

FED. SUP CLASS  
5305

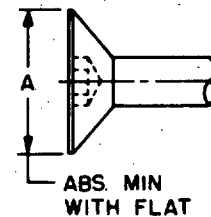
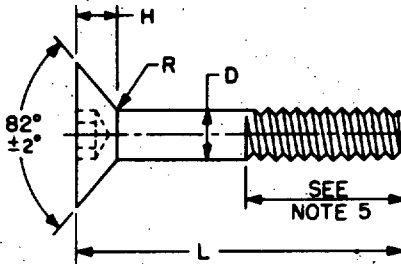
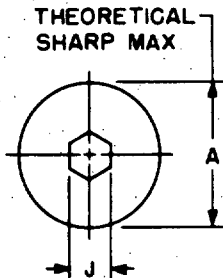


TABLE I

NOMINAL SIZE		.112	.138	.164	.190	.250	.3125	.375	.4375	.500	.625	.750
THREADS PER INCH, UNC-3A		40	32	32	24	20	18	16	14	13	11	10
D BODY DIAMETER	MAX	.1120	.1380	.1640	.1900	.2500	.3125	.3750	.4375	.5000	.6250	.7500
	MIN	.1075	.1329	.1585	.1840	.2435	.3053	.3678	.4294	.4919	.6163	.7406
A HEAD DIAMETER	SHARP MAX	.255	.307	.359	.411	.531	.656	.781	.844	.937	1.188	1.438
	ABS MIN	.218	.263	.311	.359	.480	.600	.720	.781	.872	1.112	1.355
H HEAD HEIGHT	REF	.083	.097	.112	.127	.161	.198	.234	.234	.251	.324	.396
J SOCKET SIZE	NOM	.062	.078	.094	.125	.156	.188	.219	.250	.312	.375	.500
R RADIUS	MAX	.012	.015	.015	.015	.015	.015	.015	.015	.015	.015	.015
TENSILE STRENGTH, LBS-MIN		480	725	1,120	1,400	2,540	4,190	6,200	8,500	11,300	18,000	23,300
L LENGTH	TOLERANCE (C)		DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.
	SIZE .112 THRU .375	OVER SIZE .375										
.250			1	7								
.375			2	8								
.500			3	9	13	19	27	37				
.625	+.000	+.000	4	10	14	20	28	38	49	110*		
.750	-.030	-.030	5	11	15	21	29	39	50	62*	73	
.875					16	22	30	40	51	111*	112*	
1.000					17	23	31	41	52	63*	74	113*
												114*
						24	32	42	53	64*	75	84
1.250						25	33	43	54	65*	76	85
1.500								44	55	66*	77	86
1.750	+.000	+.000										
2.000	-.040	-.060							45	56	67*	78
2.250									46	57	68*	79
2.500									47	58	69*	80
2.750	+.000	+.000								59	70*	81
3.000	-.060	-.080								60	71*	82

This military standard is approved 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: AV, IS, ME  
USER: AS, AT, MC, MU, OS, SH, WV

(C) \* INACTIVE FOR NEW DESIGN AFTER 20 February 1974.

NOTES:

- MATERIAL:** Steel, corrosion-resisting, in accordance with Fed. Std. No. 66; AISI 302, 303, 304, 305, 316 or 384 (developed for cold heading). Minimum ultimate tensile strength shall be 80,000 PSI for sizes thru 0.625 and 70,000 PSI for sizes over 0.625.
- PROTECTIVE COATING:** Passivated in accordance with QQ-P-35.
- MAGNETIC PERMEABILITY:** These screws shall have a magnetic permeability of 2.0 maximum (air = 1.0) for a field strength H = 200 oersteds when using a magnetic indicator in accordance with MIL-I-17214.
- THREADS:** Threads shall be in accordance with the procurement specification.
- THREAD LENGTH:** Minimum full form thread length shall be equal to 2D plus 0.500 inch. The tolerance shall be equal to the nominal size. Screws too short for application of the formula shall be threaded as close to the head as practicable.
- DIMENSIONS:** All dimensions in Table I are in inches. All dimensions in Table II are in millimetres.
- PART NUMBER:** The MS part number consists of the MS number, plus the dash number. Example: MS24671-1.
- Referenced documents shall be of the issue in effect on date of invitations for bid.
- For design feature purposes, this standard takes precedence over procurement documents referenced herein.

(C) For changes see sheets 1 and 2.

