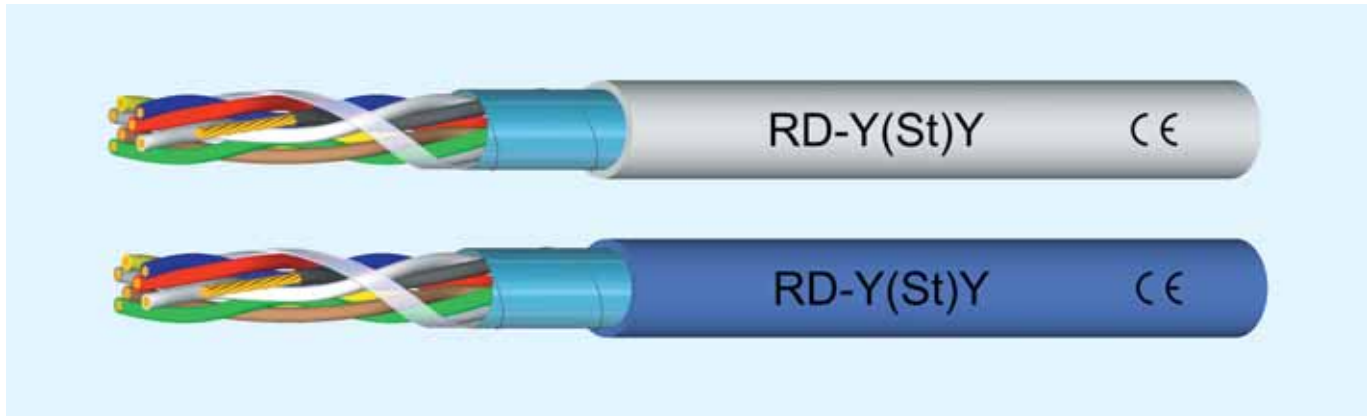


# RD-Y(St)Y

Communication cables, suitable for fast connection



## Cable structure

- Bare copper conductor 0,5 mm<sup>2</sup> (7 × 0,3 mm)
- PVC core insulation
- Color coded cores

Pair number	a-core	b-core
1	blue	red
2	grey	yellow
3	green	brown
4	white	black

(4 pairs = 1 bunch)

- Cores twisted to pairs (approx. 20 pitch/m)
- 4 pairs twisted to bunch
- Bunches twisted in concentric layers
- Electrostatic screen of plastic coated aluminium foil with tinned drain-wire 0,5 mm<sup>2</sup> (7×0,3 mm)
- Outer sheath color grey or blue
- PVC self-extinguishing and flame retardant, according to DIN VDE 0482 part 265-2-1/ EN 50265-2-1/ IEC 60332-1

## Technical data

- Special PVC for data cable according to DIN VDE 0815
- **Conductor resistance** (loop) max. 73,6 Ω/km
- **Temperature range** flexing from -5 °C to +50 °C  
fixed from -30 °C to +70 °C
- **Operating voltage** (operating value) max. 600 V
- **Test voltage a.c.** core/core 2000 V  
core/screen 2000 V
- **Insulation resistance** core/core min. 100 MΩ × km  
core/screen min. 100 MΩ × km
- **Mutual capacitance** at 800 Hz max. 100 nF/km (this value can be exceeded by 20 % in cables up to 4 pairs)
- **Impedance** at 1 kHz inf. 370 Ω  
at 10 kHz inf. 130 Ω
- **Capacity unbalance** at 800 Hz max. 200 pF/100m (20% of the values, but one value up to 400 pF is allowed)
- **Line attenuation** at 1 kHz inf. 1,2 dB/km  
at 10 kHz inf. 3,0 dB/km
- **Cross-talk** attenuation at 10 kHz and cable length of 500 m min. 60 dB
- **Minimum bending radius** approx. 7,5× cable diameter

## Application

Appliance and data transmission cables RD-Y(St)Y are used in measuring and control technology, for example in control centers of industrial lines and power plants. The static screen protects the transmission circuits against outer electrical interferences. Pairs are twisted with short pitches and different lengths that leads to good crosstalk attenuation values in a bunch. Cables are designed for transmission of analog and digital signals up to frequencies of approx. 10 kHz. These cables offer advantages of fast and economic installation. This solderless connecting technique is based on a compression termination that uses 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 PVC conductor and a semi-rigid PVC.

### Note:

CE = the product is conformed with the EC Low-Voltage Directive 73/23/EEC  
Conforms to RoHS.  
Halogen-free type RD-H(St)H available on request, see section .

Part No. grey sheath	Part No. blue sheath	No. of pairs × core cross-section [mm <sup>2</sup> ]	Outer Ø core cca [mm]	No of bunches [mm]	Approx. outer Ø cca [mm]	Copper weight [kg/km]	Approx. cable weight [kg/km]
0320160	0320140	2×2×0,5	1,5	-	7,8	25	67
0320161	0320141	4×2×0,5	1,5	1	9,8	45	112
0320162	0320142	8×2×0,5	1,5	2	12,6	85	188
0320163	0320143	12×2×0,5	1,5	3	15,7	125	292
0320164	0320144	16×2×0,5	1,5	4	17,4	165	368
0320165	0320145	24×2×0,5	1,5	6	20,3	245	484
0320166	0320146	32×2×0,5	1,5	8	23,2	325	704
0320167	0320147	48×2×0,5	1,5	12	27,0	485	1007
0320168	0320148	96×2×0,5	1,5	24	35,5	965	1836