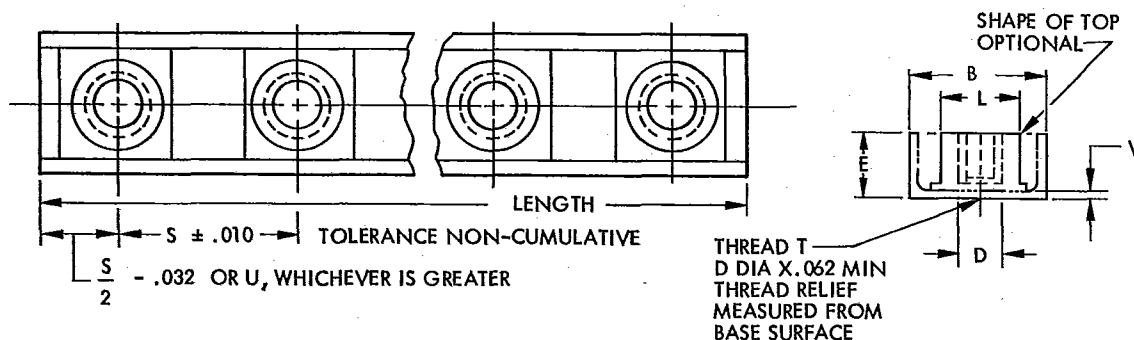




⑨

THREAD (d) T	BASIC PART NUMBER	TYPE CODE LETTER		B MAX	D ^(b) DIA MIN	E ^(a) MAX	L DIA MAX	MIN S NUT SPACING	U MIN	V MAX
		250°F AL ALLOY CHANNEL ALL METAL NUT	450°F CRES CHANNEL ALL METAL NUT							
.1640-32 UNJC-3B	NAS688	P	A	.416	.168	.250	.297	.625	.343	.035
.1900-32 UNJF-3B	NAS689			.416	.194	.250	.328	.625	.343	.035
.2500-28 UNJF-3B	NAS690			.516	.254	.281	.414	.750	.406	.045
.3125-24 UNJF-3B	NAS691			.609	.317	.328	.505	.750	.469	.045
.3750-24 UNJF-3B	NAS692			.726	.379	.344	.614	1.000	.562	.055

- ⑨ (a) MIN "E" NOT SPECIFIED, LIMITED ONLY BY STRENGTH REQUIREMENTS OF SPECIFICATION.
- (b) FLOAT OF NUT PORTION OF ASSEMBLY SHALL NOT BE LESS THAN .030 NOR MORE THAN .040 LONGITUDINALLY AND NOT LESS THAN .010 NOR MORE THAN .030 LATERALLY FROM CENTERED POSITION. NUT BODY SHALL BE CAPABLE OF ENGAGEMENT WITH A BOLT IN THE MAXIMUM MISALIGNMENT POSITION. MAXIMUM AXIAL FLOAT .020 INCHES FOR NAS688 AND NAS689; .030 FOR LARGER SIZES.
- (c) THE ASSEMBLY SHALL PROVIDE A BEARING SURFACE FOR THE NUT WITHIN THE HOUSING.
- ⑨ (d) THREADS IN ACCORDANCE WITH MIL-S-8879 BEFORE LUBRICATION.
- (e) THE CENTERLINE OF THE CHANNEL SHALL NOT DEVIATE FROM A STRAIGHT LINE BY MORE THAN .015 IN ANY 12 INCHES.

S NUT SPACING	FIRST DASH NO.	MAX NO. NUTS
.625	5	115
.750	6	96
.875	7	82
1.000	8	72
1.125	9	64
1.250	10	57
1.375	11	52
1.500	12	48
1.625	13	44
1.750	14	41
1.875	15	38
2.000	16	36
2.250	18	32
2.500	20	28
3.000	24	24

INACTIVE FOR DESIGN AFTER 15 JUNE 1971, SEE MS21063 & MS21064.
FOR DESCRIPTION OF STATUS NOTES, SEE NAS 380.

LIST OF CURRENT SHEETS

⑨

NO.	REV.
1	9
2	9

CUSTODIAN: NATIONAL AEROSPACE STANDARDS COMMITTEE

PROCUREMENT
SPECIFICATION
MIL-N-25027
EXCEPT AS NOTED

TITLE
**NUT ASSEMBLY, SELF-LOCKING, GANG
CHANNEL-LOW HEIGHT, C'BORED**

CLASSIFICATION
STANDARD PART

NAS 688-692
SHEET 1 OF 2

NATIONAL AEROSPACE STANDARD

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC., 1725 DE SALES STREET, N. W., WASHINGTON, D. C. 20036

NOTE: THE NUT AND BASE PORTION OF THE ASSEMBLY SHALL FORM ONE INTEGRAL UNIT.

