BOLT SIZE mm	PITCH mm	STRESS AREA mm²	BOLT/SCREW ASTM A325M-1									NUT ASTM A563M 10S						
			SHANK DIAMETER mm	WIDTH ACCROS FLATS mm	HEAD HEIGHT mm	PROOF STRESS Mpa	PROOF LOAD KN	TENSILE STRESS Mpa	TORQUE * N-m	HARDNESS HRC	ELONG-ATION # %	WIDTH ACCROSS FLATS mm	HEAD HEIGHT mm	PROOF STRESS Mpa		PROOF LOAD KN		HARDNESS HRC
														PLAIN	HDG	PLAIN	HDG	
M6	1	20.1																
M8	1.25	36.6																
M10	1.5	58.8																
M12	1.75	84.3				600	50.6	830	81.5	25-34	14-	20.16~21.00	11.90~12.30	1245	1165	105	98	26~38
M14	2.0	115.0				600	69.0	830	129.7	25-34	14-	23.16~24.00	13.60~14.30	1245	1165	143	134	26~38
M16	2.0	157.0	15.30~16.70	26.16~27.00	9.25~10.75	600	94.2	830	202.3	25-34	14-	26.16~27.00	16.40~17.10	1245	1165	195	183	26~38
M18	2.5	192.0				600	115.2	830	278.4	25-34	14-			1245	1165	239	224	26~38
M20	2.5	245.0	19.16~20.84	33.00~34.00	11.60~13.40	600	147.0	830	394.7	25-34	14-	33.00~34.00	19.40~20.70	1245	1165	305	285	26~38
M22	2.5	303.0	21.16~22.84	35.00~36.00	13.10~14.90	600	181.8	830	536.9	25-34	14-	35.00~36.00	22.30~23.60	1245	1165	377	353	26~38
M24	3.0	353.0	23.16~24.84	40.00~41.00	14.10~15.90	600	211.8	830	682.4	25-34	14-	40.00~41.00	22.90~24.20	1245	1165	439	411	26~38
M27	3.0	459.0	26.16~27.84	45.00~46.00	16.10~17.90	600	275.4	830	998.3	25-34	14-	45.00~46.00	26.30~27.60	1245	1165	571	535	26~38
M30	3.5	561.0	29.16~30.84	49.00~50.00	17.65~19.75	600	336.6	830	1,356	25-34	14-	49.00~50.00	29.10~30.70	1245	1165	698	654	26~38
M33	3.5	694.0				600	416.4	830	1,845	25-34	14-			1245	1165	864	809	26~38
M36	4.0	817.0	35.00~37.00	58.80~60.00	21.45~23.55	600	490.2	830	2,369	25-34	14-	58.80~60.00	35.00~36.00	1245	1165	1,017	952	26~38
M39	4.0	976.0																
M42	4.5	1,120.0																
M45	4.5	1,310.0																
M48	5.0	1,470.0																
M52	5.0	1,760.0																
M56	5.5	2,030.0																
M60	5.5	2,360.0																
M64	6.0	2,680.0																
M68	6.0	3,060.0																
M72	6.0	3,460.0																
M76	6.0	3,890.0																
M80	6.0	4,340.0																
M85	6.0	4,950.0																
M90	6.0	5,590.0																
M95	6.0	6,270.0																
M100	6.0	6,990.0																
Dimensions			HEAVY HEX as per ANSI/ASME B18.2.4.7M									HEAVY HEX as per ANSI/ASME B18.2.4.6M						
Markings			'FPI' 'A325M' '8S'									'FPI' '10S'						
Carbon			0.30-0.52									0.20-0.55						
Manganese			0.6-									0.30-						
Sulfur			-0.05/-0.04									-0.05						
Silicon			0.15-0.30 / 0.15-0.35															
Chromium																		
Molybdenum																		
Nickle																		
Vanadium																		
Boron																		
Copper																		
Nitrogen																		
Phosphorus			-0.04/-0.035									-0.040						
Material			Medium Carbon/Alloy Steel									Medium Carbon or Alloy Steel						

Notes:
Left hand side of '-' is minium value
right hand side of '-' is maximam value
Eg. 0.5-0.7 min is 0.5 and max is 0.7
Eg. -0.8 max is 0.8 no minimam value
Eg. 2.0- min is 2.0 no maximam 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.