



Tour Gamma A
193, rue de Bercy
75582 PARIS CEDEX 12
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STARLITE® STR®
SLEEVE SYSTEM NUT
Lightweight, 6AL-4V Titanium
Hexagonal, self-locking
Patent Pending

STR60

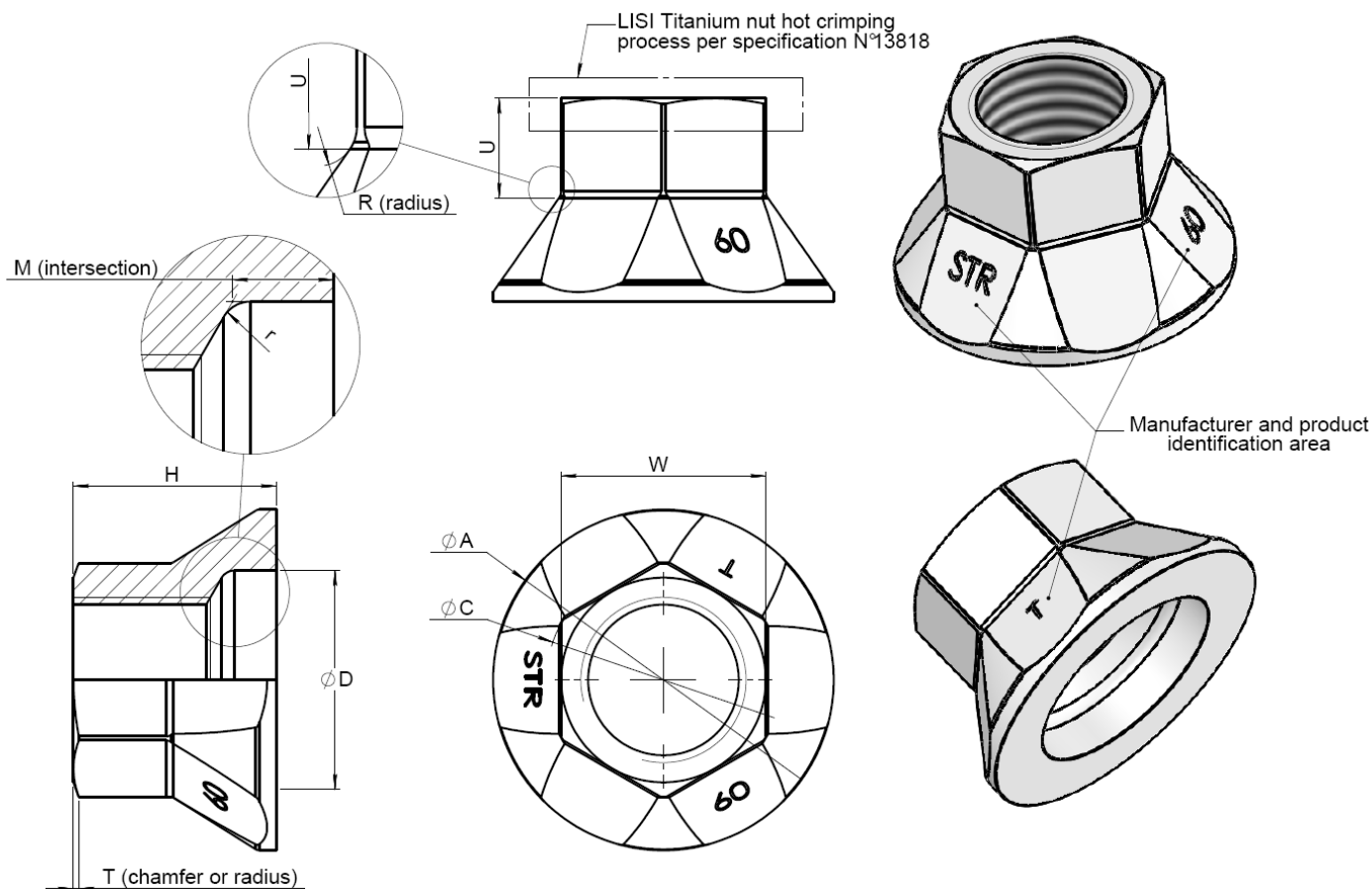


FIGURE 1: CONFIGURATION

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

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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 235°C (455°F).
The STARLITE® STR60 nut is designed to fit Sleeved Taper Hi-Lite® pins, nominal diameter and oversizes.

2. REQUIREMENTS

Table 1: Material, and finish

FINISH CODE	MATERIAL	FINISH
K	Titanium alloy 6AL-4V as per chemistry of AMS4928, AMS4965 or AMS4967, Solution heat treated and aged. Min. shear strength : Rc min = 650 MPa (95 KSI) Min. tensile strength : Rm min = 1100 MPa (160 KSI)	Non-chromated aluminum based coating: Hi-Kote® 4NC As per EN4473 type IV

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Table 2: Dimensions and tolerances

