

UNFR ACTIVITIES
ARMY-CR, MI

REVIEWER ACTIVITIES
AIR FORCE - 82
DLA-IS

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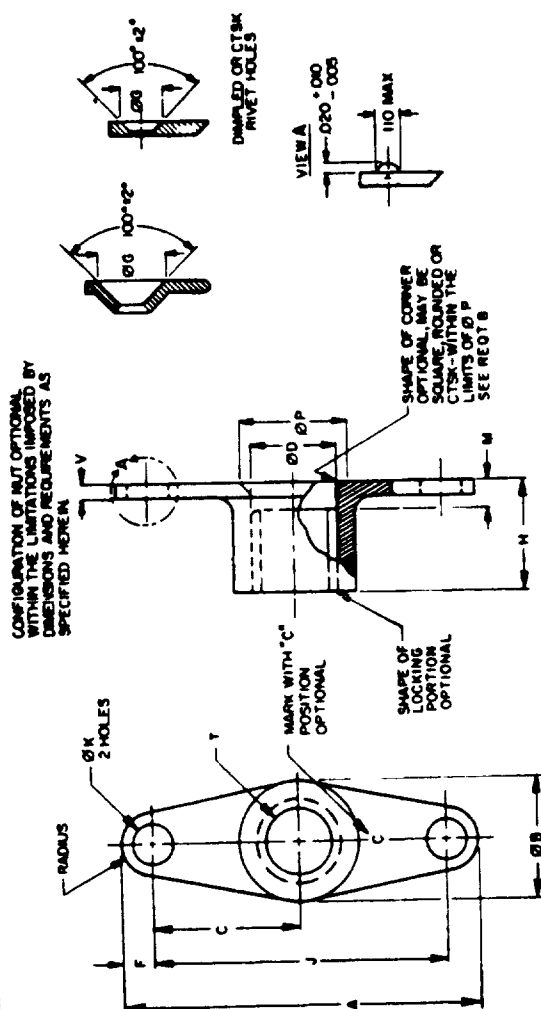


TABLE 1. FACT MARKERS AND DIMENSIONS

CASE MEMBERS		600°/°		T THERMO STRESS	A MM	B MM	C + 0.05	D MM	E MM	F MM	G ± 0.10	H MM	I V + 0.05 - 0.00	J V + 0.02	K MM	L V + 0.05 - 0.00	M MM	N MM	O P MM	P V MM	Q P MM	R MM	S P MM	T P MM	U P MM	V P MM	W P MM	X P MM	Y P MM	Z P MM
PLAIN HOLES	450°/° UP OR DOWN OR MELTING PROJECTION	PLAIN HOLES	UP OR DOWN OR MELTING PROJECTION																											
L04	L04R	-04	-04R	112-40 UNLC-3R	948	280	195	344	---	100	200	141	099	048	047	047	750	14												
L06	L06R	-06	-06R	118-12 UNLC-3R	948	285	239	344	---	100	200	171	098	048	047	047	1,130	18												
L08	L08R	-08	-08R	164-12 UNLC-3R	948	297	277	344	148	100	200	250	098	048	047	047	1,720	78												
L11	L11R	-11	-11R	190-12 UNLC-3R	948	328	308	344	184	100	200	250	098	048	047	047	2,640	29												
L4	L4R	-4	-4R	250-20 UNLP-3R	1,240	414	375	500	254	100	200	281	098	048	047	047	4,580	51												
L5	L5R	-5	-5R	3125-24 UNLP-3R	1,292	505	485	500	317	125	230	328	1,000	1,30	042	042	7,390	40												
L6	L6R	-6	-6R	375-24 UNLP-3R	1,292	618	598	500	378	125	230	344	1,000	1,30	042	042	11,450	111												
L7	L7R	-7	-7R	4175-20 UNLP-3R	677	726	695	6	442	156	230	390	1,175	1,61	062	062	15,450	1,84												
L8	L8R	-8	-8R	500-20 UNLP-3R	1,462	659	796	621	52	156	230	609	1,250	16	062	062	21,110	4,80												
L9	L9R	-9	-9R	5625-18 UNLP-3R	1,727	951	902	688	586	156	230	658	1,375	161	062	062	26,810	1,70												
L10	L10R	-10	-10R	6275-18 UNLP-3R	1,872	1,016	964	750	646	156	230	785	1,500	161	062	062	34,130	8,40												

