

# RE-2Y(St)Yv instrumentation cable, reinforced outer jacket



## 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
- **Nominal voltage** max. 300 V
- **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**  
approx. 7,5x cable Ø

## Cable construction

- Bare copper stranded wires  
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 colours with numbering pair:  
a-core black  
b-core white  
triple:  
a-core black  
b-core white  
c-core red  
with number print 1/1, 2/2, etc.
- Cores twisted to pairs with optimum pitch
- Pairs stranded in layer + 1 communication core 0,5 mm<sup>2</sup>, PE-insulated, orange (communication core for multicore version)
- Core wrapping with foil
- Electrostatic screen (St) of plastics-coated metal foil and tinned drain-wire 0,5 mm<sup>2</sup> (7x0,3 mm)
- PVC outer jacket, reinforced
- Colour black (RAL 9005) or blue (RAL 5015)
- Wall-thickness to DIN VDE 0816, col. 1

## Properties

- PVC outer sheath: self-extinguishing and flame retardant according to DIN VDE 0482 part 265-2-1/ EN 50265-2-1/ IEC 60332-1 (equivalent DIN VDE 0472 part 804 test method B)
- 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

## Note

- AWG sizes are approximate equivalent values. The actual cross-section is in mm<sup>2</sup>.
- Cop.Weight including communication core and drain-wire.

## 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 73/23/EEC and 93/68/EEC.

Part No.	No.pairs x cross-sec. mm <sup>2</sup>	Outer sheath colour	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.	Part No.	No.pairs x cross-sec. mm <sup>2</sup>	Outer sheath colour	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
20099	1 x 2 x 0,5	black	7,5	15,0	74,0	20	20235	1 x 2 x 0,5	blue	7,5	15,0	74,0	20
20100	2 x 2 x 0,5	black	10,2	30,0	117,0	20	20236	2 x 2 x 0,5	blue	10,2	30,0	117,0	20
20101	4 x 2 x 0,5	black	11,0	50,0	140,0	20	20237	4 x 2 x 0,5	blue	11,0	50,0	140,0	20
20233	6 x 2 x 0,5	black	12,6	70,0	190,0	20	20238	6 x 2 x 0,5	blue	12,6	70,0	190,0	20
20102	8 x 2 x 0,5	black	13,8	90,0	215,0	20	20239	8 x 2 x 0,5	blue	13,8	90,0	215,0	20
20103	10 x 2 x 0,5	black	14,6	110,0	220,0	20	20240	10 x 2 x 0,5	blue	14,6	110,0	220,0	20
20104	12 x 2 x 0,5	black	15,7	130,0	280,0	20	20241	12 x 2 x 0,5	blue	15,7	130,0	280,0	20
20105	16 x 2 x 0,5	black	17,5	170,0	352,0	20	20242	16 x 2 x 0,5	blue	17,5	170,0	352,0	20
20106	20 x 2 x 0,5	black	18,5	210,0	385,0	20	20243	20 x 2 x 0,5	blue	18,5	210,0	385,0	20
20107	24 x 2 x 0,5	black	20,2	250,0	468,0	20	20244	24 x 2 x 0,5	blue	20,2	250,0	468,0	20
20108	36 x 2 x 0,5	black	24,0	370,0	656,0	20	20245	36 x 2 x 0,5	blue	24,0	370,0	656,0	20
20109	48 x 2 x 0,5	black	27,4	490,0	854,0	20	20246	48 x 2 x 0,5	blue	27,4	490,0	854,0	20
20149	1 x 2 x 0,75	black	7,9	20,0	74,0	18	20169	1 x 2 x 0,75	blue	7,9	20,0	74,0	18
20150	2 x 2 x 0,75	black	10,6	35,0	123,0	18	20170	2 x 2 x 0,75	blue	10,6	35,0	123,0	18
20151	4 x 2 x 0,75	black	11,7	65,0	164,0	18	20171	4 x 2 x 0,75	blue	11,7	65,0	164,0	18
20152	8 x 2 x 0,75	black	14,6	125,0	258,0	18	20172	8 x 2 x 0,75	blue	14,6	125,0	258,0	18
20153	10 x 2 x 0,75	black	15,8	154,0	305,0	18	20173	10 x 2 x 0,75	blue	15,8	154,0	305,0	18
20154	12 x 2 x 0,75	black	17,0	185,0	350,0	18	20174	12 x 2 x 0,75	blue	17,0	185,0	350,0	18
20155	16 x 2 x 0,75	black	19,0	245,0	445,0	18	20175	16 x 2 x 0,75	blue	19,0	245,0	445,0	18
20156	20 x 2 x 0,75	black	21,5	298,0	520,0	18	20176	20 x 2 x 0,75	blue	21,5	298,0	520,0	18
20157	24 x 2 x 0,75	black	23,2	365,0	620,0	18	20177	24 x 2 x 0,75	blue	23,2	365,0	620,0	18
20158	36 x 2 x 0,75	black	28,2	532,0	940,0	18	20178	36 x 2 x 0,75	blue	28,2	532,0	940,0	18
20159	48 x 2 x 0,75	black	32,0	708,0	1250,0	18	20179	48 x 2 x 0,75	blue	32,0	708,0	1250,0	18
20125	1 x 2 x 1,3	black	8,8	31,0	102,0	-	20247	1 x 2 x 1,3	blue	8,8	31,0	102,0	-
20132	1 x 3 x 1,3	black	9,7	44,0	116,0	-	20255	1 x 3 x 1,3	blue	9,7	44,0	116,0	-
20126	2 x 2 x 1,3	black	11,7	62,0	161,0	-	20248	2 x 2 x 1,3	blue	11,7	62,0	161,0	-
20127	4 x 2 x 1,3	black	13,5	114,0	230,0	-	20249	4 x 2 x 1,3	blue	13,5	114,0	230,0	-
20234	6 x 2 x 1,3	black	16,0	168,0	310,0	-	20250	6 x 2 x 1,3	blue	16,0	168,0	310,0	-
20128	8 x 2 x 1,3	black	16,8	218,0	377,0	-	20251	8 x 2 x 1,3	blue	16,8	218,0	377,0	-
20129	12 x 2 x 1,3	black	19,3	322,0	515,0	-	20252	12 x 2 x 1,3	blue	19,3	322,0	515,0	-
20130	16 x 2 x 1,3	black	22,0	426,0	656,0	-	20253	16 x 2 x 1,3	blue	22,0	426,0	656,0	-
20131	24 x 2 x 1,3	black	26,5	684,0	952,0	-	20254	24 x 2 x 1,3	blue	26,5	684,0	952,0	-

Dimensions and specifications may be changed without prior notice.