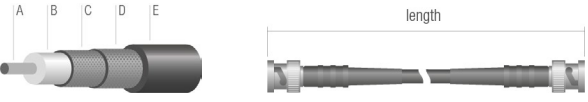


Datasheet

CAB-HF1

High Performance Coaxial Cable

Features	<ul style="list-style-type: none"> Minimizes grounding (ground loop) related noise Double shielded coaxial design, screening effectiveness ≥ 85 dB 100 % tested RF parameters Return Loss (RL) and Insertion Loss (IL) Assembled with high quality connectors 	
Applications	<ul style="list-style-type: none"> General purpose current, voltage and charge measurements For use with FEMTO low noise amplifiers at input and output (see our CAB-LN1 cable for input of high gain transimpedance amplifiers) 	
Specifications	Test conditions	$T_A = 25^\circ\text{C}$, sea level
Electrical	Impedance Capacitance Insulation resistance DC resistance, inner conductor DC resistance, outer conductor Recommended frequency range Signal delay Screening effectiveness Attenuation (nominal)	$50\ \Omega \pm 1\ \Omega$ $101\ \text{pF/m}$ $> 10^{13}\ \Omega \times \text{m}$ $< 28\ \text{m}\Omega/\text{m}$ $< 7\ \text{m}\Omega/\text{m}$ DC to 4 GHz $5\ \text{ns/m}$ $\geq 85\ \text{dB}$ (up to 1 GHz) $0.23\ \text{dB/m}$ @ 300 MHz, $0.45\ \text{dB/m}$ @ 1.0 GHz $0.78\ \text{dB/m}$ @ 2.5 GHz
RF Characteristics (100% Tested)	Return loss (RL) @ 2.5 GHz Insertion loss (IL) @ 2.5 GHz	$> 20\ \text{dB}$ $< 0.26\ \text{dB}$ (0.2 m), $< 0.51\ \text{dB}$ (0.5 m), $< 0.77\ \text{dB}$ (0.8 m), $< 1.38\ \text{dB}$ (1.5 m), $< 2.67\ \text{dB}$ (3.0 m)
Cable Design	A Inner conductor B Dielectric C Outer conductor D Outer conductor E Jacket	copper wire, silver plated, $\varnothing 0.88\ \text{mm}$ polyethylene (PE), $\varnothing 2.95\ \text{mm}$ copper braid 96 %, silver plated, $\varnothing 3.6\ \text{mm}$ copper braid 94 %, silver plated, $\varnothing 4.2\ \text{mm}$ polyvinyl chloride (PVC II) low migration, $\varnothing 5.4\ \text{mm}$
General Data		
	Length tolerance Connectors Minimum bending radius Maximum operating voltage Temperature range connectors Temperature range cable Weight	$\pm 5\ \text{mm}$ BNC plug (male) to BNC plug (male) 30 mm (fixed installation) 55 mm (≤ 50 repeated bendings) AC: $< 46\ \text{V}$ peak-peak, DC: $< 70\ \text{V}$ -60°C to $+160^\circ\text{C}$ -25°C to $+85^\circ\text{C}$ 0.2 m: 32 g (0.07 lbs), 0.5 m: 50 g (0.11 lbs), 0.8 m: 68 g (0.15 lbs), 1.5 m: 108 g (0.24 lbs), 3.0 m: 198 g (0.44 lbs)
Ordering Code	CAB-HF1-BB-020 CAB-HF1-BB-050 CAB-HF1-BB-080 CAB-HF1-BB-150 CAB-HF1-BB-300	0.2 m (0.66 ft) BNC plug (male) to BNC plug (male) 0.5 m (1.64 ft) BNC plug (male) to BNC plug (male) 0.8 m (2.62 ft) BNC plug (male) to BNC plug (male) 1.5 m (4.92 ft) BNC plug (male) to BNC plug (male) 3.0 m (9.84 ft) BNC plug (male) to BNC plug (male)

Specifications are subject to change without notice. Information provided herein is believed to be accurate and reliable. However, no responsibility is assumed by FEMTO Messtechnik GmbH for its use, nor for any infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of FEMTO Messtechnik GmbH. Product names mentioned may also be trademarks used here for identification purposes only.

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SOPHISTICATED TOOLS FOR SIGNAL RECOVERY

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CAB-HF1_R1/TH/19MAY2025