal Size or Basic Bolt Diameter	F		H	B	K	D	
	Width Across Flats		Height of Head	Flange Dia.	Wrench Height	Full Size Body Diameter	
	Max	Min	Max	Max	Min	Max	Min
1/4"	0.375	0.367	0.28	0.56	0.17	0.2500	0.2450
5/16"	0.500	0.489	0.32	0.68	0.21	0.3125	0.3065
3/8"	0.562	0.551	0.39	0.81	0.25	0.3750	0.3690
7/16"	0.625	0.612	0.46	0.93	0.30	0.4375	0.4305
1/2"	0.750	0.736	0.51	1.07	0.34	0.5000	0.4930
5/8"	0.937	0.922	0.62	1.33	0.42	0.6250	0.6170
3/4"	1.125	1.100	0.73	1.59	0.51	0.7500	0.7410

**Dimensions: IFI-111 / ASME B18.2.1**  
**Material: SAE J429 Grade 8**  
**Tensile Strength: 150,000PSI Minimum**  
**Threading: ASME B1.1, UNC & UNF, Class 2A**  
**Headmark: 6 Radial Lines 60 Degrees Apart & MFG ID**

THREAD LENGTH CHART			
Diameter	Will Be Full Thread	Will Be Partial Thread If	If Partial - Thread Length "LT"
1/4"	Through: 1-1/4" Length	1-3/8" & Longer	Min 0.750"
5/16"	Through: 1-3/8" Length	1-1/2" & Longer	Min 0.875"
3/8"	Through: 1-1/2" Length	1-5/8" & Longer	Min 1.000"
7/16"	Through: 1-3/4" Length	1-7/8" & Longer	Min 1.125"
1/2"	Through: 1-7/8" Length	2" & Longer	Min 1.250"
5/8"	Through: 2-1/2" Length	2-5/8" & Longer	Min 1.500"
3/4"	Through: 2-3/4" Length	2-7/8" & Longer	Min 1.750"

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