

D-09-03

FED. SUP CLASS
 5310

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USER ACTIVITIES:
 ARMY-CR, MI

P.A. NAVY-AS Other Cust ARMY-AV AIR FORCE-II	INTERNATIONAL INTEREST	TITLE NUT, SELF-LOCKING, PLATE, ONE LUG, FLOATING, LOW HEIGHT, CRES 125 KSI FTU, 450° & 800°F
PROCUREMENT SPECIFICATION MIL-N-25027	SUPERSEDES: NAS 687, NAS 1032 (IN PART)	

MILITARY STANDARD
MS21062

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DD FORM 672-1 (COORDINATED)

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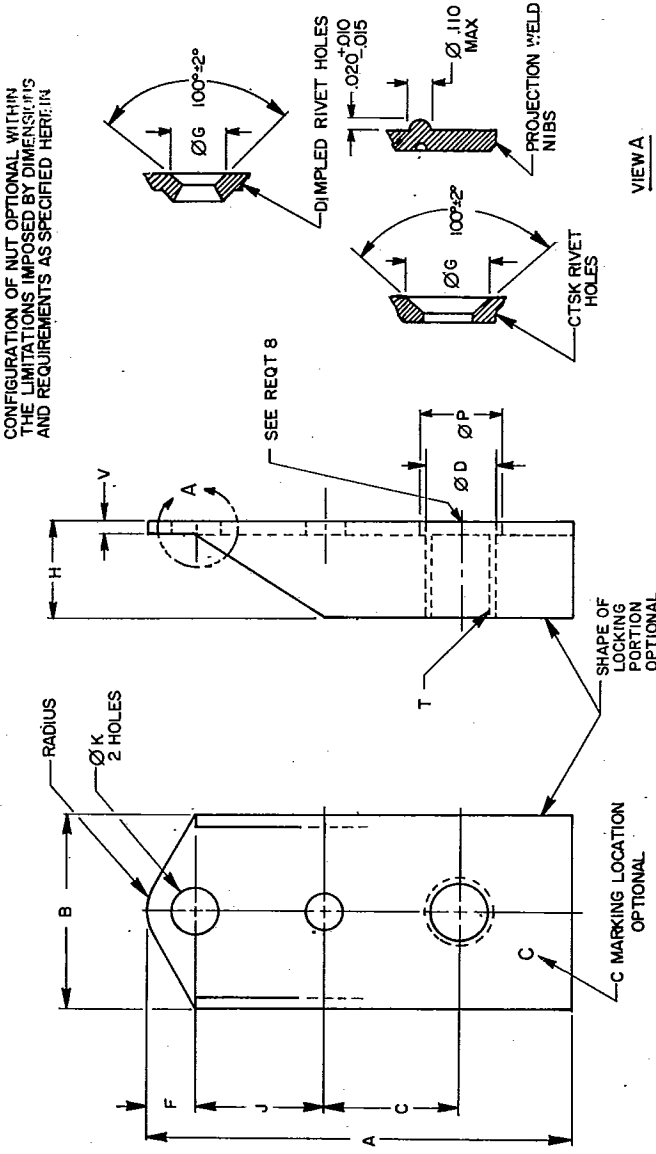


