



FULL HEAD

TABLE I DIMENSIONS AND PART NUMBERS.

NOMINAL SIZE		.138	.164	.190	.250	.3125	.375
THREADS PER INCH UNC-2A		32	32	24	20	18	16
Ø D - BODY DIAMETER	MAX	.1380	.1640	.1900	.2500	.3125	.3750
	MIN	.1141	.1399	.1586	.2127	.2712	.3287
Ø A - HEAD DIAMETER	MAX SHARP	.2790	.3320	.3850	.5070	.6350	.7620
	ABS MIN	.2440	.2920	.3400	.4520	.5680	.6850
H - HEAD HEIGHT	REF	.0830	.1000	.1160	.1530	.1910	.2300
R - RADIUS	MAX	.055	.0660	.0760	.1000	.1250	.1500
MINIMUM TENSILE LOAD - LBS		545	8400	1,050	1,900	3,140	4,650
L - LENGTH	TOLERANCE	DASH NO					
250	+.000 -.031	01		09	12	17	19
375		02					
.500		03	06	10			
.750		04	07	11			
.875	+ .000 -.062	05	08		14	18	20
1.000					15		
1.250	+.000 -.094				16		
1.500							
2.750							

USER ACTIVITIES
ARMY - ME, MI
NAVY - OS

REVIEWER ACTIVITIES
ARMY - AV, EA, MA
AIR FORCE - 82
DLA - IS
NSA - NS

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 when applicable.

REVISED
APPROVED 1 AUG 84

PA Other Cust	AR SH 99	INTERNATIONAL INTEREST	TITLE SCREW, MACHINE, 82° FLAT COUNTERSUNK HEAD, CROSS-RECESSED, CARBON STEEL, UNC-2A	MILITARY STANDARD MS51481
PROCUREMENT SPECIFICATION FF-S-92		SUPERSEDES		PAGE 1 OF 2

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REQUIREMENTS:

1. MATERIAL. CARBON STEEL IN ACCORDANCE WITH ASTM A29-79 GRADE 1015 (UNS G10150) THRU GRADE 1030 (UNS G10300) OR ASTM A29-79 GRADE 1116 (UNS G11160) THRU GRADE 1132 (UNS G11320). THE MINIMUM ULTIMATE TENSILE STRENGTH SHALL BE 60,000 PSI.
2. FINISH. ZINC COATING IN ACCORDANCE WITH ASTM B633-78, Fe/Zn, 5 (5 µm), TYPF II.
3. THREADS. THE THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H28/2. ACCEPTABILITY OF SCREW THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H28/20, SYSTEM 21.
4. THREAD LENGTH. SCREWS 2.000 INCHES LONG AND SHORTER SHALL HAVE COMPLETE THREADS EXTENDING TO WITHIN 2 THREADS OF THE HEAD, OR CLOSER IF PRACTICABLE. LONGER SCREWS SHALL HAVE A MINIMUM THREAD LENGTH OF 1.500 INCHES. THREADS SHALL NOT EXTEND TO THE FILLET RADIUS NOR SHALL THREADS EXTEND TO AND UNDERCUT THE HEAD OF THE SCREW.
5. RECESS. THE RECESS SHALL BE IN ACCORDANCE WITH MS9006.
6. PART NUMBER. THE BASIC MS PART NUMBER IS FOLLOWED BY A DASH NUMBER FROM TABLE I

EXAMPLE: MS51481-01 - SCREW, MACHINE, 82° FLAT COUNTERSUNK HEAD, CROSS-RECESSED, CARBON STEEL, .138-32UNC-2A, LENGTH .250, ZINC COATED

NOTES:

1. ALL DIMENSIONS ARE IN INCHES.
2. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BIDS OR REQUEST FOR PROPOSAL, EXCEPT THAT REFERENCED ADOPTED INDUSTRY DOCUMENTS SHALL GIVE THE DATE OF THE ISSUE ADOPTED
3. FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN

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