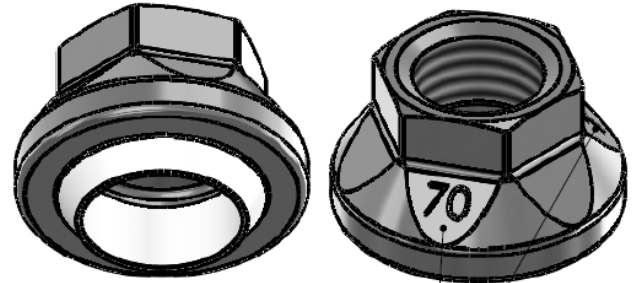
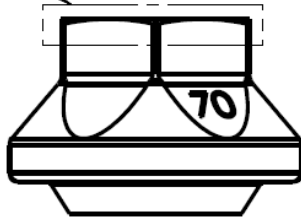


STARLITE™ NUT
Lightweight, 6AL-4V Titanium
Hexagonal, self-sealing, self-locking (for
use with nominal size of HI-LITE™ pins)

STR70

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Lisi titanium nut hot crimping
process per spec n°13818



Manufacturer symbol and
product identification area

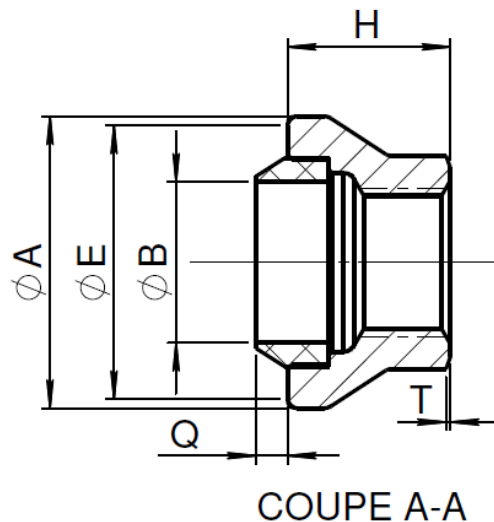
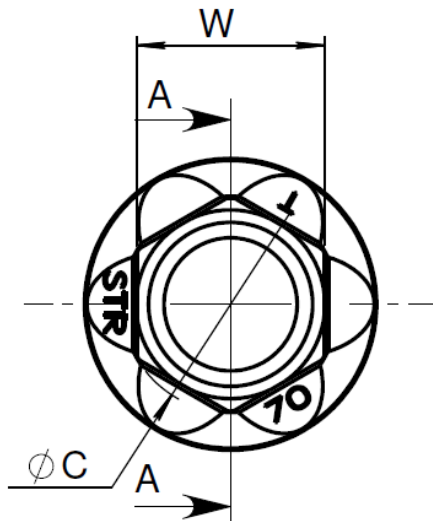


FIGURE 1: CONFIGURATION

NOTES:

UNLESS OTHERWISE SPECIFIED

I. Units

Dimensions and tolerances are in millimeters (inch).
Dimensions apply after finish.

II. Surface Texture

As per ASME B46-1 before coating.
- R_a max. = 3,2 μ m (125).
- Tool mark or distortion permissible in the locking area.

III. Threads

UNJF-3B as per SAE AS8879, except diameter code 5 (UNJC-3B)

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1. APPLICATION

This product standard specifies the dimensions, tolerances and properties of a titanium nut for use in aerospace application at a maximum operating temperature of 71°C (160°F).
 The STR70 nut of STARLITE™ product line is designed to fit HI-LITE™ pins (with short threads and cylindrical shank), nominal diameter only.

2. REQUIREMENTS

Table 1: Material, finish and identification

FINISH CODE	PART	MATERIAL	FINISH
K	NUT	Titanium alloy 6AL-4V as per chemistry of AMS4928, AMS4965 or AMS4967, solution heat treated and aged. Min. shear strength : Rc min = 655 MPa (95 KSI) Min. tensile strength : Rm min = 1103 Mpa (160 KSI)	Non-chromated aluminum based coating: HI-KOTE™ 4NC As per EN4473 type IV
	INSERT	Polytetrafluoroethylene (PTFE), per ASTM D1710 Type 1 grade 1	-

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Table 2: Dimensions and tolerances

