

RE-2Y(St)Yv

Instrumentation cable, reinforced outer sheath, meter marking



HELUKABEL RE-2Y(St)Yv 4x2x0,5 QMM / 20100 001042340



HELUKABEL RE-2Y(St)Yv 4x2x0,5 QMM / 20237 001042341



Technical data

- Computer cable in reference to EN 50288-79 (VDE 0819-7)
- Conductor resistance** at 20°C
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
- Operating peak voltage** max. 300 V
(not for heavy current installation purposes)
- Test voltage**
core/core 2000 V
core/screen 1000 V
- Mutual capacitance** at 800 Hz
- core/core 0.5 mm² approx. 60 pF/m
for 1 and 2 pairs approx. 75 pF/m
- core/core 0.75 mm² approx. 65 pF/m
for 1 and 2 pairs approx. 100 pF/m
- core/core 1.3 mm² approx. 75 pF/m
for 1 and 2 pairs approx. 100 pF/m
- Inductance** max. 0,75 mH/km
- Cross-talk attenuation**
at 60 kHz min. 0,88 dB
- Minimum bending radius**
fixed installation 7,5x outer Ø

Cable structure

- Bare copper conductor, multi wire
- Conductor construction:
0,5 mm² = 7x0,3 mm
0,75 mm² = 7x0,37 mm
1,3 mm² = 7x0,49 mm
- Core insulation of PE
- Core identification
coloured with numbering 1/1, 2/2 etc.
pairs: BK, WH
triads: BK, WH, RD
- Cores twisted together in pairs / triads
in optimal lay length
- Pairs stranded in layer
- 1 communication core 0,5 mm², PE-insulated,
orange (for multicore version)
- Foil wrapping
- Electrostatic screen (St) made of plastic-
laminated aluminium foil and tinned copper
stranded drain wire, 0.5 mm² (7x0.3 mm)
- Outer sheath of PVC, reinforced
- Sheath colour: black (RAL 9005)
or blue (RAL 5015)
- With meter marking

Properties

- Outdoor application
- Low level of line attenuations and
low mutual capacitances enable
long transmission distances and
fast pulse acceleration
- The materials used during manufacturing
are cadmium-free, contain no silicone
and are free from substances harmful
to the wetting properties of lacquers

Tests

- Flame retardant acc. to
DIN VDE 0482-332-1-2 /
DIN EN 60332-1-2 / IEC 60332-1-2

Note

- Cop.weight including communication core
and stranded drain wire
- With blue outer sheath for hazardous areas
to hazard type -i- for intrinsically safe
installation acc. to DIN EN 60079-14
section 16.2.2 (VDE 0165-1)
- The conductor is metrically constructed
(mm²). The AWG designation is
approximate and purely informative.

Application

Instrumentation cables are used in data processing and process control. 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 = Product conforms with Low-Voltage Directive 2014/35/EU.

