
**NUT – HEXAGONAL, SELF-LOCKING,
ALUMINIUM ALLOY**

Issue : **J**
Date : **Nov 06**
Page : **1/5**

SUMMARY

- 1 - SCOPE AND FIELD OF APPLICATION**
- 2 - REFERENCES**
- 3 - TERMINOLOGY**
- 4 - REQUIRED CHARACTERISTICS**
- 5 - DESIGNATION**
- 6 - MARKING**
- 7 - TECHNICAL SPECIFICATION**
- 8 - MANUFACTURERS**
- AMENDMENT RECORD SHEET**

1 - SCOPE AND FIELD OF APPLICATION

This standard specifies the dimensions, tolerances, required characteristics and the masses of a self-locking hexagonal nut.

2 - REFERENCES

- ABS1420 : Aerospace series - Nut - Ordinary, for lightweight threaded pins.
- AMS-QQ-A-225/9 : Aluminium alloy 7075, bar, rod, wire and special shapes ; rolled, drawn or cold finished.
- EN2424 : Aerospace series - Marking of aerospace products.
- EN6117 : Aerospace series - Specification for lubrication of bolts with cetyl alcohol.
- MIL-A-8625 : Anodic coatings, for aluminium and aluminium alloys.
- SAE AS8879 : Screw threads – UNJ profile, inch - Controlled radius root with increased minor diameter.

The content of this document is the property of AIRBUS FRANCE. It is supplied in confidence and commercial security on its contents must be maintained. It must not be used for any purpose other than that for which it is supplied nor may information contained in it be disclosed to unauthorized persons. It must not be reproduced in whole or in part without permission in writing from AIRBUS FRANCE.

AIRBUS FRANCE Trade Secrets or Commercial or Financial information, 5 U.S.C. (b) (4).

3 - TERMINOLOGY

Not applicable.

4 - REQUIRED CHARACTERISTICS

4.1 - Configuration, dimensions, tolerances, mass

4.1.1 - Configuration shall be in accordance with the figure.

4.1.2 - Dimensions shall be in accordance with the figure and table 1.

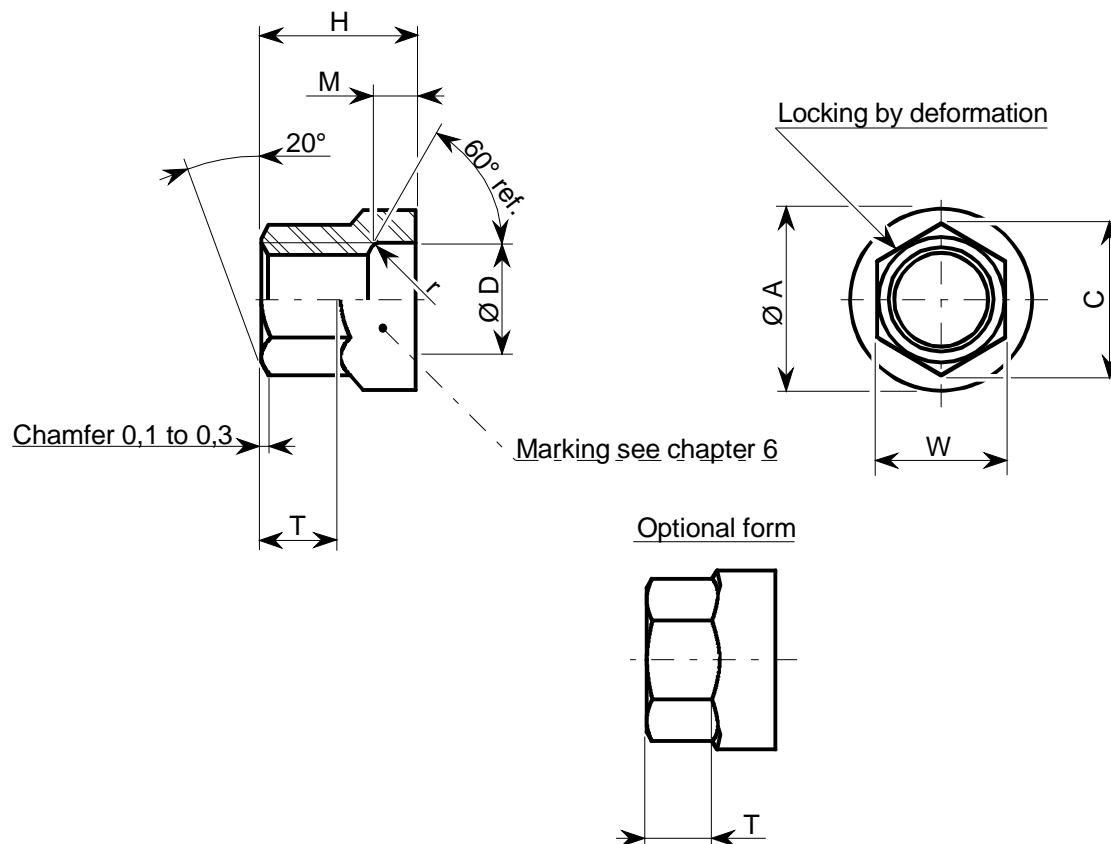
All dimensions are given after finish, but before lubrication.

4.1.3 - Tolerances shall be in accordance with table 1.

4.1.4 - Mass shall be in accordance with table 1.

