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AMSC N/A

REVIEWER ACTIVITIES:
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P.A. NAVY-AS
Other Cust
ARMY-AV
AIR FORCE-11
PROCUREMENT SPECIFICATION
MIL-N-25027

INTERNATIONAL INTEREST

TITLE
**NUT, SELF-LOCKING, PLATE, CORNER,
100° CSK, LOW HEIGHT, ALLOY STEEL,
125 KSI FTU, 450° F**

SUPERSEDES
NAS 685

**MILITARY STANDARD
MS 21057**

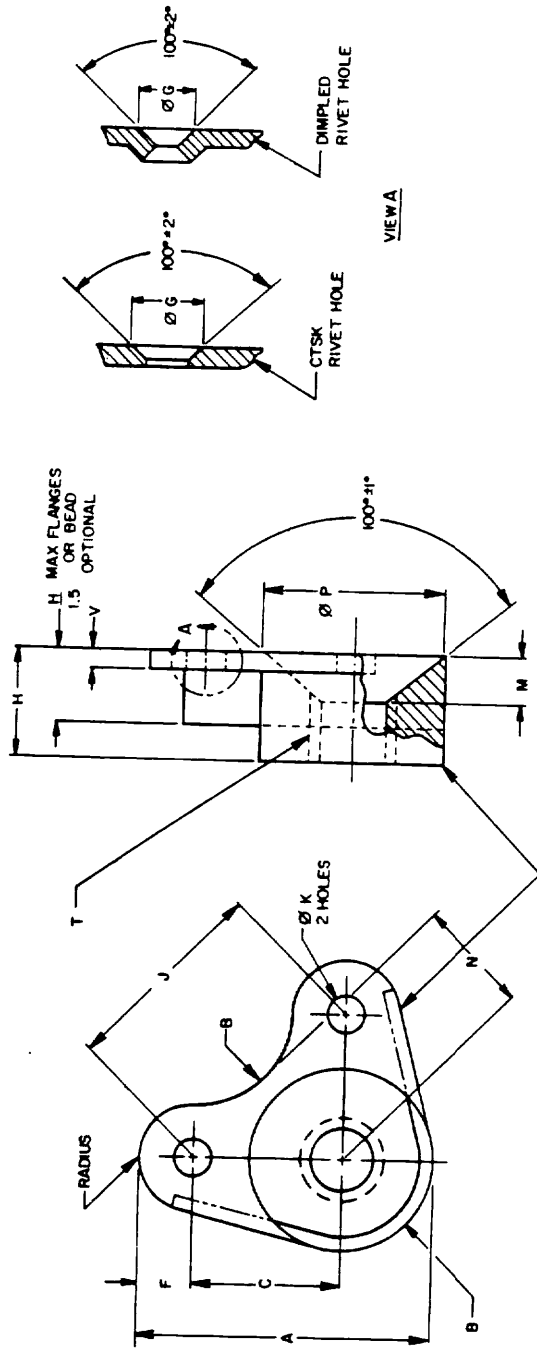
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DD FORM 672-1 (COORDINATED)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

5310-1597

CONFIGURATION OF NUT OPTIONAL WITHIN THE LIMITATIONS IMPOSED BY DIMENSIONS AND REQUIREMENTS AS SPECIFIED HEREIN.



SHAPE OF LOCKING PORTION OPTIONAL

VIEW A

TABLE 1. DASH NUMBERS AND DIMENSIONS

DASH NUMBERS	450° NON-DRY FILM LUBRICATED		450° DRY FILM LUBRICATED		T THREAD SIZES	A MAX	B MIN		C MIN	F MIN	Ø G MIN	H MAX	Ø P MAX	N MAX	Ø P + .005 MAX	V MAX	ACTUAL STRENGTH LBS/IN	NET-DRY HEIGHT LBS/100
	PLAIN HOLES	CTS/CSK OR DIMPLED HOLES	MAX	MIN														
-08	L08	L08K	.211	.180	.164-12 UNJF-3B	.700	.211	.180	.344	.100	.200	.272	.270	.270	.165	.047	1,720	.39
-3	L3	L3K	.227	.203	.190-12 UNJF-3B	.716	.227	.203	.344	.100	.200	.281	.270	.270	.165	.047	2,460	.41
-4	L4	L4K	.250	.267	.250-28 UNJF-3B	.955	.250	.267	.500	.100	.200	.340	.383	.383	.165	.055	4,580	.88
-5	L5	L5K	.383	.340	.1125-24 UNJF-3B	1.044	.383	.340	.500	.125	.200	.422	.383	.383	.165	.065	7,190	1.17

