

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 A320 L7										NUT ASTM A194 GR7						
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 lbf	TENSILE STRESS ksi	TORQUE * ft. lbf	REDUCTION OF AREA %	HARDNESS HRC	ELONG-ATION # %	WIDTH ACCROSS FLATS Inch	HEAD HEIGHT Inch	PROOF STRESS ksi	PROOF LOAD 8UN KN	HARDNESS HRC	
																							0.0318
5/16	18	24			0.0524	0.0580																	
3/8	16	24			0.0775	0.0878																	
7/16	14	20			0.1063	0.1187																	
1/2	13	20			0.1419	0.1599																	
9/16	12	18			0.182	0.203																	
5/8	11	18			0.226	0.256																	
3/4	10	16			0.334	0.373																	
7/8	9	14			0.462	0.509																	
1	8	12	8		0.606	0.663	0.606	0.976-1.022	1.575-1.625	0.591-0.700	105	63,630	125	712	50-	-35	16-	1.575-1.625	0.956-1.012	175	106,100	24-35	
1 1/8	7	12	8		0.763	0.856	0.790	1.098-1.149	1.756-1.812	0.658-0.780	105	82,950	125	1,044	50-	-35	16-	1.765-1.812	1.079-1.139	175	138,300	24-35	
1 1/4	7	12	8		0.969	1.073	1.000	1.223-1.277	1.938-2.000	0.749-0.876	105	105,000	125	1,468	50-	-35	16-	1.938-2.000	1.187-1.251	175	175,000	24-35	
1 3/8	6	12	8		1.155	1.315	1.233	1.345-1.404	2.119-2.188	0.810-0.940	105	129,570	125	1,993	50-	-35	16-	2.119-2.188	1.310-1.378	175	216,000	24-35	
1 1/2	6	12	8		1.405	1.581	1.492	1.470-1.531	2.300-2.375	0.902-1.036	105	156,660	125	2,629	50-	-35	16-	2.300-2.375	1.433-1.505	175	261,100	24-35	
1 5/8			8				1.78	1.591-1.658	2.481-2.562	0.978-1.116	105	185,850	125	3,379	50-	-35	16-	2.481-2.562	1.556-1.632	175	309,800	24-35	
1 3/4	5		8	1.90			2.08	1.716-1.785	2.662-2.750	1.054-1.196	105	218,400	125	4,276	50-	-35	16-	2.662-2.750	1.679-1.759	175	364,000	24-35	
1 7/8			8				2.41	1.839-1.912	2.844-2.938	1.130-1.276	105	253,050	125	5,308	50-	-35	16-	2.844-2.938	1.802-1.886	175	421,800	24-35	
2	4 1/2		8	2.50			2.77	1.964-2.039	3.025-3.125	1.175-1.388	105	290,850	125	6,508	50-	-35	16-	3.025-3.125	1.925-2.013	175	484,800	24-35	
2 1/4	4 1/2		8	3.25			3.56	2.214-2.305	3.388-3.500	1.327-1.548	105	373,800	125	9,409	50-	-35	16-	3.388-3.500	2.155-2.251	175	623,000	24-35	
2 1/2	4		8	4.00			4.44	2.461-2.559	3.750-3.875	1.479-1.708	105	466,200	125	13,039	50-	-35	16-	3.750-3.875	2.401-2.505	175	777,000	24-35	
2 3/4	4		8	4.93			5.43	2.711-2.827	4.112-4.250	1.632-1.869	105	570,150	125	17,541	50-	-35	16-	4.112-4.250	2.647-2.759	175	950,300	24-35	
3	4		8	5.97			6.51	2.961-3.081	4.475-4.625	1.815-2.060	105	683,550	125	22,942	50-	-35	16-	4.475-4.625	2.893-3.013	0175	1,139,300	24-35	
3 1/4	4		8	7.10			7.69				105	807,450	125	29,358	50-	-35	16-	4.838-5.000	3.124-3.252	0175	1,345,800	24-35	
3 1/2	4		8	8.33			8.96				105	940,800	125	36,838	50-	-35	16-	5.200-5.375	3.370-3.506	175	1,568,000	24-35	
3 3/4	4		8	9.66			10.34				105	1,085,700	125	45,549	50-	-35	16-	5.562-5.750	3.616-3.760	175	1,809,500	24-35	
4	4		8	11.08			11.81				105	1,240,050	125	55,492	50-	-35	16-	5.925-6.125	3.862-4.014	175	2,066,800	24-35	
Dimensions							HEAVY HEX as per ANSI/ASME B18.2.1										HEAVY HEX as per ANSI/ASME B18.2.2						
Markings							'FPI' 'L'										'FPI' '7L'						
Tempering °C							1100 ( 593 °C )										1100 ( 595 °C )						
Heating for 24 Hours for the Nut °C																	1100 ( 590 °C )						
Hardness After Heating																	94 HRB						
Charpy Test Specimen 10X10X55							27 J min (Avg)										27 J min (Avg)						
Charpy V Notch Impact test at							-101.°C Temp										-101.°C Temp						
Carbon							0.38-0.48										0.37-0.49						
Manganese							0.75-1.0										0.65-1.10						
Sulfur							-0.04										0.04						
Silicon							0.15-0.35										0.15-0.35						
Chromium							0.80-1.1										0.75-1.20						
Molybdenum							0.15-0.25										0.15-0.25						
Nickle																							
Vanadium																							
Boron																							
Copper																							
Nitrogen																							
Phosphorus							-0.035										-0.035						
Material							Chromium-Moly Steel										AISI 4140/4142/4145						

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.