

Suggested Copy for Lapp Limited in Farnell Catalogue

RG 178 Co-Axial Cable

(Farnell: Lapp Co-Axial RG 178)

Application

Coaxial cable for radio- and computer systems as well as the entire field of commercial radio-frequency technology and electronics for low range transmissions, and with the small cable diameter, for application in narrow spaces. Cable design and electrical properties of RG 178 B/U to MIL-C 17 F. Designation according to MIL-C 17 F : M 17/93 - RG178.

The cable is intended for limited flexible use and for static laying. PTFE material is used to meet requirements concerning low and high ambient temperatures resp. chemical stress.

Design

Inner conductor	stranded, silvered, copper-clad steel wires, (30AWG), 0.055 mm ² 7 x 0.102 mm, approx. 0.3 mmØ
Insulation	PTFE, 1.5 mmØ
Outer conductor	silvered copper braid, coverage nom. 94 %
Sheath	FEP, transp. brown, outer diameter approx. 1.9 m

Electrical properties at 20°C

DC resistance inner conductor		maxΩ/km	802
Insulation resistance		min. GΩ.xkm	10
Capacitance at	1 kHz	nom. nF/km	93
Nominal velocity of propagation		%	69
Impedance		Ω	50 ± 2
Attenuation at	1 MHz	nom. dB/100m	8
	5 MHz	nom. dB/100m	15
	10 MHz	nom. dB/100m	20
	20 MHz	nom. dB/100m	26
	50 MHz	nom. dB/100m	32
	100 MHz	nom. dB/100m	43
	200 MHz	nom. dB/100m	62
	400 MHz	nom. dB/100m	92
	800 MHz	nom. dB/100m	134
	1 GHz	nom. dB/100m	153
HF voltage, peak value (not for power purposes)		max. kV	1.0
Working voltage (nominal voltage)	50 Hz	Ueff kV	1.5
Test voltage		Ueff kV	2

Mechanical and thermal properties

Weight		approx. kg/km	10
Minimum bending radius	fixed installation	mm	10
	repeated bendings	mm	19
Permissible temperature range	fixed installation	°C	-90 up to + 200
Fire load		kWh/m	0.01