P.A. WC Other Cust 82	TITLE SCREW, CAP, SOCKET-HEAD-FLAT COUNTERSUNK, 82°, CORROSION-RESISTING STEEL, UNC-3A	MILITARY STANDARD <b>MS 24671</b>
PROCUREMENT SPECIFICATION FF-S-86	SUPERSEDES: MS35249 in part	SHEET 1 OF 2

APPROVED 6 APR 1960 REVISED (A) 19 DEC 1963 (B) 20 JUL 1966 (C) 20 FEB 1974

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(C) TABLE II  
METRIC TRANSLATION OF TABLE I

NOMINAL SIZE	2.84	3.50	4.17	4.83	6.35	7.94	9.52	11.11	12.70	15.88	19.05		
PITCH	.64	.79	.79	1.06	1.27	1.41	1.59	1.81	1.95	2.31	2.54		
D BODY DIAMETER	MAX 2.84 MIN 2.73	MAX 3.50 MIN 3.38	MAX 4.17 MIN 4.03	MAX 4.83 MIN 4.67	MAX 6.35 MIN 6.18	MAX 7.94 MIN 7.75	MAX 9.52 MIN 9.34	MAX 11.11 MIN 10.91	MAX 12.70 MIN 12.49	MAX 15.88 MIN 15.65	MAX 19.05 MIN 18.81		
A HEAD DIAMETER	SHARP MAX 6.48 ABS MIN 5.54	SHARP MAX 7.80 ABS MIN 6.68	SHARP MAX 9.12 ABS MIN 7.90	SHARP MAX 10.44 ABS MIN 9.12	SHARP MAX 13.49 ABS MIN 12.19	SHARP MAX 16.66 ABS MIN 15.24	SHARP MAX 19.84 ABS MIN 18.29	SHARP MAX 21.44 ABS MIN 19.84	SHARP MAX 23.80 ABS MIN 22.15	SHARP MAX 30.18 ABS MIN 28.24	SHARP MAX 36.53 ABS MIN 34.42		
H HEAD HEIGHT	REF 2.11	REF 2.46	REF 2.84	REF 3.23	REF 4.09	REF 5.03	REF 5.94	REF 5.94	REF 6.38	REF 8.23	REF 10.06		
J SOCKET SIZE	NOM 1.57	NOM 1.98	NOM 2.39	NOM 3.18	NOM 3.96	NOM 4.78	NOM 5.56	NOM 6.35	NOM 7.92	NOM 9.52	NOM 12.70		
R RADIUS	MAX .30	MAX .38	MAX .38	MAX .38	MAX .38	MAX .38	MAX .38	MAX .38	MAX .38	MAX .38	MAX .38		
L LENGTH	TOLERANCE		DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.		
	SIZE 2.84 THRU 9.52	OVER SIZE 9.52											
6.35 9.52 12.70 15.88	+ .00 - .76	+ .00 - .76	1 2 3 4	7 8 9 10	13 14 15	19 20 21	27 28 29	37 38 39	49 50	110*			
19.05 22.22 25.40			5	11	16 17	22 23	30 31	40 41	51 52	62* 111* 63*	73 112* 74*	113* 114*	115*
31.75 38.10 44.45	+ .00 - 1.02	+ .00 - 1.52			24 25	32 33	42 43 44	53 54 55	64* 65* 66*	75 76 77	84 85 86	93 94 95	
50.80 57.15 63.50							45 46 47	56 57 58	67* 68* 69*	78 79 80	87 88 89	96 97 98	
69.85 76.20	+ .00 - 1.52	+ .00 - 2.03						59 60	70* 71*	81 82	90 91	99 100	

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INTERCHANGEABILITY

Screws covered by the following dash numbers given in MS35249 in part, are canceled after 19 Dec 1963. The canceled MS35249 screws cannot always replace the MS24671 screws and should be used until existing stocks are depleted. Use only the MS24671 screws for new design and replacement. Replacement shall be in accordance with Table III.

TABLE III

PART NUMBER		PART NUMBER		PART NUMBER		PART NUMBER	
CANCELED MS35249	SUPERSEDED BY MS24671	CANCELED MS35249	SUPERSEDED BY MS24671	CANCELED MS35249	SUPERSEDED BY MS24671	CANCELED MS35249	SUPERSEDED BY MS24671
127	110	140	112	153	NR	166	88
128	62	141	74	154	NR	167	89
129	111	142	75	155	NR	168	90
130	63	143	76	156	NR	169	91
131	64	144	77	157	NR	170	115
132	65	145	78	158	NR	171	93
133	66	146	79	159	NR	172	94
134	67	147	80	160	113	173	95
135	68	148	81	161	114	174	96
136	69	149	82	162	84	175	97
137	70	150	NR	163	85	176	98
138	71	151	NR	164	86	177	99
139	73	152	NR	165	87	178	100

NR = No replacement

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PROCUREMENT SPECIFICATION FF-S-86	SUPERSEDES: MS35249 in part	SHEET 2 OF 2

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