

0032470	DATA SHEET	
valid from: 01.01.2019	RD-Y(ST)Y	

Application

RD-Y(ST)Y process control cable is used mainly for data transmission in the fields of control centres, controlling systems and units. It is intended 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 mm ²
Insulation	PVC Y13 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 mm ² 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)

Diameter of the outer sheath

Article number	Dimension	Outer sheath $\varnothing$
0032470	2 x 2 x 0.5 mm ²	ca. 6.5 mm
0032471	4 x 2 x 0,5 mm ²	ca. 9.0 mm
0032472	8 x 2 x 0.5 mm ²	ca. 11.5 mm
0032474	16 x 2 x 0.5 mm ²	ca. 15.5 mm
0032475	24 x 2 x 0.5 mm ²	ca. 19.0 mm
0032477	48 x 2 x 0.5 mm ²	ca. 25.5 mm

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)
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 $\varnothing$ 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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