



Datasheet **CAB-LN1**

Low Noise Cable

Features

- **Minimizes triboelectric/microphonic noise**
- **Noise level reduction up to a factor of 1,000**
- **Assembled with very high quality connectors**
- **Highly shielding coaxial design**

Applications

- **Low signal current, voltage and charge measurements**
- **Scanning probe microscopy, photodetectors, ionization detectors, piezo- and pyroelectric sensors etc.**
- **For use with FEMTO low noise amplifiers. Strongly recommended for all current amplifiers with gain $\geq 10^7$ V/A.**

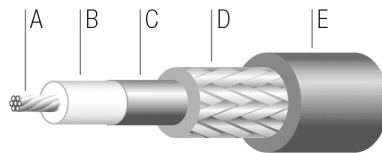
Specifications

Electrical

Impedance	$(50 \pm 5) \Omega$
Capacitance	96 pF/m
Insulation resistance	$> 10^{14} \Omega \cdot m$
DC resistance, inner conductor	$< 800 \text{ m}\Omega/m$
DC resistance, outer conductor	$< 45 \text{ m}\Omega/m$
Attenuation	$\leq 0.1 \text{ dB/m, DC to 4 MHz}$

Cable Design

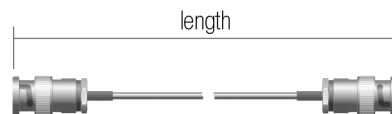
A Inner conductor	copper, 7 x $\emptyset 0.1 \text{ mm}$, $\emptyset 0.3 \text{ mm}$
B Dielectric	polytetrafluoroethylene (PTFE), $\emptyset 0.84 \text{ mm}$
C Coating	semi conductive, $\emptyset 0.88 \text{ mm}$
D Shield	silver plated tensile flex braid 90 %, $\emptyset 1.35 \text{ mm}$
E Jacket	perfluoroalkoxy (PFA), $\emptyset 1.9 \text{ mm}$



General Data

Maximum operating voltage	$< 50 \text{ VAC, } < 75 \text{ VDC}$
Temperature range	$-55 \text{ }^\circ\text{C to } +200 \text{ }^\circ\text{C}$
Weight	$(42 \pm 4) \text{ g, for length } 1.0 \text{ m}$

Dimensions



Length tolerance: +15 mm, -5 mm

Ordering Code

BNC – BNC		BNC – BNC	
Length	plug (male) – plug (male)	Length	plug (male) – plug (male)
0.1 m	CAB-LN1-BB-010	1.5 m	CAB-LN1-BB-150
0.2 m	CAB-LN1-BB-020	2.0 m	CAB-LN1-BB-200
0.5 m	CAB-LN1-BB-050	3.0 m	CAB-LN1-BB-300
1.0 m	CAB-LN1-BB-100	5.0 m	CAB-LN1-BB-500