

Aerospace series**Connector, coaxial TNC
for overbraid installation**

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1 Scope

This standard specifies the dimensions, tolerances, mass and required characteristics of a type TNC connector for coaxial cable with mounting nut and sealing which is ensured by gasket on interface and cable outlet area.

The connector is fitted with an overbraid installation area.

2 Normative references

This Airbus Standard incorporates by dated or undated reference provisions from other publications. All normative references cited at the appropriate places in the text are listed hereafter. For dated references, subsequent amendments to or revisions of any these publications apply to this Airbus Standard only when incorporated in it by amendment of revision. For undated references, the latest issue of the publication referred to shall be applied.

EN2424	Aerospace series – Marking of aerospace products. ¹
EN4604-010	Aerospace series – Cable, electrical, for signal transmission – Part 010: Cable, coaxial, light weight, 50 ohms, 200 °C, type KX (light WD) – Product standard. ¹
ABS0777	General technical specification for standard parts
ABS5334	Aerospace series – Tape – Silicone, self-adhering, electrical insulation, high temperature.
ASNE0805	Metallic clamping strips for screened termination backshell.
AIPS07-01-013	Airbus Process Specification – Shielded overbraiding of electrical harnesses developed for A380 Program.
AIPS07-05-078	Airbus Process Specification – Coaxial connectors with clamp technology (connection without crimping).
MIL-PRF-39012	Connectors, coaxial, radio frequency, general specification for. ²

3 Requirements

3.1 Configuration, dimensions, tolerances and mass

The configuration, dimensions and tolerances shall be in accordance with figures 1, 2 and table 1.

The mass shall be in accordance with table 1.

All dimensions are in millimeters.

¹ Published as ASD Standard at the date of publication of this standard

² Published by: Department of Defense (DoD), the Pentagon, Washington, D.C., 20307, USA

