

Marketed By:



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



Manufactured By:



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

PROPERTIES COMPARISON OF DIFFERENT GRADES

BOLT SIZE	PITCH TPI						BOLT/SCREW & STUD SAE J429 Gr. 8											NUT SAE J995 GRADE 8					
	UNC		UNF		8UN		SHANK DIAMETER	WIDTH ACCROSS FLATS	HEAD HEIGHT	PROOF STRESS	PROOF LOAD	PROOF LOAD	TENSILE STRESS	TORQUE *	HARDNESS	ELONG-ATION #	WIDTH ACCROSS FLATS	HEAD HEIGHT	PROOF STRESS	PROOF LOAD	PROOF LOAD	HARDNESS	
	Inch						Inch	Inch	Inch	Ksi	UNC lbf	UNF lbf	Ksi	ft. lbf	HRC	%	Inch	Inch	Ksi	UNC lbf	UNF lbf	HRC	
1/4	20	28			0.0318	0.0364	0.245-0.250	0.428-0.438	0.150-0.163	120	3,820	4,370	150	11	33-39	12-	0.428-0.438	0.212-0.226	150	4,770	173,630	24-32	
5/16	18	24			0.0524	0.0580	0.307-0.313	0.489-0.500	0.195-0.211	120	6,290	6,960	150	22	33-39	12-	0.489-0.500	0.258-0.273	150	7,860	455,880	24-32	
3/8	16	24			0.0775	0.0878	0.369-0.375	0.551-0.563	0.226-0.243	120	9,300	10,540	150	39	33-39	12-	0.551-0.562	0.320-0.337	150	11,630	1,021,110	24-32	
7/16	14	20			0.1063	0.1187	0.431-0.438	0.612-0.625	0.272-0.291	120	12,760	14,240	150	62	33-39	12-	0.675-0.688	0.365-0.385	150	15,950	1,893,270	24-32	
1/2	13	20			0.1419	0.1599	0.493-0.500	0.736-0.750	0.302-0.323	120	17,030	19,190	150	95	33-39	12-	0.736-0.750	0.427-0.448	150	21,290	3,404,270	24-32	
9/16	12	18			0.182	0.203	0.555-0.563	0.798-0.813	0.348-0.371	120	21,840	24,360	150	137	33-39	12-	0.861-0.875	0.473-0.496	150	27,300	5,541,900	24-32	
5/8	11	18			0.226	0.256	0.617-0.625	0.922-0.938	0.378-0.403	120	27,120	30,720	150	190	33-39	12-	0.922-0.938	0.535-0.559	150	33,900	8,678,400	24-32	
3/4	10	16			0.334	0.373	0.741-0.750	1.100-1.125	0.455-0.483	120	40,080	44,760	150	336	33-39	12-	1.088-1.125	0.617-0.665	150	50,100	18,687,300	26-34	
7/8	9	14			0.462	0.509	0.866-0.875	1.285-1.313	0.531-0.563	120	55,440	61,080	150	543	33-39	12-	1.269-1.312	0.724-0.776	150	69,300	35,273,700	26-34	
1	8	12	8		0.606	0.663	0.990-1.000	1.469-1.500	0.591-0.627	120	72,720	79,560	150	814	33-39	12-	1.450-1.500	0.831-0.887	150	90,900	60,266,700	26-34	
1 1/8	7	12	8		0.763	0.856	0.790	1.114-1.125	1.631-1.688	0.658-0.718	120	91,560	102,720	150	1,152	33-39	12-	1.631-1.688	0.939-0.999	150	114,450	97,969,200	26-36
1 1/4	7	12	8		0.969	1.073	1.000	1.239-1.250	1.812-1.875	0.749-0.813	120	116,280	128,760	150	1,626	33-39	12-	1.812-1.875	1.030-1.094	150	145,350	155,960,550	26-36
1 3/8	6	12	8		1.155	1.315	1.233	1.363-1.375	1.994-2.063	0.810-0.878	120	138,600	157,800	150	2,132	33-39	12-	1.994-2.062	1.138-1.206	150	173,250	227,823,750	26-36
1 1/2	6	12	8		1.405	1.581	1.492	1.488-1.500	2.175-2.250	0.902-0.974	120	168,600	189,720	150	2,829	33-39	12-	2.175-2.250	1.245-1.317	150	210,750	333,195,750	26-36
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 1/2	4		8		9.66	10.34																	
4	4		8		11.08	11.81																	
Dimensions							HEX as per ANSI/ASME B18.2.1											HEX as per ANSI/ASME B18.2.2					
Markings							'FPI' Six Radial lines											'FPI' Two Radial lines					
Carbon							0.28-0.55											-0.55					
Manganese																		0.30-					
Sulfur							-0.05											-0.05					
Silicon																							
Chromium																							
Molybdenum																							
Nickle																							
Vanadium																							
Boron																							
Copper																							
Nitrogen																							
Phosphorus							-0.03											-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

* 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.