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 AIR FORCE - 82
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PA NAVY-AS	INTERNATIONAL INTEREST	TITLE
Other Cust ARMY-AV		NUT, SELF-LOCKING, PLATE, CORNER, REDUCED RIVET SPACING, LOW HEIGHT, STEEL, 125KSI F _{tu} , 450°F
AIR FORCE-II		
PROCUREMENT SPECIFICATION MIL-N-25027	SUPERSEDES	NAS 698

MILITARY STANDARD
MS21073
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CONFIGURATION OF NUT OPTIONAL WITHIN THE LIMITATIONS IMPOSED BY DIMENSIONS AND REQUIREMENTS SPECIFIED HEREIN.

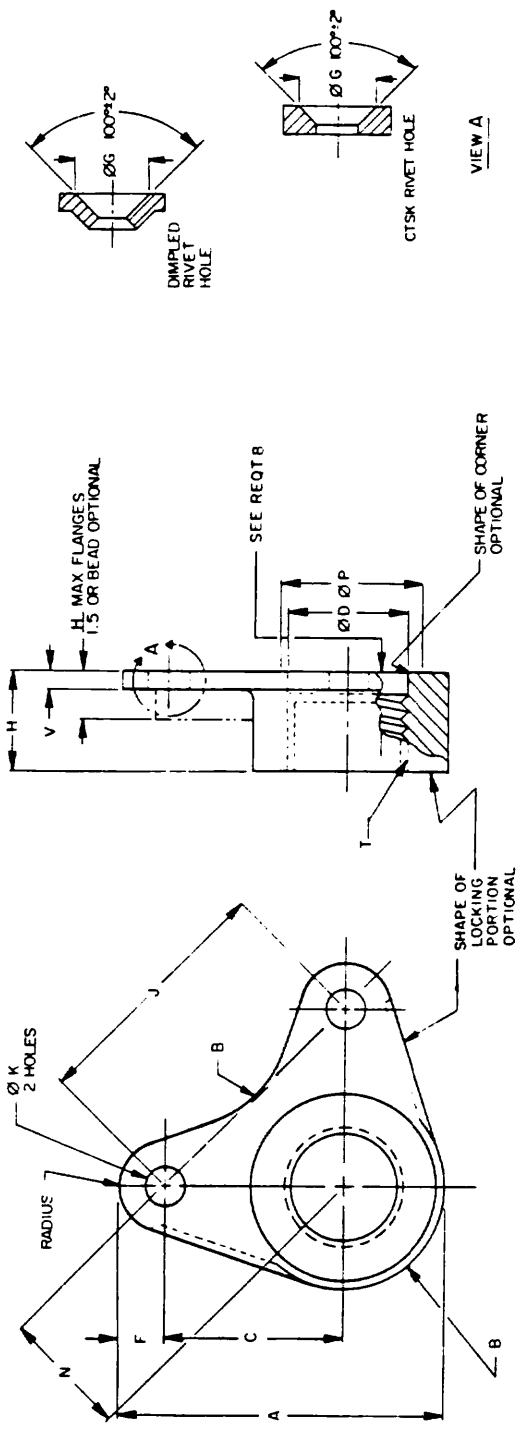


TABLE 1. DASH NUMBERS AND DIMENSIONS

DASH NUMBER	PLAIN RIVET HOLES		CLAMPING OR DIMPLED RIVET HOLES		T THREAD SIZES	A MAX	B MAX MIN		C ±.005	D MIN	F MIN	G ±.010	H/ MAX	J ±.002	K/ ±.005 - .000	N MAX	P MAX	V MAX	ACTUAL STRENGTH LBS/MIN	HEIGHT LBS/100
	NON-DRY FILM LUBRICANT	DRY FILM LUBRICANT	NON-DRY FILM LUBRICANT	DRY FILM LUBRICANT			MAX	MIN												
-02	L02	—	—	—	.086-56 UNJC-3B	.288	.092	.081	.125	—	.071	2/	.110	.177	.066	.120	.130	.035	440	.07
-03	L03	—	—	—	.099-48 UNJC-3B	.316	.125	.092	.138	—	.071	2/	.125	.196	.066	.130	.143	.035	550	.09
-04	L04	-04K	L04K	—	.112-40 UNJC-3B	.448	.156	.096	.203	—	.089	.200	.143	.287	.098	.215	.166	.040	750	.11
-06	L06	-06K	L06K	—	.138-32 UNJC-3B	.443	.156	.121	.218	—	.089	.200	.171	.308	.098	.232	.206	.047	1,130	.14
-08	L08	-08K	L08K	—	.164-32 UNJC-3B	.497	.163	.125	.234	.168	.100	.200	.250	.331	.098	.210	.248	.047	1,720	.21
-3	L3	-3K	L3K	—	.190-32 UNJF-3B	.526	.176	.156	.250	.194	.100	.200	.250	.354	.098	.215	.274	.047	2,460	.26
-4	L4	-4K	L4K	—	.250-28 UNJF-3B	.603	.222	.200	.281	.254	.100	.200	.281	.398	.098	.233	.344	.055	4,580	.45
-5	L5	-5K	L5K	—	.3125-24 UNJF-3B	.757	.271	.250	.359	.317	.125	.230	.328	.508	.130	.280	.417	.065	7,390	.80
-6	L6	—	—	—	.375-24 UNJF-3B	.870	.311	.305	.414	.379	.125	.230	.344	.585	.130	.303	.505	.075	11,450	1.92

