



METRIC – HEX HEAD BOLTS, PRODUCT GRADE A & B

METRIC – HEX HEAD BOLTS, PRODUCT GRADE A

Drawing

METRIC - HEX HEAD BOLTS, PRODUCT GRADE A														Iso 4010	
NOMINAL SIZE	THREAD PITCH	R		W		T	U	E	H		F		G	K	
		THREADED LENGTH		WASHER FACE THICKNESS		FILLET TRANSITION DIAMETER	UNDER-HEAD FILLET	WASHER FACE DIAMETER	HEAD HEIGHT		WIDTH ACROSS FLATS		WIDTH ACROSS CORNER	WRENCHING HEIGHT	
		L <=125 MM	L >125MM <=200MM	MAX	MIN	MAX	MAX	MIN	MAX	MIN	MAX	MIN	MIN	MIN	
M1.6	0.30	9	-	0.25	0.1	2	0.6	0.27	1.225	0.975	3.2	3.02	3.41	0.68	
M2	0.4	10	-	0.25	0.1	2.6	0.8	3.07	1.525	1.275	4	3.82	4.32	0.89	
M2.5	0.45	11	-	0.25	0.1	3.1	1	4.07	1.825	1.575	5	4.82	5.45	1.1	
M3	0.5	12	-	0.4	0.15	3.6	1	4.57	2.125	1.875	5.5	5.32	6.01	1.31	
M4	0.7	14	-	0.4	0.15	4.7	1.2	5.88	2.925	2.675	7	6.78	7.66	1.87	
M5	0.8	16	-	0.5	0.15	5.7	1.2	6.88	3.65	3.35	8	7.78	8.79	2.35	
M6	1	18	-	0.5	0.15	6.8	1.4	8.88	4.15	3.85	10	9.78	11.05	2.7	
M8	1.25	22	-	0.6	0.15	9.2	2	11.63	5.45	5.15	13	12.73	14.38	3.61	
M10	1.5	26	-	0.6	0.15	11.2	2	14.63	6.58	6.22	16**	15.73	17.77	4.35	
M12	1.75	30	-	0.6	0.15	13.7	3	16.63	7.68	7.32	18**	17.73	20.03	5.12	
M14	2	34	-	0.6	0.15	15.7	3	19.37	8.98	8.62	21**	20.67	23.36	6.03	
M16	2	38	40	0.8	0.2	17.7	3	22.49	10.18	9.82	24	23.67	26.75	6.87	
M20	2.5	46	44	0.8	0.2	22.4	4	28.19	12.71	12.285	30	29.67	33.53	8.6	
M24	3	54	60 73*	0.8	0.2	26.4	4	33.61	15.21	14.785	36	35.38	39.98	10.35	

Tolerance On Length

12-16MM:± 0.35

20.-30MM: ±0.42

35-50MM:± 0.5

55-80MM: ±0.6

90-120:±0.7

130-150MM:±0.8

*For nominal length over 200mm

*DIN 931 spec for maximum width across flats on these three diameters are 17, 19 & 22 mm, respectively.



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METRIC – HEX HEAD BOLTS, PRODUCT GRADE B

Drawing

METRIC - HEX HEAD BOLTS, PRODUCT GRADE B														Iso 4010	
NOMINAL SIZE	THREAD PITCH	R		W		T	U	E	H		F		G	K	
		THREADED LENGTH		WASHER FACE THICKNESS		FILLET TRANSITION DIAMETERS	UNDER-HEAD FILLET	WASHER FACE DIAMETER	HEAD HEIGHT		WIDTH ACROSS FLATS		WIDTH ACROSS CORNER	WRENCHING HEIGHT	
		L>125MM ≤200MM	L>=200 MM	MAX	MIN	MAX	MAX	MIN	MAX	MIN	MAX	MIN	MIN	MIN	
M16	2	44	-	0.8	0.2	17.7	3	22	10.29	9.71	24	23.16	26.17	6.8	
M20	2.5	52	-	0.8	0.2	22.4	4	27.7	12.85	12.15	30	29.16	32.95	8.51	
M24	3	60	73	0.8	0.2	26.4	4	33.25	15.35	14.65	36	35	39.55	10.26	
M30	3.5	72	95	0.8	0.2	33.4	6	42.75	19.12	18.28	46	45	50.85	12.8	
M36	4	84	97	0.8	0.2	39.4	6	51.11	22.92	22.08	55	53.8	60.79	15.46	
M42	4.5	96	109	1	0.3	45.6	8	59.95	26.42	25.58	65	63.1	71.3	17.91	
M48	5	108	121	1	0.3	52.6	10	69.45	30.42	29.58	75	73.1	82.6	20.71	
M56	5.5	-	137	1	0.3	63	12	78.66	35.5	34.5	85	82.8	93.56	24.15	
M64	6	-	153	1	0.3	71	13	88.16	40.5	39.5	95	92.8	104.86	27.65	
Tolerance on Length		110*120MM:±1.75		130-180MM:±2.0			200-240MM:±2.3			260-300MM:±2.6					
		320-400MM:±2.86					420-500MM:±3.15								