

# RE-2Y(St)Yv instrumentation cable, reinforced outer sheath, meter marking



## Technical data

- Special core insulation of PE
- **Conductor resistance**  
0,5 mm<sup>2</sup>: max. 39,2 Ohm/km  
0,75 mm<sup>2</sup>: max. 24,6 Ohm/km  
1,3 mm<sup>2</sup>: max. 14,2 Ohm/km
- **Temperature range**  
flexing -5°C to +50°C  
fixed installation -40°C to +70°C
- **Operating peak voltage** max. 300 V  
(not for heavy current installation purposes)
- **Test voltage**  
core/core 2000 V  
core/screen 1000 V
- **Insulation resistance**  
min. 5 GOhm x km
- **Mutual capacitance** at 800 Hz  
core/core 0,5 mm<sup>2</sup>: 60 nF/km  
for 1 and 2 pairs: 75 nF/km  
core/core 0,75 mm<sup>2</sup>: 65 nF/km  
for 1 and 2 pairs: 110 nF/km  
core/core 1,3 mm<sup>2</sup>: 75 nF/km  
for 1 and 2 pairs: 100 nF/km
- **Inductance** max. 0,75 mH/km
- **Cross-talk attenuation**  
min. 0,88 dB/km at 60 kHz
- **Minimum bending radius**  
7,5x cable Ø

## Cable structure

- Bare copper-conductor, multi-wires
- Conductor construction:  
0,5 mm<sup>2</sup> = 7x0,3 mm  
0,75 mm<sup>2</sup> = 7x0,37 mm  
1,3 mm<sup>2</sup> = 7x0,49 mm
- Core insulation of PE
- Cores coloured  
with number print 1/1, 2/2 etc.  
pair: a-core = BK; b-core = WH  
triple: a-core = BK; b-core = WH;  
c-core = RD
- Cores twisted to pairs with optimum pitch
- Pairs stranded in layer
- 1 communication core 0,5 mm<sup>2</sup>, PE-insulated, orange (for multicore version)
- Foil wrapping
- Electrostatic screen (St) of plastics-coated metal foil
- Tinned drain-wire, 0,5 mm<sup>2</sup> = 7x0,3 mm
- Outer sheath of PVC, reinforced, black (RAL 9005) or blue (RAL 5015)
- with meter marking
- Wall-thickness to DIN VDE 0816 part 1, table 7, col. 1

## Properties

- The electrostatic screen protect the screened pairs against outer electrostatic interference fields
- Low level of line attenuations and low mutual capacitances enable long transmission distances and fast pulse acceleration
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

## Tests

- 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 communication core and drain-wire.
- Control cable with blue outer sheath, see Flexible Control Cables
- with blue outer sheath for hazardous areas to hazard type -i- for intrinsically safe installation acc. to DIN EN 60079-14 section 12.2.2 (VDE 0165 part 1)
- AWG sizes are approximate equivalent values. The actual cross-section is in mm<sup>2</sup>.

## Application

Instrumentation cables are used in data processing and process control. Instrumentation cables are suitable for fixed installations in damp locations, in open spaces and for underground laying.

