



TABLE 1. DIMENSIONS AND PART NUMBERS.

NOMINAL SIZE		.112	.138	.164	.190	.250
THREADS PER INCH UNC-2A		40	32	32	24	20
Ø D - BODY DIAMETER	MAX	.1120	.1380	.1640	.1900	.2500
	MIN	.0925	.1141	.1399	.1586	.2127
Ø A - HEAD DIAMETER	MAX	.2190	.2700	.3220	.3730	.4920
	MIN	.2050	.2560	.3060	.3570	.4730
H - HEAD HEIGHT	MAX	.0800	.0970	.1150	.1330	.1750
	MIN	.0700	.0870	.1050	.1220	.1620
P - HFAD RADIUS	MIN	.0100	.0150	.0150	.0200	.0350
R - FILLET RADIUS	MAX	.0170	.0210	.0250	.0290	.0380
MINIMUM TENSILE LOAD - LBS		360	5450	840	1,350	1,900
L - LENGTH	TOLERANCE	DASH NO	DASH NO	DASH NO	DASH NO	DASH NO
.250 .375 500 625 .750 1.000	+.000 -.031	01	02	05 06 07 08 09 10	13 14 15 16 17	19 20 21 22 23
1.250 1.500 2.000				11 12		24 25
3.000						26

P A Other Cust	AR SH 99	INTERNATIONAL INTEREST	TITLE SCREW, MACHINE, PAN HEAD, CROSS - RECESSED, CARBON STEEL, UNC-2A	MILITARY STANDARD MS51492
PROCUREMENT SPECIFICATION FF-S-92		SUPERSEDES		PAGE 1 OF 2

USER ACTIVITIES

REVIEWER ACTIVITIES

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.

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5305

## 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,  $P_0/Z_{n5}$  (5  $\mu$ m), TYPE II
3. **THREADS.** THE THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H2B/2. ACCEPTABILITY OF SCREW THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H2B/20, SYSTEM 21
4. **THREAD LENGTH.** SCREWS 2.000 INCHES LONG AND SHORTER SHALL HAVE COMPLETE THREADS EXTENDING TO WITHIN 2 THREADS OF THE BEARING SURFACE OF THE HEAD, OR CLOSER IF PRACTICABLE LONGER SCREWS SHALL HAVE A MINIMUM THREAD LENGTH OF 1.750 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: MS51492-01 - SCREW, MACHINE, PAN HEAD, CROSS-RECESSED, CARBON STEEL, 112-40UNC-2A, LENGTH .625, 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

USER ACTIVITIES  
ARMY-ME,MI  
NAVY-MC,OS

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

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P.A.	AR	INTERNATIONAL INTEREST	TITLE	MILITARY STANDARD
Other Cust	SH		SCREW, MACHINE, PAN HEAD, CROSS-RECESSED, CARBON STEEL, UNC-2A	MS51492
	99			
PROCUREMENT SPECIFICATION	SUPERSEDES		PAGE	OF
FF-S-92			2	2

DD FORM 1 MAY 73 672-1 (COORDINATED)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

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