

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 BOOKS SPECIFIED IN THE SOLICITATION MIL-N-28027

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

Form Approved
DAB No 0704-0188

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

SHAPE OF HOLE IN HOUSING OPTIONAL WITHIN LIMITS OF ".01" TO ACCOMMODATE FLOAT REQUIREMENTS

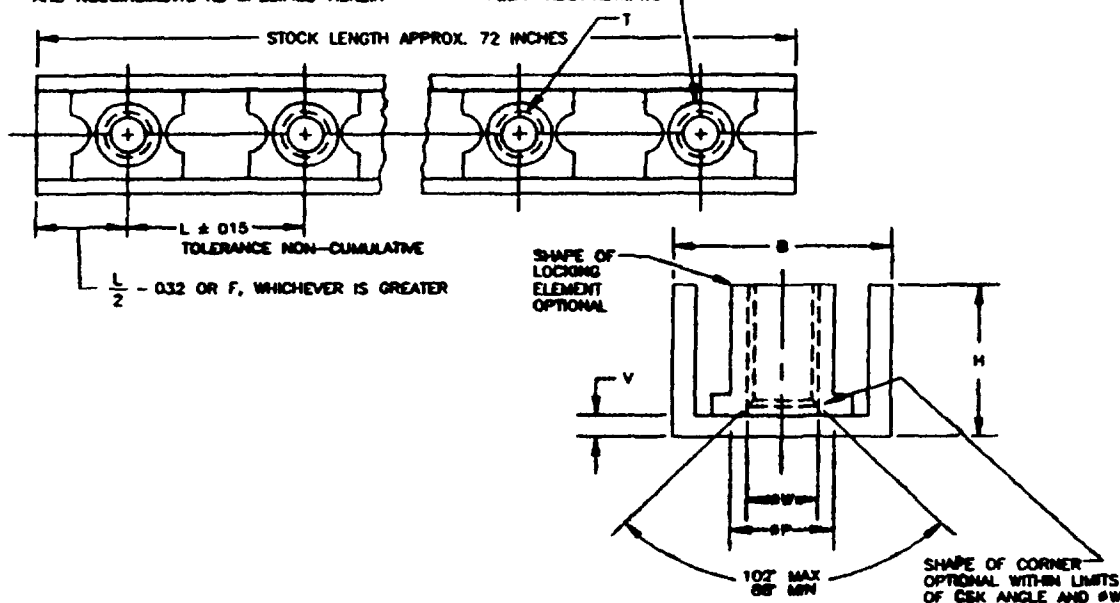


TABLE I DASH NUMBERS AND DIMENSIONS

DASH NUMBERS	T THREAD SIZES	B MAX	F MIN	H ^{1/}		L MIN SPACING AVAILABLE	BP ^{2/}		V MAX	ØW MIN	AXIAL STRENGTH LBS./MIN	WEIGHT MAX	
				MAX	MIN		MAX	MIN				NUT ELEMENTS LBS./100	CHANNEL LBS./INCH
-08	.184-32 UNJC-38	.422	.343	.312	.234	.625	.270	.184	.030	.188	1,720	.19	.0028
-3	.180-32 UNJF-38	.422	.343	.318	.234	.625	.270	.210	.030	.180	2,480	.29	.0028
-4	.250-28 UNJF-38	.518	.406	.383	.283	.780	.330	.270	.037	.230	4,580	.43	.0032
-5	.3125-24 UNJF-38	.648	.469	.387	.283	.750	.363	.333	.045	.312	7,390	.84	.0053
-6	.375-24 UNJF-38	.728	.562	.479	.434	1.000	.455	.385	.045	.375	11,450	1.08	.0073

1/ "H" MAX APPLIES TO NUT ELEMENT AND CHANNEL. MIN "H" NOT SPECIFIED, LIMITED ONLY BY STRENGTH REQUIREMENTS OF SPECIFICATION.