MINIMUM 1/4" NOT SPECIFIED LIMITED ONLY BY STRAIGHT REQUIREMENTS IF SPECIFICATION
CONTROL OF THE TAPPED HOLE SHALL NOT DEVIATE IN ANY DIRECTION FROM THE CENTER OF THE
PLATE BUT AS DETERMINED BY THE ADJET HOLE IS MORE THAN .005
TOLERANCE WHILE TOLERANCE FOR Ø .75" IS ± .015 .000

APPROVED 12 MIN 84

REVISED (F) 30 SEP 87

— **IN** —

REVISED (F) 30 SEP 87

(F) ENTIRE STANDARD REVISED

PA
NAVY-AS
Other Cast
ARMY-AV
AIR FORCE-II

**INTERNATIONAL
INTEREST**

**NUT, SELF-LOCKING, PLATE, TWO LUG,
LOW HEIGHT, CRES, 125 KSI FtU,
450° AND 800°F**

PROCUREMENT SPECIFICATION
MIL-N-25027

SUPERSEDES
AN362, AN366, NAS680, NAS1023 IN PART

MILITARY STANDARD
MS21048

PAGE _____ OF _____

5310-1532

DD FORM 672-1 (COORDINATED)

PREVIOUS TO ONE OF THE FOLLOWING PERSONS:

5310-1532

FED SUP CLASS
5310

REQUIREMENTS

1. MATERIAL CORROSION RESISTANT STEEL, TYPE A286, (UNS S46286, IN ACCORDANCE WITH AMS5525, AMS5732 OR AMS737)
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 DRAINING 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, COUNTERBORE TREAD "D" DIAMETER X .062 DEEP MINIMUM TREAD RELIEF, ON SIZE 138 AND SMALLER, COUNTERSINK TO "P" DIAMETER WITHIN THE LIMITS OF D, P AND M.
9. PERFORMANCE SEE PROCUREMENT SPECIFICATION, EXCEPT 450°F DRY FILM LUBRICATED NUTS LIMITED TO FIVE REUSE CYCLES.
10. PART NUMBER THE PART NUMBER SHALL CONSIST OF THE BASIC NS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE I

EXAMPLE MS21048L4K



MS21048L4K INDICATES NUT, SELF-LOCKING, PLATE, TWO LUG, LOW HEIGHT, CRES, 125 KSI Ftu,
450°F, DRY FILM LUBRICATION, 250-28 UNUP-3B,
COUNTERSINK 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 CPL 25027 SHALL BE USED

APPROVED 12 JUN 64 REVISED (F) FOR CHANGES SEE PAGES 1, 2 AND 3

NAVY-AS Other Code ARMY-AV AIR FORCE-II	INTERNATIONAL DIFFERENT	TITLE NUT, SELF-LOCKING, PLATE, TWO LUG, LOW HEIGHT, CRES, 125 KSI Ftu, 450° AND 800°F	MILITARY STANDARD
			MS21048
PROCUREMENT SPECIFICATION MIL-N-25027	SUPERSEDES AN362, AN366, NAS680, NAS1023 IN PART	PAGE 2 OF 3	

DD FORM 672-1 (COORDINATED)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

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FED SUP CLASS
5310

INTERCHANGEABILITY RELATIONSHIP

MS21048 NUTS CAN UNIVERSALLY REPLACE AN362, AN366, NAS680 AND NAS1023 NUTS OF LIKE MATERIAL, THREAD SIZE, LUBRICANT (DRY FILM OR NON-DRY FILM LUBRICANT), AND FASTENING METHOD (PLAIN RIVET BOLTS; DIMPLED OR COUNTERSUNK RIVET BOLTS OR PROJECTION WELDING), BUT THESE AN362, AN366, NAS680 AND NAS1023 NUTS CANNOT UNIVERSALLY REPLACE MS21048 NUTS