Part no.	No.pairs x cross-sec. mm ²	Sheath colour	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
20099	1 x 2 x 0,5	BK	7,3	15,0	74,0	20
20100	2 x 2 x 0,5	BK	9,3	30,0	117,0	20
20101	4 x 2 x 0,5	BK	10,5	50,0	140,0	20
20233	6 x 2 x 0,5	BK	12,2	70,0	190,0	20
20102	8 x 2 x 0,5	BK	13,2	90,0	215,0	20
20103	10 x 2 x 0,5	BK	14,7	110,0	220,0	20
20104	12 x 2 x 0,5	BK	15,0	130,0	280,0	20
20105	16 x 2 x 0,5	BK	16,8	170,0	352,0	20
20106	20 x 2 x 0,5	BK	18,5	210,0	385,0	20
20107	24 x 2 x 0,5	BK	19,9	250,0	468,0	20
20108	36 x 2 x 0,5	BK	22,8	370,0	656,0	20
20109	48 x 2 x 0,5	BK	26,1	490,0	854,0	20
20149	1 x 2 x 0,75	BK	7,7	20,0	74,0	19
20150	2 x 2 x 0,75	BK	10,0	35,0	123,0	19
20151	4 x 2 x 0,75	BK	11,3	65,0	164,0	19
20152	8 x 2 x 0,75	BK	14,3	125,0	258,0	19
20153	10 x 2 x 0,75	BK	16,0	154,0	305,0	19
20154	12 x 2 x 0,75	BK	16,3	185,0	350,0	19
20155	16 x 2 x 0,75	BK	18,3	245,0	445,0	19
20156	20 x 2 x 0,75	BK	20,2	298,0	520,0	19
20157	24 x 2 x 0,75	BK	21,8	365,0	620,0	19
20158	36 x 2 x 0,75	BK	25,4	532,0	940,0	19
20159	48 x 2 x 0,75	BK	28,6	708,0	1250,0	19
20125	1 x 2 x 1,3	BK	8,5	31,0	102,0	-
20132	1 x 3 x 1,3	BK	8,9	44,0	116,0	-
20126	2 x 2 x 1,3	BK	11,3	62,0	161,0	-
20127	4 x 2 x 1,3	BK	12,9	114,0	230,0	-
20234	6 x 2 x 1,3	BK	15,2	168,0	310,0	-
20128	8 x 2 x 1,3	BK	16,5	218,0	377,0	-
20129	12 x 2 x 1,3	BK	18,9	322,0	515,0	-
20130	16 x 2 x 1,3	BK	21,3	426,0	656,0	-
20131	24 x 2 x 1,3	BK	25,9	684,0	952,0	-

Part no.	No.pairs x cross-sec. mm ²	Sheath colour	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
20235	1 x 2 x 0,5	BU	7,3	15,0	74,0	20
20236	2 x 2 x 0,5	BU	9,3	30,0	117,0	20
20237	4 x 2 x 0,5	BU	10,5	50,0	140,0	20
20238	6 x 2 x 0,5	BU	12,2	70,0	190,0	20
20239	8 x 2 x 0,5	BU	13,2	90,0	215,0	20
20240	10 x 2 x 0,5	BU	14,7	110,0	220,0	20
20241	12 x 2 x 0,5	BU	15,0	130,0	280,0	20
20242	16 x 2 x 0,5	BU	16,8	170,0	352,0	20
20243	20 x 2 x 0,5	BU	18,5	210,0	385,0	20
20244	24 x 2 x 0,5	BU	19,9	250,0	468,0	20
20245	36 x 2 x 0,5	BU	22,8	370,0	656,0	20
20246	48 x 2 x 0,5	BU	26,1	490,0	854,0	20
20169	1 x 2 x 0,75	BU	7,7	20,0	74,0	19
20170	2 x 2 x 0,75	BU	10,0	35,0	123,0	19
20171	4 x 2 x 0,75	BU	11,3	65,0	164,0	19
20172	8 x 2 x 0,75	BU	14,3	125,0	258,0	19
20173	10 x 2 x 0,75	BU	16,0	154,0	305,0	19
20174	12 x 2 x 0,75	BU	16,3	185,0	350,0	19
20175	16 x 2 x 0,75	BU	18,3	245,0	445,0	19
20176	20 x 2 x 0,75	BU	20,2	298,0	520,0	19
20177	24 x 2 x 0,75	BU	21,8	365,0	620,0	19
20178	36 x 2 x 0,75	BU	25,4	532,0	940,0	19
20179	48 x 2 x 0,75	BU	28,6	708,0	1250,0	19
20247	1 x 2 x 1,3	BU	8,5	31,0	102,0	-
20255	1 x 3 x 1,3	BU	8,9	44,0	116,0	-
20248	2 x 2 x 1,3	BU	11,3	62,0	161,0	-
20249	4 x 2 x 1,3	BU	12,9	114,0	230,0	-
20250	6 x 2 x 1,3	BU	15,2	168,0	310,0	-
20251	8 x 2 x 1,3	BU	16,5	218,0	377,0	-
20252	12 x 2 x 1,3	BU	18,9	322,0	515,0	-
20253	16 x 2 x 1,3	BU	21,3	426,0	656,0	-
20254	24 x 2 x 1,3	BU	25,9	684,0	952,0	-

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