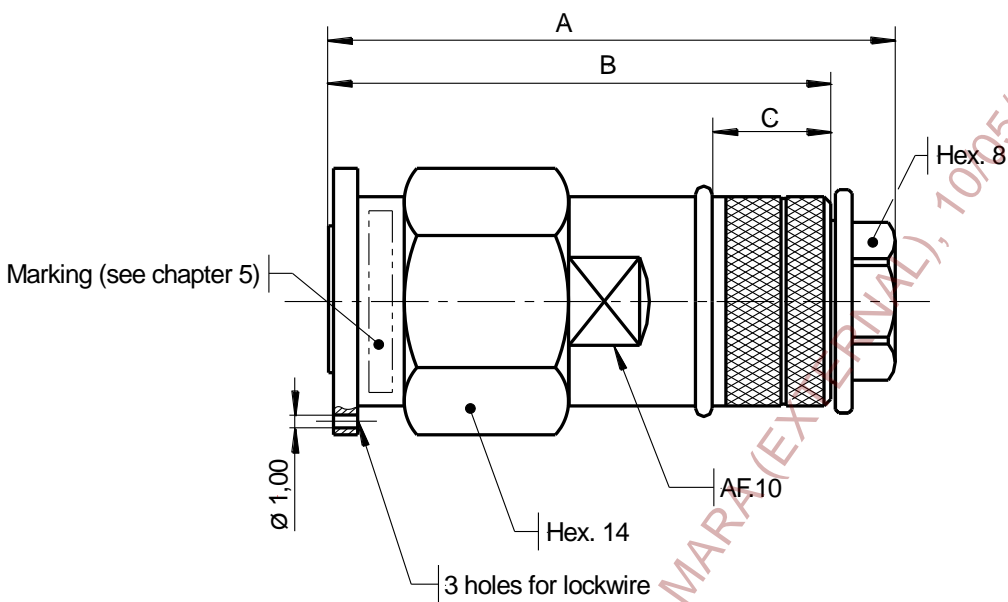


Figure 1: Configuration of connector type code F – Straight plug

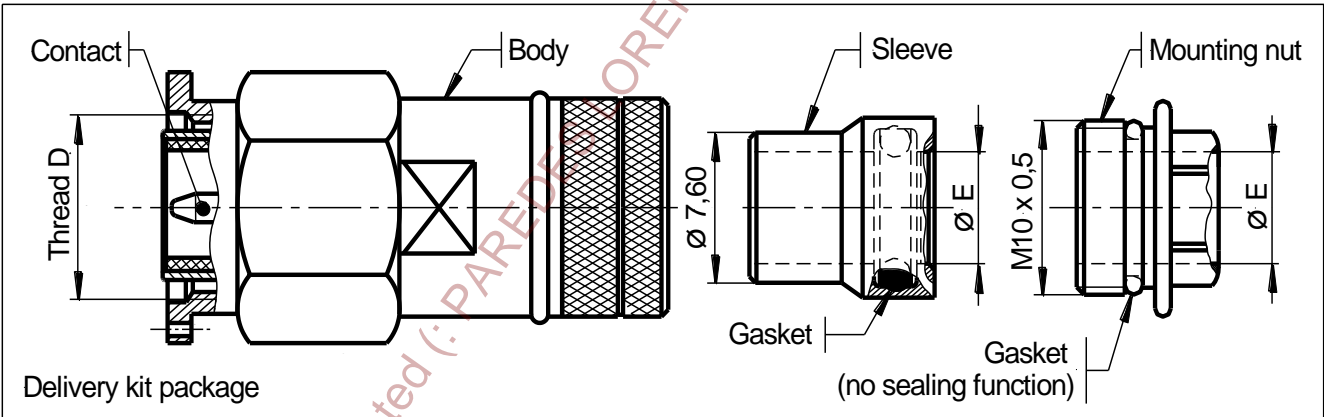


Figure 2: Delivery package of connector type code F – Straight plug

Table 1: Dimensions, tolerances and mass

Type code	Cable code	A (mm) ± 0,60	B (mm) ± 0,30	C (mm) ± 0,20	Thread D UNEF-2B (inch)	Ø E ± 0,10	Mass max. (g)
F	01	35,57	29,97	6,00	.4375-2B	5,68	21,7

3.2 Material and surface treatment

The material and surface treatment shall be in accordance with table 2.

Table 2: Material and surface treatment

Connector component	Material	Surface treatment
Body	Stainless steel	Passivated
Nut		
Mounting nut		
Contact	Copper alloy	Gold plated
Sleeve	Stainless steel	Passivated
Gaskets	Silicone	None

3.3 General characteristics

3.3.1 Connector type code

According to table 3.

Table 3: Type code

Type code	Connector type
F	Straight plug

3.3.2 Operating temperature range

The operating temperature range shall be from -65°C to +165°C.

3.3.3 Delivery condition

The connector shall be delivered as kit package (see figure 2).

3.4 Mechanical characteristics

3.4.1 Mating of the connector

Mating of the connector are 500 cycles.

3.4.2 Tightening torque

The tightening torque of the mounting nut and nut shall be in accordance with table 4.

Table 4: Tightening torque

Type code	Cable code	Dimensions in Nm	
		Connector tightening torque	
		Mounting nut	Nut
F	01	4,0 ± 0,5	2,6

3.4.3 Assembly instruction

Assembly instruction for the complete connector shall be in accordance with AIPS07-05-078.

3.5 Electrical characteristics

According to table 5.

Table 5: Electrical characteristics

Impedance (Ω)	Operating frequency (GHz)	Insulation resistance (G Ω)
50	0 – 6	5

3.5.1 Admissible cable code

According to table 6.

Table 6: Cable code

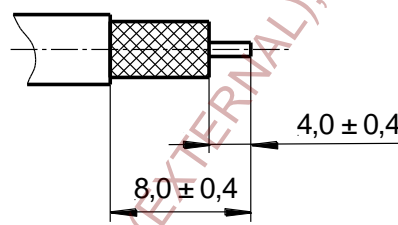
Cable code	Admissible cable
01	EN4604-010KX

3.6 Stripping lengths and admissible cables

According to table 7.

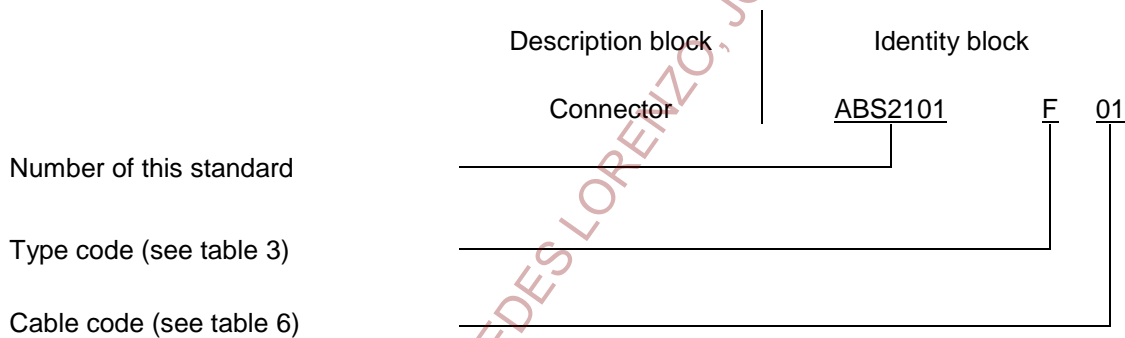
Table 7: Stripping lengths and admissible cables

Dimensions in millimeters

Type code	Cable code	Admissible cable	Stripping lengths
F	01	EN4604-010KX	

4 Designation

This type of standard shall be designated according to the philosophy of the following example:



5 Marking

According to EN2424 with, at least, the following information:

- Manufacturer monogram.
- Manufacturer part number.
- Date of manufacture (YY.WW).

