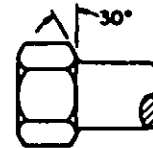
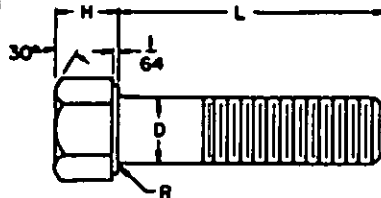
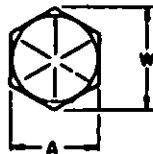


REVIEWER: NI, EL, ME, VC, SH
USER: OS, MC, CL, AT, MU

NOTE RAISED HEAD MARKINGS
PREFERRED STAMPING
ACCEPTABLE



OPTIONAL

FED. SUP CLASS
5305

NOMINAL SIZE	1/4	5/16	3/8	7/16	1/2	9/16	5/8
THREADS PER INCH	20UNF	20UNF	20UNF	20UNF	20UNF	18UNF	18UNF
BODY DIAMETER	D	Max Min	Max Min	Max Min	Max Min	Max Min	Max Min
WIDTH ACROSS FLATS	A	Max Min	Max Min	Max Min	Max Min	Max Min	Max Min
WIDTH ACROSS CORNERS	W	Max Min	Max Min	Max Min	Max Min	Max Min	Max Min
HEAD HEIGHT	H	Max Min	Max Min	Max Min	Max Min	Max Min	Max Min
RADIUS	R	Max Min	Max Min	Max Min	Max Min	Max Min	Max Min
LENGTH	L	Tolerance	Dash Number	Dash Number	Dash Number	Dash Number	Dash Number
3/8			+	+	+	+	+
7/16			+	+	+	+	+
1/2			+	+	+	+	+
9/16			+	+	+	+	+
5/8			+	+	+	+	+
3/4			+	+	+	+	+
7/8			+	+	+	+	+
1			+	+	+	+	+
1-1/8			+	+	+	+	+
1-1/4			+	+	+	+	+
1-3/8			+	+	+	+	+
1-1/2			+	+	+	+	+
1-3/4			+	+	+	+	+
2			+	+	+	+	+
2-1/4			+	+	+	+	+
2-1/2			+	+	+	+	+
2-3/4			+	+	+	+	+
3			+	+	+	+	+
3-1/4			+	+	+	+	+
3-1/2			+	+	+	+	+
3-3/4			+	+	+	+	+
4			+	+	+	+	+
4-1/4			+	+	+	+	+
4-1/2			+	+	+	+	+
4-3/4			+	+	+	+	+
5			+	+	+	+	+
5-1/2			+	+	+	+	+
6			+	+	+	+	+

MATERIAL: Alloy Steel, Grade 5 of procurement specification. Minimum tensile strengths: 130,000 psi for diameters through 1-1/2"; 125,000 psi for diameters over 1-1/2".

FINISH: Plain (untreated).

THREADS: The threads shall be in accordance with Screw-Thread Standards for Federal Services Handbook H-29.

MINIMUM THREAD LENGTH: Shall be twice the diameter plus 1/4" for lengths up to and including 6". The tolerance shall be plus 1/16" or 2-1/2 threads, whichever is greater. On products that are too short for minimum thread lengths, the distance from the bearing surface of the head to the first complete thread shall not exceed the length of 2-1/2 threads, for sizes up to and including 1" and 3-1/2 threads for sizes larger than 1".

NOTES: (1) Referenced documents of issue in effect on date of invitation for bids shall apply.
(2) In case of conflict with any referenced document, this standard will govern.
(3) The MS part number consists of the MS sheet number, plus the dash number. Example: MS35302-1.
(4) All dimensions in inches.

CANCELLED IN PART
SEE SHEET 2

© For change see sheet 1.

P.A.	VC	TITLE	MILITARY STANDARD
Other Case	SH	SCREW, CAP, HEXAGON HEAD (FINISHED HEXAGON BOLT), ALLOY STEEL, PLAIN FINISH, UNF-2A	MS 35302
PROCUREMENT SPECIFICATION 77-3-85	SUPERSEDES	SHEET 1 OF 2	

DD FORM 672-1 (Continued)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

APPROVED MARCH 4, 1954 REVISED © 6 MAY 63 © 9 JUNE 1967 © 14 JUN 1971

This military standard has been approved by the Department of Defense and is mandatory for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document.

