



REVIEWER:
USER:

D	NOMINAL DIAMETER		#2 (.086)	#4 (.112)	#6 (.138)
B	THREADS PER INCH		56NC-3A	40NC-3A	32NC-3A
C	CUP AND FLAT POINT DIAMETER	MAX MIN	.047 .039	.061 .051	.074 .064
R	OVAL POINT RADIUS		.0625	.084	.1094
Y	CONE POINT ANGLE	118° ± 2° FOR THESE LENGTHS AND UNDER	3/32	1/8	1/8
		90° ± 2° FOR THESE LENGTHS AND OVER	7/64	5/32	3/16
P	HALF DOG DIAMETER	MAX	.057	.075	.092
		MIN	.053	.070	.087
Q	POINT LENGTH		.022	.028	.035
J	SOCKET DIAMETER MINOR	MAX	.038	.051	.056
		MIN	.0375	.050	.055
M	SOCKET DIAMETER MAJOR	MAX	.050	.062	.079
		MIN	.049	.061	.078
N	SOCKET LAND AND WIDTH	MAX	.017	.014	.023
		MIN	.016	.013	.022
	NUMBER OF FLUTES		4	6	4
T	KEY ENGAGEMENT	MIN	.028	.040	.050

KEY ENGAGEMENT: These dimensions apply to screws one diameter in length or longer. For screws shorter than one diameter in length, socket to be as deep as practicable.

MATERIAL: Steel, high-grade alloy, in accordance with procurement specification.

HARDNESS: Setscrews shall be hardened by heat treatment to a hardness of Rockwell C45 to 53.

PROTECTIVE COATING: Cadmium plated, in accordance with Specification QQ-P-416, Type II, Class 3.

THREADS: The threads shall be in accordance with Screw-Thread Standards for Federal Services Handbook H-28.

DIMENSIONS: All dimensions are in inches unless otherwise specified.

PART NUMBER: The MS part number consists of the MS number, plus the dash number. Example: MS51053-101.

NOTES: (1) Referenced documents shall be of the issue in effect on date of invitation for bid.
(2) This standard takes precedence over documents referenced herein.

(A) CANCELLED/INACTIVE AS OF 10 SEP 1969
SUPERSEDED IN PART BY MS51963, MS51965, MS51973, MS51977 AND MS51981 - SEE SHEET 2.

(A) FOR CHANGES SEE SHEETS 1 AND 2.

P.A. WC Other Cust SH 82	TITLE SETScrew, FLUTED SOCKET, ALLOY STEEL, CADMIUM PLATED, NC-3A	MILITARY STANDARD MS51053
PROCUREMENT SPECIFICATION FF-S-200	SUPERSEDES:	SHEET 1 OF 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.

APPROVED 7 MAY 1958 REVISED (A) 10 SEP 1969

		CUP POINT			FLAT POINT			CONE POINT		
		#2 56NC	#4 40NC	#6 32NC	#2 56NC	#4 40NC	#6 32NC	#2 56NC	#4 40NC	#6 32NC
LENGTH	TOLERANCE	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.
1/16		101	111		201	211		301	311	
1/8		102	112*	126	202	212	226	302	312	326
3/16		103	113	127	203	213	227	303	313	327
1/4		104	114	128	204	214	228	304	314	328
5/16	± 1-1/2% of length with a minimum of + .010 in.	105	115	129	205	215	229	305	315	329
3/8			116	130		216	230		316	330
7/16			117	131		217	231		317	331
1/2			118	132		218	232		318	332
9/16			119	133		219	233		319	333
5/8		120	134	220	234	320	334			
3/4			135		235		335			
7/8			136		236		336			

		OVAL POINT			HALF-DOG POINT		
		#2 56NC	#4 40NC	#6 32NC	#2 56NC	#4 40NC	#6 32NC
LENGTH	TOLERANCE	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.
1/16		401	411		501	511	
1/8		402	412	426	502	512	526
3/16		403	413	427	503	513	527
1/4		404	414	428	504	514	528
5/16	± 1-1/2% of length with a minimum of + .010 in.	405	415	429	505	515	529
3/8			416	430		516	530
7/16			417	431		517	531
1/2			418	432		518	532
9/16			419	433		519	533
5/8		420	434	520	534		
3/4			435		535		
7/8			436		536		

NOTE: For material, protective coating and other pertinent data, see sheet 1.

- (A) Cancelled Dash Numbers 101 thru 111 and 113 thru 136 are superseded in part by MS51963.
- Cancelled Dash Numbers 201 thru 236 are superseded in part by MS51965.
- Cancelled Dash Numbers 301 thru 336 are superseded in part by MS51973.
- Cancelled Dash Numbers 401 thru 436 are superseded in part by MS51981.
- Cancelled Dash Numbers 501 thru 536 are superseded in part by MS51977.
- * Dash Number 112 is inactive and not to be used for new design.

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:
USER:

APPROVED 7 MAY 1958 REVISED (A) FOR CHANGES SEE SHEETS 1 AND 2.

P.A. WC Other Cust SH 82	TITLE SETSCREW, FLUTED SOCKET, ALLOY STEEL, CADMIUM PLATED, NC-3A	MILITARY STANDARD
PROCUREMENT SPECIFICATION FF-S-200	SUPERSEDES:	MS51053
		SHEET 2 OF