

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 DDODSS SPECIFIED IN THE SOLICITATION: MIL-N-25027

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

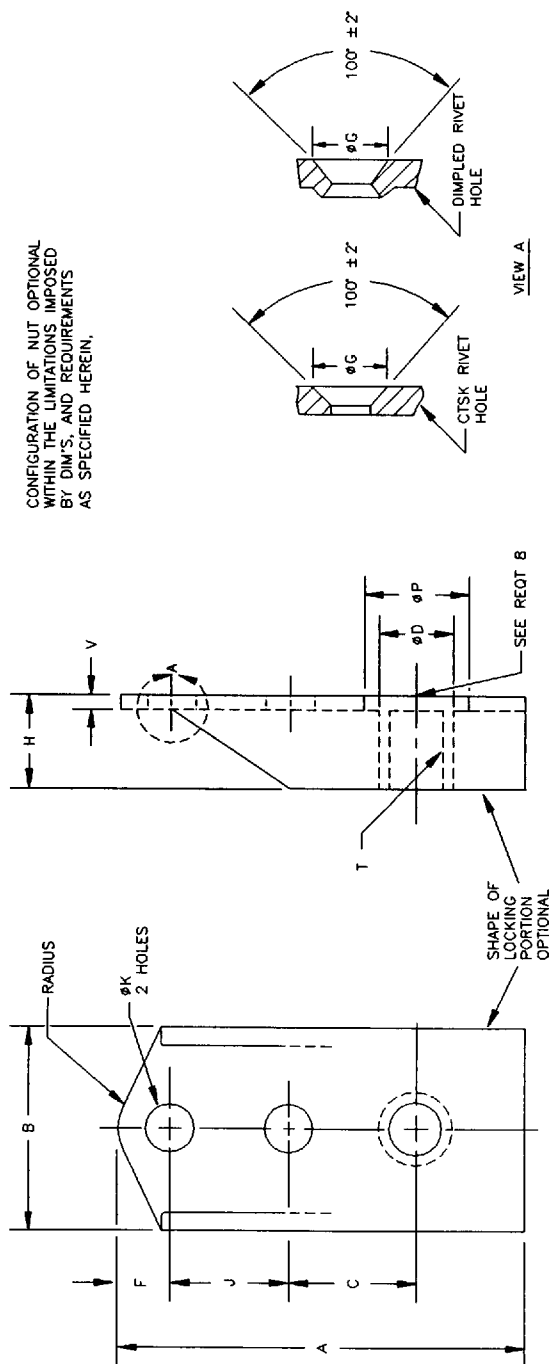


TABLE 1. DASH NUMBERS AND DIMENSIONS

PLAIN RIVET HOLES		DASH NUMBERS																			
		COUNTERSUNK OR DIMPLED RIVET HOLES																			
NON-DRY FILM LUBRICANT	DRY FILM LUBRICANT	NON-DRY FILM LUBRICANT	DRY FILM LUBRICANT	T THREAD SIZES	A		B		C	ø D		F	ø G	1/H	J	ø K ² + .005	ø P		V	AXIAL STRENGTH LBS/MIN	WEIGHT LBS/100
					MAX		MAX	MIN		MIN	MIN						MAX	MIN			
-04	L04	-04K	L04K	.112-40UNC-3B	1.051	.422	.290	.344	-	.100	.200	.175	.312	.098	.270	.172	.032	750	.52		
-06	L06	-06K	L06K	.138-32UNC-3B	1.051	.422	.290	.344	-	.100	.200	.203	.312	.098	.270	.198	.032	1,130	.53		
-08	L08	-08K	L08K	.164-32UNC-3B	1.051	.422	.290	.344	.168	.100	.200	.250	.312	.098	.270	.224	.032	1,720	.54		
-3	L3	-3K	L3K	.190-32UNF-3B	1.051	.422	.290	.344	.194	.100	.200	.250	.312	.098	.270	.250	.032	2,460	.56		
-4	L4	-4K	L4K	.250-28UNF-3B	1.306	.531	.350	.500	.254	.100	.200	.281	.312	.098	.330	.310	.032	4,580	.93		
-5	L5	-5K	L5K	.3125-24UNF-3B	1.396	.641	.412	.500	.317	.125	.230	.328	.312	.130	.392	.372	.045	7,390	1.44		
-6	L6	-	-	.375-24UNF-3B	1.422	.703	.656	.500	.380	.125	.230	.479	.312	.130	.487	.438	.075	11,450	2.00		
-8	L8	-	-	.500-20UNF-3B	1.800	.859	.796	.695	.504	.125	.230	.595	.500	.161	.550	.500	.075	15,450	2.50		

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1/ MINIMUM "H" NOT SPECIFIED, LIMITED ONLY BY STRENGTH REQUIREMENTS OF SPECIFICATION.

22/ 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: 5310-1950

DISTRIBUTION STATEMENT

MILITARY SPECIFICATION SHEET

TITLE

NUT, SELF-LOCKING, PLATE,
ONE LUG, FLOATING, LOW HEIGHT,
STEEL, 125 KSI Ftu, 450° F

SPECIFICATION SHEET NUMBER

MS21061

1 FEB 94
REV G

SUPERSEDING

MS21061F 30 SEP 87 (SEE NOTE 5)

AMSC- N/A

FSC 5310

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Page 1 of 3

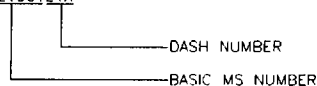
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REQUIREMENTS:

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.
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 I.

EXAMPLE: MS21061L4K



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

NOTES:

1. ALL DIMENSIONS ARE IN INCHES.
2. 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.
3. 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.
4. 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 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 QPL 25027 SHALL BE USED.
5. MS21061 SUPERSEDES NAS 687, NAS 1032 (IN PART).

PREPARING ACTIVITY: DLA-IS CUSTODIANS: ARMY- AV NAVY- AS AIR FORCE- 11 DLA-- REVIEW: USER: CR, MI PROJECT NUMBER: 5310-1950	MILITARY SPECIFICATION SHEET TITLE NUT, SELF-LOCKING, PLATE, ONE LUG, FLOATING, LOW HEIGHT, STEEL, 125 KSI Ftu, 450° F	SPECIFICATION SHEET NUMBER MS21061 1 FEB 94 REV G SUPERSEDING MS21061F 30 SEP 87 (SEE NOTE 5) AMSC- N/A FSC 5310
DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.		Page 2 of 3

DD Form 672, MAY 88

PREVIOUS EDITIONS ARE OBSOLETE

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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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