

User activities:
Army - ME

Review activities:
Army - AV, EA
DLA - IS

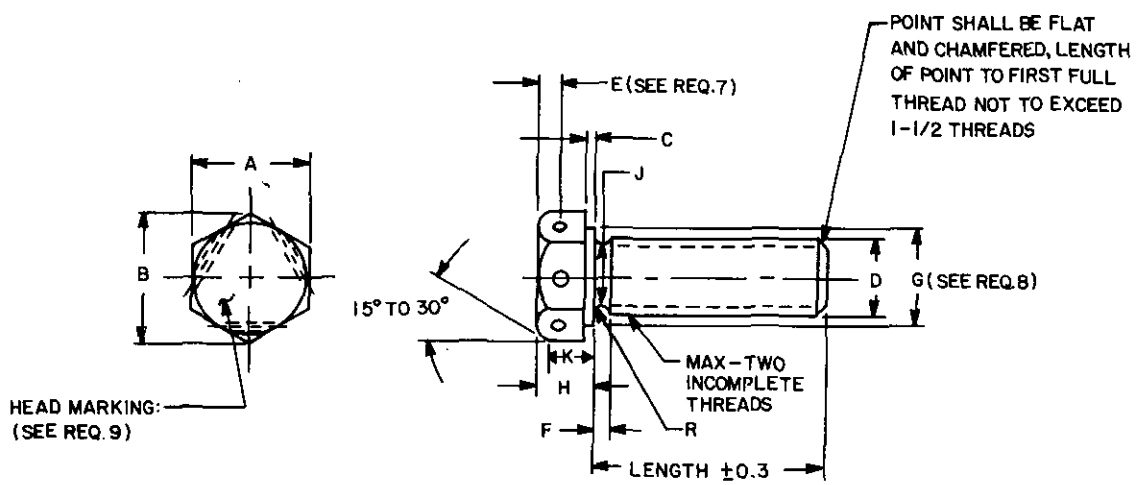


TABLE I. DIMENSIONS.

D NOMINAL BOLT DIA AND THREAD PITCH	A WIDTH ACROSS FLATS		B WIDTH ACROSS CORNERS		C WASHER FACE THICKNESS	F UNDER CUT LENGTH	G WASHER FACE DIA	H HEAD HEIGHT		J UNDERCUT DIAMETER		R RADIUS OF FILLET	K WRENCH- ING HEIGHT
	MAX	MIN	MAX	MIN	MAX	MAX	MIN	MAX	MIN	MAX	MIN	MIN	MIN
M5X0.8	8.00	7.64	9.24	8.63	0.4	2.4	7.2	3.88	3.35	3.09	3.00	0.2	2.4
M6X1	10.00	9.64	11.55	10.89	0.4	3.0	9.1	4.38	3.85	5.32	5.21	0.3	2.8
M8X1	13.00	12.57	15.01	14.20	0.4	3.0	11.9	5.68	5.10	7.32	7.21	0.4	3.7
M10X1.25	16.00	15.57	18.48	17.59	0.4	4.0	14.7	6.85	6.17	9.16	9.04	0.4	4.5
M12X1.25	18.00	17.57	20.78	19.85	0.4	4.0	16.6	7.95	7.24	11.16	11.03	0.6	5.2
M14X1.5	21.00	20.16	24.25	22.78	0.4	4.5	19.1	9.25	8.51	12.99	12.85	0.6	6.2
M16X1.5	24.00	23.16	27.71	26.17	0.4	4.5	22.0	10.75	9.68	14.99	14.85	0.6	7.0
M20X1.5	30.00	29.16	34.64	32.95	0.4	4.5	27.7	13.40	12.12	18.99	18.85	0.8	8.8
M24X2	36.00	35.00	41.57	39.55	0.5	6.0	33.2	15.90	14.56	22.66	22.49	0.8	10.5
M30X2	46.00	45.00	53.12	50.55	0.5	6.0	42.7	19.75	17.92	28.66	28.49	1.0	13.1
M36X2	55.00	53.80	63.51	60.79	0.5	6.0	51.1	23.55	21.62	34.66	34.49	1.0	15.8
M42X2	65.00	62.90	75.06	71.71	0.6	6.0	59.7	27.05	25.03	40.66	40.49	1.2	18.2
M48X2	75.00	72.60	86.60	82.76	0.6	6.0	68.9	31.07	28.93	46.66	46.48	1.5	21.0
M56X2	85.00	82.20	98.15	93.71	0.6	6.0	78.0	36.20	33.80	54.66	54.48	2.0	24.5
M64X2	95.00	91.80	109.70	104.65	0.7	6.0	87.2	41.32	38.68	62.66	62.48	2.0	28.0
M72X2	105.00	101.40	121.24	115.60	0.7	6.0	96.3	46.45	43.55	70.66	70.48	2.0	31.5
M80X2	115.00	111.00	132.79	126.54	0.8	6.0	105.4	51.58	48.42	78.66	78.48	2.0	35.0
M90X2	130.00	125.50	150.11	143.07	0.8	6.0	119.2	57.74	54.26	88.66	88.48	2.0	39.2
M100X2	145.00	140.00	167.43	159.60	0.8	6.0	133.0	63.90	60.10	98.66	98.47	2.5	43.4
M10X1.25	15.00	14.57	17.32	16.46	0.4	4.0	13.6	6.85	6.17	9.16	9.04	0.4	4.5

