RD-Y(St)Yv / RD-Y(St)YY reinforced (double) outer sheath, instrumentation cable, Maxi-Termi-Point®, meter marking

Technical data

- Special -PVC data transmission cable adapted to DIN VDE 0815 and 0816
- **Conductor resistance** (loop) max. 73,6 Ohm/km
- **Temperature range** flexing -5°C to +50°C fixed installation -40°C to +70°C
- **Operating peak voltage** max. 600 V (not for heavy current installation purposes)
- **Test voltage** core/core 2000 V core/screen 2000 V
- **Insulation resistance** core/core min. 100 MOhm x km core/screen min. 100 MOhm x km
- **Mutual capacitance** at 800 Hz max. 100 nF/km (this value may be exceeded by 20% with a make-up to 4 pairs)
- **Impedance** at 1 kHz approx. 370 Ohm at 10 kHz approx. 130 Ohm
- **Capacity unbalance** at 800 Hz max. 200 pF/100 m (20% of the values, but one value up to 400 pF is allowed)
- **Line attenuation** at 1 kHz approx. 1,2 dB/km at 10 kHz approx. 3,0 dB/km
- **Cross-talk attenuation** at 10 kHz and cable length of 500 m min. 60 dB
- **Minimum bending radius** 7,5x cable Ø

Cable structure

- Bare copper-conductor, multi-wires
- Conductor construction: 0,5 mm² = 7x0,3 mm
- Core insulation of PVC (Semi-Rigid-PVC)
- Cores colour coded pair-no.1: a-core = BU; b-core = RD pair-no.2: a-core = GY; b-core = YE pair-no.3: a-core = GN; b-core = BN pair-no.4: a-core = WH; b-core = BK
- Cores twisted in pairs (approx. 20 pitch/m ≙ 50 mm)
- 4 pairs stranded to a unit (unit labelled with numbers printed plastic helix)
- units stranded in concentric layers
- Static screen (St) of plastic coated metal foil with stranded tinned drain wire, 0,5 mm² = 7x0,3 mm
- Outer sheath of PVC
- Sheath colour grey (RAL 7032)
- with meter marking

Properties

- The static screen protects the transmission circuits against outer electrical interferences
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

Tests

- PVC self-extinguishing and flame retardant acc. to DIN VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)

Note

- Cop.Weight including drain-wire.
- Maxi-Termi-Point® = registered trade mark AMP.
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².

Application

The data transmission cables RD-Y(St)Yv are used in measurement and control technology such as in control rooms of industrial plants and power stations. The pairs are twisted with short pitches and different lay-lengths which lead to good crosstalk attenuation values in a unit. The cables serves for transmission of analog and digital signals up to frequencies of approx. 10 kHz. These cables offer considerable advantages by using the quick and economical connecting possibilities in Maxi-Termi-Point® technique. This solderless connecting technique is defined by a compression termination that employs a spring-clip for the connection of the cable to a square rigid post without pre-stripping. For this technique it is necessary to have an exact 7-core stranded conductor and a Semi-Rigid-PVC. Suitable for fixed installation only inside of buildings. With the reinforced PVC(-Yv) outer sheath these cables are suitable for fixed installation in inside buildings and also in open air and in underground.

CE= The product is conformed with the EC Low-Voltage Directive 2006/95/EC.

RD-Y(St)Yv

Part no.	No.pairs x cross-sec. mm²	No. units	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
20160	2 x 2 x 0,5	-	8,5	25,0	80,0	20
20161	4 x 2 x 0,5	1	10,0	45,0	125,0	20
20162	8 x 2 x 0,5	2	13,0	85,0	200,0	20
20163	12 x 2 x 0,5	3	14,0	125,0	255,0	20
20164	16 x 2 x 0,5	4	15,5	165,0	315,0	20
20165	24 x 2 x 0,5	6	18,5	245,0	370,0	20
20166	32 x 2 x 0,5	8	20,5	325,0	555,0	20
20167	48 x 2 x 0,5	12	24,0	485,0	1045,0	20
20168	96 x 2 x 0,5	24	35,5	965,0	1300,0	20

RD-Y(St)YY

Part no.	No.pairs x cross-sec. mm²	No. units	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
20180	2 x 2 x 0,5	-	8,5	25,0	90,0	20
20181	4 x 2 x 0,5	1	10,6	45,0	140,0	20
20182	8 x 2 x 0,5	2	13,2	85,0	220,0	20
20183	12 x 2 x 0,5	3	14,8	125,0	275,0	20
20184	16 x 2 x 0,5	4	15,8	165,0	350,0	20
20185	24 x 2 x 0,5	6	18,2	245,0	470,0	20
20186	32 x 2 x 0,5	8	22,8	325,0	620,0	20
20187	48 x 2 x 0,5	12	24,0	485,0	850,0	20
20188	96 x 2 x 0,5	24	36,5	965,0	1450,0	20

Dimensions and specifications may be changed without prior notice. (RB01)