

THIS SPECIFICATION IS APPROVED FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE
DEPARTMENT OF DEFENSE

THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION
SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DOCS SPECIFIED IN
THE SOLICITATION: MIL-N-28077

DASH NUMBERS		PLAIN RIVET HOLES		COUNTERSINK OR DIMPLED RIVET HOLES		T THREAD SIZES	A MAX	B MAX MIN	C ± .005 MIN	D MIN	F MIN	G MIN	H MAX	J ± .002 MAX	K ± .005 MAX	N MAX	P MAX	V MAX	ADIAL STRENGTH LBS/IN	WEIGHT LBS/100	
NON-DRY FILM LUBRICANT	DRY FILM LUBRICANT	NON-DRY FILM LUBRICANT	DRY FILM LUBRICANT																		
-02	L02	—	—	—	—	006-06 UNLC-38	.288	.082	.081	.125	—	.071	2/	110	177	.006	.120	.130	.035	440	07
-03	L03	—	—	—	—	099-49 UNLC-38	.318	.125	.082	.136	—	.071	3/	125	186	.006	.130	.143	.035	550	09
-04	L04	—	—	—	—	112-40 UNLC-38	.448	.156	.086	.203	—	.086	.200	.143	.287	.008	.215	.166	.040	750	11
-06	L06	—	—	—	—	138-32 UNLC-38	.463	.156	.121	.218	—	.086	.300	.171	.308	.008	.332	.208	.047	1,130	14
-08	L08	—	—	—	—	164-32 UNLC-38	.487	.183	.125	.234	.188	.100	.300	.250	.331	.008	.318	.248	.047	1,720	21
-1	L1	—	—	—	—	190-32 UNLC-38	.528	.178	.156	.250	.194	.100	.300	.250	.354	.008	.315	.274	.047	2,460	26
-4	L4	—	—	—	—	250-28 UNLC-38	.603	.222	.200	.281	.254	.100	.300	.281	.388	.008	.333	.344	.056	4,860	45
-5	L5	—	—	—	—	3125-24 UNLC-38	.757	.275	.250	.359	.317	.125	.330	.328	.508	.130	.280	.417	.065	7,390	80
-6	L6	—	—	—	—	375-24 UNLC-38	.870	.331	.306	.414	.378	.125	.330	.344	.585	.130	.303	.505	.075	11,460	192

MINIMUM "H" NOT SPECIFIED, LIMITED ONLY BY STRENGTH REQUIREMENTS OF SPECIFICATION.
SPACE WILL NOT PERMIT COUNTERSINK
DIMPLED RIVET HOLE TOLERANCE FOR "K" IS +.015- .000.

INCH-POUND

(C) DENOTES CHANGE(S)

PREPARING ACTIVITY DLA-IS
CUSTOMERS ARMY- AV NAVY- AS
AIR FORCE- II DLA-

REVIEW B2,
USER CR, MI
PROJECT NUMBER: 5310-1857
DISTRIBUTION STATEMENT

MILITARY SPECIFICATION SHEET
TITLE
NUT, SELF-LOCKING, PLATE, CORNER,
REDUCED RIVET SPACING, LOW HEIGHT,
STEEL, 125KSI F_u, 450F

SPECIFICATION SHEET NUMBER
MS21073 1 FEB 84
REV 6
SUPERSEDING
MS21073 F 30 SEPT 87 (SEE NOTE 5)
AMSC- N/A FSC 5310

A. Approved for public release, distribution is unlimited

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THE REQUIREMENTS FOR ACQUIRING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DODDS SPECIFIED IN THE SOLICITATION: MIL-N-25027

THIS SPECIFICATION IS APPROVED FOR USE BY ALL DEPARTMENTS AND AGENCIES OF THE DEPARTMENT OF DEFENSE.

Form Approved
OMB No. 0704-0188

REQUIREMENTS.

1. **MATERIAL:** CARBON STEEL, COMPOSITIONS 1035 (UNS G10350), 1040 (UNS G10400), AND 1050 (UNS G10500) IN ACCORDANCE WITH ASTM A827 OR QQ-S-700; 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:** 40 HRC, 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/ASME B46.1
7. **LUBRICANT:** DRY FILM LUBRICANT APPROVED IN ACCORDANCE MIL-N-25027. NON-DRY FILM LUBRICANTS SHALL BE SOLUBLE IN THE CLEANER SPECIFIED IN MIL-S-8802.
8. **EDGES:** BREAK ALL SHARP EDGES AND REMOVE ALL BURRS
9. **COUNTERBORE/COUNTERSINK:** ON SIZE 164 AND LARGER, THREAD RELIEF SHALL BE .062 MINIMUM, ON SIZE 138 AND SMALLER, COUNTERSINK OR RADIUS WITHIN ".01"
10. **PART NUMBER:** THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE I.

EXAMPLE: MS21073L4K

— DASH NUMBER

— BASIC MS NUMBER

MS21073L4K 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 (DODDIS) 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 SECTIONAL 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 OPL 25027 SHALL BE USED.
5. MS21073 SUPERSEDES NAS8888

INTERCHANGEABILITY RELATIONSHIP

MS21073 NUTS CAN UNIVERSALLY REPLACE NAS888 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 NAS888 NUTS CANNOT UNIVERSALLY REPLACE MS21073 NUTS.

INTERCHANGEABILITY TABLE

CANCELLED PART NUMBERS	SUBSTITUTIVE PART NUMBERS	CANCELLED PART NUMBERS	SUBSTITUTIVE PART NUMBERS
NAS888H02	MS21073-02	NAS888X3	MS21073-3
NAS888H02	MS21073L02	NAS888X3K	MS21073-3K
NAS888H03	MS21073-03	NAS888A3	MS21073L3
NAS888H03	MS21073L03	NAS888A3K	MS21073L3K
NAS888H04	MS21073-04	NAS888X4	MS21073-4
NAS888H04LK	MS21073-04K	NAS888X4K	MS21073-4K
NAS888H04L	MS21073L04	NAS888A4	MS21073L4
NAS888H04LK	MS21073L04K	NAS888A4K	MS21073L4K
NAS888H06L	MS21073-06	NAS888X5	MS21073-5
NAS888H06LK	MS21073-06K	NAS888X5K	MS21073-5K
NAS888H06L	MS21073L06	NAS888A5	MS21073L5
NAS888H06LK	MS21073L06K	NAS888A5K	MS21073L5K
NAS888H08	MS21073-08	NAS888X6	MS21073-6
NAS888H08K	MS21073-08K	NAS888A6	MS21073L6
NAS888H08	MS21073L08		
NAS888H08K	MS21073L08K		

PREPARING ACTIVITY: DLA-IS

CUSTOMERS: ARMY-AY

NAVY-AS

AIR FORCE-II

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REVIEW: B2,

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SPECIFICATION SHEET NUMBER

MS21073

1 FEB 84
REV C

SUPERSEDED

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