PAAR-TRONIC-CY

colour code DIN 47100, EMC-preferred type

TECHNICAL DATA

PVC data cable in alignment with DIN VDE 0812

Temperature range	flexible -5°C to +80°C fixed -30°C to +80°C
Peak operating voltage	350 V (not for high power current installation purposes)
Test voltage core/core	1200 V
Test voltage core/screen	800 V
Breakdown voltage	2400 V
Mutual capacitance core/core	at 800 Hz 0.14 - 0.25 mm²: approx. 100 pF/m 0.34 - 1.5 mm²: approx. 150 pF/m
Mutual capacitance core/screen	at 800 Hz 0.14 mm²: approx. 240 pF/m 0.25 mm²: approx. 270 pF/m
Capacitive coupling k_1	at 800 Hz, max. 300 pF/100m
Characteristic impedance	78 Ohm (approx. value)
Inductance	approx. 0.65 mH/km
Coupling resistance	at 30 MHz, approx. 250 Ohm/km
Minimum bending radius	flexible 10x Outer-Ø fixed 5x Outer-Ø

CABLE STRUCTURE

- Copper wire bare, 0.5 - 1.5 mm²: finely stranded acc. to DIN VDE 0295 Class 5 / IEC 60228 Class 5
- Wire structure:
  0.14 mm²: approx. 18 x 0.10 mm
  0.25 mm²: approx. 14 x 0.15 mm
  0.34 mm²: 7 x 0.25 mm
- Core insulation: PVC acc. to DIN VDE 0207-363-3 / DIN EN 50363-3 (compound type TI2)
- 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)
- Sheath colour: grey (RAL 7032)
- 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

Suitable for flexible applications with free movement, without tensile stress and without forced motion control in dry, damp and wet rooms, however, not suitable for outdoor use. Used as control and signal cables for systems at risk of interference radiation. Due to the dense braided screening, interference through parallel running cables is suppressed and as a result of the pair stranding, favourable crosstalk attenuation values are achieved. 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-weight kg/km	Weight kg/km, approx.
21001	1 x 2 x 0.14	26	3.8	16.0	34.0
21002	2 x 2 x 0.14	26	5.2	18.5	40.0
21003	3 x 2 x 0.14	26	5.5	23.0	49.0
21004	4 x 2 x 0.14	26	5.9	27.0	55.0
21005	5 x 2 x 0.14	26	6.6	31.0	66.0
21006	6 x 2 x 0.14	26	7.1	48.0	86.0
21007	7 x 2 x 0.14	26	7.1	51.0	91.0
21008	8 x 2 x 0.14	26	8.1	54.0	97.0
21009	10 x 2 x 0.14	26	9.0	59.0	109.0
21010	12 x 2 x 0.14	26	9.3	66.0	141.0
21011	14 x 2 x 0.14	26	9.7	74.0	148.0
21012	15 x 2 x 0.14	26	10.2	76.0	152.0
21013	16 x 2 x 0.14	26	10.2	79.0	155.0
21014	18 x 2 x 0.14	26	10.9	83.0	171.0

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
21015	20 x 2 x 0.14	26	11.4	97.0	183.0
21016	22 x 2 x 0.14	26	13.0	103.0	205.0
21017	24 x 2 x 0.14	26	13.0	111.0	228.0
21018	25 x 2 x 0.14	26	13.3	113.0	239.0
21019	26 x 2 x 0.14	26	13.3	122.0	245.0
21020	27 x 2 x 0.14	26	13.3	125.0	251.0
21021	28 x 2 x 0.14	26	13.3	128.0	258.0
21022	30 x 2 x 0.14	26	13.7	140.0	270.0
21023	32 x 2 x 0.14	26	13.9	145.0	284.0
21024	34 x 2 x 0.14	26	14.4	150.0	300.0
21025	36 x 2 x 0.14	26	14.4	156.0	316.0
21026	38 x 2 x 0.14	26	14.9	162.0	350.0
21027	40 x 2 x 0.14	26	14.9	177.0	370.0
21028	44 x 2 x 0.14	26	16.3	181.0	390.0

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