REVIEWER: MI, EL, ME, VC, SH
 USER: OS, NC, GL, AT, MU

FED. SUP CLASS
 5305

NOMINAL SIZE			3/4	7/8	1	1-1/8	1-1/4	1-3/8	1-1/2
THREADS PER INCH			16UNF	14UNF	12UNF	12UNF	12UNF	12UNF	12UNF
BODY DIAMETER	D	Max	.7500	.8750	1.0000	1.1250	1.2500	1.3750	1.5000
		Min	.7410	.8660	0.9900	1.1140	1.2390	1.3630	1.4880
WIDTH ACROSS FLATS	A	Max	1.1250	1.3125	1.5000	1.6875	1.8750	2.0625	2.2500
		Min	1.1000	1.2850	1.4690	1.6310	1.8120	1.9940	2.1750
WIDTH ACROSS CORNERS	W	Max	1.2990	1.5160	1.7320	1.9490	2.1650	2.3820	2.5980
		Min	1.2540	1.4650	1.6750	1.8590	2.0660	2.2730	2.4800
HEAD HEIGHT	H	Max	.4830	.5630	.6270	.7180	.8130	.8790	.9740
		Min	.4550	.5310	.5910	.6580	.7490	.8100	.9020
RADIUS	R	Max	.041	.062	.093	.093	.093	.093	.093
		Min	.021	.041	.062	.062	.062	.062	.062
LENGTH	L	TOLERANCE		Dash Number	Dash Number	Dash Number	Dash Number	Dash Number	Dash Number
		Size 3/4 and under	Size 7/8 and over						
3/4		+0	+0	+79					
7/8		-1/32	-1/16	+80	+00				
1-1/8				+81	+01				
1-1/4				+82	+02	+04			
1-3/8		+0	+0	+83	+03	+05	+06		
1-1/2		-1/16	-1/8	+84	+04	+06	+07	+08	
1-3/4				+85	+05	+07	+08	+09	+00
2				+86	+06	+08	+09	+10	+01
2-1/4				+87	+07	+09	+10	+11	+02
2-1/2				+88	+08	+10	+11	+12	+03
2-3/4				+89	+09	+11	+12	+13	+04
3				+90	+10	+12	+13	+14	+05
3-1/4				+91	+11	+13	+14	+15	+06
3-1/2				+92	+12	+14	+15	+16	+07
3-3/4				+93	+13	+15	+16	+17	+08
4		+0	+0	+94	+14	+16	+17	+18	+09
4-1/4		-3/32	-3/16	+95	+15	+17	+18	+19	+10
4-1/2				+96	+16	+18	+19	+20	+11
4-3/4				+97	+17	+19	+20	+21	+12
5				+98	+18	+20	+21	+22	+13
5-1/2				+99	+19	+21	+22	+23	+14
6				+00	+20	+22	+23	+24	+15

NOTE: For illustration, material, finish and other pertinent data, see sheet 1.

CANCELLED IN PART AFTER 9 June 1967. USE MS90727.
 INTERCHANGEABILITY RELATIONSHIP - MS90727 can replace
 the cancelled screws of the same size. The cancelled
 MS35302 cannot always replace MS90727 and should be
 used until existing stock is depleted. Then use only
 the superseding MS screws of the same size for design
 and replacement.

CANCELLED IN PART
 SEE NOTE

P.A. VC Other Case SH	TITLE SCREW, CAP, HEXAGON HEAD (FINISHED HEXAGON BOLT), ALLOY STEEL, PLAIN FINISH, UNF-2A	MILITARY STANDARD MS 35302
PROCUREMENT SPECIFICATION FY-5-85	SUPERSEDES:	SHEET 2 OF

DD FORM 672-1 (Continued)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

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APPROVED MARCH 4, 1954 REVISED 6 MAY 63 (B) 9 JUN 1967 (C) FOR CHANGES SEE SHEET 1.