

# PAAR-TRONIC-CY-CY (LiYCY-CY) EMC-preferred type



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
- **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 construction

- 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
- 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)

## Properties

- Extensively oil resistant.  
Chemical Resistance - see table Technical Informations
- PVC self-extinguishing and flame retardant according to DIN VDE 0482 part 265-2-1/ EN 50265-2-1/ 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 73/23/EEC and 93/68/EEC.

| Part No. | No.pairs x cross-sec. mm <sup>2</sup> | Outer ø ca. mm | Cop. weight kg / km | Weight ca. kg / km | AWG-No. |
|----------|---------------------------------------|----------------|---------------------|--------------------|---------|
| 21065    | 2 x 2 x 0,14                          | 7,3            | 31,0                | 95,0               | 26      |
| 21066    | 3 x 2 x 0,14                          | 7,5            | 34,0                | 105,0              | 26      |
| 21067    | 4 x 2 x 0,14                          | 9,3            | 45,0                | 140,0              | 26      |
| 21068    | 5 x 2 x 0,14                          | 10,5           | 58,0                | 160,0              | 26      |
| 21069    | 6 x 2 x 0,14                          | 11,0           | 67,0                | 185,0              | 26      |
| 21070    | 7 x 2 x 0,14                          | 11,0           | 78,0                | 230,0              | 26      |

| Part No. | No.pairs x cross-sec. mm <sup>2</sup> | Outer ø ca. mm | Cop. weight kg / km | Weight ca. kg / km | AWG-No. |
|----------|---------------------------------------|----------------|---------------------|--------------------|---------|
| 21071    | 8 x 2 x 0,14                          | 13,0           | 97,0                | 245,0              | 26      |
| 21072    | 9 x 2 x 0,14                          | 14,1           | 101,0               | 280,0              | 26      |
| 21073    | 10 x 2 x 0,14                         | 14,0           | 108,0               | 325,0              | 26      |
| 21074    | 12 x 2 x 0,14                         | 15,0           | 134,0               | 380,0              | 26      |
| 21075    | 16 x 2 x 0,14                         | 17,0           | 179,0               | 440,0              | 26      |
| 21076    | 20 x 2 x 0,14                         | 17,8           | 225,0               | 520,0              | 26      |

Dimensions and specifications may be changed without prior notice.

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