



# SERIES BNC 75 $\Omega$ COAXIAL MINIATURE CONNECTORS

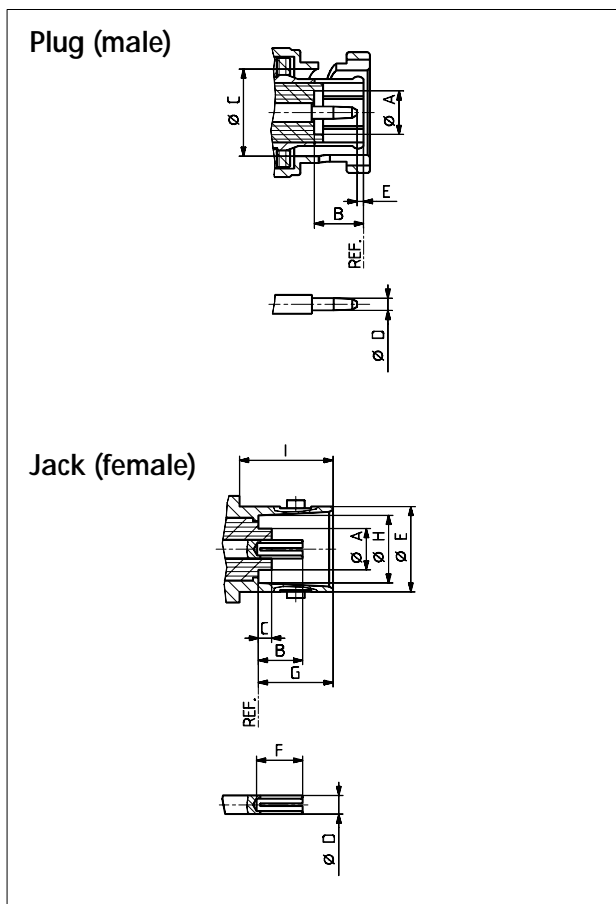
## Description

SUHNER BNC Series featuring a two stud bayonet coupling mechanism which is particularly useful for frequently coupled and uncoupled RF connections. Within the internationally standardized BNC mating face dimensions a perfect 75  $\Omega$  characteristic impedance cannot be realized. However, at frequencies up to 1 GHz the small impedance deviation is negligible for any application. A typical VSWR of 1.15 at 1 GHz is achieved.

## Compatibility

75  $\Omega$  BNC connectors and 50  $\Omega$  BNC connectors are intermateable without any 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	9.78 / .385	9.91 / .390	1.50 / .059 nom.	
D	1.32 / .052	1.37 / .054	2.10 / .827 nom.	
E	0.08 / .003	1.02 / .040	9.60 / .378	9.70 / .382
F		---	4.95 / .195	---
G		---	8.35 / .328	8.48 / .334
H	---	---	8.10 / .319	8.15 / .321
I	---	---	10.60 / .417	---

Interface dimensions conformable to the Standards:

International: IEC 60169-8 (Annex A)

## Technical Data

ELECTRICAL DATA	REQUIREMENTS
Impedance	75 $\Omega$
Frequency range	DC ... 1 GHz
RF-leakage (measured at 1 GHz)	$\geq 55$ dB
Dielectric withstanding voltage (at sea level)	1.5 kV rms, 50 Hz (depending on cable)
Working voltage (at sea level)	$\leq 500$ V rms, 50 Hz (depending on cable)
Insulation resistance	$\geq 5 \cdot 10^3$ M $\Omega$
Contact resistance - centre contact - outer contact	$\leq 1.5$ m $\Omega$ $\leq 1$ m $\Omega$

MECHANICAL DATA	REQUIREMENTS
Coupling nut torque	7 Ncm ... 28 Ncm / 0.6 in. lbs ... 2.5 in. lbs
Coupling nut retention force	$\geq 450$ N / 101.2 lbs
Contact captivation	$\geq 27$ N / 6.1 lbs
Durability (matings)	$\geq 500$

ENVIRONMENTAL DATA	TEST CONDITIONS
Temperature range	- 65°C ... + 165°C / - 85°F ... + 329°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		PTFE or PFA	
Gaskets		silicone rubber	

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