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AMSC N/A

REVIEWER ACTIVITIES:

DLA - IS

USER ACTIVITIES:

ARMY - CR, MI

P.A. NAVY - AS  
Other Cust  
ARMY - AV  
AIR FORCE - 11PROCUREMENT SPECIFICATION  
MIL-N-25027INTERNATIONAL  
INTEREST

SUPERSEDES:

NAS 1025 (SEE STATUS NOTE)

© ENTIRE STANDARD REVISED

TITLE

NUT, SELF-LOCKING, PLATE,  
ONE LUG, NON-METALLIC INSERT,  
STEEL, 125KSI FTU, 250°F

MILITARY STANDARD

MS21080

PAGE 1 OF 2

DD FORM 1 MAY 72 672-1 (COORDINATED)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

5310-1600

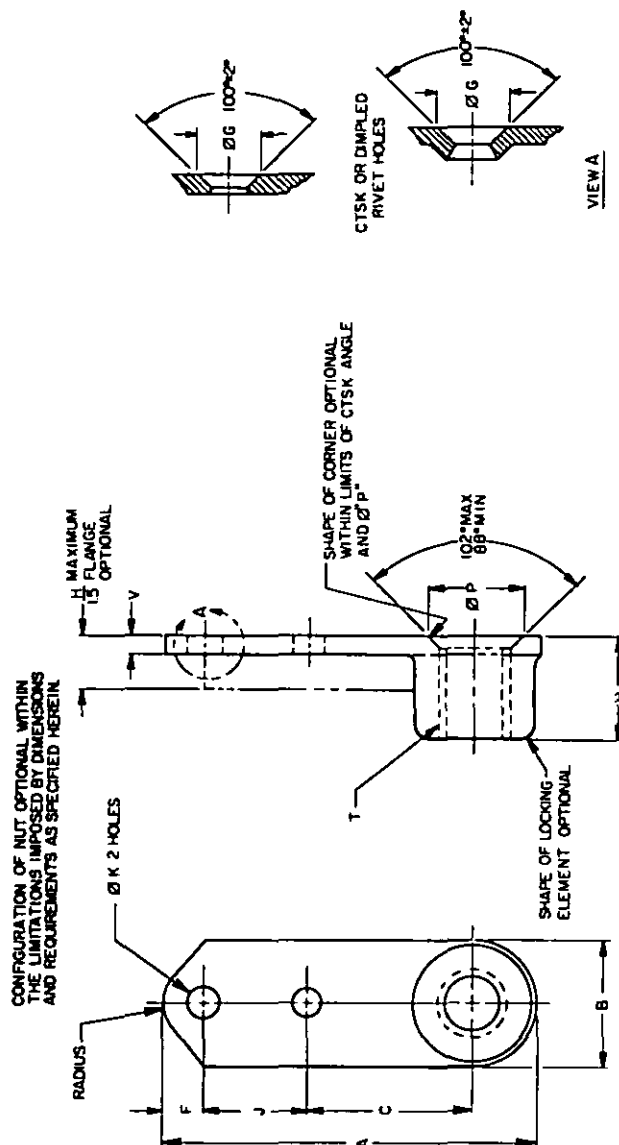


TABLE 1. DASH NUMBERS AND DIMENSIONS

DASH NUMBER PLAIN HOLES	DASH NUMBER CTSK OR DIMPLED HOLES	T THREAD SIZES	A MAX	B		C MAX	F MIN	Ø G ±.010	H		J <sub>1</sub> ±.002	J <sub>2</sub> ±.005 -1.000	Ø P		V MAX	ACTUAL STRENGTH LBS/MIN	WEIGHT LBS/100
				MAX	MIN				MAX	MIN			MAX	MIN			
-06	-06K	.138-32 UNLC-3B	1.031	.406	.375	.344	.115	.200	.297	.160	.312	.098	.177	.138	.075	1,130	1.40
-08	-08K	.164-32 UNLC-3B	1.031	.406	.375	.344	.115	.200	.297	.219	.312	.098	.230	.164	.075	1,720	1.30
-1	-1K	.190-32 UNLP-3B	1.031	.406	.375	.344	.115	.200	.312	.234	.312	.098	.230	.190	.075	2,460	1.20
-4	-4K	.250-28 UNLP-3B	1.062	.516	.438	.344	.115	.200	.375	.240	.312	.098	.293	.250	.075	4,580	1.50
-5	-5K	.3125-24 UNLP-3B	1.250	.531	.500	.500	.115	.230	.375	.271	.312	.130	.356	.312	.075	7,390	2.00
-6	-6K	.375-24 UNLP-3B	1.344	.641	.609	.500	.115	.230	.453	.318	.312	.130	.418	.375	.075	11,450	2.50

1/ THE CENTER OF THE DIMPLED HOLE SHALL NOT DEVIATE IN ANY DIRECTION FROM THE CENTER OF THE PLATE BUT AS DETERMINED BY THE RIVET HOLES, BY MORE THAN .005.