CODE: PART NUMBER = NUT THREAD SIZE

1ST DASH NO. PREFIXED BY: P = ALL METAL NUT,
ALUMINUM ALLOY
CHANNEL, MAXIMUM
TEMPERATURE 250°F.
A = ALL METAL NUT, CRES
CHANNEL, MAXIMUM
TEMPERATURE 450°F.
ADD "X" TO CODE LETTER
TO SPECIFY PARTS
WITHOUT LUBRICANT.

1ST DASH NO. = NUT SPACING (SEE TABLE).

2ND DASH NO. = NO. OF NUTS IN STRIP (NOT TO EXCEED MAX SHOWN IN TABLE).
OMISSION OF 2ND DASH NO. INDICATES STOCK LENGTH STRIP
APPROX 72 INCHES LONG.

EXAMPLES OF PART NUMBERS:

NAS689P6-10 = .1900-32 GANG CHANNEL NUT, ALL METAL NUT, ALUMINUM ALLOY CHANNEL,
.7500 NUT SPACING, 10 NUTS.

NAS690A7-12 = .2500-28 GANG CHANNEL NUT, ALL METAL NUT, CRES CHANNEL,
.8750 NUT SPACING, 12 NUTS.

NAS690A7 = .2500-28 GANG CHANNEL NUT, ALL METAL NUT, CRES CHANNEL,
.8750 NUT SPACING, APPROX 72 INCHES LONG.

MATERIALS: SEE PROCUREMENT SPECIFICATION.

NUT - STEEL

CHANNEL - ALUMINUM ALLOY

- CORROSION RESISTANT STEEL

FINISH: ⑨ STEEL: CADMIUM PLATE PER QQ-P-416, TYPE II, CLASS 2, PLUS AN APPROVED DRY
FILM LUBRICANT. EXISTING NUTS WITH AN OPTIONAL TYPE AND CLASS OF
CADMIUM PLATE PER QQ-P-416, AS PREVIOUSLY PERMITTED, MAY BE
FURNISHED UNTIL 16 DEC. 1976.

⑨ ALUMINUM ALLOY: ANODIZE OR CHEMICAL FILM PER MIL-N-25027, EXCEPT ANODIZE
SHALL BE LIMITED TO TYPE I OR TYPE II.

CLAD STOCK - NO FINISH REQUIRED.

LUBRICANT: MOLYBDENUM DISULFIDE ON NUT ELEMENTS.

PROCUREMENT SPECIFICATION:

MIL-N-25027 EXCEPT AS NOTED. ALL NUTS SHALL MEET QUALIFICATION AND INSPEC-
TION REQUIREMENTS. MANUFACTURERS SHALL PROVIDE EVIDENCE OF QUALIFICATION WHEN
REQUIRED. TESTING SHALL BE PERFORMED BY MANUFACTURER OR INDEPENDENT LABORATORY.
PROCURING AGENCY MAY CONDUCT CONFIRMING QUALIFICATION TESTS. NO QPL SHALL BE
ESTABLISHED.

AXIAL STRENGTH REQUIREMENTS PER TABLE 1 VALUES FOR REGULAR STEEL NUTS.

DIMENSIONS IN INCHES.

INACTIVE FOR DESIGN AFTER 15 JUNE 1971, SEE MS21063 & MS21064.
FOR DESCRIPTION OF STATUS NOTES, SEE NAS380.

AIA AND ITS COMMITTEES WILL NOT INVESTIGATE THE APPLICABILITY OF PATENTS TO THE SUBJECT MATTER OF NAS STANDARDS AND IN RESPECT THEREOF DO NOT ASSUME ANY LIABILITY TO PATENT OWNERS OR TO PROSPECTIVE USERS.

THIS DRAWING SUPERSEDES ALL ANTERIOR STANDARD DRAWINGS THAT HAVE BEEN ISSUED AND SHALL BECOME EFFECTIVE NO LATER THAN SIX MONTHS FROM THE LAST DATE OF APPROVAL SHOWN HEREON.