PIN
PROTRUDING SHEAR HEAD
TITANIUM

Published and distributed by:

AIRBUS INDUSTRIE
31707 BLAGNAC CEDEX
FRANCE

Approved
AIRBUS INDUSTRIE

1. SCOPE AND FIELD OF APPLICATION

This standard specifies the characteristics and dimensions of pin protruding shear head, titanium for use preferably as nonremovable fasteners in primary structure.

2. REFERENCES

MIL-S-8879	Screw threads, controlled radius rott with increased minor diameter, General Specification.
ANSI B46.1	Surface texture (Surface Roughness).
AMS4928	Titanium alloy (6AL-4V)
AMS4967	Titanium alloy (6AL-4V)
ABS0274	Collar aluminium alloy, shear application
prEN2424	Identification marking of standard fasteners, aerospace series
HS-Spec294(*)	Aluminium coating for titanium fastener systems
HS-Spec305(*)	Cetyl alcohol and lauric acid lubrication of fasteners
HS-Spec380(*)	Product specification HI-LITE fastening system HI-LITE pin

3. REQUIRED CHARACTERISTICS

3.1. Configuration-Dimensions-Loads-Tolerances-Mass

3.1.1. Configuration shall be accordance with the figure.

3.1.2. Dimensions shall conform with the table 1 and 2. To be meet after finish.

3.1.3. Loads shall be accordance with table 1

3.1.4. Tolerances, Concentricity "A" to "D" diameter within 0,25mm (.010 in) FIR

3.1.5. Mass shall be accordance with table 2

(*) Manufacturer Specification

3.2. Material

Titanium alloy 6AL-4V per AMS4928 or AMS4967

3.3. Heat treatment

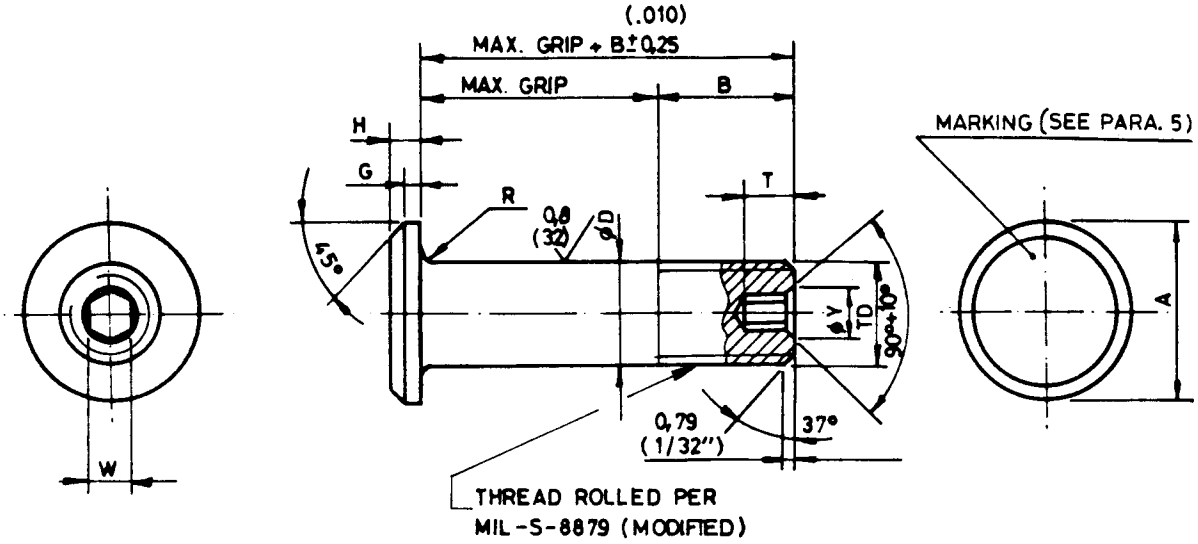
Min shear strength 655N/mm^2 (MPa)

3.4. Finish

Aluminium coating per HS-Spec 294 colour black on thread end and cetyl alcohol lube per HS-Spec 305 (Code A)

3.5. Surface texture

Per ANSI B46.1



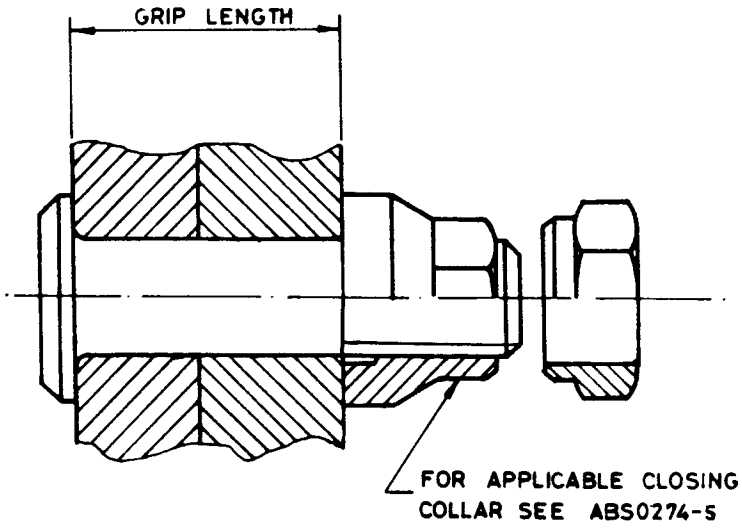


Figure-Configuration

Table 1 - Dimensions - Loads

Table 1 Dimensions in millimetres (inch)

