PAAR-TRONIC-Li-2YCYv

low capacitance, reinforced outer sheath, EMC-preferred type

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 mm²: max. 93.0 Ohm/km 0.34 mm²: max. 57.5 Ohm/km 0.5 mm²: max. 39.3 Ohm/km 1 mm²: max. 19.6 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 mm
  0.34 mm²: 7 x 0.25 mm
  0.5 mm²: 7 x 0.3 mm
  1 mm²: 7 x 0.42 mm
- 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
- 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), reinforced (v)
- Sheath colour: black (RAL 9005)
- Length marking: in metres

PROPERTIES

- resistant to: UV radiation, weathering effects
- for outdoor use
- direct burial
- 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
- UV-resistant acc. to DIN EN ISO 4892-2
- weather-resistant acc. to DIN EN ISO 4892-2
- 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, as well as outdoors and direct burial. 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. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
21129	2 x 2 x 0.22	24	8.3	26.0	60.0
21130	3 x 2 x 0.22	24	8.6	31.0	79.0
21131	4 x 2 x 0.22	24	9.2	38.0	96.0
21132	8 x 2 x 0.22	24	11.6	62.0	140.0
21133	10 x 2 x 0.22	24	12.4	79.0	184.0
21135	2 x 2 x 0.34	22	9.5	35.0	83.0
21136	3 x 2 x 0.34	22	9.9	44.0	92.0
21137	4 x 2 x 0.34	22	10.6	53.0	112.0
21138	8 x 2 x 0.34	22	13.7	86.0	179.0
21139	10 x 2 x 0.34	22	15.0	104.0	219.0

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu factor per km	Weight kg/km, approx.
21141	2 x 2 x 0.5	20	10.0	49.0	90.0
21142	3 x 2 x 0.5	20	10.5	60.0	126.0
21143	4 x 2 x 0.5	20	11.2	73.0	146.0
21144	8 x 2 x 0.5	20	14.9	124.0	246.0
21145	10 x 2 x 0.5	20	16.0	155.0	292.0
21146	2 x 2 x 1	18	11.9	81.0	141.0
21147	3 x 2 x 1	18	12.5	102.0	170.0
21148	4 x 2 x 1	18	13.5	130.0	203.0
21149	8 x 2 x 1	18	18.3	240.0	361.0
21150	10 x 2 x 1	18	20.0	282.0	387.0