Static screened data transmission cable for control technology

In order to reduce costs, the multi-wire stranded copper cable has been provided for Maxi TERMI-POINT® connecting technology.
This wiring method (semi-automatic) considerably reduces the time and the costs required for installation;
Decoupling of circuits by means of
twisted-pair (TP) design (crosstalk effects)

Product description

Application range

- RD-Y(ST)Y is used as a data transmission cable for applications such as monitoring systems and control units
- Measurement, control and regulation technology and also in control rooms of power plants and industrial facilities.
- Suitable for transmission of analog and digital signals up to a frequency of about 10 kHz
- Designed for fixed installations in enclosed rooms.

Benefits

- In order to reduce costs, the multi-wire stranded copper cable has been provided for Maxi TERMI-POINT® connecting technology.
  This wiring method (semi-automatic) considerably reduces the time and the costs required for installation.

- Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects)

Product Make-up

- 7-wire bare stranded copper conductor, core insulation made of PVC
- Cores twisted into pairs, 4 pairs twisted into a bundle, bundles in layers, bundles labelled using numbered foil
- Aluminium-laminated plastic foil static screen with tinned drain wire
- Outer sheath made of PVC
- Outer sheath colour: Grey or Blue (RAL 5015)

Norm references / Approvals

- Based on DIN VDE 0815

Product features

- Outer sheath colour: grey or blue for intrinsically safe systems
- Variant with 2 double cores twisted as star quad

Technical Data

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
Mutual capacitance	At 800 Hz: ? 100 nF/km The values may be exceeded by 20 % on cables with up to 4 double cores.
Peak operating voltage	(not for power applications) 225 V
Classification	ETIM 5.0 Class-ID: EC000104 ETIM 5.0 Class-Description: Control cable
Conductor resistance	(loop): ? 73.6 Ohm/km
Cable attenuation/attenuation	At 1 kHz: approx. 1.2 dB/km At 10 kHz: approx. 2.8 dB/km
Minimum bending radius	Occasional flexing: 15 x outer diameter Fixed installation: 7.5 x outer diameter
Short-range crosstalk attenuation	At 10 kHz and 500 m cable length: min. 60 dB
Test voltage	C/C: 2000 V C/S: 2000 V

Temperature range	Occasional flexing: -5°C to +50°C Fixed installation: -40°C to +80°C
Characteristic impedance	At 1 kHz: approx. 370 ohm At 10 kHz: approx. 130 ohm