TABLE 1. DASH NUMBERS AND DIMENSIONS

DASH NUMBERS				THREAD SIZES		A		B		C		Ø D		F		Ø G		J		Ø P		V		AXIAL STRENGTH LBS/MIN		HEIGHT LBS/100	
450°F				800°F		MAX		MIN		MAX		MIN		MIN		MAX		MAX		MAX		MAX		MAX		MAX	
PLAIN HOLES	CTSK OR DIMPLED HOLES	WELDING PROJECTIONS	PLAIN HOLES	CTSK OR DIMPLED HOLES	WELDING PROJECTIONS																						
L04	L04K	L04W	-04	-04K	-04W	1.051	1.051	.422	.290	.344	.344	.168	.168	.100	.100	.200	.200	.312	.312	.270	.270	.172	.172	750	750	.52	.52
L06	L06K	L06W	-06	-06K	-06W	1.051	1.051	.422	.290	.344	.344	.168	.168	.100	.100	.200	.200	.312	.312	.270	.270	.198	.198	1,130	1,130	.53	.53
L08	L08K	L08W	-08	-08K	-08W	1.051	1.051	.422	.290	.344	.344	.168	.168	.100	.100	.200	.200	.312	.312	.270	.270	.224	.224	1,720	1,720	.54	.54
L10	L10K	L10W	-10	-10K	-10W	1.051	1.051	.422	.290	.344	.344	.168	.168	.100	.100	.200	.200	.312	.312	.270	.270	.250	.250	2,460	2,460	.56	.56
L12	L12K	L12W	-12	-12K	-12W	1.306	1.306	.531	.350	.500	.500	.254	.254	.125	.125	.230	.230	.312	.312	.330	.330	.310	.310	4,580	4,580	1.00	1.00
L14	L14K	L14W	-14	-14K	-14W	1.396	1.396	.641	.412	.500	.500	.317	.317	.125	.125	.230	.230	.312	.312	.392	.392	.372	.372	7,390	7,390	1.44	1.44
L16	L16K	L16W	-16	-16K	-16W	1.422	1.422	.703	.656	.500	.500	.380	.380	.125	.125	.230	.230	.312	.312	.487	.487	.438	.438	11,450	11,450	2.00	2.00
L18	L18K	L18W	-18	-18K	-18W	1.800	1.800	.859	.796	.625	.625	.504	.504	.125	.125	.230	.230	.500	.500	.550	.550	.500	.500	15,450	15,450	2.50	2.50

1/ MINIMUM IF NOT SPECIFIED, LIMITED ONLY BY STRENGTH REQUIREMENTS OF SPECIFICATION.
 2/ DIMPLED RIVET HOLE TOLERANCE FOR Ø P IS +.015 -.000.

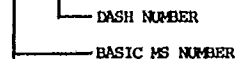
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REQUIREMENTS:

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 ANSI 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 RADIALLY 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: MS21062L4K



MS21062L4K 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.

APPROVED 23 JUL 64 / REVISED (E) FOR CHANGES SEE PAGES 1,2 AND 3

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

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INTERCHANGEABILITY 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; DIMPLED 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
NAS687C04	NAS1032C04	MS21062-04
NAS687C04K	NAS1032C04K	MS21062-04K
---	NAS1032C04W	MS21062-04W
NAS687C04M	---	MS21062L04
NAS687C04MK	---	MS21062L04K
---	---	MS21062L04W
NAS687C06	NAS1032C06	MS21062-06
NAS687C06K	NAS1032C06K	MS21062-06K
---	NAS1032C06W	MS21062-06W
NAS687C06M	---	MS21062L06
NAS687C06MK	---	MS21062L06K
---	---	MS21062L06W
NAS687C08	NAS1032C08	MS21062-08
NAS687C08K	NAS1032C08K	MS21062-08K
---	NAS1032C08W	MS21062-08W
NAS687C08M	---	MS21062L08
NAS687C08MK	---	MS21062L08K
---	---	MS21062L08W
NAS687C3	NAS1032C3	MS21062-3
NAS687C3K	NAS1032C3K	MS21062-3K
---	NAS1032C3W	MS21062-3W
NAS687C3M	---	MS21062L3
NAS687C3MK	---	MS21062L3K
---	---	MS21062L3W
NAS687C4	NAS1032C4	MS21062-4
NAS687C4K	NAS1032C4K	MS21062-4K
---	NAS1032C4W	MS21062-4W
NAS687C4M	---	MS21062L4
NAS687C4MK	---	MS21062L4K
---	---	MS21062L4W
NAS687C5	NAS1032C5	MS21062-5
NAS687C5K	NAS1032C5K	MS21062-5K
---	NAS1032C5W	MS21062-5W
NAS687C5M	---	MS21062L5
NAS687C5MK	---	MS21062L5K
---	---	MS21062L5W
---	NAS1032C6	MS21062-6
---	NAS1032C6W	MS21062-6W
---	NAS1032C8	MS21062-8
---	NAS1032C8W	MS21062-8W

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