Ø Code	THREAD UNJF-3B	Ø A min	Ø C ref	Ø D min	H ±0,1 (±.004)	M min	r min	R max	T ref	U min	W ref
6	.1900-32	10,52 (0.414)	7,17 (0.282)	7,17 (0.282)	8,58 (0.338)	3,77 (0.148)	0,5 (0.020)	0,8 (0.031)	0,16 (0.006)	2,79 (0.110)	6,28 (0.247)
7	.2160-28	11,78 (0.464)	8,06 (0.317)	8,36 (0.329)	9,20 (0.362)	3,77 (0.148)	0,5 (0.020)	0,8 (0.031)	0,18 (0.007)	3,20 (0.126)	7,07 (0.278)
8	.2500-28	13,45 (0.530)	8,94 (0.352)	9,56 (0.376)	10,10 (0.398)	3,77 (0.148)	0,5 (0.020)	0,8 (0.031)	0,20 (0.008)	3,62 (0.143)	7,85 (0.309)
10	.3125-24	16,34 (0.643)	10,77 (0.424)	11,16 (0.439)	11,62 (0.457)	3,80 (0.150)	0,7 (0.028)	0,8 (0.031)	0,24 (0.009)	4,45 (0.175)	9,45 (0.372)
12	.3750-24	19,78 (0.779)	14,38 (0.566)	13,16 (0.518)	12,73 (0.501)	3,80 (0.150)	0,7 (0.028)	1,0 (0.039)	0,32 (0.013)	5,41 (0.213)	12,63 (0.497)
14	.4375-20	22,87 (0.900)	16,16 (0.636)	15,14 (0.596)	13,97 (0.550)	3,80 (0.150)	0,7 (0.028)	1,0 (0.039)	0,36 (0.014)	6,12 (0.241)	14,20 (0.559)
16	.5000-20	26,05 (1.026)	17,96 (0.707)	16,74 (0.659)	15,33 (0.603)	3,87 (0.152)	1,1 (0.043)	1,0 (0.039)	0,41 (0.016)	7,09 (0.279)	15,73 (0.619)
18	.5625-18	28,58 (1.125)	19,79 (0.779)	18,34 (0.722)	16,59 (0.653)	3,87 (0.152)	1,1 (0.043)	1,0 (0.039)	0,45 (0.018)	7,78 (0.306)	17,33 (0.682)
20	.6250-18	30,04 (1.183)	22,43 (0.883)	19,95 (0.785)	18,03 (0.710)	3,87 (0.152)	1,1 (0.043)	1,0 (0.039)	0,51 (0.020)	8,84 (0.348)	19,64 (0.773)
24	.7500-16	35,93 (1.415)	26,98 (1.062)	23,54 (0.927)	21,55 (0.849)	3,87 (0.152)	1,1 (0.043)	1,0 (0.039)	0,61 (0.024)	11,46 (0.451)	23,63 (0.930)
28	.8750-14	41,76 (1.644)	30,56 (1.203)	27,14 (1.069)	24,51 (0.965)	3,95 (0.155)	1,5 (0.059)	1,0 (0.039)	0,69 (0.027)	12,95 (0.510)	26,78 (1.054)
32	1.0000-12	47,21 (1.859)	34,22 (1.347)	30,33 (1.194)	27,14 (1.069)	3,95 (0.155)	1,5 (0.059)	1,0 (0.039)	0,77 (0.030)	14,46 (0.569)	29,98 (1.180)
36	1.1250-12	53,12 (2.091)	37,70 (1.484)	33,54 (1.320)	30,31 (1.193)	3,95 (0.155)	1,5 (0.059)	1,0 (0.039)	0,85 (0.033)	16,18 (0.637)	33,02 (1.300)

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Table 3: Tensile strength, mass and wrench size

Ø Code	Thread UNJF-3B	Min. Axial Tensile Strength (1) N (Lbf)	Mass kg/1000 parts (lb/1000parts) (For information only)	Wrench size (inch)
6	.1900-32	15770 (3.545)	1,231 (2.717)	1/4
7	.2160-28	20340 (4.573)	1,529 (3.375)	9/32
8	.2500-28	28689 (6.449)	2,043 (4.510)	5/16
10	.3125-24	45797 (10.296)	3,42 (7.550)	3/8
12	.3750-24	69271 (15.573)	6,355 (14.029)	1/2
14	.4375-20	91143 (20.490)	8,818 (19.466)	9/16
16	.5000-20	122803 (27.607)	11,531 (25.455)	5/8
18	.5625-18	155836 (35.033)	14,702 (32.455)	11/16
20	.6250-18	196509 (44.177)	19,23 (42.450)	25/32
24	.7500-16	300427 (67.539)	32,022 (70.689)	15/16
28	.8750-14	411220 (92.446)	47,896 (105.731)	1-1/16
32	1.0000-12	535050 (120.284)	65,234 (144.004)	1-3/16
36	1.1250-12	694784 (156.194)	87,299 (192.713)	1-5/16

(1) Mechanical properties apply at room temperature.

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3. DESIGNATION

STR60 K ()

Ø code number in 1/32nds inch

Finish code (table 1)

Basic part number

Example:

STR60K28 : STARLITE® nut for Sleeved Taper Hi-Lite® pins fastener systems, Non-chromated coating Hi-Kote® 4NC, Diameter code 28/32"

4. MARKING

Basic part number "STR60" and manufacturer symbol identification on flange petals (see figure 1).

5. PROCUREMENT SPECIFICATION

The STR60 nut must meet all the inspection requirements of LISI AEROSPACE Product Specification STR-QA02.

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Revision	Date	Modifications	Justification
A	September 17, 2010	New standard	-
B	2015-03-30	§5: Product specification STR-TS02 replaced by STR-QA02	-

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