

# PAAR-TRONIC-CY-CY (LiYCY-CY) EMC-preferred type, meter marking



HELUKABEL PAAR-TRONIC-CY-CY 6x2x0,34 QMM / 21094 001042319 CE

B



## Technical data

- Special PVC data transmission cable adapted to DIN VDE 0812 and 0814
- **Temperature range**  
flexing -5 °C to +80 °C  
fixed installation -40 °C to +80 °C
- **Conductor resistance**  
0,14 mm<sup>2</sup> = max. 138 Ohm/km  
0,25 mm<sup>2</sup> = max. 77,8 Ohm/km
- **Nominal voltage**  
0,14 mm<sup>2</sup> = max. 350 V  
0,25 mm<sup>2</sup> = max. 500 V
- **Test voltage**  
0,14 mm<sup>2</sup> = 1200 V  
0,25 mm<sup>2</sup> = 2000 V
- **Breakdown voltage**  
0,14 mm<sup>2</sup> = 2400 V  
0,25 mm<sup>2</sup> = 4000 V
- **Mutual capacitance**  
core/core  
0,14 mm<sup>2</sup> = 147 pF/m  
0,25 mm<sup>2</sup> = 152,5 pF/m  
core/screen  
0,14 mm<sup>2</sup> = 147 pF/m  
0,25 mm<sup>2</sup> = 263 pF/m
- **Impedance**  
0,14 mm<sup>2</sup> = 536 Ohm/1 kHz/20 °C  
0,25 mm<sup>2</sup> = 396 Ohm/1 kHz/20 °C
- **Coupling** 250 pF/100 m/1 kHz
- **Screen resistance**  
0,14 mm<sup>2</sup> = 36 Ohm/km  
0,25 mm<sup>2</sup> = 18 Ohm/km
- **Attenuation**  
0,14 mm<sup>2</sup> = 3,6 dB/1 kHz/km  
0,25 mm<sup>2</sup> = 2,2 dB/1 kHz/km
- **Minimum bending radius**  
flexing 12x cable ø  
fixed installation 6x cable ø
- **Radiation resistance**  
up to 80x10<sup>6</sup> cJ/kg (bis 80 Mrad)

## Cable structure

- Bare copper, fine wire conductors, to DIN VDE 0812
- Strand make-up  
0,14 mm<sup>2</sup> = 18x0,10 mm  
0,25 mm<sup>2</sup> = 14x0,15 mm  
0,34 mm<sup>2</sup> = 7x0,25 mm
- Special PVC core insulation Y12, to DIN VDE 0207 part 4
- Core colours to DIN 47100 with colour repetition
- Cores stranded in pairs with optimal lay-length
- Pairs screened individually, tinned copper, coverage approx. 85%
- Special PVC coating over individual screened pairs
- All pairs-CY stranded together
- Core wrapping with polyester foil, overlapped
- Overall braid-screening, tinned copper coverage approx. 85%
- Special PVC outer sheath YM2, to DIN VDE 0207 part 5
- Colour grey (RAL 7001)
- with meter marking, change-over in 2011

## Properties

- Extensively oil resistant, oil-/ chemical Resistance - see table Technical Informations
- PVC 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

- As of 0,75 mm<sup>2</sup> cross-sec. see type L-EDV-PiMF-CY.
- AWG sizes are approximate equivalent values. The actual cross-section is in mm<sup>2</sup>.

## Application

This cable type offers total interference-free data transfer and is ideal for use as a signal and control cable in combination with computers and external units. The screening properties also make this cable type well suited for use as a connecting cable in sound studio equipment, measuring and control sectors as well as proving a highly reliable cable for process-control and security systems. The copper screening assures a disturbance-free data and signal transmission for measuring and control systems.

**EMC** = Electromagnetic compatibility

To optimise the EMC features we recommend a large round contact of the copper braiding on both ends.

CE The product is conformed with the EC Low-Voltage Directive 2006/95/EG.

