



SERIES TNC 75 Ω COAXIAL MINIATURE CONNECTORS

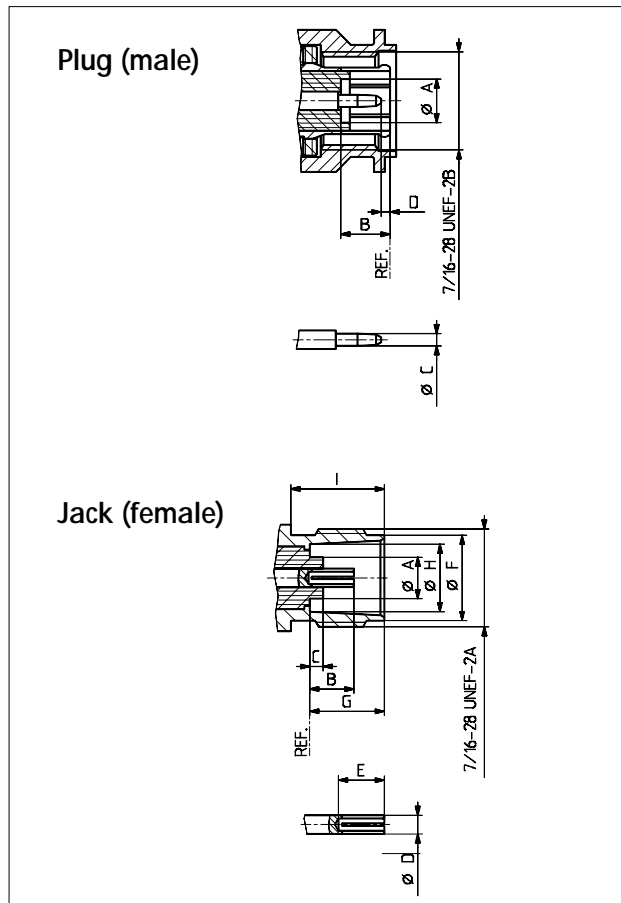
Description

Within the internationally standardized TNC mating face dimensions a perfect 75 Ω characteristic impedance cannot be realized. However, at frequencies up to 1 GHz the small impedance deviation is negligible for practical applications. A typical VSWR of 1.15 at 1 GHz is achieved. The threaded coupling mechanism allows them to be used under higher environmental load than BNC.

Compatibility

75 Ω TNC connectors and 50 Ω TNC connectors are intermateable without restrictions.

Interface Dimensions



Interface Dimensions in mm / inches

	Plug		Jack	
	min.	max.	min.	max.
A	4.83 / .190	4.97 / .196	---	4.72 / .186
B	5.28 / .208	5.79 / .228	4.72 / .186	5.23 / .206
C	1.32 / .052	1.37 / .054	1.50 / .059 nom.	
D	0.08 / .003	1.02 / .040	2.10 / .827 nom.	
E	---	---	4.95 / .195	---
F	---	---	9.60 / .378	9.70 / .382
G	---	---	8.35 / .328	8.48 / .334
H	---	---	8.10 / .319	8.15 / .321
I	---	---	10.60 / .417	---

Interface dimensions conformable to the Standards:

(based on
IEC 169-17 and
IEC 60169-8, Annex A)

Technical Data

ELECTRICAL DATA	REQUIREMENTS
Impedance	75 Ω
Frequency range	DC ... 1 GHz
RF-leakage (measured at 1 GHz)	≥ 60 dB
Dielectric withstanding voltage (at sea level)	1.5 kV rms, 50 Hz (depending on cable)
Working voltage (at sea level) - unmated	≤ 500 V rms, 50 Hz (depending on cable)
Insulation resistance	$\geq 5 \cdot 10^3$ M Ω
Contact resistance - centre contact - outer contact	≤ 1.5 m Ω ≤ 1 m Ω

MECHANICAL DATA	REQUIREMENTS
Coupling nut torque - recommended - proof torque	46 Ncm ... 69 Ncm / 4.1 in. lbs ... 6.1 in. lbs 170 Ncm / 15.0 in. lbs
Coupling nut retention force	≥ 450 N / 101.2 lbs
Contact captivation	≥ 27 N / 6.1 lbs
Durability (matings)	≥ 500

ENVIRONMENTAL DATA	TEST CONDITIONS
Temperature range	$-65^{\circ}\text{C} \dots +165^{\circ}\text{C}$ / $-89^{\circ}\text{F} \dots +329^{\circ}\text{F}$
Climatic category	IEC \rightarrow 55/155/21
Thermal shock	MIL-STD-202, Method 107, Condition B
Moisture resistance	MIL-STD-202, Method 106
Corrosion	Saltspray test acc. to MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition B
Shock	MIL-STD-202, Method 213, Condition G

MATERIAL DATA

CONNECTOR PART	STANDARDS	MATERIAL	PLATING
Bodies Pin contact	QQ-B-626	brass	SUCOPLATE® gold
Socket contact	QQ-C-530	beryllium-copper, hardened copper alloy	gold
Crimp ferrules	SUHNER® specification QQ-B-626	copper brass	SUCOPLATE®
Insulators, standard version		PTFE or PFA	
Gaskets		silicone rubber	

Some connectors may have a specification that differs from the above mentioned data.