

PAAR-TRONIC-Li-2YCY

low capacitance, EMC-preferred type



HELUKABEL® PAAR-TRONIC-Li-2YCY 4x2x0,34 QMM / 21119 CE

TECHNICAL DATA

PVC data cable

Temperature range	flexible -5°C to +70°C fixed -30°C to +80°C
Peak operating voltage	250 V (not for high power current installation purposes)
Test voltage core/core	2000 V
Test voltage core/screen	1000 V
Conductor resistance at 20°C	0.22 mm ² : max. 93.0 Ohm/km 0.34 mm ² : max. 57.5 Ohm/km 0.5 mm ² : max. 39.3 Ohm/km
Mutual capacitance core/core	at 800 Hz 2 - 4 pairs: approx. 72 pF/m 8 - 10 pairs: approx. 60 pF/m
Crosstalk attenuation	at 1 MHz, 50.00 dB at 10 MHz, 40.00 dB (approx. value)
Inductance	approx. 0.66 mH/km
Coupling resistance	at 30 MHz, approx. 250 Ohm/ km
Minimum bending radius	flexible 12x Outer-Ø fixed 7.5x Outer-Ø

CABLE STRUCTURE

- Copper wire bare, stranded
- Wire structure:
 - 0.22 mm²: 7 x 0.2
 - 0.34 mm²: 7 x 0.25
 - 0.5 mm²: 7 x 0.3
- Core insulation: PE acc. to DIN VDE 0819-103 / DIN EN 50290-2-23 (compound type LD/MD)
- Core identification acc. to DIN 47100 (paired stranding), colour coded
- x = without protective conductor
- Cores stranded in pairs with optimal lay lengths, Pairs stranded in layers with optimal lay lengths

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
21111	2 x 2 x 0.22	24	6.3	26.0	48.0
21112	3 x 2 x 0.22	24	6.6	31.0	66.0
21113	4 x 2 x 0.22	24	7.2	38.0	82.0
21114	8 x 2 x 0.22	24	9.6	62.0	123.0
21115	10 x 2 x 0.22	24	10.4	79.0	165.0
21117	2 x 2 x 0.34	22	7.5	35.0	68.0
21118	3 x 2 x 0.34	22	7.9	44.0	77.0
21119	4 x 2 x 0.34	22	8.6	53.0	95.0

- Foil wrapping
- Drain wire, tinned copper
- 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

- 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
- certifications and approvals: EAC

APPLICATION

PE-insulated data cable with twisted pairs, for interference-free transmission of data and signals over longer distances. The twisted-pair lay-up prevents electrical unbalances within the cable and this thus effectively suppresses cross-talking effects. The high transmission rates are particularly suitable for RS 422 and RS 485 interfaces; suitable for fixed installations in dry, damp and wet rooms, but not outdoors. 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 (mm²) constructed, AWG numbers are approximated, and are for reference only

Part no.	No. cores x cross-sec. mm ²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
21120	8 x 2 x 0.34	22	11.9	86.0	158.0
21121	10 x 2 x 0.34	22	13.4	104.0	195.0
21123	2 x 2 x 0.5	20	8.0	49.0	74.0
21124	3 x 2 x 0.5	20	8.5	60.0	109.0
21125	4 x 2 x 0.5	20	9.4	73.0	128.0
21126	8 x 2 x 0.5	20	13.3	124.0	223.0
21127	10 x 2 x 0.5	20	14.4	155.0	265.0