

ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED ARE IN INCHES

This military standard 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: AV, EL, IS, MI, MU  
USER: AL, CL, MC, ME, OS, SH, YD

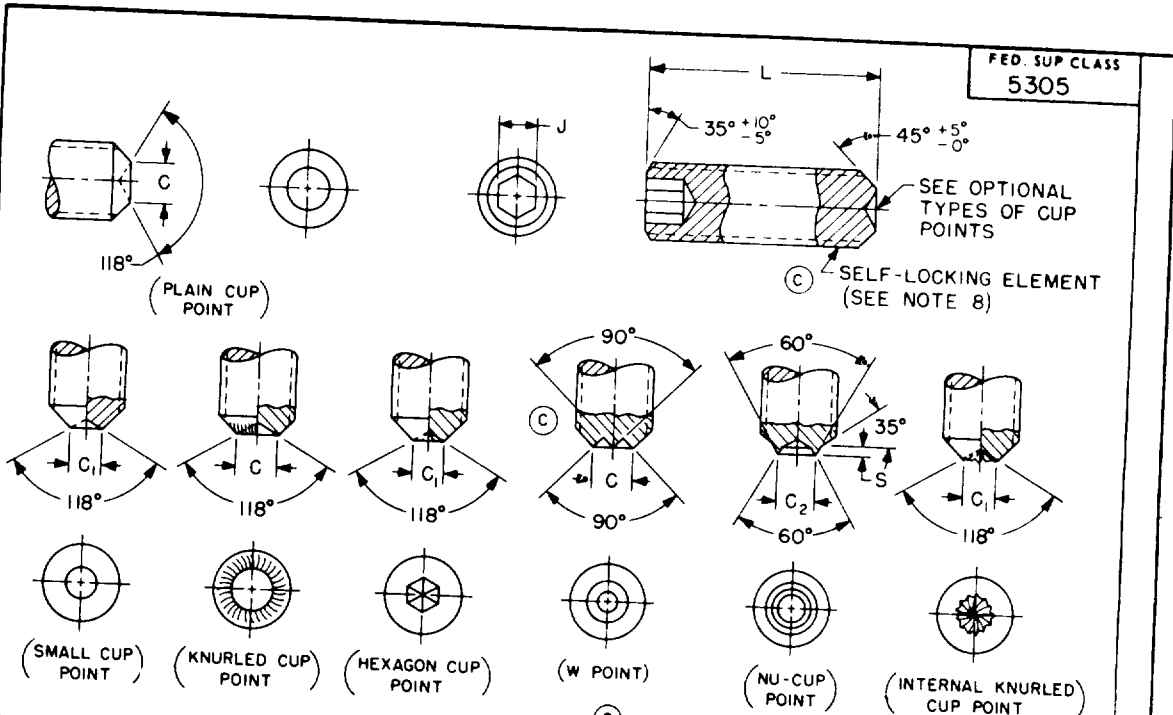


TABLE I (C)

NOMINAL SIZE	.086	.112	.138	.164	.190	.250	.3125	.375	.500
THREADS PER INCH (UNC-3A)	56	40	32	32	24	20	18	16	13
J SOCKET WIDTH ACROSS FLATS NOM	.035	.050	.062	.078	.094	.125	.156	.188	.250
C POINT DIAMETER	MAX .047 MIN .039	.061 .051	.074 .064	.087 .076	.102 .088	.132 .118	.172 .156	.212 .194	.291 .270
C1 POINT DIAMETER	MAX .043 MIN .038	.056 .051	.069 .062	.082 .074	.095 .086	.125 .114	.156 .144	.187 .174	.250 .235
C2 POINT DIAMETER	MAX .043 MIN .038	.059 .054	.074 .068	.090 .084	.101 .095	.156 .150	.190 .185	.241 .236	.333 .328
S POINT LENGTH	MAX .010 MIN .007	.013 .008	.017 .012	.021 .016	.024 .019	.027 .022	.038 .033	.041 .036	.054 .049

L LENGTH	TOL	DASH NUMBER											
		PLAIN	PLAIN	SELF-LOCKING	PLAIN	SELF-LOCKING	PLAIN	SELF-LOCKING	PLAIN	PLAIN	PLAIN	PLAIN	PLAIN
.125	±.010	1	9	101	21	111	131						
.188		2	10	102	22	112	31	132					
.250		3	11	103	23	113	32	133	42	55			
.312		12	104	24	114	33	134	43	56	68			
.375		13	105	25	115	34	135	44	57	69	80		
.438	±.020		14	106		116		45	58	70	81	91	
.500			15	107		117							
.562				108		118	36	137	47	60	72	83	93
.625				109		119		138	48	61	73	84	94
.750						120		139	49	62	74	85	95
.875					121		140						
1.000							141						
							142		63	75	86	96	

(C) For changes see sheets 1 and 2.

