

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 ASTM A490-1										NUT ASTM A563 DH*			
BOLT SIZE	Inch	UNC	UNF	8UN	UNC	UNF	8UN	SHANK DIAMETER Inch	WIDTH ACCROSS FLATS Inch	HEAD HEIGHT Inch	PROOF STRESS Ksi	PROOF LOAD UNC lbf	TENSILE STRESS Ksi	TORQUE * ft. lbf	HARDNESS HRC	ELONGATION # %	WIDTH ACCROSS FLATS Inch	HEAD HEIGHT Inch	PROOF STRESS Ksi	PROOF LOAD		HARDNESS HRC					
																				UNC lbf	HDG		PLAIN	HDG			
1/4	20	28			0.0318	0.0364																					
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		0.482-0.515	0.850-0.875	0.302-0.323	120	17,030	150-173	95	33-39	14-	0.850-0.875	0.464-0.504	175	150	24,830.0	21,290.0	24-38				
9/16	12	18			0.182	0.203					120	21,840	150-173	137	33-39	14-			175	150	31,850.0	27,300.0	24-38				
5/8	11	18			0.226	0.256		0.605-0.642	1.031-1.063	0.378-0.403	120	27,120	150-173	190	33-39	14-	1.031-1.062	0.587-0.631	175	150	39,550.0	33,900.0	24-38				
3/4	10	16			0.334	0.373		0.729-0.768	1.212-1.250	0.455-0.483	120	40,080	150-173	336	33-39	14-	1.212-1.250	0.710-0.758	175	150	58,450.0	50,100.0	24-38				
7/8	9	14			0.462	0.509		0.852-0.895	1.394-1.437	0.531-0.563	120	55,440	150-173	543	33-39	14-	1.394-1.438	0.833-0.885	175	150	80,850.0	69,300.0	24-38				
1	8	12	8		0.606	0.663	0.606	0.976-1.022	1.575-1.625	0.591-0.627	120	72,720	150-173	814	33-39	14-	1.575-1.625	0.956-1.012	175	150	106,050.0	90,900.0	24-38				
1 1/8	7	12	8		0.763	0.856	0.790	1.098-1.149	1.756-1.813	0.658-0.718	120	91,560	150-173	1,152	33-39	14-	1.756-1.812	1.079-1.139	175	150	133,530.0	114,450.0	24-38				
1 1/4	7	12	8		0.969	1.073	1.000	1.223-1.277	1.938-2.000	0.749-0.813	120	116,280	150-173	1,626	33-39	14-	1.938-2.000	1.187-1.251	175	150	169,580.0	145,350.0	24-38				
1 3/8	6	12	8		1.155	1.315	1.233	1.345-1.404	2.119-2.188	0.810-0.878	120	138,600	150-173	2,132	33-39	14-	2.119-2.188	1.310-1.378	175	150	202,130.0	173,250.0	24-38				
1 1/2	6	12	8		1.405	1.581	1.492	1.470-1.531	2.300-2.375	0.902-0.974	120	168,600	150-173	2,829	33-39	14-	2.300-2.375	1.433-1.505	175	150	245,880.0	210,750.0	24-38				
1 5/8			8				1.78																				
1 3/4	5		8		1.90		2.08																				
1 7/8			8				2.41																				
2	4 1/2		8		2.50		2.77																				
2 1/4	4 1/2		8		3.25		3.56																				
2 1/2	4		8		4.00		4.44																				
2 3/4	4		8		4.93		5.43																				
3	4		8		5.97		6.51																				
3 1/4	4		8		7.10		7.69																				
3 1/2	4		8		8.33		8.96																				
3 3/4	4		8				10.34																				
4	4		8		11.08		11.81																				
Dimensions								HEAVY HEX as per ANSI/ASME B18.2.6										HEAVY HEX as per ANSI/ASME B18.2.2									
Markings								'FPI' 'A490' '10S'										'FPI' DH									
Carbon								0.30-0.48/0.35-0.53										0.20-0.55									
Manganese								-1.65										0.6-									
Sulfur								-0.04										-0.05									
Silicon								-0.6																			
Chromium								-3.99																			
Molybdenum																											
Nickel																											
Vanadium																											
Boron																											
Copper																											
Nitrogen																											
Phosphorus								-0.04										-0.04									
Material								Plain Carbon/Alloy Steel										Plain 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

\* Alternative ASTM A194 2H

\* 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.