

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



Technical data

- Special core insulation of PE
- **Conductor resistance**
0,5 mm²: max. 39,2 Ohm/km
0,75 mm²: max. 24,6 Ohm/km
1,3 mm²: 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 mm²: 60 nF/km
for 1 and 2 pairs: 75 nF/km
core/core 0,75 mm²: 65 nF/km
for 1 and 2 pairs: 110 nF/km
core/core 1,3 mm²: 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 mm² (7x0,3 mm)
0,75 mm² (7x0,37 mm)
1,3 mm² (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 mm², 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 mm² (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 mm².
- 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 ² | 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 |
| 20100 | 2 x 2 x 0,5 | black | 10,2 | 30,0 | 117,0 | 20 |
| 20101 | 4 x 2 x 0,5 | black | 11,0 | 50,0 | 140,0 | 20 |
| 20233 | 6 x 2 x 0,5 | black | 12,6 | 70,0 | 190,0 | 20 |
| 20102 | 8 x 2 x 0,5 | black | 13,8 | 90,0 | 215,0 | 20 |
| 20103 | 10 x 2 x 0,5 | black | 14,6 | 110,0 | 220,0 | 20 |
| 20104 | 12 x 2 x 0,5 | black | 15,7 | 130,0 | 280,0 | 20 |
| 20105 | 16 x 2 x 0,5 | black | 17,5 | 170,0 | 352,0 | 20 |
| 20106 | 20 x 2 x 0,5 | black | 18,5 | 210,0 | 385,0 | 20 |
| 20107 | 24 x 2 x 0,5 | black | 20,2 | 250,0 | 468,0 | 20 |
| 20108 | 36 x 2 x 0,5 | black | 24,0 | 370,0 | 656,0 | 20 |
| 20109 | 48 x 2 x 0,5 | black | 27,4 | 490,0 | 854,0 | 20 |
| 20149 | 1 x 2 x 0,75 | black | 7,9 | 20,0 | 74,0 | 18 |
| 20150 | 2 x 2 x 0,75 | black | 10,6 | 35,0 | 123,0 | 18 |
| 20151 | 4 x 2 x 0,75 | black | 11,7 | 65,0 | 164,0 | 18 |
| 20152 | 8 x 2 x 0,75 | black | 14,6 | 125,0 | 258,0 | 18 |
| 20153 | 10 x 2 x 0,75 | black | 15,8 | 154,0 | 305,0 | 18 |
| 20154 | 12 x 2 x 0,75 | black | 17,0 | 185,0 | 350,0 | 18 |
| 20155 | 16 x 2 x 0,75 | black | 19,0 | 245,0 | 445,0 | 18 |
| 20156 | 20 x 2 x 0,75 | black | 21,5 | 298,0 | 520,0 | 18 |
| 20157 | 24 x 2 x 0,75 | black | 23,2 | 365,0 | 620,0 | 18 |
| 20158 | 36 x 2 x 0,75 | black | 28,2 | 532,0 | 940,0 | 18 |
| 20159 | 48 x 2 x 0,75 | black | 32,0 | 708,0 | 1250,0 | 18 |
| 20125 | 1 x 2 x 1,3 | black | 8,8 | 31,0 | 102,0 | - |
| 20132 | 1 x 3 x 1,3 | black | 9,7 | 44,0 | 116,0 | - |
| 20126 | 2 x 2 x 1,3 | black | 11,7 | 62,0 | 161,0 | - |
| 20127 | 4 x 2 x 1,3 | black | 13,5 | 114,0 | 230,0 | - |
| 20234 | 6 x 2 x 1,3 | black | 16,0 | 168,0 | 310,0 | - |
| 20128 | 8 x 2 x 1,3 | black | 16,8 | 218,0 | 377,0 | - |
| 20129 | 12 x 2 x 1,3 | black | 19,3 | 322,0 | 515,0 | - |
| 20130 | 16 x 2 x 1,3 | black | 22,0 | 426,0 | 656,0 | - |
| 20131 | 24 x 2 x 1,3 | black | 26,5 | 684,0 | 952,0 | - |