2/ DIMPLED RIVET HOLE TOLERANCE FOR Ø P IS +.015 - .000.

APPROVED 9 MAR 64 REVISED © 30 SEP 87

FED SUP CLASS  
5310

FED SUP CLASS  
5310USER ACTIVITIES:  
ARMY-CR,MREVIEWER ACTIVITIES:  
DLA-IS

1. **MATERIAL:** CARBON STEEL, COMPOSITIONS 1035 (UNS G10350), 1040 (UNS G10400) AND 1050 (UNS G10500), IN ACCORDANCE WITH QQ-S-635; 1042 (UNS G10420), 1137 (UNS G11370). IN ACCORDANCE WITH ASTM A29. COMPOSITION 11L37 (UNS G11374) IN ACCORDANCE WITH ASM 5020. ALLOY STEEL, GRADES 4130 (UNS G41300), 4340 (UNS G43400) AND 8740 (UNS G87400), IN ACCORDANCE WITH ASTM A29. INSERT-NON-METALLIC, NYLON OR EQUIVALENT.
2. **FINISH:** CADMIUM PLATE IN ACCORDANCE WITH QQ-P-416, TYPE 11, CLASS 2.
3. **DIMENSIONING AND TOLERANCING:** DIMENSIONING AND TOLERANCING SHALL BE IN ACCORDANCE WITH ANSI Y14.5M.
4. **HARDNESS:** 35HRC, MAX.
5. **THREADS:** THREADS IN ACCORDANCE WITH MIL-S-8879.
6. **SURFACE TEXTURE:** SURFACE TEXTURE, UNLESS OTHERWISE SPECIFIED, SHALL NOT EXCEED 125 MICROINCHES, IN ACCORDANCE WITH ANSI B46.1.
7. **VIBRATION LIFE:** MINIMUM VIBRATION LIFE REQUIREMENT SHALL BE THREE TIMES AVERAGE VIBRATION LIFE IN ACCORDANCE WITH PROCUREMENT SPECIFICATION.
8. **EDGES:** BREAK ALL SHARP EDGES AND REMOVE ALL HANGING BURRS AND SLIVERS.
9. **PART NUMBER:** THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE 1.

EXAMPLE: MS21080-4  
 └───┬─── DASH NUMBER  
 └───┴─── BASIC MS NUMBER

MS21080-4 INDICATES: NUT, SELF-LOCKING, PLATE, ONE LUG, NON-METALLIC INSERT, STEEL;  
 125 KSI FTU, 250°F; .250-28 UNF-3B; PLAIN 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 JA 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.

**INTERCHANGEABILITY RELATIONSHIP**

MS21080 NUTS CAN UNIVERSALLY REPLACE NAS1025 NUTS OF LIKE MATERIAL, THREAD SIZE, PLATING LUBRICANTS (DRY FILM OR NON-DRY FILM), RIVET SPACING AND FASTENING METHOD (PLAIN RIVET HOLES; DIMPLED OR COUNTERSUNK RIVET HOLES OR PROJECTION WELDING), BUT THESE NAS1025 NUTS CANNOT UNIVERSALLY REPLACE MS21080 NUTS.

**INTERCHANGEABILITY TABLE**

CANCELLED PART NUMBERS	SUBSTITUTIVE PART NUMBERS
NAS1025AD6	MS21080-06
NAS1025N06K	MS21080-06K
NAS1025N08	MS21080-08
NAS1025N08K	MS21080-08K
NAS1025N3	MS21080-3
NAS1025N3K	MS21080-3K
NAS1025N4	MS21080-4
NAS1025N4K	MS21080-4K
NAS1025N5	MS21080-5
NAS1025N5K	MS21080-5K
NAS1025N6	MS21080-6
NAS1025N6K	MS21080-6K

NAVY-AS Other Govt ARMY-AV AIR FORCE-II	INTERNATIONAL INTEREST	TITLE <b>NUT, SELF-LOCKING, PLATE,          ONE LUG, NON-METALLIC INSERT,          STEEL, 125 KSI FTU, 250°F</b>	<b>MILITARY STANDARD</b>
			<b>MS 21080</b>
PROCUREMENT SPECIFICATION <b>MIL-N-25027</b>	SUPERSEDES: <b>NAS 1025 (SEE STATUS NOTE)</b>	PAGE 2 OF 2	

DD FORM 13 MAY 73 **672-1** (COORDINATED)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

5310-1600

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