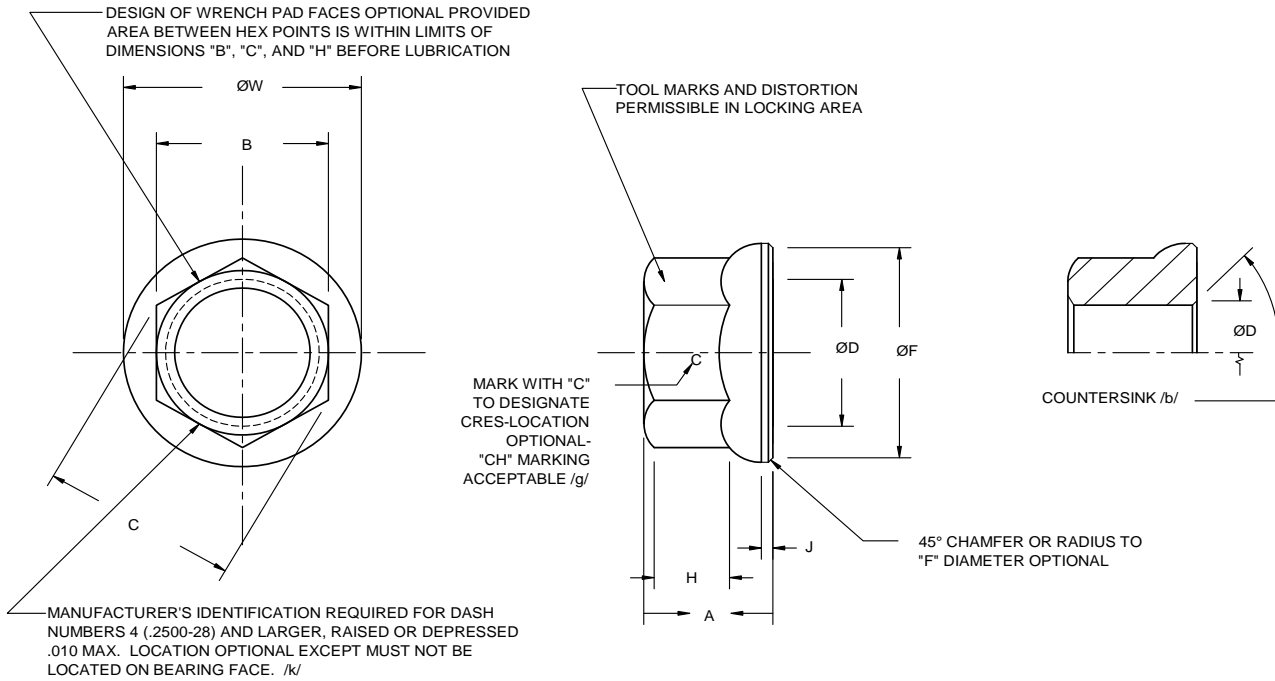


FED. SUPPLY CLASS

5310

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC
1000 WILSON BLVD.
ARLINGTON, VA 22209



THIS DRAWING SUPERSEDES ALL ANTECEDENT STANDARD DRAWINGS FOR THE SAME
PRODUCT AND SHALL BECOME EFFECTIVE NO LATER THAN SIX MONTHS FROM THE LAST
REVISION DATE.

/3/ THREAD	DASH NUMBER						A		B		C		/2/ ØD	
	450°F		800°F	450°F	800°F									
	/9/ STEEL	/9/ STEEL	/4/ A286 CRES	/4/ /10/ A286 CRES	/4/ A286 GRES	/4/ A286 GRES	MIN	MAX	MIN	MAX	MIN	MIN	MAX	
.0860-56 UNJC-3B	Ø2	XØ2	C02M	Ø02	AØ2M	AØ2	.080	.100	.122	.127	.138	.086	.106	
.1120-40 UNJC-3B	Ø4	XØ4	C04M	Ø04	AØ4M	AØ4	.103	.125	.150	.158	.171	.112	.142	
.1380-32 UNJC-3B	Ø6	XØ6	C06M	Ø06	AØ6M	AØ6	.115	.141	.181	.190	.207	.138	.168	
.1640-32 UNJC-3B	Ø8	XØ8	C08M	Ø08	AØ8M	AØ8	.125	.188	.213	.221	.244	.164	.194	
.1900-32 UNJF-3B	3	X3	C3M	Ø3	A3M	A3	.154	.188	.243	.252	.277	.190	.220	
.2500-28 UNJF-3B	4	X4	C4M	Ø4	A4M	A4	.204	.219	.304	.316	.347	.250	.280	
.3125-24 UNJF-3B	5	X5	C5M	Ø5	A5M	A5	.251	.266	.367	.378	.419	.312	.342	
.3750-24 UNJF-3B	6	X6	C6M	Ø6	A6M	A6	.267	.282	.430	.440	.491	.375	.405	
.4375-20 UNJF-3B	7	X7	C7M	C7	A7M	A7	.313	.328	.494	.504	.562	.437	.467	
.5000-20 UNJF-3B	8	X8	C8M	C8	A8M	A8	.350	.410	.556	.566	.633	.500	.530	
.5625-18 UNJF-3B	9	X9	C9M	C9	A9M	A9	.420	.480	.680	.692	.775	.562	.592	
.6250-18 UNJF-3B	10	X10	C10M	C10	A10M	A10	.490	.550	.743	.755	.846	.625	.655	

