

**PAAR-TRONIC-CY-CY (LiYCY-CY)** EMC-preferred type,

meter marking



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

**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
- **Operating peak voltage**  
(not for heavy current installation purposes)  
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
- **Coupling resistance**  
max. 250 Ohm/km
- **Minimum bending radius**  
flexing 12x cable Ø  
fixed installation 6x cable Ø
- **Radiation resistance**  
up to 80x10<sup>6</sup> cJ/kg (up to 80 Mrad)

**Cable structure**

- Bare copper, fine wire conductors, to DIN VDE 0295 cl.5
- Conductor construction:  
0,14 mm<sup>2</sup> = 18x0,1 mm  
0,25 mm<sup>2</sup> = 14x0,15 mm  
0,34 mm<sup>2</sup> = 7x0,25 mm
- Core insulation of special PVC compound type T12 to DIN VDE 0207-363-3 / DIN EN 50363-3
- Core identification (pair) to DIN 47100
- 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
- Foil wrapping
- Overall braid-screening, tinned copper coverage approx. 85%
- Outer sheath of special PVC compound type TM2 to DIN VDE 0207-363-4-1 / DIN EN 50363-4-1
- Sheath colour grey (RAL 7001)
- with meter marking

**Properties**

- Extensively oil resistant, oil-/ chemical Resistance - see table Technical Informations
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

**Tests**

- PVC 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**

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

**Application**

As a control and signal cable in electronics, instrumentation and control technology. Interference free transmission of data signals from peripheral devices to information storage. Excellent connecting cable for mixing console, studio equipment, measuring and control technology. Reliable in process control, in machining centers and safety engineering systems. These cables with copper screening are suitable for interference free data and signal transmission in the measurement, control and regulation technology.

**EMC** = Electromagnetic compatibility

To optimize 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/EC.

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	7,6	31,0	95,0	26	21071	8 x 2 x 0,14	12,0	97,0	245,0	26
21066	3 x 2 x 0,14	8,4	34,0	105,0	26	21072	9 x 2 x 0,14	13,0	101,0	280,0	26
21067	4 x 2 x 0,14	9,9	45,0	140,0	26	21073	10 x 2 x 0,14	14,1	108,0	325,0	26
21068	5 x 2 x 0,14	10,4	58,0	160,0	26	21074	12 x 2 x 0,14	15,2	134,0	380,0	26
21069	6 x 2 x 0,14	11,0	67,0	185,0	26	21075	16 x 2 x 0,14	16,7	179,0	440,0	26
21070	7 x 2 x 0,14	11,0	78,0	230,0	26	21076	20 x 2 x 0,14	18,4	225,0	520,0	26

Continuation ▶

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

EAC

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	8,6	62,0	125,0	24
21078	3 x 2 x 0,25	9,3	78,2	140,0	24
21079	4 x 2 x 0,25	10,4	124,1	205,0	24
21080	5 x 2 x 0,25	12,1	137,6	230,0	24
21081	6 x 2 x 0,25	13,9	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	15,9	213,9	420,0	24
21085	12 x 2 x 0,25	17,0	238,3	465,0	24
21086	16 x 2 x 0,25	19,8	291,4	590,0	24
21087	20 x 2 x 0,25	21,2	325,0	620,0	24
21088	24 x 2 x 0,25	24,0	367,5	690,0	24
21089	32 x 2 x 0,25	26,5	588,0	785,0	24
21090	48 x 2 x 0,25	31,6	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	10,5	88,1	157,0	22
21093	4 x 2 x 0,34	11,3	137,2	213,0	22
21094	6 x 2 x 0,34	13,9	174,8	308,0	22
21095	8 x 2 x 0,34	15,4	247,2	385,0	22
21096	10 x 2 x 0,34	17,6	288,7	433,0	22
21097	12 x 2 x 0,34	18,3	321,0	495,0	22
21098	14 x 2 x 0,34	19,6	388,4	600,0	22
21099	16 x 2 x 0,34	20,9	425,5	637,0	22
21100	24 x 2 x 0,34	26,1	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	11,7	106,4	179,0	20
21103	4 x 2 x 0,5	13,1	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	16,4	311,5	441,0	20
21106	10 x 2 x 0,5	20,6	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)



Suitable accessories can be found in Chapter X.

- Cable tie

B