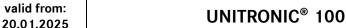
# 0028009 DATA SHEET





## **Application**

UNITRONIC® 100 is a control and signal cable with small cross-sections for fixed installation as well as occasional flexing at free, non-continuously recurring movement without tensile load. It is used in dry, damp and wet interiors but it is not appropriate for outside usage. The cables are used in the milliampere range for computer systems, electronic control equipment, office machines, balances etc. and wherever the thinnest possible control cables are required.

#### Design

Design Design based on standard VDE 0812 and EN 50288-7

Certification EN 13501-6 and EN 50575

Classification of fire behaviour

(article/dimension range see www.lappkabel.com/cpr)

Conductor fine wire strands of bare copper acc. to IEC 60228 resp. EN IEC 60228, class 5

Insulation PVC compound TI52 acc. to EN 50290-2-21

Core identification code acc. to UNITRONIC® colour code

Cable assembly cores are stranded in layers, optionally with fillers
Outer sheath PVC compound TM52 acc. to EN 50290-2-22

colour: grey (similar RAL 7001)

# Electrical properties at 20 °C

Conductor resistance 0.14 mm²: max. 138.0 Ω/km

0.25 mm²: max. 79.0  $\Omega/km$  0.34 mm²: max. 57.0  $\Omega/km$ 

Specific volume resistivity > 20 G  $\Omega$  x cm

Mutual capacitance C/C: approx. 120 nF/km

(at 800 Hz)

Inductance approx. 0.65 mH/km

Maximum operating voltage 0.14 mm<sup>2</sup>: 350 V

≥ 0.25 mm<sup>2</sup>: 500 V

(not intended to be used in conjunction with low impedance sources, such as power grids)

Test voltage 0.14 mm<sup>2</sup>: 1200 V

≥ 0.25 mm<sup>2</sup>: 1500 V

### Mechanical and thermal properties

Minimum bending radius occasional flexing: 15 x outer diameter

fixed installation: 4 x outer diameter

Temperature range occasional flexing: -5  $^{\circ}$ C up to +70  $^{\circ}$ C

fixed installation: -40  $^{\circ}\text{C}$  up to +80  $^{\circ}\text{C}$ 

Flammability flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2

General requirements These cables are conform to

EU-Directive 2014/35/EU (Low Voltage Directive) and to

EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain

hazardous substances).

A part of these cables (see www.lappkabel.com/cpr) are classified

acc. to the EU-Regulation no. 305/2011 (CPR).

Environmental information These cables meet the substance-specific requirements of the EU Directive 2011/65/EU (RoHS).