1st CODE NUMBER			5
NOMINAL DIA			4 (5/32)
THREAD MIL-S-8879			.1640-32UNJC-3A MODIFIED
A		MAX	6,65 (.262)
		MIN	6,15 (.242)
B		REF	7,11 (.280)
D		MAX	4,153 (.1635)
		MIN	4,128 (.1625)
TD		MAX	4,051 (.1595)
		MIN	3,988 (.1570)
G		REF	0,51 (.020)
H		MAX	1,19 (.047)
		MIN	0,94 (.037)
R		MAX	0,64 (.025)
		MIN	0,38 (.015)
INTERNAL HEXAGON	W	MAX	1,638 (.0645)
		MIN	1,613 (.0635)
	T	MAX	3,43 (.135)
		MIN	2,92 (.115)
	Y	MAX	2,29 (.090)
		MIN	1,90 (.075)
DOUBLE SHEAR kN (lbs)		MIN	17,84 (4010)
TENSION kN (lbs)		MIN	8,63 (1940)

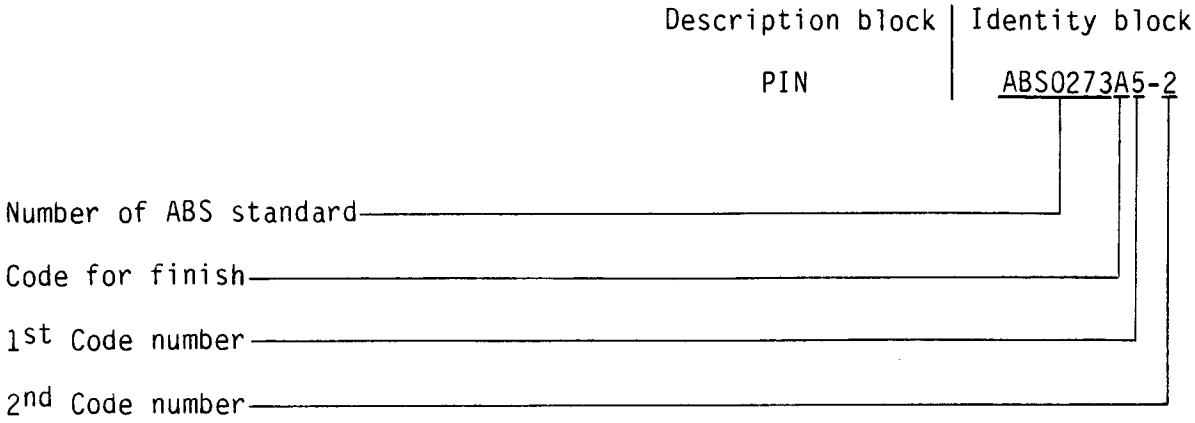
Table 2-Grip dimensions-Mass

Dimensions in millimetres (inch)
Mass in kg/1000 parts

Table 2

2nd CODE NUMBER	GRIP ± 0,73 (.005)	GRIP LENGTH MAX	GRIP LENGTH MIN	MASS 1st CODE NUMBER 5
2	3,2 (1/8)	3,1 (.12)	1,6 (.06)	0,59
3	4,8 (3/16)	4,7 (.19)	3,2 (.12)	0,69
4	6,4 (1/4)	6,3 (.25)	4,8 (.19)	0,78
5	7,9 (5/16)	7,8 (.31)	6,4 (.25)	0,88
6	9,5 (3/8)	9,4 (.38)	7,9 (.31)	0,97
7	11,1 (7/16)	11,0 (.44)	9,5 (.38)	1,07
8	12,7 (1/2)	12,6 (.50)	11,1 (.44)	1,16
9	14,3 (9/16)	14,2 (.56)	12,7 (.50)	1,26
10	15,9 (5/16)	15,8 (.62)	14,3 (.56)	1,36
11	17,5 (11/16)	17,4 (.69)	15,9 (.62)	1,45
12	19,1 (3/4)	19,0 (.75)	17,5 (.69)	1,55
13	20,6 (13/16)	20,5 (.81)	19,1 (.75)	1,64
14	22,2 (7/8)	22,1 (.88)	20,6 (.81)	1,74
15	23,8 (15/16)	23,7 (.94)	22,2 (.88)	1,83
16	25,4 (1)	25,3 (1.00)	23,8 (.94)	1,93
17	27,0 (1-1/16)	26,9 (1.06)	25,4 (1.00)	2,02
18	28,6 (1-1/8)	28,5 (1.12)	27,0 (1.06)	2,12
19	30,2 (1-3/16)	30,1 (1.19)	28,6 (1.12)	2,21
20	31,8 (1-1/4)	31,7 (1.25)	30,2 (1.19)	2,31

4. DESIGNATION



5. MARKING

According to prEN2424 style F plus material code "V"
and diameter-dash-no

6. TECHNICAL SPECIFICATION

HS-Spec.380