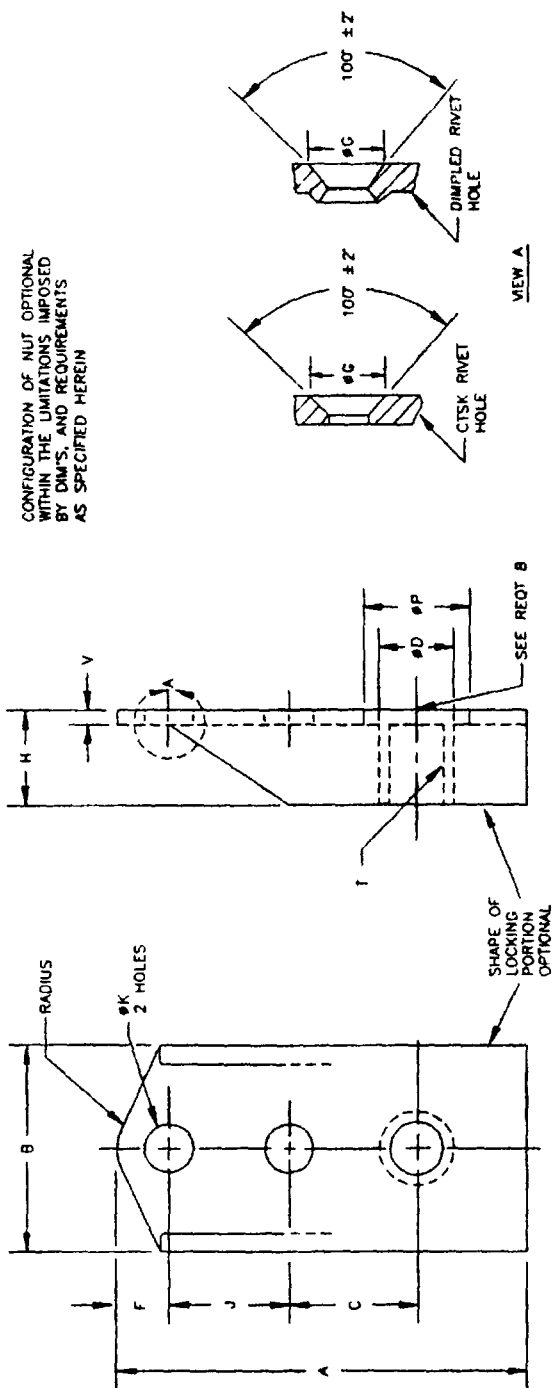


THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DODDSS SPECIFIED IN THE SOLICITATION MIL-N-25027

THIS SPECIFICATION IS APPROVED FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE

Form Approved
OMB No 0704-0188



CONFIGURATION OF NUT OPTIONAL WITHIN THE LIMITATIONS IMPOSED BY DIM'S. AND REQUIREMENTS AS SPECIFIED HEREIN

VIEW A

TABLE 1 DASH NUMBERS AND DIMENSIONS

| DASH NUMBERS | PLAIN RIVET HOLES | | COUNTERSUNK OR DIMPLED RIVET HOLES | | T THREAD SIZES | A MAX | B MIN | C ± 005 | D MIN | F MIN | G ± 010 | H MAX | J ± 002 | K + 005 | P MAX | V MAX | AXIAL STRENGTH LBS./MIN | WEIGHT LBS./100 | |
|--------------|------------------------|--------------------|------------------------------------|--------------------|-------------------|----------|----------|------------|----------|----------|------------|----------|------------|------------|----------|----------|-------------------------|-----------------|-----|
| | NON-DRY FILM LUBRICANT | DRY FILM LUBRICANT | NON-DRY FILM LUBRICANT | DRY FILM LUBRICANT | | | | | | | | | | | | | | | |
| -04 | L04 | -04K | L04K | | 112-40UNJ-C-38 | 1 051 | 290 | 344 | - | 100 | 200 | 175 | 312 | 098 | 270 | 172 | 032 | 750 | 52 |
| -06 | L06 | -06K | L06K | | 138-32UNJ-C-38 | 1 051 | 290 | 344 | - | 100 | 200 | 203 | 312 | 098 | 270 | 198 | 032 | 1,150 | 53 |
| -08 | L08 | -08K | L08K | | 164-32UNJ-C-38 | 1 051 | 290 | 344 | 168 | 100 | 200 | 250 | 312 | 098 | 270 | 224 | 032 | 1,720 | 54 |
| -3 | L3 | -3K | L3K | | 190-32UNJ-F-38 | 1 051 | 290 | 344 | 194 | 100 | 200 | 250 | 312 | 098 | 270 | 250 | 032 | 2,460 | 56 |
| -4 | L4 | -4K | L4K | | 250-28UNJ-F-38 | 1 308 | 531 | 350 | 500 | 254 | 100 | 281 | 312 | 098 | 330 | 310 | 032 | 4,580 | 93 |
| -5 | L5 | -5K | L5K | | 3125-24UNJ-F-38 | 1 398 | 641 | 412 | 500 | 317 | 125 | 328 | 312 | 130 | 392 | 372 | 045 | 7,390 | 144 |
| -6 | L6 | - | - | - | 375-24UNJ-F-38 | 1 422 | 703 | 656 | 500 | 380 | 125 | 479 | 312 | 130 | 487 | 436 | 075 | 11,450 | 200 |
| -8 | L8 | - | - | - | 500-20UNJ-F-38 | 1 800 | 859 | 796 | 625 | 504 | 125 | 595 | 500 | 161 | 550 | 500 | 075 | 15,450 | 250 |

