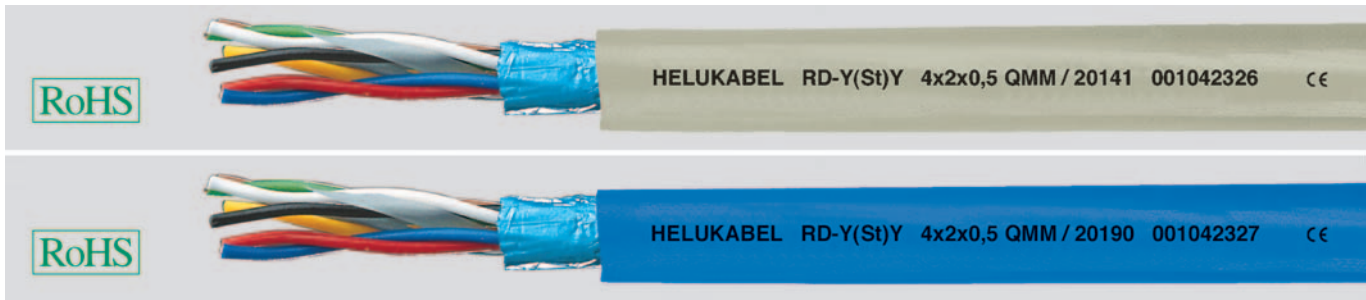


# RD-Y(St)Y Instrumentation Cable suitable for Maxi-Termi-Point®-connection, meter marking



## Technical data

- Special -PVC data transmission cable adapted to DIN VDE 0815
- **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-wire
- Conductor construction: 0,5 mm<sup>2</sup> = 7x0,3 mm
- Core insulation of PVC (Semi-Rigid-PVC)
- Core identification coloured 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 stranded 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
- Electrostatic screen of plastic coated aluminium foil and drain-wire tinned, 0,5 mm<sup>2</sup> = 7x0,3 mm
- Outer sheath of PVC
- Sheath colour grey (RAL 7032) or blue (RAL 5015)
- with meter marking

## Properties

- Twisted pairs with short different lay-lengths within a bundle results to good crosstalk attenuation values
- 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.
- Also available halogen-free type RD-H(St)H on request.
- Maxi-Termi-Point® = registered trade mark AMP.
- AWG sizes are approximate equivalent values. The actual cross-section is in mm<sup>2</sup>.

## Application

The data transmission cables RD-Y(St)Y are used in measurement and control technology such as in control rooms of industrial plants and power stations. 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 blue outer sheath suitable for intrinsic safe systems.

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

Part no.	No.pairs x cross-sec. mm <sup>2</sup>	Sheath colour	No. units	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.	Part no.	No.pairs x cross-sec. mm <sup>2</sup>	Sheath colour	No. units	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
20140	2 x 2 x 0,5	GY	-	6,8	25,0	61,0	20	20189	2 x 2 x 0,5	BU	-	6,8	25,0	61,0	20
20141	4 x 2 x 0,5	GY	1	8,7	45,0	96,0	20	20190	4 x 2 x 0,5	BU	1	8,7	45,0	96,0	20
20142	8 x 2 x 0,5	GY	2	11,0	85,0	160,0	20	20191	8 x 2 x 0,5	BU	2	11,0	85,0	160,0	20
20143	12 x 2 x 0,5	GY	3	12,5	125,0	210,0	20	20192	12 x 2 x 0,5	BU	3	12,5	125,0	210,0	20
20144	16 x 2 x 0,5	GY	4	14,0	165,0	282,0	20	20193	16 x 2 x 0,5	BU	4	14,0	165,0	282,0	20
20145	24 x 2 x 0,5	GY	6	17,0	245,0	330,0	20	20194	24 x 2 x 0,5	BU	6	17,0	245,0	330,0	20
20146	32 x 2 x 0,5	GY	8	20,0	325,0	530,0	20	20195	32 x 2 x 0,5	BU	8	20,0	325,0	530,0	20
20147	48 x 2 x 0,5	GY	12	23,5	485,0	730,0	20	20196	48 x 2 x 0,5	BU	12	23,5	485,0	730,0	20
20148	96 x 2 x 0,5	GY	24	32,5	965,0	1400,0	20	20197	96 x 2 x 0,5	BU	24	32,5	965,0	1400,0	20

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