



SERIES BNT TRIAxIAL MINIATURE CONNECTORS

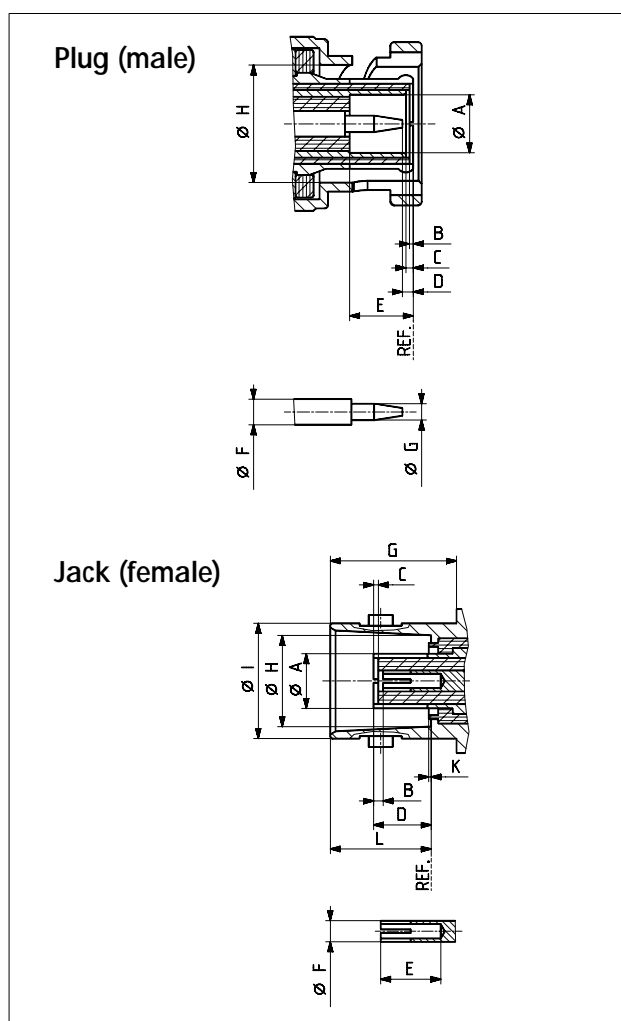
Description

SUHNER BNT triaxial connectors are RF connectors with a bayonet coupling mechanism and three concentric contacts (inner conductor, inner screen and outer screen) for triaxial cables.

SUHNER BNT connectors are intermateable with BNC connectors, but the inner conductor and outer screen are connected only.

BNT connectors are suitable for applications up to 3 GHz.

Interface Dimensions



Interface Dimensions in mm / inches

	Plug		Jack	
	min.	max.	min.	max.
A	4.85/.191	4.90/.193	4.95/.195*	5.05/.199*
B	0.00/.000	0.40/.016	0.10/.004	---
C	0.50/.020 nom.		0.20/.008 nom.	
D	0.60/.024 nom.		4.90/.193 nom.	
E	5.30/.209	---	5.00/.197	---
F	1.43/.056	1.47/.058	1.70/.067	1.75/.069
G	1.32/.052	1.37/.054	10.52/.414	---
H	9.78/.385	9.91/.390	8.10/.319	8.15/.321
I	---	---	9.60/.378	9.70/.382
K	---	---	0.20/.008 nom.	
L	---	---	8.31/.327	8.51/.335

* prior to slotting

Technical Data

ELECTRICAL DATA	REQUIREMENTS
Impedance	50 Ω (between centre contact and first outer contact)
Frequency range	DC ... 3 GHz
Dielectric withstanding voltage (at sea level) - centre contact/inner screen - between screens	1 kV rms, 50 Hz 400 V rms, 50 Hz
Insulation resistance - centre contact/inner screen - between screens	$\geq 5 \cdot 10^3$ M Ω $\geq 5 \cdot 10^2$ M Ω
Contact resistance - centre contact - inner screen - outer screen	≤ 1.5 m Ω ≤ 1 m Ω ≤ 1.5 m Ω

MECHANICAL DATA	REQUIREMENTS
Coupling nut torque	7 Ncm ... 28 Ncm / 0.6 in. lbs ... 2.5 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	- 50°C ...+ 125°C / - 58°F ...+ 257°F
Climatic category	IEC → 50/125/21
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 1. outer contact	QQ-B-626	brass	SUCOPLATE® gold silver
Socket contact	QQ-C-530	beryllium-copper, hardened	gold
Crimp ferrules	SUHNER® specification	copper	SUCOPLATE®
Insulators		PTFE or PFA	
Gaskets		silicone rubber	

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