



ASTM A193M B7 HEX BOLT

HEXAGON BOLT GRADE B7 ASTM A193M

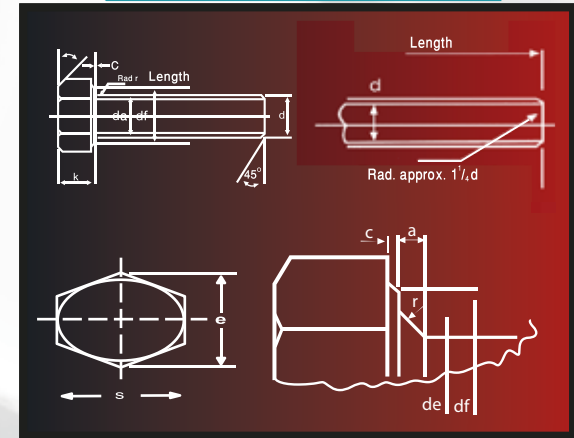
NOMINAL SIZE (D)	BODY DIAMETER		HEAD THICKNEASTM A193		ACROASTM A193 THE FLATS		ACROASTM A193 CORNERS	
	D (MAX)	D (MIN)	H (MAX)	H (MIN)	F (MAX)	F (MIN)	C (MAX)	C (MIN)
M10	10.00	9.78	6.63	6.17	17.00	15.73	18.48	17.77
M12	12.00	11.73	7.76	4.24	19.00	17.73	20.78	20.03
M14	14.00	13.73	9.09	8.51	22.00	20.67	24.25	23.35
M16	16.00	15.73	10.32	9.68	24.00	23.67	27.71	26.75
M20	20.00	19.67	12.88	12.12	30.00	29.16	34.64	32.95
M24	24.00	23.67	15.44	14.56	36.00	35.00	41.57	39.55
M30	30.00	29.67	19.48	17.92	46.00	45.00	53.12	50.85
M36	36.00	35.61	23.38	21.63	55.00	53.80	63.51	60.79
M42	42.00	41.38	26.97	25.03	65.00	62.90	75.06	71.71
M48	48.00	47.38	31.07	28.93	75.00	72.60	86.60	82.76
M56	56.00	55.26	36.2	33.80	85.00	82.20	98.15	93.71
M64	64.00	63.26	41.32	38.68	95.00	91.80	109.70	104.65
M72	72.00	71.26	46.45	43.55	105.00	101.40	121.24	115.60
M80	80.00	79.26	51.58	48.42	115.00	111.00	132.72	126.54
M90	90.00	89.13	57.74	54.26	130.00	125.50	150.11	143.07
M100	90.00	99.13	63.9	60.10	145.00	140.00	167.43	159.60

ASTM A193 Grade B7 Fasteners
ASTM A193 grade B7 stud bolt
ASTM A193 Grade B7 Plow Bolt
ASTM A193 grade B7 threaded Rod, B7 stud bolt
ASTM A193 Grade B7 Structural Bolt
ASTM A193 Grade B7 wheel stud bolt
ASTM A193 grade B7 threaded rod with 2h nut
ASTM A193 Grade B7 Flat Washer
Stud bolt DIN 975 Grade ASTM A193 B7
ASTM A193 Grade B7 Stud Bolt
ASTM A193 Grade B7 Material
ASTM A193 Grade B7 U bolts

Mechanical Properties of ASTM A193 B7 Bolt

Grade	Size	Tensile ksi, min	Yield, ksi, min	Elong, %, min	RA % min	HBW	HRC
B7	Up to 2 -1/2	125	105	16	50	321 max	35 max
	2-5/8 - 4	115	95	16	50		
	4-1/8 - 7	100	75	18	50		

Drawing



Marking



Chemical Composition

Element	B7 (AISI 4140)
Carbon	0.38 - 0.48%
Manganese	0.75 - 1.00%
Phosphorus, max	0.035%
Sulfur, max	0.040%
Silicon	0.15 - 0.35%
Chromium	0.80 - 1.10%
Nickel	
Molybdenum	0.15 - 0.25%