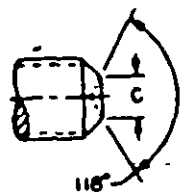
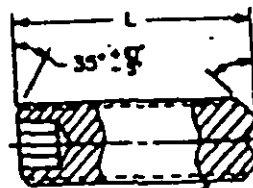


REVISIONS: AT, EL, IS, MI, NU
LSER, AT, GL, MC, ME, OS, SH, TO

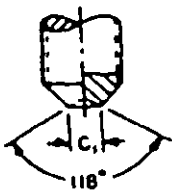


(PLAIN CUP POINT)

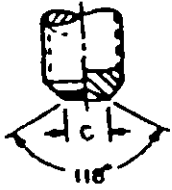


SEE OPTIONAL
TYPES OF CUP
POINTS

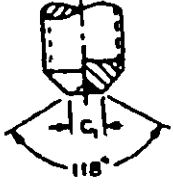
(C) SELF-LOCKING ELEMENT
(SEE NOTE B)



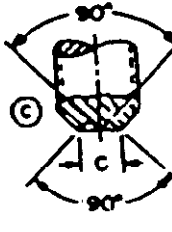
(SMALL CUP POINT)



(KNURLED CUP POINT)



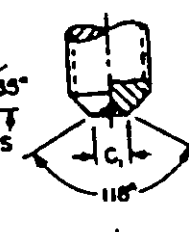
(HEXAGON CUP POINT)



(W POINT)



(NU-CUP POINT)



(INTERNAL KNURLED CUP POINT)

TABLE I (C)

NOMINAL SIZE	.060	.064	.112	.138	.164	.190	.250	.3125	.375	.500
THREADS PER INCH (UNF-3A)	80	64	48	40	36	32	28	24	24	20
J SOCKET WIDTH ACROSS FLATS	MIN	.028	.035	.050	.062	.078	.094	.125	.156	.250
C POINT DIAMETER	MAX MIN	.031 .027	.047 .039	.061 .051	.074 .064	.087 .076	.102 .088	.132 .118	.156 .144	.250 .235
C ₁ POINT DIAMETER	MAX MIN	.032 .027	.043 .038	.054 .051	.069 .062	.085 .074	.101 .086	.125 .114	.156 .144	.250 .235
C ₂ POINT DIAMETER	MAX MIN	.027 .022	.043 .038	.059 .054	.074 .068	.090 .084	.101 .095	.156 .150	.190 .185	.313 .308
S POINT LENGTH	MAX MIN	.007 .004	.010 .007	.013 .008	.017 .012	.021 .016	.024 .019	.027 .022	.038 .033	.054 .049

DASH NUMBER

L LENGTH	TOL	PLAIN	PLAIN	PLAIN	PLAIN	PLAIN	PLAIN	SELF LOCK	PLAIN	SELF LOCK	PLAIN	SELF LOCK	PLAIN	SELF LOCK	PLAIN	SELF LOCK
.125		1	9	18	27	36	48	101*	60	112	72*	125	83*	137	93	147
.188		2	10	19	28	37	49	102	61	113	73	126	84	138	94	148
.250		3	11	20	29	38	50	103	62	114	74	127	85	139	95	149
.312			12	21	31	40	51	104	63	115	75	128	86	140	96	150
.375								105	64	116	76	129	87	141	97	151
.438	2.010				32	41	52	106	65	117	77	130	88	142	98	152
.500								107	66	118		131	89	143	99	153
.562								108	67	119		132	90	144	100	154
.625								109	68	120		133	91	145	101	155
.750								110	69	121		134	92	146	102	156
.875								111	70	122		135	93	147	103	157
1.000	2.020									123		136	94	148	104	158
1.250																
1.500																
1.750																
2.000																
2.500	2.031															
3.000																

(C) * Inactive for new design after 29 DEC 1972. (C) For changes see sheets 1 and 2.

P.A. VC	TITLE	MILITARY STANDARD
Drawn 02	SETSCREW-HEXAGON SOCKET, CUP POINT, CORROSION-RESISTING STEEL, PASSIVATED, UNF-3A, PLAIN AND SELF-LOCKING (C)	MS 51023
DOCUMENT SPECIFICATION FF-S-100	SUPPLEMENT MS51024, BCT11.1 and in part MS18064 and BCT11.2	SHEET 1 OF 1

APPROVED 7 MAY 1956 REVISED 29 JAN 1964 26 NOV 1967 29 DEC 1972

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.

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 15°, unless otherwise specified.
7. **PART NUMBER:** The MS part number consists of the MS number, plus the dash number.
Example: MS51023-1.
8. **SELF-LOCKING ELEMENT:**
 - (a) The self-locking element shall be in accordance with MIL-F-18240.
 - (b) For design and usage limitations, see MS15901.
 - (c) Location of effective locking area shall be in accordance with MS15901.
 - (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 MS51024 are cancelled after 29 January 1964 and superseded by the screws covered on MS51023 having the same dash numbers. Cancelled screws may be used until existing stocks are depleted. Use only MS51023 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	MS51023	MS18064	MS51023	MS18064	MS51023	MS18064	MS51023
DASH NUMBER		DASH NUMBER		DASH NUMBER		DASH NUMBER	
4	101	12	116	64	131	82	145
6	102	17	117	70	132	85	146
11	103	45	118	74	133	92	147
19	104	50	119	78	134	40	148
25	105	57	120	81	135	53	149
31	106	61	121	84	136	60	150
36	107	69	122	91	137	66	151
44	108	71	123	39	138	72	152
49	109	77	124	52	139	76	153
56	110	15	125	59	140	80	154
68	111	21	126	65	141	83	155
9	112	27	127	71	142	86	156
14	113	36	128	75	143	87	157
20	114	51	129	79	144	88	158
26	115	59	130				

MS 51023	FILE	MILITARY STANDARD
02	SETScrew-HEXAGON SOCKET, CUP POINT, CORROSION-RESISTING STEEL, PASSIVATED, UNF-3A, PLAIN AND SELF-LOCKING	MS51023
PROCURMENT SPECIFICATION 77-5-200	SUPERSEDES MS51024, BC11.1 and in part MS18064 and BC11.2	SHEET 1 OF 2

DD FORM 672-1 (Continued)

APPROVED 7 MAY 1956 REVISED A 29 JAN 1964 B 28 NOV 1967 C FOR CHANGES SEE SHEETS 1 AND 2

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.

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