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	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
20099	1 x 2 x 0,5	BK	7,5	15,0	74,0	20
20100	2 x 2 x 0,5	BK	9,8	30,0	117,0	20
20101	4 x 2 x 0,5	BK	11,3	50,0	140,0	20
20233	6 x 2 x 0,5	BK	13,1	70,0	190,0	20
20102	8 x 2 x 0,5	BK	14,6	90,0	215,0	20
20103	10 x 2 x 0,5	BK	16,1	110,0	220,0	20
20104	12 x 2 x 0,5	BK	16,4	130,0	280,0	20
20105	16 x 2 x 0,5	BK	18,3	170,0	352,0	20
20106	20 x 2 x 0,5	BK	19,2	210,0	385,0	20
20107	24 x 2 x 0,5	BK	22,3	250,0	468,0	20
20108	36 x 2 x 0,5	BK	24,5	370,0	656,0	20
20109	48 x 2 x 0,5	BK	27,7	490,0	854,0	20
20149	1 x 2 x 0,75	BK	7,9	20,0	74,0	19
20150	2 x 2 x 0,75	BK	10,4	35,0	123,0	19
20151	4 x 2 x 0,75	BK	11,9	65,0	164,0	19
20152	8 x 2 x 0,75	BK	15,0	125,0	258,0	19
20153	10 x 2 x 0,75	BK	17,0	154,0	305,0	19
20154	12 x 2 x 0,75	BK	17,6	185,0	350,0	19
20155	16 x 2 x 0,75	BK	19,5	245,0	445,0	19
20156	20 x 2 x 0,75	BK	21,5	298,0	520,0	19
20157	24 x 2 x 0,75	BK	24,0	365,0	620,0	19
20158	36 x 2 x 0,75	BK	26,5	532,0	940,0	19
20159	48 x 2 x 0,75	BK	30,3	708,0	1250,0	19
20125	1 x 2 x 1,3	BK	8,7	31,0	102,0	-
20132	1 x 3 x 1,3	BK	9,0	44,0	116,0	-
20126	2 x 2 x 1,3	BK	11,5	62,0	161,0	-
20127	4 x 2 x 1,3	BK	14,3	114,0	230,0	-
20234	6 x 2 x 1,3	BK	16,0	168,0	310,0	-
20128	8 x 2 x 1,3	BK	17,3	218,0	377,0	-
20129	12 x 2 x 1,3	BK	20,5	322,0	515,0	-
20130	16 x 2 x 1,3	BK	23,0	426,0	656,0	-
20131	24 x 2 x 1,3	BK	27,9	684,0	952,0	-

Part no.	No.pairs x cross-sec. mm <sup>2</sup>	Sheath colour	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
20235	1 x 2 x 0,5	BU	7,5	15,0	74,0	20
20236	2 x 2 x 0,5	BU	9,8	30,0	117,0	20
20237	4 x 2 x 0,5	BU	11,3	50,0	140,0	20
20238	6 x 2 x 0,5	BU	13,1	70,0	190,0	20
20239	8 x 2 x 0,5	BU	14,6	90,0	215,0	20
20240	10 x 2 x 0,5	BU	16,1	110,0	220,0	20
20241	12 x 2 x 0,5	BU	16,4	130,0	280,0	20
20242	16 x 2 x 0,5	BU	18,3	170,0	352,0	20
20243	20 x 2 x 0,5	BU	19,2	210,0	385,0	20
20244	24 x 2 x 0,5	BU	22,3	250,0	468,0	20
20245	36 x 2 x 0,5	BU	24,5	370,0	656,0	20
20246	48 x 2 x 0,5	BU	27,7	490,0	854,0	20
20169	1 x 2 x 0,75	BU	7,9	20,0	74,0	19
20170	2 x 2 x 0,75	BU	10,4	35,0	123,0	19
20171	4 x 2 x 0,75	BU	11,9	65,0	164,0	19
20172	8 x 2 x 0,75	BU	15,0	125,0	258,0	19
20173	10 x 2 x 0,75	BU	17,0	154,0	305,0	19
20174	12 x 2 x 0,75	BU	17,6	185,0	350,0	19
20175	16 x 2 x 0,75	BU	19,5	245,0	445,0	19
20176	20 x 2 x 0,75	BU	21,5	298,0	520,0	19
20177	24 x 2 x 0,75	BU	24,0	365,0	620,0	19
20178	36 x 2 x 0,75	BU	26,5	532,0	940,0	19
20179	48 x 2 x 0,75	BU	30,3	708,0	1250,0	19
20247	1 x 2 x 1,3	BU	8,7	31,0	102,0	-
20255	1 x 3 x 1,3	BU	9,0	44,0	116,0	-
20248	2 x 2 x 1,3	BU	11,5	62,0	161,0	-
20249	4 x 2 x 1,3	BU	14,3	114,0	230,0	-
20250	6 x 2 x 1,3	BU	15,8	168,0	310,0	-
20251	8 x 2 x 1,3	BU	17,3	218,0	377,0	-
20252	12 x 2 x 1,3	BU	20,5	322,0	515,0	-
20253	16 x 2 x 1,3	BU	23,0	426,0	656,0	-
20254	24 x 2 x 1,3	BU	27,9	684,0	952,0	-

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