* SEE NOTE 2

METRIC

APPROVED 12 AUG 83
REVISED

This military standard is approved for use by Armament, Munitions and Chemical Command, Department of the Army, and is available for use by all Departments and Agencies of the Department of Defense.

P. A. AR	INTERNATIONAL INTEREST	TITLE BOLT, MACHINE, HEX HEAD • FULLY THREADED, FINE THREAD, METRIC	MILITARY STANDARD
Other Cust			DS51417(AR)
PROCUREMENT SPECIFICATION ANSI B18.2.3.5M-1979	SUPERSEDES:		PAGE 1 OF 3

User activities:
Army -ME

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DLA -IS

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TABLE II - STANDARD SIZE DASH NUMBERS

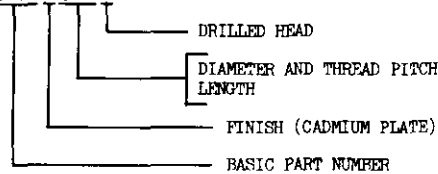
J + .03	NOMINAL DIAMETER AND THREAD PITCH																		
	M5X0.8	M6X1	M8X1	M10X1.25	M12X1.25	M14X1.5	M16X1.5	M20X1.5	M24X2	M30X2	M36X2	M42X2	M48X2	M56X2	M64X2	M72X2	M80X2	M90X2	M100X2
8	05008	06008	08008	10008	12010	14012	16012	20016	24016	30040	36040	42040	48040	56045	64045	72050	80050	90050	10050
10	05010	06010	08010	10010	12012	14012	16012	20016	24020	30035	36035	42045	48045	56050	64050	72055	80055	90055	10055
12	05012	06012	08012	10012	12014	14014	16014	20016	24020	30035	36035	42045	48045	56050	64050	72055	80055	90055	10055
14	05014	06014	08014	10014	12016	14016	16016	20016	24020	30035	36035	42045	48045	56050	64050	72055	80055	90055	10055
16	05016	06016	08016	10016	12016	14016	16016	20016	24020	30035	36035	42045	48045	56050	64050	72055	80055	90055	10055
20	05020	06020	08020	10020	12025	14025	16025	20025	24025	30035	36035	42045	48045	56050	64050	72055	80055	90055	10055
25	05025	06025	08025	10025	12025	14025	16025	20025	24025	30035	36035	42045	48045	56050	64050	72055	80055	90055	10055
30	05030	06030	08030	10030	12035	14035	16035	20035	24035	30035	36035	42045	48045	56050	64050	72055	80055	90055	10055
35	05035	06035	08035	10035	12035	14035	16035	20035	24035	30035	36035	42045	48045	56050	64050	72055	80055	90055	10055
40	05040	06040	08040	10040	12040	14040	16040	20040	24040	30040	36040	42045	48045	56050	64050	72055	80055	90055	10055
45	05045	06045	08045	10045	12045	14045	16045	20045	24045	30045	36045	42045	48045	56050	64050	72055	80055	90055	10055
50	05050	06050	08050	10050	12050	14050	16050	20050	24050	30050	36050	42045	48050	56050	64050	72055	80055	90055	10055
