

USER SYMBOLS:  
ARMY - EL, MI  
NAVY - AS  
USAF - 11  
ARMY - AV  
DSA - ES

REVIEWER SYMBOLS:  
NAVY - AS  
USAF - 11  
ARMY - AV  
DSA - ES

This military standard is mandatory for use by all Departments  
B. Agencies of the Department of Defense. Selection for all new  
engineering and design applications and for replacing use shall  
be made from this document.

CONFIGURATION OF NUT WITHIN THE LIMITATIONS IMPOSED BY DIMENSIONS AND REQUIREMENTS AS SPECIFIED HEREIN.

FED. SUP CLASS 5310

T THREAD SIZE	(a) A MAX.	B MAX. MIN.	C MAX. MIN.	F MAX. MIN.	G DIA. 1.010	(b) H MAX.	(c) J MAX.	K DIA. +.005 -.000	M REF.	N MAX.	P DIA. +.005 MAX.	V MAT'L MAX.	AXIAL STRENGTH LBS. MIN.	WEIGHT LBS/100 MAX.
.1640-32UNJC-3B	.700	.211 .180	.344 .100	.200 .272	.486 .098	.084 .270	.365 .047	1,720	.39					
.1900-32UNJF-3B	.716	.227 .203	.344 .100	.200 .281	.486 .098	.093 .270	.411 .047	2,460	.41					
.2500-28UNJF-3B	.955	.310 .267	.500 .100	.200 .340	.707 .098	.121 .383	.540 .055	4,580	.88					
.3125-24UNJF-3B	1.044	.383 .340	.500 .125	.230 .422	.707 .130	.156 .383	.686 .065	7,390	1.17					

(a) THREADS BEFORE LUBRICATION PER MIL-S-8879.  
(b) MINIMUM "H" NOT SPECIFIED, LIMITED ONLY BY STRENGTH REQUIREMENTS.  
(c) CENTER OF THE TAPPED HOLE SHALL NOT DEVIATE IN ANY DIRECTION FROM THE CENTER OF THE PLATE NUT AS DETERMINED BY THE RIVET HOLES BY MORE THAN .005.  
(d) DIMPLED HOLE TOLERANCE FOR "K" IS  $\pm .015$ ,  $-.000$  AFTER FORMING.

NOTES:

- MATERIAL: CORROSION RESISTANT STEEL, (A286) AMS 5525, AMS 5735, OR AMS 5737.
- PLATING: ONLY 800° F NUTS, SILVER PLATE IN ACCORDANCE WITH AMS 2410. PLATE THICKNESS, MEASURED ON ANY EXTERNAL SURFACE OF THE NUT, SHALL NOT BE LESS THAN 0.0002 IN; THREADS SHALL SHOW COMPLETE COVERAGE BUT THICKNESS REQUIREMENTS ON THREAD IS WAIVED. NO SILVER PLATE ON WELD NIBS.
- MAGNETIC PERMEABILITY: SHALL BE LESS THAN 2.0 (AIR = 1.0) FOR A FIELD STRENGTH H = 200 OERSTEDS USING A MAGNETIC PERMEABILITY INDICATOR PER MIL-I-17214, OR EQUIVALENT.
- HARDNESS: ROCKWELL C49 MAXIMUM.
- LUBRICANT: ONLY 450° F NUTS, DRY FILM LUBRICANT IN ACCORDANCE WITH MIL-N-25027. FOR USAF APPLICATIONS, NUTS TREATED WITH DRY FILM LUBRICANTS SHALL NOT BE USED IN INTERNAL FUEL SYSTEMS.
- DIMENSIONS IN INCHES, UNLESS OTHERWISE SPECIFIED.
- SURFACE ROUGHNESS IN ACCORDANCE WITH ASA B46.1-1962 (ANSI). UNLESS OTHERWISE SPECIFIED, THE SURFACE ROUGHNESS SHALL NOT EXCEED 125 MICRO INCHES.
- PERFORMANCE: SEE PROCUREMENT SPECIFICATION, EXCEPT 450° F. DRY FILM LUBRICATED NUTS LIMITED TO FIVE REUSE CYCLES.
- DESIGN AND USAGE LIMITATIONS: THESE NUTS ARE DESIGNED TO DEVELOP THE TENSILE STRENGTH OF BOLTS AND SCREWS WITH AN ULTIMATE TENSILE STRENGTH OF 125 KSI BASED ON A CROSS SECTIONAL AREA AT THE BASIC ROOT DIAMETER OF THE THREAD. THESE NUTS ARE DESIGNED TO BE USED ON 3A EXTERNAL THREADS. THESE NUTS SHALL BE USED IN ACCORDANCE WITH THE LIMITATIONS OF MS33588. ONLY NUTS FOR WHICH THERE ARE QUALIFIED PRODUCTS LISTED ON QPL 25027 SHALL BE USED.