Dia. Code	THREAD UNJF-3B	Ø A Max	Ø C ref	Ø E min	H Max	Q Max	ØB min	T Max	W ⁽²⁾ ±0,05 (±.002)
5	.1640-32 ⁽¹⁾	8,59 (.338)	6,30 (.248)	7,67 (.302)	5,82 (.229)	0,89 (.035)	4,08 (.161)	0,27 (.011)	5,51 (.217)
6	.1900-32	9,74 (.383)	7,17 (.282)	8,82 (.347)	6,17 (.243)	1,02 (.040)	4,70 (.185)	0,28 (.011)	6,27 (.247)
7	.2160-28	10,85 (.427)	8,06 (.317)	9,93 (.391)	6,55 (.258)	1,27 (.050)	5,53 (.218)	0,27 (.010)	7,07 (.278)
8	.2500-28	12,28 (.483)	8,94 (.352)	11,36 (.447)	6,93 (.273)	1,40 (.055)	6,50 (.256)	0,29 (.012)	7,85 (.309)
10	.3125-24	15,06 (.593)	10,77 (.424)	14,14 (.557)	8,04 (.317)	1,40 (.055)	8,07 (.318)	0,35 (.014)	9,45 (.372)
12	.3750-24	18,30 (.720)	14,38 (.566)	17,38 (.684)	9,06 (.357)	1,40 (.055)	9,61 (.378)	0,42 (.017)	12,62 (.497)
14	.4375-20	21,07 (.829)	16,16 (.636)	19,64 (.773)	10,41 (.410)	1,27 (.050)	10,94 (.431)	0,48 (.019)	14,20 (.559)
16	.5000-20	24,29 (.956)	17,96 (.707)	22,87 (.900)	11,42 (.450)	1,27 (.050)	12,52 (.493)	0,50 (.020)	15,72 (.619)

(1) Dia. Code 5: UNJC-3B thread as per SAE AS8879.

(2) Deformed for self-locking. Dimensions apply before deformation.

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Table 3: Tensile strength, mass and wrench size

Dia. Code	Thread UNJF-3B	Min. Axial Tensile Strength ⁽²⁾ N (Lbf)	Mass Kg/1000 parts (Lb/1000parts)	Wrench Size (inch)
5	.1640-32 ⁽¹⁾	10 240 (2 302)	0,623 (1.374)	7/32
6	.1900-32	12 566 (2 825)	0,805 (1.776)	1/4
7	.2160-28	17 000 (3 822)	1,058 (2.334)	9/32
8	.2500-28	23 500 (5 283)	1,406 (3.099)	5/16
10	.3125-24	36 930 (8 302)	2,244 (4.948)	3/8
12	.3750-24	58 000 (13 039)	4,263 (9.398)	1/2
14	.4375-20	84 550 (19 008)	6,089 (13.424)	9/16
16	.5000-20	113 470 (25 509)	8,419 (18.560)	5/8

(1) Dia. code 5: UNJC-3B thread as per SAE AS8879.**(2)** Mechanical properties apply at room temperature.

Tensile value is valid for nut only.

See pin standards for pin strengths.

Lower strength (pin or nut) determines system strength.

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3. DESIGNATION

STR70 K ()

Dia. code number in 1/32nds inch

Finish code (table 1)

Basic part number

Example:

STR70K8: STR70 nut for HI-LITE™ pins fastener systems, Titanium alloy 6AL-4V coated with non-chromated coating HI-KOTE™ 4NC, dia. Code ¼ inch.

4. MARKING

Manufacturer symbol and basic part number “STR70” on the flange area (except Ø5/32”: manufacturer symbol only).

Marking shall be positioned as indicated on Figure 1.

5. QUALIFICATION AND ACCEPTANCE

The STR70 nuts shall meet all the inspection requirements of LISI AEROSPACE Qualification and Acceptance Specification STR-QA03.

6. INSTALLATION

Refer to LISI AEROSPACE Installation Specification STR-IS01.

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Issue	Date	Modifications	Justification
A	09-10-2013	First release	
B	2015-04-29	Addition of Øcodes 10/32" & 12/32"	
C	2015-10-19	- Addition of all Øcodes - Marking update for Ø5/32": manufacturer symbol only	Not enough space on the flange area to mark the product standard

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