

1032401	<b>DATA SHEET</b>	 <b>LAPP</b>
valid from: 2024-07-05	<b>UNITRONIC® RE-2Y(ST)Yv S</b>	

## Application

UNITRONIC® RE-2Y(ST)Yv S computer cables are mainly used in measurement and control engineering. They are intended for use when process computers have to process large volumes of data, e.g. high-capacity computer systems in waste incineration plants or sewage treatment plants. These cables are suitable for fixed installation in dry or damp rooms and, in case of the black jacketed versions, also for outdoor use. Thanks to reinforced, nominal/ minimum average wall thickness of the outer sheath of at least 1.8 mm, the cables are suitable for applications, where a reinforced outer sheath may turn out to be advantageous.

## 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 <a href="http://www.lappkabel.com/cpr">www.lappkabel.com/cpr</a> )
Conductor	7-wire bare stranded copper conductor
Insulation	PE-based compound
Core identification code	a-core: black; b-core: white with consecutive numbers 1-1, 2-2, 3-3, 4-4 etc.
Stranding	cores twisted into pairs, pairs stranded in layers, complete stranding contains 1 core for communication (0,5 mm <sup>2</sup> ; core colour orange), (in case of single pair construction: without orange communication core), wrapping with foil on the outer layer
Screen	static screen of aluminium-laminated plastic foil with multi-wired, tinned drain-wire
Outer sheath	special PVC-based compound, flame retardant, reinforced sheath colour: black (similar RAL 9005); blue (similar RAL 5015)

## Electrical properties at 20 °C

Conductor resistance	0.5 mm <sup>2</sup> : max. 39.2 Ω/km 1.3 mm <sup>2</sup> : max. 14.3 Ω/km
Specific volume resistivity	> 5 G Ω x km
Mutual capacitance	C/C: 0.5 mm <sup>2</sup> : approx. 75 nF/km C/C: 1.3 mm <sup>2</sup> : approx. 100 nF/km (reference values at 800 Hz)
Inductance	max. 0.65 mH/km
Characteristic impedance	approx. 100 Ω (0.5 mm <sup>2</sup> ) approx. 80 Ω (1.3 mm <sup>2</sup> )
Maximum operating voltage	300 V (not for power applications) Must not be connected to the mains supply voltage.
Test voltage	C/C 2000 V C/S 1000 V

## Mechanical and thermal properties

Minimum bending radius	occasional flexing: 15 x outer diameter fixed installation: 7.5 x outer diameter
Temperature range	occasional flexing: -5 °C up to +50 °C fixed installation: -40 °C up to +80 °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).  
These cables (see [www.lappkabel.com/cpr](http://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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