P.A. WC Other Cust 82	TITLE <b>SETScrew - HEXAGON SOCKET, CUP POINT, CORROSION-RESISTING STEEL, PASSIVATED, UNC-3A, PLAIN AND SELF-LOCKING</b>	<b>MILITARY STANDARD</b>
PROCUREMENT SPECIFICATION FF-S-200	SUPERSEDES: MS51022 and in part MS18064, BCTX1.2 and BCUX5.	<b>MS51021</b>
DD FORM 1 SEP 57 672-1 (Coordinated)		SHEET 1 OF 2

APPROVED 7 MAY 1958 REVISED (A) 29 JAN 1964 (B) 28 NOV 1967 (C) 29 DEC 1972

FED. SUP CLASS  
5305

## NOTES:

1. **MATERIAL:** Corrosion-Resisting Steel, 300 Series, in accordance with procurement specification.
2. **PROTECTIVE COATING:** Passivated in accordance with QQ-P-35.
3. **THREADS:** The threads shall be in accordance with MIL-S-7742.
4. **MAGNETIC PERMEABILITY:** These setscrews have a magnetic permeability of 2.0 max (air = 1.0) for a field strength of H = 200 oersteds, when using a magnetic indicator per MIL-I-17214.
5. **DIMENSIONS:** All dimensions are in inches, unless otherwise specified.
6. **TOLERANCES:** Angles  $\pm 5^\circ$ , unless otherwise specified.
7. **PART NUMBER:** The MS part number consists of the MS number, plus the dash number.  
Example: MS51021-1.
8. **SELF-LOCKING ELEMENT:**
  - (a) The self-locking element shall be in accordance with MIL-F-18240.
  - (b) For design and usage limitations, see MS15981.
  - (c) Location of effective locking area shall be in accordance with MS15981.
  - (d) Maximum ring gage diameter that locking region of setscrew must pass thru freely or with finger pressure shall be the nominal size plus 0.010.
  - (e) MIL-F-18240 doesn't establish torque requirements for lengths above the dashed line. Only a positive indication of torque is required.
9. Referenced documents shall be of the issue in effect on date of invitations for bid.
10. For design feature purposes, this standard takes precedence over procurement documents referenced herein.

## INTERCHANGEABILITY

Screws covered by the dash numbers given in MS51022 are cancelled after 29 January 1964 and superseded by the screws covered on MS51021 having the same dash numbers. Cancelled screws may be used until existing stocks are depleted. Use only MS51021 screws for new design.

Screws covered by the dash numbers given in MS18064 in part are cancelled. Cancelled screws may be used until existing stocks are depleted. Use only the superseding screws for new design. Replacement shall be in accordance with Table II.

TABLE II

CANCELLED	SUPERSEDING	CANCELLED	SUPERSEDING	CANCELLED	SUPERSEDING	CANCELLED	SUPERSEDING
MS18064	MS51021	MS18064	MS51021	MS18064	MS51021	MS18064	MS51021
DASH NUMBER		DASH NUMBER		DASH NUMBER		DASH NUMBER	
1	101	46	109	42	118	24	135
5	102	2	111	47	119	30	136
10	103	6	112	54	120	35	137
16	104	11	113	61	121	43	138
22	105	17	114	3	131	48	139
89	106	23	115	7	132	55	140
13	107	90	116	12	133	62	141
41	108	34	117	18	134	67	142

P.A. WC Other Cust 82	TITLE SETScrew - HEXAGON SOCKET, CUP POINT, CORROSION-RESISTING STEEL, PASSIVATED, UNC-3A, PLAIN AND SELF-LOCKING	MILITARY STANDARD MS51021
PROCUREMENT SPECIFICATION FF-S-200	SUPERSEDES MS51022 and in part MS18064, BCTX1.2 and BCUX5.	SHEET 2 OF 2

DD FORM 672-1 (Coordinated)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

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CLASSIFICATION: UNCLASSIFIED  
SERIAL: 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51

APPROVED 7 MAY 1958 REVISED (A) 29 JAN 1964 (B) 28 NOV 1967 (C) FOR CHANGES SEE SHEETS 1 AND 2