

Marketed By:



فاستنر بوينت (ش.ذ.م.م.)  
**FASTENER POINT LLC**



Manufactured By:



فاستنر بوينت للصناعات (ش.ذ.م.م.)  
**FASTENER POINT IND. LLC**

		PITCH TPI		Stress area in <sup>2</sup>				BOLT/SCREW & STUD ASTM A193 B7M										NUT ASTM A194 2HM					
BOLT SIZE	Inch	UNC	UNF	8UN	UNC	UNF	8UN	SHANK DIAMETER Inch	WIDTH ACCROSS FLATS Inch	HEAD HEIGHT Inch	YIELD STRESS ksi	YIELD LOAD 8UN ksi	TENSILE STRESS ksi	TORQUE * ft. lbf	REDUCTION OF AREA %	HARDNESS HRB	ELONG-ATION # %	WIDTH ACCROSS FLATS Inch	HEAD HEIGHT Inch	PROOF STRESS ksi	PROOF LOAD lbf	HARDNESS HRB	
																							0.0318
5/16	18	24			0.0524	0.0580																	
3/8	16	24			0.0775	0.0878		0.360-0.388	0.669-0.688	0.226-0.268	80	6,200	100	26	50-	-99	18-	0.669-0.688	0.341-0.377	150	11,630	84-99	
7/16	14	20			0.1063	0.1187					80	8,500	100	42	50-	-99	18-			150	15,950	84-99	
1/2	13	20			0.1419	0.1599		0.482-0.515	0.850-0.875	0.302-0.364	80	11,350	100	64	50-	-99	18-	0.850-0.875	0.464-0.504	150	21,290	84-99	
9/16	12	18			0.182	0.203					80	14,560	100	92	50-	-99	18-			150	27,300	84-99	
5/8	11	18			0.226	0.256		0.605-0.642	1.031-1.062	0.378-0.444	80	18,080	100	126	50-	-99	18-	1.031-1.062	0.587-0.631	150	33,900	84-99	
3/4	10	16			0.334	0.373		0.729-0.768	1.212-1.250	0.455-0.524	80	26,720	100	224	50-	-99	18-	1.212-1.250	0.710-0.758	150	50,100	84-99	
7/8	9	14			0.462	0.509		0.852-0.895	1.394-1.438	0.531-0.604	80	36,960	100	362	50-	-99	18-	1.394-1.438	0.833-0.885	150	69,300	84-99	
1	8	12	8	0.606	0.663	0.606	0.976-1.022	1.575-1.625	0.591-0.700	80	48,480	100	542	50-	-99	18-	1.575-1.625	0.956-1.012	150	90,900	84-99		
1 1/8	7	12	8	0.763	0.856	0.790	1.098-1.149	1.756-1.812	0.658-0.780	80	63,200	100	795	50-	-99	18-	1.756-1.812	1.079-1.139	150	118,500	84-99		
1 1/4	7	12	8	0.969	1.073	1.000	1.223-1.277	1.938-2.000	0.749-0.876	80	80,000	100	1,119	50-	-99	18-	1.938-2.000	1.187-1.251	150	150,000	84-99		
1 3/8	6	12	8	1.155	1.315	1.233	1.345-1.404	2.119-2.188	0.810-0.940	80	98,720	100	1,519	50-	-99	18-	2.119-2.188	1.310-1.378	150	185,100	84-99		
1 1/2	6	12	8	1.405	1.581	1.492	1.470-1.531	2.300-2.375	0.902-1.036	80	119,360	100	2,003	50-	-99	18-	2.300-2.375	1.433-1.505	150	223,800	84-99		
1 5/8			8			1.78	1.591-1.658	2.481-2.562	0.978-1.116	80	141,600	100	2,574	50-	-99	18-	2.481-2.562	1.556-1.632	150	265,500	84-99		
1 3/4	5		8	1.90		2.08	1.716-1.785	2.662-2.750	1.054-1.196	80	166,400	100	3,258	50-	-99	18-	2.662-2.750	1.679-1.759	150	312,200	84-99		
1 7/8			8			2.41	1.839-1.912	2.844-2.938	1.130-1.276	80	192,800	100	4,044	50-	-99	18-	2.844-2.938	1.802-1.886	150	361,500	84-99		
2	4 1/2		8	2.50		2.77	1.964-2.039	3.025-3.125	1.175-1.388	80	221,600	100	4,958	50-	-99	18-	3.025-3.125	1.925-2.013	150	415,500	84-99		
2 1/4	4 1/2		8	3.25		3.56	2.214-2.305	3.388-3.500	1.327-1.548	80	284,800	100	7,169	50-	-99	18-	3.388-3.500	2.155-2.251	150	534,000	84-99		
2 1/2	4		8	4.00		4.44	2.461-2.559	3.750-3.875	1.479-1.708	80	355,200	100	9,935	50-	-99	18-	3.750-3.875	2.401-2.505	150	666,000	84-99		
2 3/4	4		8	4.93		5.43	2.711-2.827	4.112-4.250	1.632-1.869	80	434,400	100	13,365	50-	-99	18-	4.112-4.250	2.647-2.759	150	814,500	84-99		
3	4		8	5.97		6.51	2.961-3.081	4.475-4.625	1.815-2.060	80	520,800	100	17,479	50-	-99	18-	4.475-4.625	2.893-3.013	150	976,500	84-99		
3 1/4	4		8	7.10		7.69				80	615,200	100	22,368	50-	-99	18-	4.838-5.000	3.124-3.252	150	1,153,500	84-99		
3 1/2	4		8	8.33		8.96				80	716,800	100	28,067	50-	-99	18-	5.200-5.375	3.370-3.506	150	1,344,000	84-99		
3 3/4	4		8	9.66		10.34				80	827,200	100	34,704	50-	-99	18-	5.562-5.750	3.616-3.760	150	1,551,000	84-99		
4	4		8	11.08		11.81				80	944,800	100	42,280	50-	-99	18-	5.925-6.125	3.862-4.014	150	1,771,500	84-99		
Dimensions							HEAVY HEX as per ANSI/ASME B18.2.1										HEAVY HEX as per ANSI/ASME B18.2.2						
Markings							'FPI' 'B7M'										'FPI' '2HM'						
Tempering °C							1150 (620 °C)										1150 (620 °C)						
Heating for 24 Hours for the Nut °C																	1000 (540 °C)						
Hardness After Heating																	84 HRB						
Charpy Test Specimen 10X10X55																							
Charpy V Notch Impact test at																							
Carbon							0.37-0.49										0.4-						
Manganese							0.65-1.10										-1.0						
Sulfur							-0.040										-0.050						
Silicon							0.15-0.35										-0.40						
Chromium							0.75-1.20																
Molybdenum							0.15-0.25																
Nickel																							
Vanadium																							
Boron																							
Copper																							
Nitrogen																							
Phosphorus							-0.035										-0.04						
Material							Chromium-molybdenum Steel										Medium Carbon Steel						

Notes:

- 8UN means less than 1" UNC thread and above 1" 8 TPI thread
- Left hand side of '-' is minimum value right hand side of '-' is maximum value  
Eg. 0.5-0.7 min is 0.5 and max is 0.7  
Eg. -0.8 max is 0.8 no minimum value  
Eg. 2.0- min is 2.0 no maximum value

\* Torque value based on 75% of proof load and finish as received steel  
# Elongation in length of 4 times Diameter

While every care has been taken in preparation of the information, the company accepts no liability for any loss or damage either direct or consequential, Please refer Original standards for details.