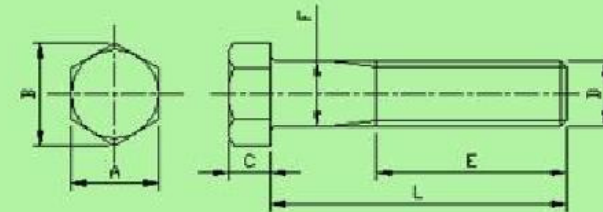




Hexagon Head Bolts/Screws

Matric Series - Dimensions

1. The Bolts and screws will generally conform to DIN ISO 4017 & 4014,15-1364
2. Threads will conform to class 6g of IS : 4218, Coarse Series.
3. Material : Lloyds High Grade steel
4. Heat Treatment : Property Class 10.9 or 8.8 of IS : 1367/ISO:898
5. Thread Length LT :
 - LT1 for L < 125
 - LT2 for L > 125 to 200
 - LT3 for L > 200
6. Screw length equal to or shorter than listed in row 'LFT' will be threaded to head
7. Sizes in brackets are non-preferred standards
8. All dimensions are in millimeters



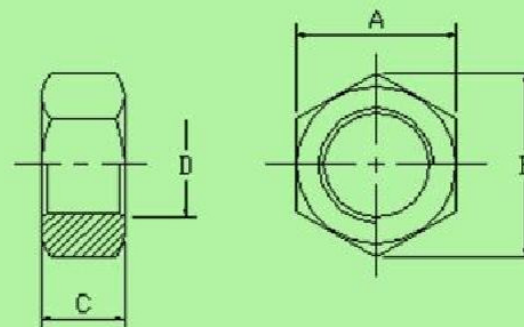
Thread Size	Pitch	W Max.	C Min.	B Max.	H Nom.	R Min.	Length of Thread				Length Range L
							LT1	LT2	LT3	LFT	
M8	1.25	13.0	14.38	8.0	5.3	0.4	11.6	28	-	30	12-90
M10	1.5	16.0	17.80	10.0	6.4	0.4	15.6	32	45	35	16-90
M12	1.775	18.0	20.3	12.0	7.5	0.6	17.4	36	49	40	20-280
(M14)	2.0	21.0	23.45	14.0	8.8	0.6	20.5	40	53	45	25-200
M16	2.0	24.0	26.75	16.0	10.0	0.6	22.5	44	57	50	25-280
(M18)	2.5	27.0	30.14	18.0	11.5	0.6	25.3	48	61	60	40-200
M20	2.5	30.0	33.53	20.0	12.5	0.8	28.2	52	65	60	20-280
(M22)	2.5	34.0	37.72	22.0	14.0	0.8	30.0	56	69	65	50-280
M24	3.0	36.0	39.98	24.0	15.0	0.8	33.6	60	73	75	50-280
(M27)	3.0	41.0	45.20	27.0	17.0	1.0	38.0	66	79	85	70-300
M30	3.5	46.0	50.85	30.0	18.7	1.0	42.7	72	85	85	75-300
(M33)	3.5	50.0	55.55	33.0	21.0	1.0	46.6	78	91	95	75-300
M36	4.0	55.0	60.79	36.0	22.5	1.0	51.1	84	97	100	80-300
(M39)	4.0	60.0	66.44	39.0	25.0	1.0	55.9	90	103	110	90-300
M42	4.5	65.0	72.02	42.0	26.0	1.2	61.6	96	109	120	90-300



Hexagon Nuts

Metric Series - Dimensions- Physical Properties

1. The nuts will generally conform to IS :
2. Threads will conform to class 6H of IS : 4218, Coarse Series.
3. Material & Heat Treatment To achieve mechanical properties Class 8 or 10 of IS : 1367-VI, ISO 898/2
4. Nuts of Property Class 8 are used with bolts of Property Class 10.9 (In General, nuts of a higher property class can replace nuts of a lower property class in a joint).
5. In Bolts/Nuts assembly, tightening should be done by rotation of nut. Torque values as recommended in tables for bolts (P.2)
6. Sizes in brackets are non-preferred standards.
7. All dimensions are in millimeters.



Dimensions:

Thread Size	Pitch	A Max.	B Min.	C Nom.	
M12	1.75	18.0	20.3	10.0	10.80
(M14)	2.0	21.0	23.45	11.0	12.80
M16	2.0	24.0	26.75	13.0	14.80
(M18)	2.5	27.0	30.14	15.0	15.80
M20	2.5	30.0	33.53	16.0	18.00
(M22)	2.5	34.0	37.72	18.0	19.40
M24	3.0	36.0	39.98	19.0	21.50
(M27)	3.0	41.0	45.20	22.0	23.80
M30	3.5	46.0	50.85	24.0	25.60
(M33)	3.5	50.0	55.55	26.0	28.70
M36	4.0	55.0	60.79	29.0	31.00
(M39)	4.0	60.0	66.44	31.0	33.40
M42	4.5	65.0	72.09	34.00	

Physical Properties

Nuts Size		Property Class 8				Property Class 10					
		Proof Load Stress	Hardness HV		Hardness HR		Proof Load Stress	Hardness HV		Hardness HR	
			Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
Over	To	N/mm ²					N/mm ²				
	M42	800	170			HRB87	1040				
M4	M7	810		302		HRC30	1040				
M7	M10	830	188			HRB90	1040	272	353	26	36
M10	M16	840					1050				
M16	M42	920					1060				