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| 2170002 | DATA SHEET |  |
| valid from: 30.04.2020 | RG-178 B/U | |

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

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| 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 ²) 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

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| 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

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| 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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