2/ HOLE IN CHANNEL MUST PROVIDE FOR FULL FLOAT OF NUT ELEMENT BUT NEED NOT BE CIRCULAR

TABLE II DASH NUMBERS AND DIMENSIONS

SECOND DASH NUMBER	L NUT ELEMENT SPACING	MAXIMUM NUMBER OF NUT ELEMENT
-5	.625	115
-6	.750	96
-7	.875	82
-8	1.000	72
-9	1.125	64
-10	1.250	57
-11	1.375	52
-12	1.500	48
-13	1.625	44
-14	1.750	41
-15	1.875	38
-16	2.000	36
-18	2.250	32
-20	2.500	28
-24	3.000	24

INCH POUND

(F) DENOTES CHANGE(S)

PREPARING ACTIVITY DLA-BE

CUSTOMERS ARMY-AV

NAVY-AS

AIR FORCE-88

DLA-

REVIEW CR, MI

PROJECT NUMBER 5310-1938

DISTRIBUTION STATEMENT A. Approved for public release, distribution is unlimited

MILITARY SPECIFICATION SHEET

TITLE

NUT, SELF-LOCKING GANG CHANNEL,
NON-METALLIC INSERT, 125 KSI Ftu,
250°F

SPECIFICATION SHEET NUMBER

MS21079

15 APR 84

REV F

SUPERSEDING

MS21079 E

30 JAN 89

AMSC-

N/A

FSC 5310

Page 1 of 1

DD Form 672, MAY 88

PREVIOUS EDITIONS ARE OBSOLETE

REQUIREMENTS

1. MATERIAL

NUT ELEMENT - CARBON STEEL, COMPOSITIONS 1008 (UNS G10080)1035 (UNS G10350), 1040 (UNS G10400) OR 1050 (UNS G10500), IN ACCORDANCE WITH ASTM A 29, ASTM A 829 OR QQ-S-700; 1042 (UNS G10420), IN ACCORDANCE WITH ASTM A 29 COMPOSITION 11L37 (UNS G11374) IN ACCORDANCE WITH AMS 5020, ALLOY STEEL, GRADES 4130 (UNS G41300), 4340 (UNS G4340) AND 8740 (UNS G87400) IN ACCORDANCE WITH ASTM A29

CHANNEL - ALUMINUM, ALLOY 2024, TEMPER T4 (UNS A92024), IN ACCORDANCE WITH QQ-A-250/4 ALUMINUM, ALLOY 7075, TEMPER T6 (UNS A97075), IN ACCORDANCE WITH QQ-A-250/12 OR QQ-A-250/13 (ALCLAD) (UNS A97075), IN ACCORDANCE WITH QQ-A-250/12 OR QQ-A-250/13 (ALCLAD)
NON-METALLIC INSERT - NYLON OR EQUIVALENT

2. LENGTH TO BE STOCKED IN 72-INCH LENGTHS ONLY

3. FINISH: NUT ELEMENT - CADMIUM PLATE IN ACCORDANCE WITH QQ-P-416, TYPE II, CLASS 2
CHANNEL - IN ACCORDANCE WITH PROCUREMENT SPECIFICATION

4. LUBRICANT: DRY FILM LUBRICANT ON NUT ELEMENT ONLY, APPROVED IN ACCORDANCE WITH MIL-N-25027 NON-DRY FILM LUBRICANTS SHALL BE SOLUBLE IN THE CLEANER SPECIFIED IN MIL-S-8802

5. DIMENSIONING AND TOLERANCING. DIMENSIONING AND TOLERANCING SHALL BE IN ACCORDANCE WITH ANSI Y14.5M

6. HARDNESS. NUT ELEMENTS SHALL HAVE A HARDNESS OF 49HRC, MAX

7. THREADS. THREADS BEFORE LUBRICATION IN ACCORDANCE WITH MIL-S-8879

8. SURFACE TEXTURE. SURFACE TEXTURE, UNLESS OTHERWISE SPECIFIED, SHALL NOT EXCEED 125 MICROINCHES, IN ACCORDANCE WITH ANSI/ASME B46.1

9. FLOAT OF NUT ELEMENT. FLOAT OF NUT ELEMENT PORTION OF ASSEMBLY SHALL NOT BE LESS THAN 0.30 NOR MORE THAN 0.40 LONGITUDINALLY AND NOT LESS THAN 0.10 NOR MORE THAN 0.30 Laterally FROM CENTERED POSITION. NUT ELEMENT SHALL BE CAPABLE OF ENGAGEMENT WITH A BOLT IN THE MAXIMUM MISALIGNMENT POSITION. MAXIMUM AXIAL FLOAT 0.20 INCH FOR -08 AND -3, 0.30 FOR LARGER SIZES

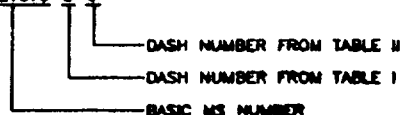
10. ASSEMBLY. THE ASSEMBLY SHALL PROVIDE A BEARING SURFACE FOR THE NUT ELEMENT WITHIN THE HOUSING THE CENTERLINE OF THE CHANNEL SHALL NOT DEVIATE FROM A STRAIGHT LINE BY MORE THAN 0.15 IN ANY 12 INCHES THE NUT ELEMENT AND BASE PORTION OF THE ASSEMBLY SHALL FORM ONE INTEGRAL UNIT

