

Low Capacitance Cable

Features	- Minimizes noise current caused by cable capacitance - 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. Recommended for all current amplifiers with gain $\geq 10^5$ V/A - Recommended for low frequency applications (≤ 20 MHz)																																							
Specifications	<table><tr><td>Test conditions</td><td>$T_A = 25\text{ }^{\circ}\text{C}$</td></tr><tr><td>Electrical</td><td></td></tr><tr><td>Impedance</td><td>$135\text{ }\Omega \pm 15\text{ }\Omega$</td></tr><tr><td>Capacitance</td><td>$30\text{ pF/m} \pm 2\text{ pF/m}$</td></tr><tr><td>Insulation resistance</td><td>$> 10^{14}\text{ }\Omega \times \text{m}$</td></tr><tr><td>Signal delay</td><td>4.1 ns/m</td></tr><tr><td>Recommended frequency range</td><td>DC to 20 MHz</td></tr><tr><td>Attenuation</td><td>$< 0.085\text{ dB/m}$ (@ DC to 20 MHz)</td></tr><tr><td>General Data</td><td></td></tr><tr><td>Cable jacket</td><td>PE (Polyethylene), $\varnothing 5\text{ mm} \pm 0.15\text{ mm}$</td></tr><tr><td>Dielectric</td><td>SPE (Foamed Polyethylene)</td></tr><tr><td>Outer conductor</td><td>Copper, braid 95%, 3.6 mm</td></tr><tr><td>Centre conductor</td><td>Copper wire, 0.15 mm</td></tr><tr><td>Connectors</td><td>BNC plug (male) to BNC plug (male)</td></tr><tr><td>Minimum bending radius</td><td>25 mm (fixed installation) 50 mm (free movement)</td></tr><tr><td>Maximum operating voltage</td><td>AC: $< 46\text{ V}$ peak-peak, DC: $< 70\text{ V}$</td></tr><tr><td>Temperature range connectors</td><td>$-55\text{ }^{\circ}\text{C}$ to $+155\text{ }^{\circ}\text{C}$</td></tr><tr><td>Temperature range cable</td><td>$-40\text{ }^{\circ}\text{C}$ to $+85\text{ }^{\circ}\text{C}$</td></tr><tr><td>Weight</td><td>0.5 m: 37 g (0.08 lbs), 0.8 m: 46 g (0.1 lbs), 1.5 m: 65 g (0.14 lbs), 3.0 m: 106 g (0.23 lbs), 5.0 m: 161 g (0.35 lbs), 10.0 m: 298 g (0.66 lbs)</td></tr></table>		Test conditions	$T_A = 25\text{ }^{\circ}\text{C}$	Electrical		Impedance	$135\text{ }\Omega \pm 15\text{ }\Omega$	Capacitance	$30\text{ pF/m} \pm 2\text{ pF/m}$	Insulation resistance	$> 10^{14}\text{ }\Omega \times \text{m}$	Signal delay	4.1 ns/m	Recommended frequency range	DC to 20 MHz	Attenuation	$< 0.085\text{ dB/m}$ (@ DC to 20 MHz)	General Data		Cable jacket	PE (Polyethylene), $\varnothing 5\text{ mm} \pm 0.15\text{ mm}$	Dielectric	SPE (Foamed Polyethylene)	Outer conductor	Copper, braid 95%, 3.6 mm	Centre conductor	Copper wire, 0.15 mm	Connectors	BNC plug (male) to BNC plug (male)	Minimum bending radius	25 mm (fixed installation) 50 mm (free movement)	Maximum operating voltage	AC: $< 46\text{ V}$ peak-peak, DC: $< 70\text{ V}$	Temperature range connectors	$-55\text{ }^{\circ}\text{C}$ to $+155\text{ }^{\circ}\text{C}$	Temperature range cable	$-40\text{ }^{\circ}\text{C}$ to $+85\text{ }^{\circ}\text{C}$	Weight	0.5 m: 37 g (0.08 lbs), 0.8 m: 46 g (0.1 lbs), 1.5 m: 65 g (0.14 lbs), 3.0 m: 106 g (0.23 lbs), 5.0 m: 161 g (0.35 lbs), 10.0 m: 298 g (0.66 lbs)
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