



## RE-2Y(ST)Yv

Instrumentation cable with reinforced outer sheath



### Benefits

- Aluminium-laminated plastic foil static screen with tin-plated drain wire minimises the interference of high frequency, electromagnetic fields
- Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects)
- Low capacitance due to polyolefin-based insulation

### Application range

- In measurement and control engineering
- 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 the version with a black outer sheath can also be used outdoors or for direct burial

### Product features

- Outer sheath colour: black for outdoor applications or blue for intrinsically safe systems
- Flame-retardant according IEC 60332-1-2

### Norm references / Approvals

- Based on EN 50288-7

### Product make-up

- 7-wire bare stranded copper conductor, core insulation made of polyethylene (PE), cores twisted into pairs, pairs stranded in layers
- Complete stranding contains 1 core for communication (core colour orange); the communication core is omitted on single-pair versions
- Foil wrapping, static screening made of aluminium-laminated plastic film with tinned drain wire
- Reinforced outer sheath made of PVC
- Outer sheath colour: black (RAL 9005) or blue (RAL 5015)

### Technical data



#### Core identification code

a-core: black; b-core: white with consecutive numbers: 1-1, 2-2, 3-3, 4-4 etc. Three-way version: black, white, red



#### Mutual capacitance

(guideline values at 800 Hz): C/C: 0.5 mm<sup>2</sup>: max. 75 nF/km (guideline values at 800 Hz): C/C: 1.3 mm<sup>2</sup>: max. 100 nF/km



#### Peak operating voltage

(not for power applications) 300 V



#### Insulation resistance

> 5 GOhm x km



#### Conductor resistance

0.5 mm<sup>2</sup>: max. 39.2 ohm/km  
1.3 mm<sup>2</sup>: max. 14.3 ohm/km



#### Minimum bending radius

Occasional flexing: 15 x outer diameter  
Fixed installation: 7.5 x outer diameter

#### Short-range crosstalk attenuation

At 60 kHz: min. 0.88 dB/km



#### Test voltage

Core/core: 2000 V  
Core/screen: 1000 V



#### Temperature range

Occasional flexing: -5°C to +50°C  
Fixed installation: -40°C to +80°C



#### Characteristic impedance

approx. 100 ohms

| Article number                  | Number of pairs and mm <sup>2</sup> per conductor | Outer diameter (mm) | Copper index (kg/km) | Weight (kg/km) |
|---------------------------------|---|---------------------|----------------------|----------------|
| <b>RE-2Y(ST)Yv</b>              |   |                     |                      |                |
| <b>0.5 mm<sup>2</sup> blue</b>  |   |                     |                      |                |
| 0032400                         | 1 x 2 x 0.5                                       | 7.2                 | 15.0                 | 74             |
| 0032401                         | 2 x 2 x 0.5                                       | 9.5                 | 30.0                 | 117            |
| 0032402                         | 4 x 2 x 0.5                                       | 11.1                | 50.0                 | 140            |
| 0032403                         | 8 x 2 x 0.5                                       | 13.4                | 90.0                 | 180            |
| 0032405                         | 12 x 2 x 0.5                                      | 15.5                | 130.0                | 280            |
| 0032407                         | 20 x 2 x 0.5                                      | 17.9                | 210.0                | 385            |
| <b>0.5 mm<sup>2</sup> black</b> |   |                     |                      |                |
| 0032411                         | 1 x 2 x 0.5                                       | 7.2                 | 15.0                 | 74             |
| 0032412                         | 2 x 2 x 0.5                                       | 9.5                 | 30.0                 | 117            |
| 0032413                         | 4 x 2 x 0.5                                       | 11.1                | 50.0                 | 140            |
| 0032414                         | 8 x 2 x 0.5                                       | 13.4                | 90.0                 | 180            |
| 0032415                         | 10 x 2 x 0.5                                      | 14.5                | 110.0                | 220            |
| 0032417                         | 16 x 2 x 0.5                                      | 17.0                | 170.0                | 352            |
| 0032418                         | 20 x 2 x 0.5                                      | 17.9                | 210.0                | 385            |
| 0032420                         | 36 x 2 x 0.5                                      | 22.6                | 370.0                | 656            |
| 0032421                         | 48 x 2 x 0.5                                      | 27.1                | 490.0                | 854            |
| <b>1.3 mm<sup>2</sup> blue</b>  |   |                     |                      |                |
| 0032422                         | 1 x 2 x 1.3                                       | 8.6                 | 31.0                 | 102            |
| 0032423                         | 2 x 2 x 1.3                                       | 11.5                | 62.0                 | 161            |
| 0032424                         | 4 x 2 x 1.3                                       | 13.8                | 114.0                | 230            |
| 0032425                         | 8 x 2 x 1.3                                       | 16.9                | 218.0                | 377            |
| 0032426                         | 12 x 2 x 1.3                                      | 19.3                | 322.0                | 520            |
| 0032427                         | 16 x 2 x 1.3                                      | 22.8                | 426.0                | 656            |
| 0032428                         | 24 x 2 x 1.3                                      | 27.5                | 684.0                | 952            |
| 0032429                         | 1 x 3 x 1.3                                       | 9.1                 | 44.0                 | 116            |
| <b>1.3 mm<sup>2</sup> black</b> |   |                     |                      |                |
| 0032430                         | 1 x 2 x 1.3                                       | 8.6                 | 31.0                 | 102            |
| 0032431                         | 2 x 2 x 1.3                                       | 11.5                | 62.0                 | 161            |
| 0032432                         | 4 x 2 x 1.3                                       | 13.8                | 114.0                | 230            |
| 0032433                         | 8 x 2 x 1.3                                       | 16.9                | 218.0                | 377            |
| 0032434                         | 12 x 2 x 1.3                                      | 19.3                | 322.0                | 520            |
| 0032435                         | 16 x 2 x 1.3                                      | 22.8                | 426.0                | 656            |
| 0032436                         | 24 x 2 x 1.3                                      | 27.5                | 684.0                | 952            |

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Photographs are not to scale and do not represent detailed images of the respective products.

### Similar products

- RE-2Y(ST)Yv PiMF refer to page 277

### Accessories

- KS 20 cable shears refer to page 908
- KT cable shears refer to page 908