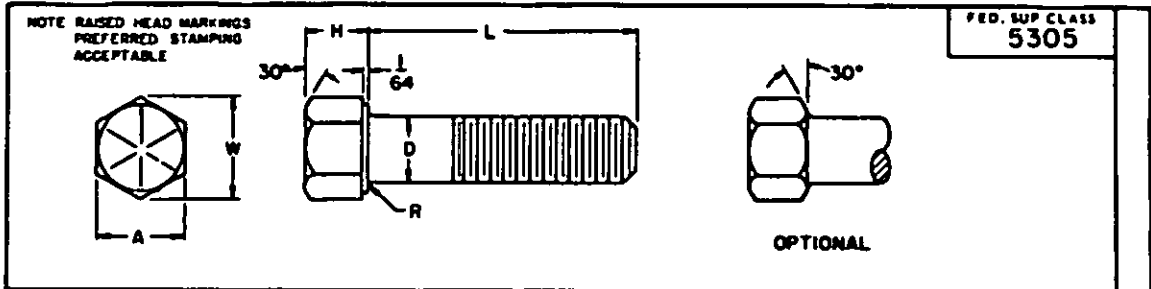


REVIEWER: MI, EL, ME, VC, SH
 USER: OS, MC, CL, AT, MU

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FED. SUP CLASS
5305

NOMINAL SIZE			1/4	5/16	3/8	7/16	1/2	9/16	5/8
THREADS PER INCH			20UNF	24UNF	28UNF	32UNF	36UNF	48UNF	60UNF
BODY DIAMETER	D	Max Min	.2500 .2450	.3125 .3075	.3750 .3690	.4375 .4305	.5000 .4930	.5625 .5545	.6250 .6170
WIDTH ACROSS FLATS	A	Max Min	.4375 .4250	.5000 .4950	.5625 .5510	.6250 .6120	.7500 .7360	.9125 .8950	.9375 .9220
WIDTH ACROSS CORNERS	W	Max Min	.5050 .4850	.5770 .5570	.6500 .6290	.7220 .6980	.8500 .8400	.9350 .9100	1.0330 1.0510
HEAD HEIGHT	H	Max Min	.1130 .1500	.2110 .1950	.2430 .2260	.2910 .2720	.3230 .3020	.3710 .3480	.4030 .3750
RADIUS	R	Max Min	.023 .009	.023 .009	.023 .009	.023 .009	.023 .009	.041 .021	.041 .021
LENGTH	L	Tolerance	Dash Number	Dash Number	Dash Number	Dash Number	Dash Number	Dash Number	Dash Number
	3/8 7/16 1/2 9/16 5/8 3/4	+0 -1/32	4 5 6	8 9 10 11 12	14 15 16 17 18	20 21 22 23 24 25	28 29 30 31 32 33	36 37 38 39 40 41	48 49 50 51 52 53
	7/8 1 1-1/8 1-1/4 1-3/8 1-1/2	+0 -1/16	7 8 9 10 11 12	13 14 15 16 17 18	19 20 21 22 23 24	26 27 28 29 30 31	34 35 36 37 38 39	42 43 44 45 46 47	54 55 56 57 58 59
	1-3/4 2 2-1/4 2-1/2 2-3/4 3	+0 -3/32	13 14 15 16 17 18	19 20 21 22 23 24	25 26 27 28 29 30	32 33 34 35 36 37	38 39 40 41 42 43	44 45 46 47 48 49	50 51 52 53 54 55
	3-1/4 3-1/2 3-3/4 4 4-1/4 4-1/2	+0 -3/32	19 20 21 22 23 24	25 26 27 28 29 30	31 32 33 34 35 36	38 39 40 41 42 43	44 45 46 47 48 49	50 51 52 53 54 55	56 57 58 59 60 61
	4-3/4 5 5-1/2 6	+0 -3/32	25 26 27 28	29 30 31 32	33 34 35 36	38 39 40 41	42 43 44 45	46 47 48 49	50 51 52 53

MATERIAL: Alloy Steel, Grade 5 of procurement specification. Minimum tensile strengths: 150,000 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 1-1/2 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 Other Case SH	TITLE SCREW, CAP, HEXAGON HEAD (FINISHED HEXAGON BOLT), ALLOY STEEL, PLAIN FINISH, UNF-2A	MILITARY STANDARD MS 35302
PROCUREMENT SPECIFICATION 77-3-85	SUPERSEDES	SHEET 1 OF 2

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

REVIEWER: MI, EL, ME, VC, SH
 USER: OS, MC, 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	7/8	+0	-1/32	+0	-1/16	±79					
						±80	±82	±84			
1-1/8	1-1/4	+0	-1/16	+0	-1/8	±81	±83	±85	±87		
						±82	±84	±86	±88		
1-1/2	1-3/4	+0	-1/16	+0	-1/8	±83	±85	±87	±89	±91	±93
						±84	±86	±88	±90	±92	±94
2-1/4	2-1/2	+0	-1/16	+0	-1/8	±85	±87	±89	±91	±93	±95
						±86	±88	±90	±92	±94	±96
2-3/4	3	+0	-1/16	+0	-1/8	±87	±89	±91	±93	±95	±97
						±88	±90	±92	±94	±96	±98
3-1/4	3-1/2	+0	-3/32	+0	-3/16	±89	±91	±93	±95	±97	±99
						±90	±92	±94	±96	±98	±100
4-1/4	4-1/2	+0	-3/32	+0	-3/16	±91	±93	±95	±97	±99	±101
						±92	±94	±96	±98	±100	±102
4-3/4	5	+0	-3/32	+0	-3/16	±93	±95	±97	±99	±101	±103
						±94	±96	±98	±100	±102	±104
5-1/2	6	+0	-3/32	+0	-3/16	±95	±97	±99	±101	±103	±105
						±96	±98	±100	±102	±104	±106

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

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

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DD FORM 672-1 (Continued)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.