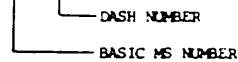
1/ MINIMUM "H" NOT SPECIFIED, LIMITED ONLY BY STRENGTH REQUIREMENTS OF SPECIFICATION.
 2/ SPACE WILL NOT PERMIT CLAMPING.
 3/ DIMPLED RIVET HOLE TOLERANCE: FOR Ø "K" IS ±.015 - .000.

APPROVED 6 APR 64 REVISED 30 SEP 87

REQUIREMENTS:

1. **MATERIAL:** CARBON STEEL, COMPOSITIONS 1035 (UNS G10350), 1040 (UNS G10400), AND 1050 (UNS G10500) IN ACCORDANCE WITH QQ-S-635; 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 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. **PART NUMBER:** THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE 1.

EXAMPLE: MS21073LAK



MS21073LAK INDICATES: NUT, SELF-LOCKING, PLATE, CORNER, REDUCED RIVET SPACING, LOW HEIGHT, STEEL; 125 KSI F_{tu}, 450° F; .250-28 UNF-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 3A EXTERNAL THREADS. THESE NUTS SHALL BE USED IN ACCORDANCE WITH THE LIMITATIONS OF MS13588. ONLY NUTS FOR WHICH THERE ARE QUALIFIED PRODUCTS LISTED ON QPL 25027 SHALL BE USED.

INTERCHANGEABILITY RELATIONSHIP

MS21073 NUTS CAN UNIVERSALLY REPLACE NAS698 NUTS OF LIKE MATERIAL, THREAD SIZE, LUBRICANT (DRY FILM OR NON-DRY FILM LUBRICANT), AND FASTENING METHOD (PLAIN RIVET HOLES; DIMPLED OR COUNTERSUNK RIVET HOLES), BUT THESE NAS698 NUTS CANNOT UNIVERSALLY REPLACE MS21073 NUTS.

INTERCHANGEABILITY TABLE

CANCELLED PART NUMBERS	SUBSTITUTIVE PART NUMBERS	CANCELLED PART NUMBERS	SUBSTITUTIVE PART NUMBERS
NAS698X02	MS21073-02	NAS698X3	MS21073-3
NAS698A02	MS21073L02	NAS698X3K	MS21073-3K
NAS698X03	MS21073-03	NAS698A3	MS21073L3
NAS698A03	MS21073L03	NAS698A3K	MS21073L3K
NAS698X04L	MS21073-04	NAS698X4	MS21073-4
NAS698X04LK	MS21073-04K	NAS698X4K	MS21073-4K
NAS698A04L	MS21073L04	NAS698A4	MS21073L4
NAS698A04LK	MS21073L04K	NAS698A4K	MS21073L4K
NAS698X06L	MS21073-06	NAS698X5	MS21073-5
NAS698X06LK	MS21073-06K	NAS698X5K	MS21073-5K
NAS698A06L	MS21073L06	NAS698A5	MS21073L5
NAS698A06LK	MS21073L06K	NAS698A5K	MS21073L5K
NAS698X08	MS21073-08	NAS698X6	MS21073-6
NAS698X08K	MS21073-08K	NAS698A6	MS21073L6
NAS698A08	MS21073L08		
NAS698A08K	MS21073L08K		

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