Part no.	No.pairs x cross-sec. mm <sup>2</sup>	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.	Part no.	No.pairs x cross-sec. mm <sup>2</sup>	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
21065	2 x 2 x 0,14	7,4	31,0	95,0	26	21071	8 x 2 x 0,14	13,2	97,0	245,0	26
21066	3 x 2 x 0,14	8,5	34,0	105,0	26	21072	9 x 2 x 0,14	14,1	101,0	280,0	26
21067	4 x 2 x 0,14	10,0	45,0	140,0	26	21073	10 x 2 x 0,14	15,1	108,0	325,0	26
21068	5 x 2 x 0,14	10,5	58,0	160,0	26	21074	12 x 2 x 0,14	15,3	134,0	380,0	26
21069	6 x 2 x 0,14	11,6	67,0	185,0	26	21075	16 x 2 x 0,14	17,0	179,0	440,0	26
21070	7 x 2 x 0,14	12,1	78,0	230,0	26	21076	20 x 2 x 0,14	17,8	225,0	520,0	26

Continuation ▶

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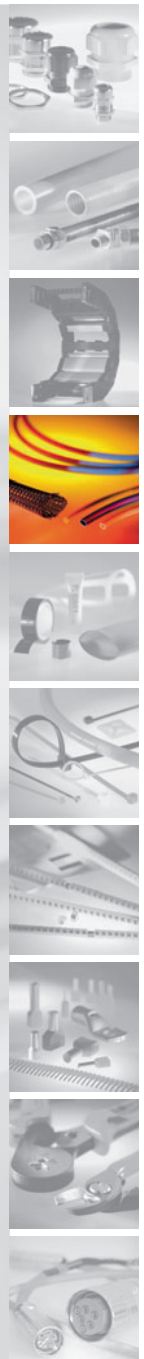
Part no.	No.pairs x cross-sec. mm <sup>2</sup>	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
21077	2 x 2 x 0,25	8,1	62,0	125,0	24
21078	3 x 2 x 0,25	9,5	78,2	140,0	24
21079	4 x 2 x 0,25	10,5	124,1	205,0	24
21080	5 x 2 x 0,25	11,9	137,6	230,0	24
21081	6 x 2 x 0,25	12,6	148,1	275,0	24
21082	7 x 2 x 0,25	13,9	159,1	295,0	24
21083	8 x 2 x 0,25	14,2	178,7	330,0	24
21084	10 x 2 x 0,25	15,2	213,9	420,0	24
21085	12 x 2 x 0,25	17,5	238,3	465,0	24
21086	16 x 2 x 0,25	22,0	291,4	590,0	24
21087	20 x 2 x 0,25	22,6	325,0	620,0	24
21088	24 x 2 x 0,25	27,5	367,5	690,0	24
21089	32 x 2 x 0,25	29,8	588,0	785,0	24
21090	48 x 2 x 0,25	34,5	840,5	970,0	24
21091	2 x 2 x 0,34	9,5	73,1	139,0	22
21092	3 x 2 x 0,34	11,6	88,1	157,0	22
21093	4 x 2 x 0,34	12,4	137,2	213,0	22
21094	6 x 2 x 0,34	15,0	174,8	308,0	22
21095	8 x 2 x 0,34	16,5	247,2	385,0	22
21096	10 x 2 x 0,34	19,0	288,7	433,0	22
21097	12 x 2 x 0,34	19,5	321,0	495,0	22
21098	14 x 2 x 0,34	20,7	388,4	600,0	22
21099	16 x 2 x 0,34	22,5	425,5	637,0	22
21100	24 x 2 x 0,34	28,0	577,1	781,0	22

Part no.	No.pairs x cross-sec. mm <sup>2</sup>	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
21101	2 x 2 x 0,5	10,4	83,1	143,0	20
21102	3 x 2 x 0,5	11,6	106,4	179,0	20
21103	4 x 2 x 0,5	13,0	158,0	241,0	20
21104	6 x 2 x 0,5	15,6	201,4	319,0	20
21105	8 x 2 x 0,5	18,0	311,5	441,0	20
21106	10 x 2 x 0,5	20,8	334,5	464,0	20
21107	12 x 2 x 0,5	21,5	394,1	529,0	20
21108	14 x 2 x 0,5	21,6	446,0	641,0	20
21109	16 x 2 x 0,5	23,8	501,2	694,0	20
21110	24 x 2 x 0,5	28,4	712,4	930,0	20

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

## Insulating, shrinking, braided and temperature protection tubes

- Braided hoses**
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- Insulation tubes**
- Heat-shrink tubes**
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