4.2 - Material, finish, lubrication

Material, finish and lubrication shall be in accordance with table 2.



Dimensions in mm.

Figure - Configuration, dimensions

ASNA2529

Issue : Nov 06

Page : 3

Table 1 - Dimensions, tolerances, mass

| Ø CODE No. | THREAD UNJF-3B as per SAE AS8879 | Ø A max. | C Ref. | Ø D min. | H max. | M min. | r Ref. | T min. | W | Min. AXIAL TENSILE STRENGTH (daN) | MASS (kg/1 000 parts) |
|------------------|---|-------------|-----------|-------------|-----------|-----------|-----------|-----------|----------------|--|-----------------------------|
| 3 | .1900-32 | 9,02 | 7,0 | 5,66 | 6,5 | 2,54 | 0,8 | 2,5 | 6,37 6,17 | 711 | 0,47 |
| 3A | .2160-28 | 9,91 | 7,9 | 6,48 | 6,90 | | 0,9 | | 7,22 6,93 | 1 000 | 0,63 |
| 4 | .2500-28 | 11,18 | 8,8 | 7,19 | 7,3 | 2,64 | 1,0 | 2,7 | 7,95 7,75 | 1 334 | 0,81 |
| 5 | .3125-24 | 13,59 | 10,6 | 8,76 | 8,5 | 2,69 | | 3,2 | 9,55 9,32 | 2 222 | 1,36 |
| 6 | .3750-24 | 17,35 | 14,3 | 10,33 | 9,4 | 2,74 | 1,2 | 3,8 | 12,75 12,50 | 3 114 | 2,60 |
| 7 | .4375-20 | 19,69 | 16,0 | 11,94 | 10,6 | 2,84 | 1,4 | 4,6 | 14,32 14,05 | 4 223 | 3,63 |
| 8 | .5000-20 | 22,35 | 20,3 | 13,51 | 11,4 | 2,89 | 1,6 | | 17,45 17,07 | 5 555 | 5,46 |
| 9 | .5625-18 | 23,49 | 22,1 | 15,29 | 12,9 | 2,99 | | 6,5 | 19,05 18,67 | 6 445 | 6,64 |
| 10 | .6250-18 | 25,40 | | 16,86 | 14,3 | | | 7,9 | 20,86 20,48 | 8 000 | 9,60 |
| 12 | .7500-16 | 28,45 | 25,4 | 19,94 | 20,1 | 3,05 | | 8,6 | 22,30 21,92 | 12 233 | 14,4 |

Dimensions in mm.

Table 2 - Material, finish, lubrication

| ELEMENT | MATERIAL | FINISH | LUBRICATION |
|---------|---|---|---------------------------------|
| NUT | Aluminium alloy 7075 as per AMS-QQ-A-225/9 T73 | Anodizing as per MIL-A-8625, Type II, class 2 (dark blue color) | Cethyl alcohol as per EN6117 |

ASNA2529

Issue : Nov 06

Page : 4

5 - DESIGNATION

Example of part number identification to be used on drawing schedules:

ASNA2529-3 , Nut

Example of part number construction:

| | | |
|----------|---|---|
| ASNA2529 | - | 3 |
|----------|---|---|

Standard No.

Diameter code No.

Designation to be used by Procurement Departments only:

| | | | |
|----------|---|---|---|
| ASNA2529 | - | 3 | S |
|----------|---|---|---|

Standard No.

Procurement code

Diameter code No.

NOTE: Add "S" to the coded part number for delivery of nuts in "feeders" (for use with screw driving machines).

6 - MARKING

Parts shall be marked as per EN2424, categories F or G.

7 - TECHNICAL SPECIFICATION

ABS1420.

8 - MANUFACTURERS

Refer to the list of qualified manufacturers and products.

AMENDMENT RECORD SHEET

| Issue | Modified paragraph | Modification summary | Justification |
|---------|--------------------|---|---|
| A.05.88 | | New standard. | |
| B.10.88 | | Chamfer added in figure. Values of dimensions W and T modified in table 1. | Following note EG/ST 437.127/88 Annex 2 |
| C.04.89 | | Dimensions C, H and T modified in table 1. In figure: knurling added for identification of diameter code No. 10. | A320 |
| D.10.89 | | In table 2: material QQ-A-282, 73 condition changed to QQ-A-225/9, 73 condition. | American specification evolvment |
| E.10.90 | | In table 1: mass in kg/100 changed to in kg/1 000. | Following mistake |
| F.09.96 | | Standard fully amended. Note added in chapter 5. | Memo. No. 60319 of 21.08.96 |
| G.01.00 | | In table 1, thread modified for Ø code No. 4: 0.2599-28 changed to 0.2500-28. "Knurled flange for identification of diameter code No. 10" deleted in figure. Dimension W modified in table 1 for diameter code No. 10: 19,05/18,67 mm changed to 20,86/20,48 mm. Diameter code No. 12 added. | Following mistake Notes JLM No. 0440293/99 564.2323/99 A340/600 |
| H.01.03 | | Diameter code No. 3A added. | In accordance with manufacturer's documentation |
| J.11.06 | | References updated. Go thread gage penetration deleted. Modification of figure with introduction of dimension T min. and optional form. Mass modified. | Specification defined in ABS1420 |

Note: Modification to the last standard issue are indicated by a vertical line in the margin.