1/ MINIMUM "H" NOT SPECIFIED LIMITED ONLY BY STRENGTH REQUIREMENTS OF SPECIFICATION
2/ DIMPLED RIVET HOLE TOLERANCE FOR "ØK" IS + 015 - 000

G DENOTES CHANGES

INCH-POUND

PREPARING ACTIVITY DLA-IS
CUSTODIANS ARMY- AV NAVY- AS
AIR FORCE- 11 DLA-
REVIEW USER CR, MI
PROJECT NUMBER 5310-1930
DISTRIBUTION STATEMENT

MILITARY SPECIFICATION SHEET
TITLE
NUT, SELF-LOCKING, PLATE, ONE LUG, FLOATING, LOW HEIGHT, STEEL, 125 KSI F_u 450° F

SPECIFICATION SHEET NUMBER
MS21061 1 FEB 94 REV C
SUPERSEDING MS21061F 30 SEP 87 (SEE NOTE 5)
AMSC- N/A FSC 5310

A. Approved for public release distribution is unlimited Page 1 of 3

THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DODISS SPECIFIED IN THE SOLICITATION MIL-N-25027

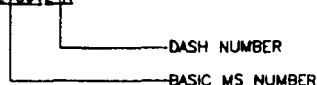
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REQUIREMENTS

- (G) 1. MATERIAL. CARBON STEEL COMPOSITIONS 1035 (UNS G10350) 1040 (UNS G10400) AND 1050 (UNS G10500) IN ACCORDANCE WITH ASTM A827 OR QQ-S-700 1042 (UNS G10420) IN ACCORDANCE WITH ASTM A29 ALLOY STEEL GRADES 4130 (UNS C41300) 4340 (UNS G43400) AND 8740 (UNS G87400) IN ACCORDANCE WITH ASTM A29
2. FINISH. CADMIUM PLATE IN ACCORDANCE WITH QQ-P-416 TYPE II CLASS 2 FOR DRY FILM LUBRICATED NUTS THE TYPE AND CLASS ARE OPTIONAL IF THE NUTS MEET THE SALT SPRAY REQUIREMENTS OF QQ-P-416 TYPE II
3. DIMENSIONING AND TOLERANCING. DIMENSIONING AND TOLERANCING SHALL BE IN ACCORDANCE WITH ANSI Y14.5M
4. HARDNESS. 49HRC, MAX
5. THREADS. THREADS BEFORE LUBRICATION IN ACCORDANCE WITH MIL-S-8879
6. SURFACE TEXTURE. SURFACE TEXTURE UNLESS OTHERWISE SPECIFIED SHALL NOT EXCEED 125 MICRONS IN ACCORDANCE WITH ANSI/ASME B46.1
7. LUBRICANT. DRY FILM LUBRICANT APPROVED IN ACCORDANCE WITH MIL-N-25027 NON-DRY FILM LUBRICANTS SHALL BE SOLUBLE IN THE CLEANER SPECIFIED IN MIL-S-8802
8. COUNTERBORE/COUNTERSINK. ON SIZE 164 AND LARGER THREAD RELIEF SHALL BE .062 MINIMUM, ON SIZE 138 AND SMALLER, COUNTERSINK OR RADIUS WITHIN "P" DIAMETER
9. FLOAT OF NUT PORTION. FLOAT OF NUT PORTION OF ASSEMBLY SHALL NOT BE LESS THAN .030 RADIALLY FROM CENTERED POSITION NUT ELEMENT SHALL BE CAPABLE OF ENGAGEMENT WITH BOLT IN THE MAXIMUM MISALIGNED POSITION
10. PART NUMBER. THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE 1

