

RE-2Y(St)Yv PiMF

Instrumentation cable, pairs screened, reinforced outer

jacket, 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 top level voltage**
max. 300 V (not for purposes of high current and power installation)
- **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 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**
approx. 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 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 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)
- PVC outer jacket, reinforced, black
(RAL 9005) or blue (RAL 5015)
- with meter marking, change-over in 2011
- Wall-thickness to DIN VDE 0816 part 1,
table 7, col. 1
- with blue outer jacket for hazardous areas
to hazard type -i- for intrinsically safe
installation according to DIN EN 60079-14
and IEC 60079-14 section 12.2.2 (VDE 0165
part 1)

Properties

- self-extinguishing and flame retardant
according to VDE 0482-332-1-2, DIN EN
60332-1-2/ IEC 60332-1 (equivalent
DIN VDE 0472 part 804 test method B)
- The materials used in manufacture are
cadmium-free and contain no silicone and
free from substances harmful to the
wetting properties of lacquers.

Note

- AWG sizes are approximate equivalent
values. The actual cross-section is in mm².
- Cop. weight including communication core
and drain-wire.
- Control cable with blue outer jacket, see
catalog part A.

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/EG.

Part no.	No.pairs x cross-sec. mm ²	Jacket colour	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
20115	2 x 2 x 0,5	black	12,0	35,0	128,0	20
20116	4 x 2 x 0,5	black	13,2	60,0	170,0	20
21535	6 x 2 x 0,5	black	14,0	82,0	215,0	20
20117	8 x 2 x 0,5	black	14,9	121,0	246,0	20
20118	10 x 2 x 0,5	black	16,7	136,0	261,0	20
20119	12 x 2 x 0,5	black	17,6	161,0	351,0	20
20120	16 x 2 x 0,5	black	19,8	212,0	430,0	20
20121	20 x 2 x 0,5	black	21,5	262,0	496,0	20
20122	24 x 2 x 0,5	black	23,6	313,0	604,0	20
20123	36 x 2 x 0,5	black	27,0	465,0	850,0	20
20124	48 x 2 x 0,5	black	32,3	616,0	1115,0	20
20133	2 x 2 x 1,3	black	12,7	68,0	184,0	-
20134	4 x 2 x 1,3	black	15,2	124,0	269,0	-
21536	6 x 2 x 1,3	black	16,7	178,0	370,0	-
20135	8 x 2 x 1,3	black	19,1	239,0	442,0	-
20136	12 x 2 x 1,3	black	21,4	353,0	593,0	-
20137	16 x 2 x 1,3	black	24,7	468,0	789,0	-
20138	24 x 2 x 1,3	black	29,4	697,0	1104,0	-

Part no.	No.pairs x cross-sec. mm ²	Jacket colour	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
21537	2 x 2 x 0,5	blue	12,0	35,0	128,0	20
21538	4 x 2 x 0,5	blue	13,2	60,0	170,0	20
21539	6 x 2 x 0,5	blue	14,0	82,0	215,0	20
21540	8 x 2 x 0,5	blue	14,9	121,0	246,0	20
21541	10 x 2 x 0,5	blue	16,7	136,0	261,0	20
21542	12 x 2 x 0,5	blue	17,6	161,0	351,0	20
21543	16 x 2 x 0,5	blue	19,8	212,0	430,0	20
21544	20 x 2 x 0,5	blue	21,5	262,0	496,0	20
21545	24 x 2 x 0,5	blue	23,6	313,0	604,0	20
21546	36 x 2 x 0,5	blue	27,0	465,0	850,0	20
21547	48 x 2 x 0,5	blue	32,3	616,0	1115,0	20
21548	2 x 2 x 1,3	blue	12,7	68,0	184,0	-
21549	4 x 2 x 1,3	blue	15,2	124,0	269,0	-
21550	6 x 2 x 1,3	blue	16,7	178,0	370,0	-
21551	8 x 2 x 1,3	blue	19,1	239,0	442,0	-
21552	12 x 2 x 1,3	blue	21,4	353,0	593,0	-
21553	16 x 2 x 1,3	blue	24,7	468,0	789,0	-
21554	24 x 2 x 1,3	blue	29,4	697,0	1104,0	-

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