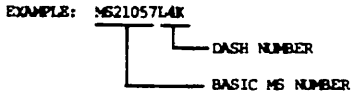
1/ MINIMUM "H" NOT SPECIFIED, LIMITED ONLY BY STRENGTH REQUIREMENTS OF SPECIFICATION.
2/ CENTER OF THE "DIMPLED HOLE" SHALL NOT DEVIATE IN ANY DIRECTION FROM THE CENTER OF THE PLATE NUT AS DETERMINED BY THE RIVET HOLES BY MORE THAN .005.
3/ DIMPLED HOLE TOLERANCE FOR Ø "K" IS +.015 -.000, AFTER FORMING.

APPROVED 21 JUL 64 REVISED (F) 30 SEP 87

FED SUP CLASS
5310

REQUIREMENTS:

- MATERIAL:** CARBON STEEL, COMPOSITIONS 1035 (UNS G10350), 1040 (UNS G10400) AND 1050 (UNS G10500), IN ACCORDANCE WITH QQ-6-635; 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.
- 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.
- LUBRICANT:** DRY FILM LUBRICANT APPROVED IN ACCORDANCE WITH MIL-N-25027. NON-DRY FILM LUBRICANTS SHALL BE SOLUBLE IN THE CLEANER SPECIFIED IN MIL-6-8802.
- DIMENSIONING AND TOLERANCING:** DIMENSIONING AND TOLERANCING SHALL BE IN ACCORDANCE WITH ANSI Y14.5M.
- HARDNESS:** 49HRC, MAX.
- THREADS:** THREADS BEFORE LUBRICATION IN ACCORDANCE WITH MIL-6-8879.
- SURFACE TEXTURE:** SURFACE TEXTURE, UNLESS OTHERWISE SPECIFIED, SHALL NOT EXCEED 125 MICROINCHES, IN ACCORDANCE WITH ANSI B46.1.
- PART NUMBER:** THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE I.



MS21057L4K INDICATES: NUT, SELF-LOCKING, PLATE, CORNER, 100° CSK, LOW HEIGHT, ALLOY STEEL; 125 KSI FTU, 450° F; .250-28 UNJF-3B; DRY FILM LUBRICANT; COUNTERSUNK OR DIMPLED HOLES.

NOTES:

- ALL DIMENSIONS ARE IN INCHES.
- 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.
- 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.
- 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.

INTERCHANGEABILITY RELATIONSHIP

MS21057 NUTS CAN UNIVERSALLY REPLACE NAS685 NUTS OF LIKE MATERIAL, THREAD SIZE, PLATING LUBRICANTS (DRY FILM OR NON-DRY FILM), RIVET SPACING AND FASTENING METHOD (PLAIN RIVET HOLES; DIMPLED OR COUNTERSUNK RIVET HOLES OR PROJECTION WELDING), BUT THESE NAS685 NUTS CANNOT UNIVERSALLY REPLACE MS21057 NUTS.

INTERCHANGEABILITY TABLE

CANCELLED PART NUMBERS	SUBSTITUTIVE PART NUMBERS
NAS685X08	MS21057-08
NAS685X08K	MS21057-08K
NAS685A08	MS21057L08
NAS685A08K	MS21057L08K
NAS685X3	MS21057-3
NAS685X3K	MS21057-3K
NAS685A3	MS21057L3
NAS685A3K	MS21057L3K
NAS685X4	MS21057-4
NAS685X4K	MS21057-4K
NAS685A4	MS21057L4
NAS685A4K	MS21057L4K
NAS685X5	MS21057-5
NAS685X5K	MS21057-5K
NAS685A5	MS21057L5
NAS685A5K	MS21057L5K

P.A. NAVY-AS Other Cust: ARMY-AV AIR FORCE-II	INTERNATIONAL INTEREST	TITLE NUT, SELF-LOCKING, PLATE, CORNER, 100° CSK, LOW HEIGHT, ALLOY STEEL, 125 KSI FTU, 450° F
PROCUREMENT SPECIFICATION MIL-N-25027	SUPERSEDES: NAS 685	

MILITARY STANDARD
MS21057
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