6 Technical specification

- ABS0777
- MIL-PRF-39012

7 Example of installation

According to figure 3.

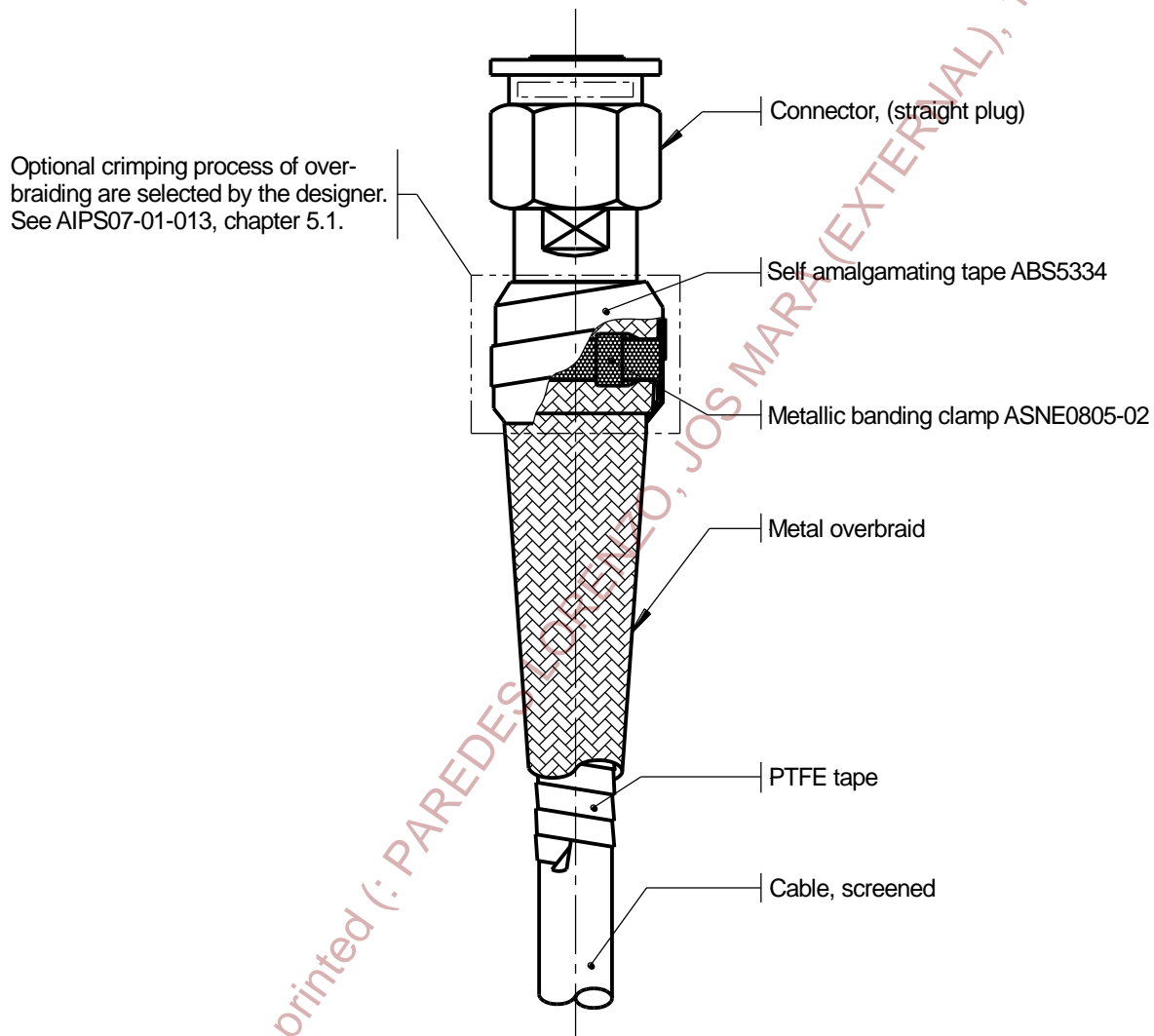


Figure 3: Example of installation

RECORD OF REVISIONS

Issue	Clause modified	Description of modification
1 03/10		New standard.
2 03/14	Figures 1 and 2 Table 5	Knurl at mounting nut removed. Dimension ØE corrected.
3 12/14	All 4 5	Template updated. Content reorganised according to the new template. Content adapted to the new organisation of the Standard. Marking requirements updated to reference EN2424 and add Date Code.