

RE-2Y(St)Yv PiMF Instrumentation cable, pairs screened, reinforced outer sheath, meter marking



Technical data

- Special core insulation of PE
- **Conductor resistance**
0,5 mm² = max. 39,2 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
- **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** (approx. value)
at 800 Hz
core/core 0,5 mm² = 75 nF/km
core/core 1,3 mm² = 100 nF/km
- **Inductance** max. 0,75 mH/km
- **Cross-talk attenuation**
min. 1,02 dB/km at 60 kHz
- **Minimum bending radius**
7,5x cable Ø

Cable structure

- Bare copper stranded wires
0,5 mm² = 7x0,3 mm
1,3 mm² = 7x0,49 mm
- Core insulation of PE
- Cores coloured
with number print 1/1, 2/2 etc.
a-core = BK; b-core = WH
- Cores twisted in pairs with optimum pitch
- PiMF (pair in metal foil),
PiMF structure: foil taping,
Cu-tinned drain-wire 0,6 mm Ø,
plastic coated alu-foil
and foil wrapping
- PiMFe stranded in layer,
1 communication core 0,5 mm²,
PE-insulated orange (communication core
for multicore version)
- Electrostatic screen (St) of plastics-coated
metal foil and tinned drain-wire 0,5 mm²
(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 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 mm².

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 2006/95/EC.

Part no.	No.pairs x cross-sec. mm ²	Sheath colour	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.	Part no.	No.pairs x cross-sec. mm ²	Sheath colour	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
20115	2 x 2 x 0,5	BK	11,0	35,0	128,0	20	21537	2 x 2 x 0,5	BU	11,0	35,0	128,0	20
20116	4 x 2 x 0,5	BK	12,6	60,0	170,0	20	21538	4 x 2 x 0,5	BU	12,6	60,0	170,0	20
21535	6 x 2 x 0,5	BK	14,6	82,0	215,0	20	21539	6 x 2 x 0,5	BU	14,6	82,0	215,0	20
20117	8 x 2 x 0,5	BK	15,5	121,0	246,0	20	21540	8 x 2 x 0,5	BU	15,5	121,0	246,0	20
20118	10 x 2 x 0,5	BK	16,8	136,0	261,0	20	21541	10 x 2 x 0,5	BU	16,8	136,0	261,0	20
20119	12 x 2 x 0,5	BK	17,9	161,0	351,0	20	21542	12 x 2 x 0,5	BU	17,9	161,0	351,0	20
20120	16 x 2 x 0,5	BK	19,8	212,0	430,0	20	21543	16 x 2 x 0,5	BU	19,8	212,0	430,0	20
20121	20 x 2 x 0,5	BK	21,0	262,0	496,0	20	21544	20 x 2 x 0,5	BU	21,0	262,0	496,0	20
20122	24 x 2 x 0,5	BK	23,4	313,0	604,0	20	21545	24 x 2 x 0,5	BU	23,4	313,0	604,0	20
20123	36 x 2 x 0,5	BK	26,5	465,0	850,0	20	21546	36 x 2 x 0,5	BU	26,5	465,0	850,0	20
20124	48 x 2 x 0,5	BK	29,5	616,0	1115,0	20	21547	48 x 2 x 0,5	BU	29,5	616,0	1115,0	20
20133	2 x 2 x 1,3	BK	12,8	68,0	184,0	-	21548	2 x 2 x 1,3	BU	12,8	68,0	184,0	-
20134	4 x 2 x 1,3	BK	14,8	124,0	269,0	-	21549	4 x 2 x 1,3	BU	14,8	124,0	269,0	-
21536	6 x 2 x 1,3	BK	17,3	178,0	370,0	-	21550	6 x 2 x 1,3	BU	17,3	178,0	370,0	-
20135	8 x 2 x 1,3	BK	18,5	239,0	442,0	-	21551	8 x 2 x 1,3	BU	18,5	239,0	442,0	-
20136	12 x 2 x 1,3	BK	21,6	353,0	593,0	-	21552	12 x 2 x 1,3	BU	21,6	353,0	593,0	-
20137	16 x 2 x 1,3	BK	24,7	468,0	789,0	-	21553	16 x 2 x 1,3	BU	24,7	468,0	789,0	-
20138	24 x 2 x 1,3	BK	29,8	697,0	1104,0	-	21554	24 x 2 x 1,3	BU	29,8	697,0	1104,0	-

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