EXAMPLE: MS21061L4K



MS21061L4K INDICATES NUT, SELF-LOCKING PLATE ONE LUG FLOATING LOW HEIGHT, STEEL, 125 KSI Flu, 450° F, 250-28 UNJF-3B DRY FILM LUBRICANT, COUNTERSUNK OR DIMPLED HOLES

NOTES

- ALL DIMENSIONS ARE IN INCHES
- IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS STANDARD AND THE REFERENCES CITED HEREIN THE TEXT OF THIS STANDARD SHALL TAKE PRECEDENCE
- REFERENCED GOVERNMENT (OR NON-GOVERNMENT) DOCUMENTS OF THE ISSUE LISTED IN THAT ISSUE OF THE DEPARTMENT OF DEFENSE INDEX OF SPECIFICATIONS AND STANDARDS (DODISS) SPECIFIED IN THE SOLICITATION FORM A PART OF THIS STANDARD TO THE EXTENT SPECIFIED HEREIN
- DESIGN AND USAGE LIMITATIONS THESE NUTS ARE DESIGNED TO DEVELOP THE TENSILE STRENGTH OF BOLTS AND SCREWS WITH AN ULTIMATE TENSILE STRENGTH OF 125 KS, BASED ON THE CROSS SECTION AREA AT THE BASIC ROOT DIAMETER OF THE THREADS THESE NUTS ARE DESIGNED TO BE USED ON A 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 OPL 25027 SHALL BE USED
- MS21061 SUPERSEDES NAS 687, NAS 1032 (IN PART)

| | | |
|---|--|--|
| PREPARING ACTIVITY DLA-JS CUSTODIANS ARMY- AV NAVY- AS AIR FORCE- 11 DLA- | MILITARY SPECIFICATION SHEET TITLE NUT, SELF-LOCKING, PLATE, ONE LUG, FLOATING, LOW HEIGHT STEEL, 125 KSI Flu, 450° F | SPECIFICATION SHEET NUMBER MS21061 1 FEB 84 REV G SUPERSEDING MS21061F 30 SEP 87 (SEE NOTE 5) AMSC- N/A FSC 5310 |
| REVIEW USER CR MI PROJECT NUMBER 5310-1950 | DISTRIBUTION STATEMENT A. Approved for public release, distribution is unlimited | |
| | | Page 2 of 3 |

DD Form 672, MAY 88

PREVIOUS EDITIONS ARE OBSOLETE

INTERCHANGEABILITY RELATIONSHIP

MS21061 NUTS CAN UNIVERSALLY REPLACE NAS687 AND NAS1032 NUTS OF ALL LIKE MATERIAL, THREAD SIZE LUBRICANT (DRY FILM OR NON-DRY FILM LUBRICANT) FASTENING METHOD (PLAIN RIVET HOLES DIMPLED OR COUNTERSUNK RIVET HOLES) BUT THESE NAS687 AND NAS1032 NUTS CAN NOT UNIVERSALLY REPLACE MS21061 NUTS

INTERCHANGEABILITY TABLE

| CANCELLED PART NUMBERS | | SUBSTITUTIVE PART NUMBERS |
|------------------------|------------|---------------------------|
| NAS687X04 | ---- | MS21061-04 |
| NAS687X04K | ---- | MS21061-04K |
| NAS687A04 | NAS1032A04 | MS21061L04 |
| NAS687A04K | ---- | MS21061L04K |
| NAS687X06 | ---- | MS21061-06 |
| NAS687X06K | ---- | MS21061-06K |
| NAS687A06 | NAS1032A06 | MS21061L06 |
| NAS687A06K | ---- | MS21061L06K |
| NAS687X08 | ---- | MS21061-08 |
| NAS687X08K | ---- | MS21061-08K |
| NAS687A08 | NAS1032A08 | MS21061L08 |
| NAS687A08K | ---- | MS21061L08K |
| NAS687X3 | ---- | MS21061-3 |
| NAS687X3K | ---- | MS21061-3K |
| NAS687A3 | NAS1032A3 | MS21061L3 |
| NAS687A3K | ---- | MS21061L3K |
| NAS687X4 | ---- | MS21061-4 |
| NAS687X4K | ---- | MS21061-4K |
| NAS687A4 | NAS1032A4 | MS21061L4 |
| NAS687A4K | ---- | MS21061L4K |
| NAS687X5 | ---- | MS21061-5 |
| NAS687X5K | ---- | MS21061-5K |
| NAS687A5 | NAS1032A5 | MS21061L5 |
| NAS687A5K | ---- | MS21061L5K |
| ---- | ---- | MS21061-6 |
| ---- | NAS1032A6 | MS21061L6 |
| ---- | ---- | MS21061-8 |
| ---- | NAS1032A8 | MS21061L8 |

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| | | |
|--|--|--|
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