


2170002	<b>DATA SHEET</b>	
valid from: 30.04.2020	<b>RG-178 B/U</b>	

## Application

RG-178 B/U are coaxial cables for radio and computer systems, as well as applications related to commercial radio-frequency (high frequency) technology and electronics. They allow distortion-free and low-attenuation transmission of signals with a high bandwidth over shorter distances and were designed for operating frequencies up to 3 GHz. The cable is intended for limited movements and for fixed installation in dry and damp interiors and outdoors. It meets the requirements concerning high ambient temperatures and chemical stress.

## Design

Design	Cable design and electrical properties of M17/93-RG178 to MIL-C-17. Designation in accordance with MIL-DTL-17 H: M17/140-00001
Conductor	Inner conductor: steel wire, copper plated silver 7x0.102 mm (30AWG/0.057 mm <sup>2</sup> ) Ø: 0.30 ± 0.025
Insulation	PTFE, 0.86 mm Ø
Screen	Outer conductor: braid silvered copper wires coverage 96 % (nominal value)
Outer sheath	FEP, transparent brown Outer diameter: 1.81 ± 0.13 mm

## Electrical properties at 20°C

Conductor resistance	Inner conductor: max. 802 Ω/km
Insulation resistance	min. 10 GΩ x km
Mutual capacitance	max. 95 pF/m (1 kHz)
Characteristic impedance	50 ± 2 Ω
Attenuation	max. 62 dB/100 m (200 MHz) max. 92 dB/100 m (400 MHz) max. 152 dB/100 m (1000 MHz) max. 280 dB/100 m (3000 MHz)
Velocity of propagation	0,70 c
Peak operating voltage	max. 1 kV (HF voltage)
Rated voltage	max. 0.75 kV (RMS)
Test voltage	2 kV

## Mechanical and thermal properties

Minimum bending radius	occasional flexing: 10 x cable Ø fixed installation: 6 x cable Ø
Temperature range	fixed installation: -55 °C up to 200 °C
General requirements	This cable is conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).
Environmental information	These cables meet the substance-specific requirements of the EU Directive 2011/65/EU (RoHS).

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