



NOMINAL SIZE	#8 (.164)	#10 (.190)	1/4	5/16	3/8	1/2	
B THREADS PER INCH	32 UNC-3A	24 UNC-3A	20 UNC-3A	18 UNC-3A	16 UNC-3A	13 UNC-3A	
D BODY DIAMETER	MAX MIN	.1640 .1613	.1900 .1867	.2500 .2464	.3125 .3084	.3750 .3705	.5000 .4948
A HEAD DIAMETER	MAX MIN	.270 .265	5/16 .306	3/8 .367	7/16 .429	9/16 .553	3/4 .739
H HEAD HEIGHT	MAX MIN	.164 .160	.190 .185	1/4 .244	5/16 .306	3/8 .368	1/2 .492
J SOCKET SIZE	NOM	1/8	5/32	3/16	7/32	1/16	3/8
R RADIUS	MAX MIN	.015 .010	.015 .010	.015 .010	.015 .010	.015 .010	.030 .020
L LENGTH	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.	DASH NO.
3/8	1	11	21	33			
1/2	2	12	22	34	48		
5/8	3	13	23	35	49		
3/4	4	14	24	36	50		62
7/8	5	15	25	37	51		63
1	6	16	26	38	52		64
1-1/4			27	39	53		65
1-1/2			28	40	54		66
1-3/4			29	41	55		67
2			30	42	56		68
2-1/4				43	57		69
2-1/2				44	58		70

**MATERIAL:** Steel, Corrosion-Resisting, Federal Standard No. 66, Steel Numbers: 302, 303, 304, 305, 410, 416 and 420.

**TREATMENT:** Passivate in accordance with Procurement Specification.

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

**MINIMUM THREAD LENGTH:** Shall be twice the diameter, plus 1/2 in. or 1/2 the length whichever is the greater. Screws too short for the formula shall be threaded as close to the head as practicable.

**LENGTH TOLERANCE:** The allowable tolerance on the length (L) under the head on lengths 2 inches and under shall be 3 per cent of the nominal length with a minimum of .030 in., two-thirds to be applied plus and one-third minus. On lengths over 2 in. to 6 in. plus or minus 1/32 in. and on lengths over 6 in plus or minus 1/16 in.

**NOTES:** (1) Referenced documents shall be of the issue in effect on date of invitations for bid.  
 (2) This document has been promulgated by the Department of Defense as the Military Standard to limit the selection of the item, product or design covered herein in engineering, design and procurement. This standard shall become effective not later than 90 days after the latest date of approval shown.  
 (3) This standard takes precedence over documents referenced herein.  
 (4) Plain or knurled heads are optional.  
 (5) The MS part number consists of the MS number, plus the dash number. Example: MS35461-2.  
 (6) All dimensions in inches.

**INACTIVE FOR DESIGN after 21 SEP 1964** Use MS16995 for design and engineering.  
 For maintenance of existing equipment use MS35461 to replace the 5/16 inch size. This size cannot be replaced by the 5/16 inch size appearing on MS16995 in counterbored holes or other close applications.

ENTIRE STANDARD REVISED-INACTIVE FOR DESIGN

P.A. WC Other Cust SHIPS ASD	TITLE SCREW, CAP, SOCKET HEAD-HEXAGON, STEEL, CORROSION-RESISTING, PASSIVATED, UNC-3A	MILITARY STANDARD <b>MS35461</b>
PROCUREMENT SPECIFICATION FF-S-86	SUPERSEDES:	SHEET 1 OF 1

REVIEWER: IS, EL, MC, MI, SHIPS, WC, WEPS, MU  
 USER: DOCKS  
 This military standard is approved by the Department of Defense and is mandatory on all activities. Selection for all new engineering and design applications and for repetitive use shall be made from this document.

APPROVED 9 MAR 1986 REVISED 4 5 APRIL 62 21 SEP 1964