| Part No. | No.pairs x cross-sec. mm ² | Outer sheath colour | Outer Ø ca. mm | Cop. weight kg / km | Weight ca. kg / km | AWG-No. |
|----------|---------------------------------------|---------------------|----------------|---------------------|--------------------|---------|
| 20235 | 1 x 2 x 0,5 | blue | 7,5 | 15,0 | 74,0 | 20 |
| 20236 | 2 x 2 x 0,5 | blue | 10,2 | 30,0 | 117,0 | 20 |
| 20237 | 4 x 2 x 0,5 | blue | 11,0 | 50,0 | 140,0 | 20 |
| 20238 | 6 x 2 x 0,5 | blue | 12,6 | 70,0 | 190,0 | 20 |
| 20239 | 8 x 2 x 0,5 | blue | 13,8 | 90,0 | 215,0 | 20 |
| 20240 | 10 x 2 x 0,5 | blue | 14,6 | 110,0 | 220,0 | 20 |
| 20241 | 12 x 2 x 0,5 | blue | 15,7 | 130,0 | 280,0 | 20 |
| 20242 | 16 x 2 x 0,5 | blue | 17,5 | 170,0 | 352,0 | 20 |
| 20243 | 20 x 2 x 0,5 | blue | 18,5 | 210,0 | 385,0 | 20 |
| 20244 | 24 x 2 x 0,5 | blue | 20,2 | 250,0 | 468,0 | 20 |
| 20245 | 36 x 2 x 0,5 | blue | 24,0 | 370,0 | 656,0 | 20 |
| 20246 | 48 x 2 x 0,5 | blue | 27,4 | 490,0 | 854,0 | 20 |
| 20169 | 1 x 2 x 0,75 | blue | 7,9 | 20,0 | 74,0 | 18 |
| 20170 | 2 x 2 x 0,75 | blue | 10,6 | 35,0 | 123,0 | 18 |
| 20171 | 4 x 2 x 0,75 | blue | 11,7 | 65,0 | 164,0 | 18 |
| 20172 | 8 x 2 x 0,75 | blue | 14,6 | 125,0 | 258,0 | 18 |
| 20173 | 10 x 2 x 0,75 | blue | 15,8 | 154,0 | 305,0 | 18 |
| 20174 | 12 x 2 x 0,75 | blue | 17,0 | 185,0 | 350,0 | 18 |
| 20175 | 16 x 2 x 0,75 | blue | 19,0 | 245,0 | 445,0 | 18 |
| 20176 | 20 x 2 x 0,75 | blue | 21,5 | 298,0 | 520,0 | 18 |
| 20177 | 24 x 2 x 0,75 | blue | 23,2 | 365,0 | 620,0 | 18 |
| 20178 | 36 x 2 x 0,75 | blue | 28,2 | 532,0 | 940,0 | 18 |
| 20179 | 48 x 2 x 0,75 | blue | 32,0 | 708,0 | 1250,0 | 18 |
| 20247 | 1 x 2 x 1,3 | blue | 8,8 | 31,0 | 102,0 | - |
| 20255 | 1 x 3 x 1,3 | blue | 9,7 | 44,0 | 116,0 | - |
| 20248 | 2 x 2 x 1,3 | blue | 11,7 | 62,0 | 161,0 | - |
| 20249 | 4 x 2 x 1,3 | blue | 13,5 | 114,0 | 230,0 | - |
| 20250 | 6 x 2 x 1,3 | blue | 16,0 | 168,0 | 310,0 | - |
| 20251 | 8 x 2 x 1,3 | blue | 16,8 | 218,0 | 377,0 | - |
| 20252 | 12 x 2 x 1,3 | blue | 19,3 | 322,0 | 515,0 | - |
| 20253 | 16 x 2 x 1,3 | blue | 22,0 | 426,0 | 656,0 | - |
| 20254 | 24 x 2 x 1,3 | blue | 26,5 | 684,0 | 952,0 | - |

Dimensions and specifications may be changed without prior notice.