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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.

NOMINAL SIZE		1/10 (.190)	1/4	5/16	3/8	1/2	
THREADS PER INCH		32UNF-3A	28UNF-3A	24UNF-3A	24UNF-3A	20UNF-3A	
D BODY DIAMETER	MAX	.190	.250	.3125	.375	.500	
	MIN	.1867	.2464	.3084	.3705	.4948	
A HEAD DIAMETER	THEO. SHARP MAX	.411	.531	.656	.781	.937	
	ABS. MIN	.359	.480	.600	.720	.872	
H HEAD HEIGHT	REFERENCE MAX	.127	.161	.198	.234	.251	
J SOCKET WIDTH ACROSS FLATS	MAX	.1270	.1582	.1895	.2207	.3155	
	MIN	.1250	.1562	.1875	.2187	.3125	
T KEY ENGAGEMENT	MIN	.087	.111	.135	.159	.172	
R RADIUS	MAX	.019	.025	.031	.037	.050	
MINIMUM BREAKING STRENGTH		LBS 1400	2550	4060	6150	11200	
L LENGTH	TOL.	DASH NO.	FIIN	DASH NO.	FIIN	DASH NO.	FIIN
3/8	+1/64 -1/64	1		9		17	
1/2		2		10		25	
5/8		3		11		26	
3/4		4		12		27	
1		5		13		28	
1-1/4	+1/32 -1/64	6		14		29	
1-1/2		7		15		30	
1-3/4							
2						32	
						33	
						34	
						35	
						36	
						37	

MATERIAL: STEEL, CORROSION RESISTING, IN ACCORDANCE WITH FEDERAL STANDARD #66, CLASS 303 OR CLASS 304; ULTIMATE LOAD - 70,000 PSI MIN TENSILE STRENGTH; PROOF LOAD - 30,000 PSI MIN YIELD STRENGTH; ELONGATION - 35 PERCENT MIN.

PROTECTIVE COATING: PASSIVATED IN ACCORDANCE WITH THE PROCUREMENT SPECIFICATION.

THREADS: THE THREADS SHALL BE IN ACCORDANCE WITH SCREW-THREAD STANDARDS FOR FEDERAL SERVICES, HANDBOOK H-28.

MINIMUM THREAD LENGTH: THE MINIMUM USABLE THREAD LENGTH SHALL BE EQUAL TO 2D PLUS 1/2". THE THREAD LENGTH TOLERANCE SHALL BE EQUAL TO THE NOMINAL DIAMETER. SCREWS TOO SHORT FOR APPLICATION OF THE FORMULA SHALL BE THREADED AS CLOSE TO THE HEAD AS PRACTICABLE.

POINT CHAMFER: THE POINTS SHALL BE FLAT AND CHAMFERED. THE FLAT SHALL BE NORMAL TO THE AXIS OF THE SCREW. THE CHAMFER SHALL EXTEND SLIGHTLY BELOW THE ROOT OF THE THREAD AND THE EDGE BETWEEN THE FLAT AND THE CHAMFER MAY BE ROUNDED. THE INCLUDED ANGLE OF THE THREADED POINT SHALL BE APPROXIMATELY 90°. CHAMFERING OF SCREW SIZES UP TO AND INCLUDING #8 SHALL BE AT THE OPTION OF THE MANUFACTURER.

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: MS24672-1.

NOTES: (1) REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.
(2) THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.

P.A. Ord Other Cust SHIPS	TITLE SCREW, CAP, SOCKET HEAD, FLAT COUNTERSUNK, CORROSION RESISTING STEEL, UNF-3A	MILITARY STANDARD MS24672
PROCUREMENT SPECIFICATION FF-S-86	SUPERSEDES:	SHEET 1 OF 1

DD FORM 672-1 (Coordinated)

— PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

APPROVED GAPP 60 REVISED