55	05055	06055	08055	10055	12055	14055	16055	20055	24055	30055	36055	42045	48055	56055	64055	72055	80055	90055	10055
60	05060	06060	08060	10060	12060	14060	16060	20060	24060	30060	36060	42045	48060	56060	64060	72055	80060	90060	10060
65	05065	06065	08065	10065	12065	14065	16065	20065	24065	30065	36065	42045	48065	56065	64065	72055	80065	90065	10065
70	05070	06070	08070	10070	12070	14070	16070	20070	24070	30070	36070	42070	48070	56070	64070	72070	80070	90070	10070
75	05075	06075	08075	10075	12075	14075	16075	20075	24075	30075	36075	42075	48075	56075	64075	72075	80075	90075	10075
80	05080	06080	08080	10080	12080	14080	16080	20080	24080	30080	36080	42080	48080	56080	64080	72080	80080	90080	10080
90	05090	06090	08090	10090	12090	14090	16090	20090	24090	30090	36090	42090	48090	56090	64090	72090	80090	90090	10090
100	05100	06100	08100	10100	12100	14100	16100	20100	24100	30100	36100	42100	48100	56100	64100	72100	80100	90100	10100
110	--	--	08110	10110	12110	14110	16110	20110	24110	30110	36110	42110	48110	56110	64110	72110	80110	90110	10110
120	--	--	08120	10120	12120	14120	16120	20120	24120	30120	36120	42120	48120	56120	64120	72120	80120	90120	10120
130	--	--	08130	10130	12130	14130	16130	20130	24130	30130	36130	42130	48130	56130	64130	72130	80130	90130	10130
140	--	--	08140	10140	12140	14140	16140	20140	24140	30140	36140	42140	48140	56140	64140	72140	80140	90140	10140
150	--	--	08150	10150	12150	14150	16150	20150	24150	30150	36150	42150	48150	56150	64150	72150	80150	90150	10150
160	--	--	08160	10160	12160	14160	16160	20160	24160	30160	36160	42160	48160	56160	64160	72160	80160	90160	10160
180	--	--	--	--	--	14180	16180	20180	24180	30180	36180	42180	48180	56180	64180	72180	80180	90180	10180
200	--	--	--	--	14200	16200	18200	20200	24200	30200	36200	42200	48200	56200	64200	72200	80200	90200	10200
220	--	--	--	--	14220	16220	18220	20220	24220	30220	36220	42220	48220	56220	64220	72220	80220	90220	10220
240	--	--	--	--	14240	16240	18240	20240	24240	30240	36240	42240	48240	56240	64240	72240	80240	90240	10240
260	--	--	--	--	14260	16260	18260	20260	24260	30260	36260	42260	48260	56260	64260	72260	80260	90260	10260
300	--	--	--	--	14300	16300	18300	20300	24300	30300	36300	42300	48300	56300	64300	72300	80300	90300	10300

