

FED SUP CLASS
5310

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AMSC N/A

REVIEWER ACTIVITIES
DLA-1S

USER ACTIVITIES
ARMY-CR,MI

PA NAVY-AS
Other Cost:
ARMY-AV
AIR FORCE-II
PROCUREMENT SPECIFICATION
MIL-N-25027

SUPERSEDES
NAS 687, NAS 1032 (IN PART)

ENTIRE STANDARD REVISED

TITLE
NUT, SELF-LOCKING, PLATE, ONE LUG,
FLOATING, LOW HEIGHT, CRES
125 KSI FTU, 450° & 800° F

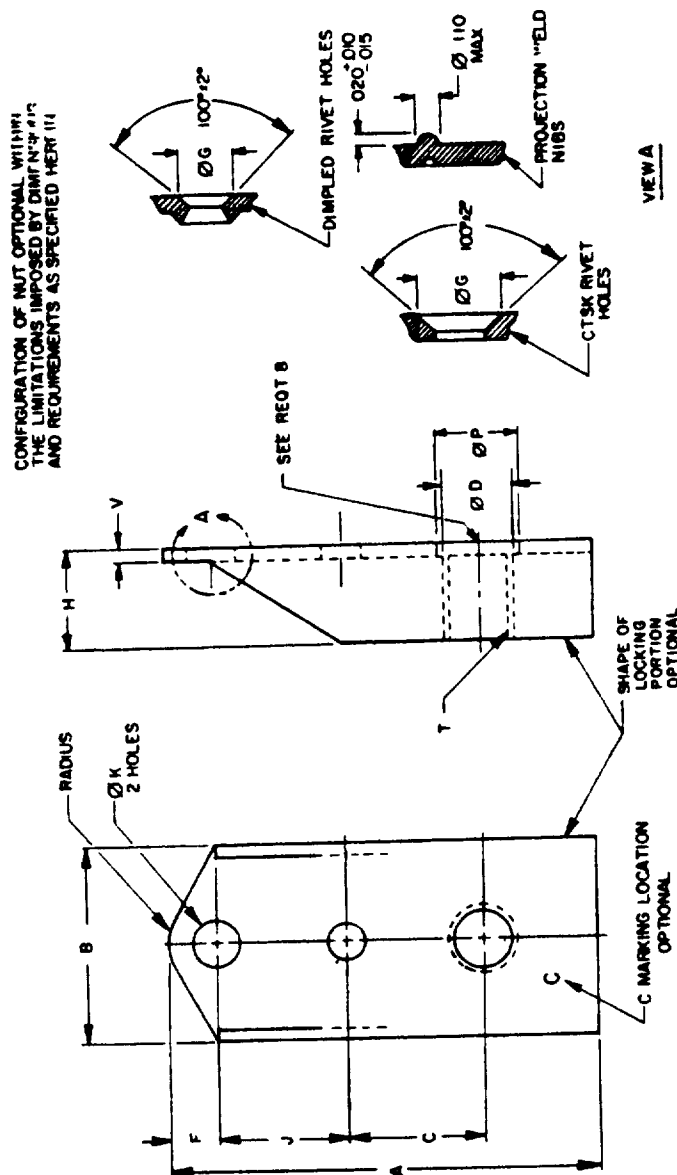
MILITARY STANDARD
MS21062

PAGE 1 OF 3

DD FORM 672-1 (COORDINATED)

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5310-1572



VIEW A

TABLE 1 DIMENSIONS AND DIMENSIONS

450° F	TYPE OR DIMPLED HOLES	WELDING PROTECTIONS	PLAN PROJECTIONS	WELDING PROJECTIONS	T	A	B	C	D	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A	1.0A
1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B	1.0B
1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C	1.0C
1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D	1.0D
1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E	1.0E
1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F	1.0F
1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G	1.0G
1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H	1.0H
1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I	1.0I
1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J	1.0J
1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K	1.0K
1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L	1.0L
1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M	1.0M
1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N	1.0N
1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O	1.0O
1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P	1.0P
1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q	1.0Q
1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R	1.0R
1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S	1.0S
1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T	1.0T
1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U	1.0U
1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V
1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W	1.0W
1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X	1.0X
1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y	1.0Y
1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z	1.0Z

MINIMUM "T" NOT SPECIFIED, LIMITED ONLY BY STRENGTH REQUIREMENTS OF SPECIFICATION
COMPLIANT RIVET HOLE TOLERANCE PER Ø 1" IS ± 0.015 - 0.00

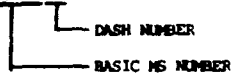
APPROVED 23 JUL 64 REVISED (E) 30 SEP 87

