

# RE-2Y(St)Yv PiMF Instrumentation cable, pairs screened, reinforced outer jacket



## Technical data

- Special core insulation of PE
- **Conductor resistance**  
0,5 mm<sup>2</sup>: max. 39,2 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**  
(nominal value at 800 Hz)  
core/core 0,5 mm<sup>2</sup>: 75 nF/km  
core/core 1,3 mm<sup>2</sup>: 100 nF/km
- **Inductance** max. 0,75 mH/km
- **Cross-talk attenuation**  
min. 1,02 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)  
1,3 mm<sup>2</sup> (7x0,49 mm)
- Core insulation of PE
- Cores colours with numbering  
a-core black  
b-core white  
with number print 1/1, 2/2, etc.
- Cores twisted in pairs with optimum pitch
- PiMF (pair in metal foil):  
foil taping, drain-wire
- Cu-bare 0,6 mm Ø, plastic coated alu-foil and plastic foil
- PiMFe stranded in layer,  
1 communication core 0,5 mm<sup>2</sup>,
- PE-insulated orange (communication core for multicore version)
- 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, black (RAL 9005) or blue (RAL 5015)
- wall-thickness to DIN VDE 0816, col. 1

## Properties

- PVC jacket 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)

## 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. The individual screening of the pairs guarantee high cross-talk attenuation. 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. 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. |
|----------|---------------------------------------|---------------------|----------------|---------------------|--------------------|---------|----------|---------------------------------------|---------------------|----------------|---------------------|--------------------|---------|
| 20115    | 2 x 2 x 0,5                           | black               | 12,0           | 35,0                | 128,0              | 20      | 21537    | 2 x 2 x 0,5                           | blue                | 12,0           | 35,0                | 128,0              | 20      |
| 20116    | 4 x 2 x 0,5                           | black               | 12,7           | 60,0                | 170,0              | 20      | 21538    | 4 x 2 x 0,5                           | blue                | 12,7           | 60,0                | 170,0              | 20      |
| 21535    | 6 x 2 x 0,5                           | black               | 14,0           | 82,0                | 215,0              | 20      | 21539    | 6 x 2 x 0,5                           | blue                | 14,0           | 82,0                | 215,0              | 20      |
| 20117    | 8 x 2 x 0,5                           | black               | 14,9           | 121,0               | 246,0              | 20      | 21540    | 8 x 2 x 0,5                           | blue                | 14,9           | 121,0               | 246,0              | 20      |
| 20118    | 10 x 2 x 0,5                          | black               | 16,4           | 136,0               | 261,0              | 20      | 21541    | 10 x 2 x 0,5                          | blue                | 16,4           | 136,0               | 261,0              | 20      |
| 20119    | 12 x 2 x 0,5                          | black               | 17,6           | 161,0               | 351,0              | 20      | 21542    | 12 x 2 x 0,5                          | blue                | 17,6           | 161,0               | 351,0              | 20      |
| 20120    | 16 x 2 x 0,5                          | black               | 19,8           | 212,0               | 430,0              | 20      | 21543    | 16 x 2 x 0,5                          | blue                | 19,8           | 212,0               | 430,0              | 20      |
| 20121    | 20 x 2 x 0,5                          | black               | 21,2           | 262,0               | 496,0              | 20      | 21544    | 20 x 2 x 0,5                          | blue                | 21,2           | 262,0               | 496,0              | 20      |
| 20122    | 24 x 2 x 0,5                          | black               | 23,6           | 313,0               | 604,0              | 20      | 21545    | 24 x 2 x 0,5                          | blue                | 23,6           | 313,0               | 604,0              | 20      |
| 20123    | 36 x 2 x 0,5                          | black               | 26,9           | 465,0               | 850,0              | 20      | 21546    | 36 x 2 x 0,5                          | blue                | 26,9           | 465,0               | 850,0              | 20      |
| 20124    | 48 x 2 x 0,5                          | black               | 32,2           | 616,0               | 1115,0             | 20      | 21547    | 48 x 2 x 0,5                          | blue                | 32,2           | 616,0               | 1115,0             | 20      |
| 20133    | 2 x 2 x 1,3                           | black               | 12,7           | 68,0                | 184,0              | -       | 21548    | 2 x 2 x 1,3                           | blue                | 12,7           | 68,0                | 184,0              | -       |
| 20134    | 4 x 2 x 1,3                           | black               | 15,2           | 124,0               | 269,0              | -       | 21549    | 4 x 2 x 1,3                           | blue                | 15,2           | 124,0               | 269,0              | -       |
| 21536    | 6 x 2 x 1,3                           | black               | 16,7           | 178,0               | 370,0              | -       | 21550    | 6 x 2 x 1,3                           | blue                | 16,7           | 178,0               | 370,0              | -       |
| 20135    | 8 x 2 x 1,3                           | black               | 18,8           | 239,0               | 442,0              | -       | 21551    | 8 x 2 x 1,3                           | blue                | 18,8           | 239,0               | 442,0              | -       |
| 20136    | 12 x 2 x 1,3                          | black               | 21,4           | 353,0               | 593,0              | -       | 21552    | 12 x 2 x 1,3                          | blue                | 21,4           | 353,0               | 593,0              | -       |
| 20137    | 16 x 2 x 1,3                          | black               | 24,7           | 468,0               | 789,0              | -       | 21553    | 16 x 2 x 1,3                          | blue                | 24,7           | 468,0               | 789,0              | -       |
| 20138    | 24 x 2 x 1,3                          | black               | 29,4           | 697,0               | 1104,0             | -       | 21554    | 24 x 2 x 1,3                          | blue                | 29,4           | 697,0               | 1104,0             | -       |

Dimensions and specifications may be changed without prior notice.