

3/ PLATE NOT AS DETERMINED BY THE  
DIMPLED RIVET HOLE TOLERANCE FOR "ØK" IS + 0.15 -- 0.00

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

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

Form Approved  
OMB No 0704-0188

# REQUIREMENTS

- (C) 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 G41300), 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 MICROINCHES 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
- (C) 8 EDGES BREAK ALL SHARP EDGES AND REMOVE ALL BURRS
- 9 COUNTERBORE/COUNTERSINK ON SIZE 1/4 AND LARGER COUNTERBORE THREAD "D" DIAMETER X .062 DEEP MINIMUM THREAD RELIEF ON SIZE 1/8 AND SMALLER COUNTERSINK TO ".04" WITHIN THE LIMITS OF D P AND M
- 10 PART NUMBER THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE I

EXAMPLE MS21051L4  
 └───┬─── DASH NUMBER  
 └───┴─── BASIC MS NUMBER

MS21051L4 INDICATES NUT SELF-LOCKING PLATE ONE LUG LOW HEIGHT STEEL  
 125 KSI F<sub>u</sub> 450 F 250-25 UNJF-3B DRY FILM LUBRICANT  
 COUNTERSUNK OR DIMPLED RIVET 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 KSI BASED ON THE CROSS SECTION AREA AT THE BASIC ROOT DIAMETER OF THE THREADS THESE NUTS ARE DESIGNED TO BE USED ON 3A EXTERNAL THREADS THESE NUTS SHALL BE USED IN ACCORDANCE WITH THE LIMITATIONS OF MSJ3588 ONLY NUTS FOR WHICH THERE ARE QUALIFIED PRODUCTS LISTED ON QPL 25027 SHALL BE USED
- MS21051 SUPERSEDES NAS682 NAS1025 IN PART

## INTERCHANGEABILITY RELATIONSHIP

MS21051 NUTS CAN UNIVERSALLY REPLACE NAS682 NUTS OF LIKE MATERIAL, THREAD SIZE, LUBRICANT (DRY FILM OR NON-DRY FILM LUBRICANT) AND FASTENING METHOD (PLAIN RIVET HOLES, DIMPLED OR COUNTERSUNK RIVET HOLES) BUT THESE NAS682 NUTS CANNOT UNIVERSALLY REPLACE MS21051 NUTS

## INTERCHANGEABILITY TABLE

CANCELLED PART NUMBERS	SUBSTITUTIVE PART NUMBERS
NAS682X06	MS21051-06
NAS682X06K	MS21051-06K
NAS682A06	MS21051L06
NAS682A06K	MS21051L06K
NAS682X08	MS21051-08
NAS682X08K	MS21051-08K
NAS682A08	MS21051L08
NAS682A08K	MS21051L08K
NAS682X13	MS21051-13
NAS682X13K	MS21051-13K
NAS682A13	MS21051L13
NAS682A13K	MS21051L13K
NAS682X14	MS21051-14
NAS682X14K	MS21051-14K
NAS682A14	MS21051L14
NAS682A14K	MS21051L14K
NAS682X15	MS21051-15
NAS682X15K	MS21051-15K
NAS682A15	MS21051L15
NAS682A15K	MS21051L15K
NAS682X16	MS21051-16
NAS682A16	MS21051L16
NAS682X17	MS21051-17
NAS682A17	MS21051L17

PREPARING ACTIVITY DLA-IS CUSTODIANS ARMY-AV NAVY-AS AIR FORCE-11 DLA- REVIEW 82 USER CR MI PROJECT NUMBER 5310-1946	<b>MILITARY SPECIFICATION SHEET</b> TITLE NUT, SELF-LOCKING PLATE ONE LUG LOW HEIGHT STEEL 125 KSI F <sub>u</sub> 450 F	SPECIFICATION SHEET NUMBER <b>MS21051</b> 1 FEB 84 REV G SUPERSEDING MS21051 F 30 SEP 87 (SEE NOTE 5) AMSC- N/A FSC 5310
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