13 COMPLETELY REVISED

REVISION DATE: FEBRUARY 28, 2010

ISSUE DATE: JUNE 1959

FORM 09-01

THIRD ANGLE PROJECTION	CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 13
PROCUREMENT SPECIFICATION NOTED	TITLE NUT, SELF-LOCKING, HEXAGON- LOW HEIGHT, LIGHT WEIGHT	CLASSIFICATION PART STANDARD NAS1291 SHEET 1 OF 3

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC.
1000 WILSON BLVD.
ARLINGTON, VA 22209

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PRODUCT AND SHALL BECOME EFFECTIVE NO LATER THAN SIX MONTHS FROM THE LAST
REVISION DATE.

/3/ THREAD	ØF (MIN)	H (MIN)	J (MIN)	/6/ S	ØW (MAX)	MAX WT-LBS PER 100	/1/ AXIAL TENSILE STRENGTH LBS MIN STEEL	/1/ AXIAL TENSILE STRENGTH LBS MIN A286 CRES
.0860-56 UNJC-3B	.137	.045	.008	.0025	.167	.02	660	465
.1120-40 UNJC-3B	.176	.050	.010	.003	.206	.05	1,110	760
.1380-32 UNJC-3B	.214	.055	.010	.003	.244	.08	1,670	1,150
.1640-32 UNJC-3B	.260	.060	.015	.003	.290	.15	2,490	1,720
.1900-32 UNJF-3B	.290	.065	.015	.003	.330	.18	3,470	2,460
.2500-28 UNJF-3B	.386	.090	.019	.003	.420	.35	6,200	4,580
.3125-24 UNJF-3B	.482	.120	.023	.004	.520	.60	9,820	7,390
.3750-24 UNJF-3B	.575	.125	.030	.004	.620	.80	15,200	11,450
.4375-20 UNJF-3B	.680	.160	.035	.005	.708	1.3	20,600	15,450
.5000-20 UNJF-3B	.786	.225	.040	.005	.814	2.1	27,500	21,110
.5625-18 UNJF-3B	.874	.320	.045	.006	.912	3.6	34,800	26,810
.6250-18 UNJF-3B	.976	.365	.050	.007	1.014	4.5	43,600	34,130

NOTES:

- /1/ MINIMUM TENSILE STRENGTH FOR STEEL (450°F) NUT PER TABLE IS BASED ON 160,000 PSI AND ON AREAS CALCULATED BY USING 98% OF THE BASIC PITCH DIAMETER AS SHOWN IN TABLES 8 AND 9 OF ASME B1.1, EXCEPT .3750 AND LARGER SIZES WHICH ARE BASED ON 100%. TEST BOLTS SHALL BE 180,000 PSI MIN. TENSILE VALUES FOR A286 ARE BASED ON 125,000 PSI PER NASM25027 .
- /2/ COUNTERSINK, COUNTERSINK-COUNTERBORE OR RADIUS RELIEF TO THREAD WITHIN LIMITS OF "ØD" DIAMETER AND 120° MAX. ANGLE.
- /3/ THREADS IN ACCORDANCE WITH AS8879 BEFORE LUBRICATION. ~~THREADS IN ACCORDANCE WITH MIL-S-7742 ARE ACCEPTABLE UNTIL 31 DECEMBER 1969.~~
- /4/ MAGNETIC PERMEABILITY OF A286 NUTS SHALL BE LESS THAN 2.0 (AIR = 1.0) FOR A FIELD STRENGTH H = 200 OERSTEDS USING A MAGNETIC PERMEABILITY INDICATOR PER A 342/A 342M OR EQUIVALENT.
- (5) MINIMUM "GO" THREAD GAGE PENETRATION SHALL BE 3/4 REVOLUTION BEFORE DRY FILM LUBRICANT.
- /6/ BEARING SURFACE MUST BE SQUARE WITH PITCH DIAMETER WITHIN "S" WHEN MEASURED IN ACCORDANCE WITH NASM25027 .
- /7/ IDENTIFICATION MARKING ON DASH NUMBERS 3 (.1900-32) AND SMALLER AT MANUFACTURER'S OPTION.
- (8) DASH NUMBER 8 (.5000-20), DASH NUMBER 9 (.5625-18), AND DASH NUMBER 10 (.6250-18) NUTS NOT INTENDED FOR USE WITH SHORT THREAD SCREWS OR BOLTS.
- /9/ NAS1291-02 THROUGH -6 AND NAS1291X02 THROUGH X6 ARE INACTIVE FOR NEW DESIGN. SEE NASM21042
- /10/ NAS1291C04 THROUGH C6 ARE INACTIVE FOR NEW DESIGN. SEE NASM21043.
- /11/ ALL NUTS MANUFACTURED AFTER DECEMBER 1, 1991 SHALL MEET MARKING REQUIREMENTS.

