# 1030200 DATA SHEET

valid from: 2021-01-14

## **UNITRONIC® LIYY BK**



## **Application**

UNITRONIC® LIYY BK is a data cable for low frequency applications. The cable is designed for fixed installation and for conditional flexible use. It is used in dry and damp interiors but not appropriate for outside usage.

The cable is used for example in computer systems, instrumentation technology, office equipment and balances.

#### 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 wires

Insulation special PVC-based compound

Core identification code acc. to DIN 47100

Stranding cores are stranded in layers

Outer sheath special PVC-based compound colour: black (similar RAL 9005)

## Electrical properties at 20 °C

Conductor resistance 0.14 mm<sup>2</sup>: max. 138.0  $\Omega$ /km

0.25 mm²: max. 79.0  $\Omega/\text{km}$  0.34 mm²: max. 57.0  $\Omega/\text{km}$  0.5 mm²: max. 39.0  $\Omega/\text{km}$  0.75 mm²: max. 26.0  $\Omega/\text{km}$  1 mm²: max. 19.5  $\Omega/\text{km}$  1.5 mm²: max. 13.3  $\Omega/\text{km}$ 

Specific volume resistivity  $> 20 \text{ G} \Omega \text{ x cm}$ 

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 (not for power applications)

≥ 0.25 mm<sup>2</sup>: 500 V (not for power applications) Must not be connected to the mains supply voltage.

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 flexing: 10 x outer diameter

fixed installation: 4 x outer diameter

Temperature range flexing: -5 °C up to +70 °C

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

Flammability flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2 Weather and UV resistance acc. to EN 50525-1 cables with black outer sheath are suitable

for permanent outdoor use

General requirements These cables are conform to

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

substances) and EU-Directive 2014/35/EU (Low Voltage Directive). A part of these cables (see www.lappkabel.com/cpr) are classified

in accordance with the EU-Regulation no. 305/2011 (CPR).

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

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Page 1 of 1