REF SUP CLASS
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REQUIREMENTS

1. MATERIAL CORROSION RESISTANT STEEL, TYPE A286, (UNS S66286) IN ACCORDANCE WITH AMS5525, AMS5732 OR AMS5737
2. FINISH ONLY 800°F NUTS SILVER PLATE ALL THREADED SURFACES OF NUT ELEMENT IN ACCORDANCE WITH AMS 2410 THREADS SHALL SHOW COMPLETE COVERAGE SILVER PLATING ON ALL OTHER SURFACES OPTIONAL TARNISHING OR DISCOLORATION OF SILVER NOT CAUSE FOR REJECTION
3. LUBRICANT ONLY 450°F NUTS DRY FILM LUBRICANT IN ACCORDANCE WITH MIL-N-25027
4. DIMENSIONING AND TOLERANCING DIMENSIONING AND TOLERANCING SHALL BE IN ACCORDANCE WITH ANSI Y14.5M
5. HARDNESS 49HRC, MAX
6. THREADS THREADS BEFORE LUBRICATION IN ACCORDANCE WITH MIL-S-8879.
7. SURFACE TEXTURE: SURFACE TEXTURE, UNLESS OTHERWISE SPECIFIED, SHALL NOT EXCEED 125 MICROINCHES, IN ACCORDANCE WITH AMS B46.1.
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. PERFORMANCE SEE PROCUREMENT SPECIFICATION, EXCEPT 450°F DRY FILM LUBRICATED NUTS LIMITED TO FIVE REUSE CYCLES.
10. FLOAT OF NUT PORTION. FLOAT OF NUT PORTION OF ASSEMBLY SHALL NOT BE LESS THAN .030 RADIALY FROM CENTERED POSITION NUT ELEMENT SHALL BE CAPABLE OF ENGAGEMENT WITH BOLT IN THE MAXIMUM MISALIGNED POSITION.
11. PART NUMBER. THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE I

EXAMPLE: MS21062LAK



MS21062LAK INDICATES NUT, SELF-LOCKING, PLATE, ONE LUG, FLOATING, LOW HEIGHT, CRES, 125 KSI Ftu, 450°F; DRY FILM LUBRICATION, 250-28 UNF-3B, 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 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

PA NAVY-AS	INTERNATIONAL INTEREST	TITLE	MILITARY STANDARD
Other Cust ARMY-AV		NUT, SELF-LOCKING, PLATE, ONE LUG, FLOATING, LOW HEIGHT, CRES, 125 KSI FTU, 450°F & 800°F	MS 21062
AIR FORCE-II			
PROCUREMENT SPECIFICATION MIL-N-25027	SUPERSEDES	NAS 687, NAS 1032 (IN PART)	PAGE 2 OF 3

DD FORM 672-1 (COORDINATED)

PREVIOUS EDITIONS OF THIS STANDARD

5310-1572

INSTR. ACTIVITIES
ARMY-CR, M1REVIEWER ACTIVITIES
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FED SUP CLASS
5 3 1 0INTERCHANGEABILITY RELATIONSHIP

MS21062 NUTS CAN UNIVERSALLY REPLACE NAS687 AND NAS1032 NUTS OF LIKE MATERIAL, THREAD SIZE, LUBRICANT (DRY FILM OR SILVER PLATE), RIVET SPACING AND FASTENING METHOD (PLAIN RIVET HOLES; DRILLED OR COUNTERSUNK RIVET HOLES OR PROJECTION WELDING), BUT THESE NAS687 AND NAS1032 NUTS CANNOT UNIVERSALLY REPLACE MS21062 NUTS

INTERCHANGEABILITY TABLE

CANCELLED PART NUMBERS		SUBSTITUTIVE PART NUMBERS
NAS687CD4	NAS1032CD4	MS21062-04
NAS687CD4K	NAS1032CD4K	MS21062-04K
---	NAS1032CD4W	MS21062-04W
NAS687CD4H	---	MS21062L04
NAS687CD4HK	---	MS21062L04K
---	---	MS21062L04W
NAS687CD6	NAS1032CD6	MS21062-06
NAS687CD6K	NAS1032CD6K	MS21062-06K
---	NAS1032CD6W	MS21062-06W
NAS687CD6H	---	MS21062L06
NAS687CD6HK	---	MS21062L06K
---	---	MS21062L06W
NAS687CD8	NAS1032CD8	MS21062-08
NAS687CD8K	NAS1032CD8K	MS21062-08K
---	NAS1032CD8W	MS21062-08W
NAS687CD8H	---	MS21062L08
NAS687CD8HK	---	MS21062L08K
---	---	MS21062L08W
NAS687C3	NAS1032C3	MS21062-3
NAS687C3K	NAS1032C3K	MS21062-3K
---	NAS1032C3W	MS21062-3W
NAS687C3H	---	MS21062L3
NAS687C3HK	---	MS21062L3K
---	---	MS21062L3W
NAS687C4	NAS1032C4	MS21062-4
NAS687C4K	NAS1032C4K	MS21062-4K
---	NAS1032C4W	MS21062-4W
NAS687C4H	---	MS21062L4
NAS687C4HK	---	MS21062L4K
---	---	MS21062L4W
NAS687C5	NAS1032C5	MS21062-5
NAS687C5K	NAS1032C5K	MS21062-5K
---	NAS1032C5W	MS21062-5W
NAS687C5H	---	MS21062L5
NAS687C5HK	---	MS21062L5K
---	---	MS21062L5W
---	NAS1032C6	MS21062-6
---	NAS1032C6W	MS21062-6W
---	NAS1032C8	MS21062-8
---	NAS1032C8W	MS21062-8W

USER ACTIVITIES
ARMY-CR, MIREVIEWER ACTIVITIES
DLA - IS

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PA NAVY-AS Other Code ARMY-AV AIR FORCE-11	INTERNATIONAL INTEREST	TITLE NUT, SELF-LOCKING, PLATE, ONE LUG, FLOATING, LOW HEIGHT, CRES, 125KSI FTU, 450°F & 800°F	MILITARY STANDARD
PROCUREMENT SPECIFICATION MIL-N-25027	SUPERSEDES NAS 687, NAS 1032 (IN PART)	MS21062	
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