EXAMPLES OF PART NUMBERS:

- NAS1291-7 = .4375-20 NUT, ALL METAL CONSTRUCTION OF STEEL, CADMIUM PLATED WITH AN APPROVED DRY FILM LUBRICANT FOR 450°F USE.
- NAS1291X7 = .4375-20 NUT, ALL METAL CONSTRUCTION, CADMIUM PLATED, WITHOUT DRY FILM COATING OR ANY OTHER LUBRICANT FOR 450°F USE.
- NAS1291C7M = .4375-20 NUT, ALL METAL CONSTRUCTION OF A286, WITH AN APPROVED DRY FILM LUBRICANT FOR 450°F USE.
- NAS1291C7 = .4375-20 NUT, ALL METAL CONSTRUCTION OF A286, SILVER PLATED FOR 800°F USE WITH NO LUBRICANT.
- NAS1291A4M = ~~1/4-28 NUT, ALL METAL CONSTRUCTION OF A286, WITH AN APPROVED DRY FILM LUBRICANT FOR 450°F USE.~~
- NAS1291A4 = ~~1/4-28 NUT, ALL METAL CONSTRUCTION OF A286, SILVER PLATED FOR 800°F USE.~~

NOTE: "A" MATERIAL CODE CALL-OUT TO DESIGNATE A286 CRES, AS IN NAS1291A7, IS INACTIVE FOR NEW DESIGN. USE "C" MATERIAL CODE CALL-OUT TO DESIGNATE A286 CRES, AS IN NAS1291C7, FOR NEW DESIGN.

13 COMPLETELY REVISED

REVISION 13
NAS1291 SHEET 2



NATIONAL AEROSPACE STANDARD

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AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC
1000 WILSON BLVD.
ARLINGTON, VA 22209

MATERIAL: STEEL - SEE PROCUREMENT SPECIFICATION.
CRES - A286 (UNS S66286) CONFORMING TO THE CHEMISTRY OF AMS5732, AMS5737 OR AMS5525.

HARDNESS: STEEL - ROCKWELL C49 MAXIMUM.

FINISH: STEEL - CADMIUM PLATE PER AMS-QQ-P-416, CLASS 1 OR 2 PLUS AN APPROVED DRY FILM LUBRICANT. TYPE OF PLATING IS OPTIONAL IF LUBRICATED NUTS WILL MEET THE SALT SPRAY REQUIREMENTS OF AMS-QQ-P-416, TYPE II. ~~PARTS WITH CLASS 3 PLATING MAY BE FURNISHED FROM SUPPLIER'S STOCK UNTIL DECEMBER 15, 1974.~~

DRY FILM LUBRICANT IN ACCORDANCE WITH NASM25027. OTHER LUBRICANTS SHALL BE SOLUBLE IN THE CLEANERS SPECIFIED IN THE PROCUREMENT SPECIFICATION.

CRES - SILVER PLATE FOR 800°F USE PER AMS2410 TO A .0002 MINIMUM THICKNESS ON SURFACES WHICH CAN BE TOUCHED BY A .7500 (3/4-INCH) BALL. THREADS SHALL SHOW COMPLETE COVERAGE BUT THICKNESS REQUIREMENT ON THREADS IS WAIVED.

DRY FILM LUBRICANT, FOR 450°F USE, IN ACCORDANCE WITH NASM25027. OTHER LUBRICANTS SHALL BE SOLUBLE IN THE CLEANERS SPECIFIED IN THE PROCUREMENT SPECIFICATION.

NOTE: WRENCH TORQUE PER NASM25027 TABLE II FOR REGULAR NUTS; BOX OR SOCKET WRENCH REQUIRED ONLY FOR TEST PURPOSES. MINIMUM BREAK-AWAY TORQUE SHALL BE 0.2 INCH POUND FOR DASH NUMBER 02 (.0860-56) AND 0.5 INCH-POUND FOR DASH NUMBER 04 (.1120-40). FOR LARGER SIZES, SEE NASM25027.

PROCUREMENT SPECIFICATION: NASM25027 EXCEPT AS NOTED. ALL NUTS SHALL MEET QUALIFICATION AND INSPECTION REQUIREMENTS. MANUFACTURER 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.

NOTE: UNLESS OTHERWISE SPECIFIED, PART INVENTORY MANUFACTURED TO PREVIOUS REVISIONS OF THE APPLICABLE DRAWING OR SPECIFICATION MAY BE PROCURED AND USED UNTIL STOCK IS DEPLETED.

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FORM 09-01

13 COMPLETELY REVISED

REVISION
13
NAS1291
SHEET 3