2170010	DATA SHEET	LAPP
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 GΩ x km
Mutual capacitance	max. 76 pF/m (1 kHz)
Characteristic impedance	75 ± 3 Ω
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 Ø fixed installation: 6 x cable Ø
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).