

# PAAR-TRONIC-CY-CY

colour code DIN 47100, EMC-preferred type



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

## TECHNICAL DATA

### PVC data cable in alignment with DIN VDE 0812

<b>Temperature range</b>	flexible -5°C to +80°C fixed -40°C to +80°C
<b>Peak operating voltage</b>	0.14 mm <sup>2</sup> : 350 V 0.25 - 0.5 mm <sup>2</sup> : 500 V (not for high power current installation purposes)
<b>Test voltage core/core</b>	0.14 mm <sup>2</sup> : 1200 V 0.25 - 0.5 mm <sup>2</sup> : 2000 V
<b>Test voltage core/screen</b>	800 V
<b>Breakdown voltage</b>	0.14 mm <sup>2</sup> : 2400 V 0.25 - 0.5 mm <sup>2</sup> : 4000 V
<b>Mutual capacitance core/core</b>	at 800 Hz 0.14 mm <sup>2</sup> : approx. 147 pF/m 0.25 mm <sup>2</sup> : approx. 152 pF/m
<b>Mutual capacitance core/screen</b>	at 800 Hz 0.14 mm <sup>2</sup> : approx. 220 pF/m 0.25 mm <sup>2</sup> : approx. 263 pF/m
<b>Capacitive coupling k<sub>1</sub></b>	at 800 Hz, max. 250 pF/100m
<b>Coupling resistance</b>	at 30 MHz, approx. 250 Ohm/km
<b>Minimum bending radius</b>	flexible 12x Outer-Ø fixed 6x Outer-Ø

## CABLE STRUCTURE

- Copper wire bare, 0.5 mm<sup>2</sup>: finely stranded acc. to DIN VDE 0295 Class 5 / IEC 60228 Class 5
- Wire structure:  
0.14 mm<sup>2</sup>: approx. 18 x 0.10 mm  
0.25 mm<sup>2</sup>: approx. 14 x 0.15 mm  
0.34 mm<sup>2</sup>: 7 x 0.25 mm
- Core insulation: PVC acc. to DIN VDE 0207-363-3 / DIN EN 50363-3 (compound type T12)
- Core identification acc. to DIN 47100 (paired stranding), colour coded
- x = without protective conductor
- Cores stranded in pairs with optimal lay lengths

Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
21065	2 x 2 x 0.14	26	8.3	31.0	95.0
21066	3 x 2 x 0.14	26	9.2	34.0	105.0
21067	4 x 2 x 0.14	26	10.2	45.0	140.0
21068	5 x 2 x 0.14	26	11.1	58.0	160.0
21069	6 x 2 x 0.14	26	12.3	67.0	185.0
21070	7 x 2 x 0.14	26	12.3	78.0	230.0
21071	8 x 2 x 0.14	26	14.6	97.0	245.0
21072	9 x 2 x 0.14	26	15.8	101.0	280.0
21073	10 x 2 x 0.14	26	16.0	108.0	325.0
21074	12 x 2 x 0.14	26	16.7	134.0	380.0
21075	16 x 2 x 0.14	26	18.6	179.0	440.0
21076	20 x 2 x 0.14	26	21.0	225.0	520.0

- Screening element: Pairs, braided screen of tinned copper wires, approx. coverage 85%
- PVC sheath over each screened pair
- Pairs stranded in layers with optimal lay lengths
- Foil wrapping
- Screen: braided screen of tinned copper wires, approx. coverage 85%
- Outer sheath: PVC acc. to DIN VDE 0207-363-4-1 / DIN EN 50363-4-1 (compound type TM2)
- Sheath colour: grey (RAL 7001)
- Length marking: in metres

## PROPERTIES

- largely resistant to: oil, for details, see "Technical Information"
- 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

## APPLICATION

Used as a control and signal cable in electronic engineering, measurement and control technology. It provides interference-free transmission of data signals from peripheral equipment to information storage. Excellent connection cable for sound mixers, studio equipment and measurement and control technology. Reliable in process control, machining centres and safety-related systems. These cables with copper screening are ideally suited for interference-free data and signal transmission for measurement and control technology. EMC = Electromagnetic Compatibility; in order to optimise EMC properties, we recommend a double-sided and all-round large contact area of the copper braiding.

## NOTES

- the conductor is metrically (mm<sup>2</sup>) constructed, AWG numbers are approximated, and are for reference only

Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
21077	2 x 2 x 0.25	24	9.5	62.0	125.0
21078	3 x 2 x 0.25	24	10.6	78.2	140.0
21079	4 x 2 x 0.25	24	11.5	124.1	205.0
21080	5 x 2 x 0.25	24	13.0	137.6	230.0
21081	6 x 2 x 0.25	24	14.3	148.1	275.0
21082	7 x 2 x 0.25	24	14.3	159.1	295.0
21083	8 x 2 x 0.25	24	16.8	178.7	330.0
21084	10 x 2 x 0.25	24	18.4	213.9	420.0
21085	12 x 2 x 0.25	24	19.4	238.3	465.0
21086	16 x 2 x 0.25	24	21.6	291.4	590.0
21087	20 x 2 x 0.25	24	24.3	325.0	620.0
21088	24 x 2 x 0.25	24	27.4	367.5	690.0

# PAAR-TRONIC-CY-CY

colour code DIN 47100, EMC-preferred type



Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
21089	32 x 2 x 0.25	24	30.3	588.0	785.0
21090	48 x 2 x 0.25	24	36.3	840.5	970.0
21091	2 x 2 x 0.34	22	10.1	73.1	139.0
21092	3 x 2 x 0.34	22	11.0	88.1	157.0
21093	4 x 2 x 0.34	22	12.2	137.2	213.0
21094	6 x 2 x 0.34	22	15.0	174.8	308.0
21095	8 x 2 x 0.34	22	17.6	247.2	385.0
21096	10 x 2 x 0.34	22	19.5	288.7	433.0
21097	12 x 2 x 0.34	22	20.3	321.0	495.0
21098	14 x 2 x 0.34	22	21.5	388.4	600.0
21099	16 x 2 x 0.34	22	22.6	425.5	637.0

Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
21100	24 x 2 x 0.34	22	28.6	577.1	781.0
21101	2 x 2 x 0.5	20	11.2	83.1	143.0
21102	3 x 2 x 0.5	20	12.3	106.4	179.0
21103	4 x 2 x 0.5	20	13.9	158.0	241.0
21104	6 x 2 x 0.5	20	16.7	201.4	319.0
21105	8 x 2 x 0.5	20	20.0	311.5	441.0
21106	10 x 2 x 0.5	20	21.9	334.5	464.0
21107	12 x 2 x 0.5	20	22.8	394.1	529.0
21108	14 x 2 x 0.5	20	24.1	446.0	641.0
21109	16 x 2 x 0.5	20	25.5	501.2	694.0
21110	24 x 2 x 0.5	20	32.1	712.4	930.0