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|---------------------------|-------------------|---|
| 2170005                   | <b>DATA SHEET</b> |  |
| valid from:<br>30.04.2020 | <b>RG-213 /U</b>  |   |

## Application

RG-213 /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 M17/74-RG213 to MIL-C-17.<br>Designation in accordance with MIL-DTL-17 H: M17/189-00001 |
| Conductor    | Inner conductor:<br>stranded bare copper wires<br>7x 0.76 (3.17 mm <sup>2</sup> )<br>Ø: 2.25 ± 0.0254 mm                          |
| Insulation   | PE, 7.25 mm Ø   |
| Screen       | Outer conductor:<br>braid bare copper wires<br>coverage 95 % (nominal value)  |
| Outer sheath | PVC, black<br>Outer diameter: 10.29 ± 0.18 mm   |

## Electrical properties at 20°C

|                          |  |
|--------------------------|--|
| Conductor resistance     | Inner conductor: max. 5.8 Ω/km   |
| Insulation resistance    | min. 5 GΩ x km   |
| Mutual capacitance       | max. 101 pF/m (1 kHz)  |
| Characteristic impedance | 50 ± 2 Ω   |
| Attenuation              | max. 10 dB/100 m (200 MHz)<br>max. 15 dB/100 m (400 MHz)<br>max. 28 dB/100 m (1000 MHz)<br>max. 52 dB/100 m (3000 MHz) |
| Velocity of propagation  | 0,66 c   |
| Peak operating voltage   | max. 5.0 kV (HF voltage)   |
| Rated voltage            | max. 3,7 kV (RMS)  |
| Test voltage             | 10 kV  |

## Mechanical and thermal properties

|                           |  |
|---------------------------|--|
| Minimum bending radius    | occasional flexing: 10 x cable Ø<br>fixed installation: 6 x cable Ø  |
| Temperature range         | fixed installation: -40°C up to 80°C   |
| Flammability              | flame retardant acc. to IEC 60332-1-2  |
| 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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