11. EDGES. BREAK SHARP CORNERS AND REMOVE ALL BURRS.

12. CODE. FIRST DASH NUMBER DESIGNATES THREAD SIZE.
SECOND DASH NUMBER DESIGNATES NUT ELEMENT SPACING IN EIGHTHS OF AN INCH
THIRD DASH NUMBER INDICATES NUMBER OF NUT ELEMENTS WHEN LESS THAN STOCK LENGTH (APPROX 72 INCHES) IS DESIRED

13. PART NUMBER. THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE I AND TABLE II AND A THIRD DASH NUMBER, IF SPECIFIED (SEE REQUIREMENT 12)

EXAMPLE MS21079-3-8



MS21079-3-8 INDICATES. NUT, SELF-LOCKING, GANG CHANNEL, NON-METALLIC INSERT, GANG CHANNEL ASSEMBLY CONSISTING OF NINETY-SIX 190-32 UNF-3B, CADMIUM PLATED NUT ELEMENTS SPACED AT 750 INCH

NOTES

- ALL DIMENSIONS ARE IN INCHES DIMENSIONS TO BE MET PRIOR TO LUBRICATION
- 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 (DDISS) 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 OPL 25027 SHALL BE USED

PREPARING ACTIVITY DLA-IS

CUSTODIANS ARMY-AV

NAVY-AS

AIR FORCE-99

DLA-

REVIEW CR, MI

PROJECT NUMBER 5310-1850

MILITARY SPECIFICATION SHEET

TITLE

NUT, SELF-LOCKING GANG CHANNEL,
NON-METALLIC INSERT, 125 KSI Ftu,
250°F

SPECIFICATION SHEET NUMBER

MS21079

15 APR 94
REV F

SUPERSEDING

MS21079 C

30 JAN 89

AMSC-

N/A

FSC 5310

DISTRIBUTION STATEMENT A. Approved for public release distribution is unlimited

Page 2 of 3

DD Form 672, MAY 88

PREVIOUS EDITIONS ARE OBSOLETE

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 DDISS SPECIFIED IN THE SOLICITATION: MIL-N-25027

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

THE REQUIREMENTS FOR ASSURING THE PRODUCT(S) DESCRIBED HEREIN SHALL CONSIST OF THIS SPECIFICATION SHEET AND THE ISSUE OF THE FOLLOWING SPECIFICATION LISTED IN THAT ISSUE OF THE DOORS 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

INTERCHANGEABILITY RELATIONSHIP

MS21079 NUTS CAN UNIVERSALLY REPLACE NAS1034 THRU NAS1038 NUTS OF LIKE THREAD SIZE MATERIAL, NUT ELEMENT SPACING, NUMBER OF NUT ELEMENTS AND WITH EITHER NON-METALLIC OR ALL METAL LOCKING ELEMENT, BUT THESE NAS1034 THRU NAS1038 NUTS CANNOT UNIVERSALLY REPLACE MS21079 NUTS

INTERCHANGEABILITY TABLE

CANCELLED PART NUMBERS ^{1/}	SUBSTITUTIVE PART NUMBERS ^{1/}
NAS1034N	MS21079-08
NAS1035N	MS21079-3
NAS1036N	MS21079-4
NAS1037N	MS21079-5
NAS1038N	MS21079-6

^{1/} NUT ELEMENT SPACING DASH NUMBER IS IDENTICAL FOR BOTH CANCELLED AND CORRESPONDING SUBSTITUTIVE PART NUMBERS

PREPARING ACTIVITY DLA-15 CUSTODIANS: ARMY- AV NAVY- AS AIR FORCE- 98 DLA- REVIEW: CR, MH	<h3>MILITARY SPECIFICATION SHEET</h3> TITLE NUT, SELF-LOCKING GANG CHANNEL, NON-METALLIC INSERT, 125 KSI Fty, 250°F	SPECIFICATION SHEET NUMBER <h2>MS21079</h2> 15 APR 94 REV F
PROJECT NUMBER: 5310-1050	SUPERSIDING MS21079 E 30 JAN 89	AMSC- N/A FSC 5310
DISTRIBUTION STATEMENT A. Approved for public release, distribution is unlimited		Page <u>1</u> of <u>1</u>

DD Form 672, MAY 88

PREVIOUS EDITIONS ARE OBSOLETE