# 2170010 DATA SHEET

valid from: 01.01.2019 RG 187 A/U



#### **Application**

RG 187 A/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.

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 RG 187 A/U to MIL-C-17.

Designation in accordance with MIL-DTL-17 H: M17/136-00001

Conductor Inner conductor:

steel wire, copper plated silver 7x0.102 mm, (30AWG) Ø: ca. 0.30 mm

Insulation PTFE, 1.6 mm Ø
Screen Outer conductor:

braid of silver coated copper wires coverage 94 % (nominal value)

Outer sheath PFA, white

Outer diameter: 2.54 ± 0.13 mm

## Electrical properties at 20°C

Conductor resistance Inner conductor: max. 802 Ω/km

Insulation resistance min. 10 G $\Omega$  x km Mutual capacitance max. 76 pF/m (1 kHz)

Characteristic impedance 75  $\pm$  3  $\Omega$ 

Attenuation max. 25 dB/100 m (100 MHz)

max. 69 dB/100 m (400 MHz) max. 87 dB/100 m (1 GHz) max. 161 dB/100 m (3 GHz)

Velocity of propagation 69 %

Peak operating voltage max. 1 kV (HF voltage)

Rated voltage 1.5 kV (50 Hz)

Test voltage 2 kV

#### Mechanical and thermal properties

Minimum bending radius occasional flexing: 10 x cable  $\emptyset$ 

fixed installation: 6 x cable  $\emptyset$ 

Temperature range Fixed installation: -55 °C up to 260 °C

General requirements This cable is conform to the EU-Directive 2011/65/EU

(RoHS, Restriction of the use of certain hazardous substances).