INTERCHANGEABILITY RELATIONSHIP: MS 21058 NUTS CAN UNIVERSALLY REPLACE NAS 685 NUTS OF LIKE MATERIAL, THREAD SIZE, PLATING, LUBRICANTS (SILVER PLATE OR DRY FILM LUBRICANT), RIVET SPACING, AND FASTENING METHOD (PLAIN RIVET HOLES, DIMPLED, COUNTERSUNK RIVET HOLES OR PROJECTION WELDING). BUT NAS 685 NUTS CANNOT UNIVERSALLY REPLACE MS 21058 NUTS.

FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.

(D) DENOTES CHANGES

P.A. NAVY - AS Other Cust ARMY - AV USAF - 11	TITLE NUT, SELF-LOCKING, PLATE, CORNER, 100° CSK, LOW HEIGHT, CRCS, 125 KSI F.T.U., 450° & 800° F	MILITARY STANDARD MS21058
PROCUREMENT SPECIFICATION MIL-N-25027	SUPERSEDES: NAS 685	SHEET 1 OF 2

DD FORM 672-1 (Coordinated)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

PROJECT NO. 5310-0977

STATE NO. 15320

APPROVED 23 JUL 64  
REVISED (A) 12 FEB 65 (B) 4 NOV 66 (C) 20 APR 71 (D) 15 MARCH 1978

FED. SUP CLASS  
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"Review/Year information is current as of the date of this document.  
For future coordination of changes to this document, draft circulation  
should be based on the information in the current 000193."

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& Agencies of the Department of Defense. Selection for all new  
engineering and design applications and for repetitive use shall  
be made from this document.

T THREAD SIZE	DASH NUMBERS					
	800° F			450° F		
	PLAIN HOLES	CTSK OR DIMPLED HOLES	WELDING PROJECTION	PLAIN HOLES	CTSK OR DIMPLED HOLES	WELDING PROJECTION
.1640-32UNJC-3B	-08	-08K	-08W	L08	L08K	L08W
.1000-32UNJF-3B	-3	-3K	-3W	L3	L3K	L3W
.2500-28UNJF-3B	-4	-4K	-4W	L4	L4K	L4W
.3125-24UNJF-3B	-5	-5K	-5W	L5	L5K	L5W

## EXAMPLE OF PART NUMBER:

MS21058 L4K

NUT DASH NUMBER

BASIC PART NUMBER

.2500-28UNJF-3B NUT, SELF LOCKING,  
CORNER, CRES., 125 KSI, 450° F. DRY FILM  
LUBRICATED, WITH COUNTERSUNK OR  
DIMPLED RIVET HOLES.

INTERCHANGEABILITY TABLE	
CANCELED PART NUMBERS	SUBSTITUTIVE PART NUMBERS
NAS 685	
NAS 685 C08	MS 21058-08
C08K	-08K
- - -	-08W
C08M	L08
C08MK	L08K
- - -	L08W
C3	-3
C3K	-3K
- - -	-3W
C3M	L3
C3MK	L3K
- - -	L3W
C4	-4
C4K	-4K
- - -	-4W
C4M	L4
C4MK	L4K
- - -	L4W
C5	-5
C5K	-5K
- - -	-5W
C5M	L5
C5MK	L5K
NAS 685- - -	MS 21058 L5W

APPROVED 23 JUL 64 REVISED (D) FOR CHANGES SEE SHEETS 1 AND 2

P.A. NAVY - AS Other Cnst	TITLE NUT, SELF-LOCKING, PLATE, CORNER, 100° CSK, LOW HEIGHT, CRES, 125 KSI F1U, 450° & 800° F	MILITARY STANDARD
ARMY - AV USAF - 11		MS21058
PROCUREMENT SPECIFICATION MIL-N-25027	SUPERSEDES: NAS 685	SHEET 2