


<b>0032400</b>	<b>DATA SHEET</b>	
<b>valid from: 01.01.2019</b>	<b>UNITRONIC® RE-2Y(ST)Yv</b>	

## Application

UNITRONIC® RE-2Y(ST)Yv computer cables are mainly used in measurement and control engineering. They are intended for use when modern 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 operation, while they all feature enhanced suitability for direct burial in the ground.

## Design

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	2 cores twisted to pairs pairs stranded together with an orange 7-wire communication core (0,5 mm <sup>2</sup> ) Exception: one-pair-construction without communication core
Screen	static screen of aluminium-laminated plastic foil with multi-wired, tinned drain-wire
Outer sheath	PVC-based compound, flame retardant, reinforced sheath colour: black (similar RAL 9005); blue (similar RAL 5015)

## Diameter of the outer sheath

Article number	Dimension	Outer sheath $\varnothing$
0032400/0032411	1 x 2 x 0.5 mm <sup>2</sup>	ca. 7.2 mm
0032401/0032412	2 x 2 x 0.5 mm <sup>2</sup>	ca. 9.5 mm
0032413	4 x 2 x 0.5 mm <sup>2</sup>	ca. 11.1 mm
0032415	10 x 2 x 0.5 mm <sup>2</sup>	ca. 14.5 mm
0032418	20 x 2 x 0.5 mm <sup>2</sup>	ca. 17.9 mm
0032420	36 x 2 x 0.5 mm <sup>2</sup>	ca. 22.6 mm
0032421	48 x 2 x 0.5 mm <sup>2</sup>	ca. 27.1 mm
0032422/0032430	1 x 2 x 1.3 mm <sup>2</sup>	ca. 8.6 mm
0032423/0032431	2 x 2 x 1.3 mm <sup>2</sup>	ca. 11.5 mm
0032424/0032432	4 x 2 x 1.3 mm <sup>2</sup>	ca. 13.8 mm
0032433	8 x 2 x 1.3 mm <sup>2</sup>	ca. 16.9 mm
0032434	12 x 2 x 1.3 mm <sup>2</sup>	ca. 19.3 mm
0032428/0032436	24 x 2 x 1.3 mm <sup>2</sup>	ca. 27.5 mm

## Electrical properties at 20°C

Conductor resistance	0.5 mm <sup>2</sup> : max. 39.2 $\Omega$ /km 1.3 mm <sup>2</sup> : max. 14.3 $\Omega$ /km
Specific volume resistivity	> 5 G $\Omega$ 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 $\Omega$
Near-end cross-talk	min. 88 dB (60 kHz)
Peak operating voltage	300 V (not for power applications) in accordance with VDE 0812 table 4
Test voltage	C/C 2000 V C/S 1000 V

## Mechanical and thermal properties

Minimum bending radius	occasional flexing: 15 x cable $\varnothing$ fixed installation: 7.5 x cable $\varnothing$
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
General requirements	This cable is conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).

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