0032488 DATA SHEET

valid from: 01.01.2019 RD-Y(ST)Yv



Application

RD-Y(ST)Yv process control cable is used mainly for data transmission in the fields of control centres, controlling systems and units with reinforced outer sheath.

It is intendend for static wiring or laying in closed interiors.

The cable may not be used for purposes with power or high-voltage current.

Design

Design based on VDE 0815

Conductor strands, 7-wires of plain copper acc. to VDE 0295 class 2

nom. cross section 0,5 mm²

Insulation PVC YI3 compound acc. to VDE 0207-4

Core identification code Pair no. 1: a-conductor: blue; b-conductor: red

Pair no. 2: a-conductor: grey; b-conductor: yellow

Pair no. 3: a-core: green; b-core brown Pair no. 4: a-core: white; b-core black

4 pairs = 1 bundle/bundles marked by numbered foil

Stranding 2 cores twisted to pairs and 4 pairs twisted to a unit

(2 x 2 x 0,5 mm² version is star quad stranded)

units in layers, plastic foil, static screen of Aluminium laminated plastic foil

with multi-wired and tinned drain-wire

Outer sheath PVC YM1 compound acc. to VDE 0207-5, flame retardant

sheath colour:

silver-grey (similar RAL 7000), sky-blue (similar RAL 5015)

Electrical properties at 20°C

Conductor resistance \max . 78.4 Ω/km Insulation resistance \max . 100 Ω/km Mutual capacitance A/A: \max . 100 nF/km

2 and 4 pairs:

A/A: max. 120 nF/km

(at 800 Hz)

Capacitive coupling max. 200 pF/100 m (at 800 Hz)

Characteristic impedance ca. 370 Ω (at 1 kHz)

ca. 130 Ω (at 10 kHz)

Attenuation 1,2 dB/km (at 1 kHz)
2 8 dB/km (at 10 kHz)

2,8 dB/km (at 10 kHz)

Near-end cross-talk min. 60 dB (at 10 kHz)

Peak operating voltage 225 V (not for power applications)

Test voltage C/C: 2000 V C/S: 2000 V

Mechanical and thermal properties

Minimum bending radius Occasional flexing: 15 x cable Ø

Fixed installation: 7,5 x cable Ø

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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