INTERCHANGEABILITY TABLE

CANCELLED PART NUMBER	SUBSTITUTIVE PART NUMBER	CANCELLED PART NUMBER	SUBSTITUTIVE PART NUMBER
MS1023CD4	MS21048-04	MS1023C6	MS21048-6
MS1023CD4K	MS21048-04K	MS1023CDM	MS21048-6M
MS1023CD4W	MS21048-04W	MS1023C7	MS21048-7
MS1023CD6	MS21048-06	MS1023C7W	MS21048-7W
MS1023CD6K	MS21048-06K	MS1023C8	MS21048-8
MS1023CD6W	MS21048-06W	MS1023CDM	MS21048-8M
MS1023CD8	MS21048-08	MS1023C9	MS21048-9
MS1023CD8K	MS21048-08K	MS1023C9W	MS21048-9W
MS1023CD8W	MS21048-08W	MS1023C10	MS21048-10
MS1023C3	MS21048-3	MS1023C10W	MS21048-10W
MS1023C3K	MS21048-3K	—	—
MS1023C3W	MS21048-3W	—	—
MS1023C4	MS21048-4	—	—
MS1023C4K	MS21048-4K	—	—
MS1023C4W	MS21048-4W	—	—
MS1023C5	MS21048-5	—	—
MS1023C5K	MS21048-5K	—	—
MS1023C5W	MS21048-5W	—	—

INTERCHANGEABILITY TABLE

CANCELLED PART NUMBERS			SUBSTITUTIVE PART NUMBERS	CANCELLED PART NUMBERS			SUBSTITUTIVE PART NUMBERS
—	—	NAS680C4	MS21048-04	—	—	NAS680C3M	MS21048L3
—	—	NAS680C4K	MS21048-04K	—	—	NAS680C3W	MS21048L3W
—	—	—	MS21048-04W	—	—	—	MS21048L3M
—	—	NAS680C4M	MS21048L04	AN362C428	AN366MC1032	NAS680C4	MS21048-4
—	—	NAS680C4W	MS21048L04K	—	—	NAS680C4K	MS21048-4K
—	—	—	MS21048L04W	AN362MC428	—	—	MS21048-4W
AN362C632	—	NAS680C6	MS21048-06	—	AN366MC428B	—	MS21048L4M
—	—	NAS680C6K	MS21048-06K	—	—	NAS680C4M	MS21048L4
AN362MC632	—	—	MS21048-06W	—	AN366MC428	NAS680C4W	MS21048L4K
—	AN366MC632B	—	MS21048L06	—	—	—	MS21048L4W
—	—	NAS680C6M	MS21048L06K	AN362C524	—	NAS680C5	MS21048-5
—	—	NAS680C6W	MS21048L06W	—	—	NAS680C5K	MS21048-5K
AN362C832	—	—	MS21048-08	AN362MC524	—	—	MS21048-5M
—	AN366MC832	NAS680C8	MS21048-08K	—	—	NAS680C5M	MS21048L5
—	—	NAS680C8K	MS21048-08W	—	—	NAS680C5W	MS21048L5K
AN362MC832	—	—	MS21048L08	—	AN366MC524	—	MS21048L5M
—	AN366MC832B	—	MS21048L08K	AN362C624	—	NAS680C6	MS21048-6
—	—	NAS680C8M	MS21048L08W	AN362MC624	—	—	MS21048-6M
—	—	NAS680C8W	MS21048L08M	—	—	NAS680C6M	MS21048L6
—	AN366MC832	—	MS21048-3	—	—	NAS680C6W	MS21048L6K
AN362C1032	—	NAS680C3	MS21048-3K	—	—	—	MS21048-7
—	—	NAS680C3K	MS21048-3W	—	—	—	MS21048-7M
AN362MC1032	—	—	MS21048L3M	—	—	—	MS21048L7
—	AN366MC1032B	—	—	—	—	—	MS21048L7M

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PAGE 3 OF 3

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