P. A. AR	INTERNATIONAL INTEREST	TITLE	MILITARY STANDARD
Other Cust		BOLT, MACHINE, HEX HEAD FULLY THREADED, FINE THREAD, METRIC	DS51417(AR)
PROCUREMENT SPECIFICATION ANSI B18.2.3.5M-1979	SUPERSEDES:		PAGE 2 OF 3

REQUIREMENTS:

1. MATERIAL. STEEL, PROPERTY CLASS 10.9, IN ACCORDANCE WITH ANSI B18.2.3.5M-1979.
2. FINISH. CADMIUM PLATE IN ACCORDANCE WITH QQ-P-416, TYPE II, CLASS 3 (5.1 μm THICK).
3. THREADS. STANDARD FINE PITCH M PROFILE TOLERANCE CLASS 6g, IN ACCORDANCE WITH FED-STD-H28/21. ACCEPTABILITY OF SCREW THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H28/20, SYSTEM 21.
4. PART NUMBER. THE BASIC PART NUMBER IS FOLLOWED BY A FINISH CODE LETTER ("A" - CADMIUM PLATE), FOLLOWED BY A FIVE DIGIT NUMBER INDICATING DIAMETER AND THREAD PITCH AND LENGTH (TABLE II), FOLLOWED BY THE LETTER "D" IF A DRILLED HEAD IS REQUIRED, FOLLOWED BY THE LETTER "F" IF THE 15 mm HPX WIDTH ACROSS FLATS IS REQUIRED FOR THE M10 DIAMETER SIZE.

EXAMPLE: DS51417A0500RD



DS51417A0500RD INDICATES BOLT, MACHINE, HEX HEAD, FULLY THREADED, FINE THREAD, METRIC, M5X0.8 DIAMETER AND THREAD PITCH, 8 mm LENGTH, CADMIUM PLATED WITH DRILLED HEAD.

5. QUALITY ASSURANCE PROVISIONS. QUALITY ASSURANCE PROVISIONS IN ACCORDANCE WITH PROCUREMENT SPECIFICATION.
6. PACKAGING. PACKAGING IN ACCORDANCE WITH PROCUREMENT SPECIFICATION.
7. "E" DIMENSION SHALL BE 1/2 OF "H" DIMENSION. WHEN SPECIFIED, DRILL HEAD HOLES AS FOLLOWS:

 FOR 5 mm DIAMETER - DRILL THREE HOLES COUNTERSUNK 90° X 1 mm MINIMUM DIAMETER, WITHIN 0.3 mm OF CENTER OF HEX FLATS.

 FOR 6 mm AND 8 mm DIAMETERS - DRILL THREE HOLES COUNTERSUNK 90° X 1.4 mm MINIMUM DIAMETER, WITHIN 0.3 mm OF CENTER OF HEX FLATS.

 FOR 10 mm DIAMETER AND LARGER - DRILL THREE HOLES COUNTERSUNK 90° X 1.6 mm MINIMUM DIAMETER, WITHIN 0.3 mm OF CENTER OF HEX FLATS.
8. MAXIMUM DIAMETER OF WASHER FACE SHALL NOT EXCEED WIDTH ACROSS FLATS OF HEX HEAD OR BE LESS THAN THE "G" VALUES LISTED IN TABLE I.
9. HEAD MARKING SHALL BE IN ACCORDANCE WITH PROCUREMENT SPECIFICATION.

NOTES:

1. DIMENSIONS. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS.
2. THIS SIZE IS NOT AN ISO STANDARD. UNLESS M10 BOLTS WITH 15 mm WIDTH ACROSS FLATS ARE SPECIFICALLY ORDERED, M10 BOLTS WITH 16 mm WIDTH ACROSS FLATS SHALL BE FURNISHED.
3. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON THE DATE OF INVITATIONS FOR BIDS, OR REQUEST FOR PROPOSAL.
4. FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.

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			DS51417(AR)
PROCUREMENT SPECIFICATION ANSI B18.2.3.5M-1979		SUPERSEDES:	PAGE 3 OF 3