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.**

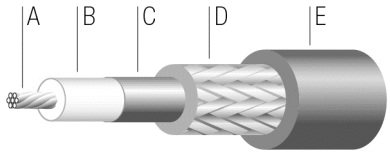
Specifications

Electrical

Impedance	(50 ± 5) Ω
Capacitance	96 pF/m
Insulation resistance	> 10^{14} Ω·m
DC resistance, inner conductor	< 800 mΩ/m
DC resistance, outer conductor	< 45 mΩ/m
Attenuation	≤ 0.1 dB/m, DC to 4 MHz

Cable Design

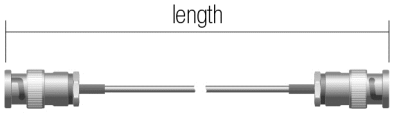
A Inner conductor	copper, 7 x Ø 0.1 mm, Ø 0.3 mm
B Dielectric	polytetrafluoroethylene (PTFE), Ø 0.84 mm
C Coating	semi conductive, Ø 0.88 mm
D Shield	silver plated tensile flex braid 90 %, Ø 1.35 mm
E Jacket	perfluoroalkoxy (PFA), Ø 1.9 mm



General Data

Maximum operating voltage	< 50 VAC, < 75 VDC
Temperature range	–55 °C to +200 °C
Weight	(42 ± 4) g, for length 1.0 m

Dimensions



Length tolerance: +15 mm, –5 mm

Ordering Code

Length	BNC – BNC plug (male) – plug (male)	Length	BNC – BNC 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

FEMTO Messtechnik GmbH
Klosterstr. 64
10179 Berlin · Germany
Phone: +49 30 280 4711-0
Fax: +49 30 280 4711-11
Email: info@femto.de
www.femto.de