

PAAR-TRONIC-CY flexible, Cu-unscreened, colour coded to DIN 47100, EMC-preferred type, meter marking



Technical data

- Special PVC data cables, adapted to DIN VDE 0812, 0814
- **Temperature range**
flexing -5°C to +80°C
fixed installation -30°C to +80°C
- **Operating voltage** 350 V
(not for purposes of high current and power installation)
- **Test voltage**
core/core 1200 V
core/screen 800 V
- **Breakdown voltage** min. 2400 V
- **Insulation resistance**
min. 20 MOhm x km
- **Conductor resistance**
at 0,14 mm² = 138 Ohm/km
at 0,25 mm² = 75,5 Ohm/km
at 0,34 mm² = 57,5 Ohm/km
at 0,50 mm² = 39 Ohm/km
at 0,75 mm² = 26 Ohm/km
- **Capacitance** (approx.-value) at 800 Hz
core/core 0,14 mm² = 120 pF/m
core/core ≥0,25 mm² = 150 pF/m
core/screen 0,14 mm² = 240 pF/m
core/screen ≥0,25 mm² = 270 pF/m
- **Load**
at 0,14 mm² = 1,5 A
at 0,25 mm² = 2,5 A
at 0,34 mm² = 4,5 A
at 0,50 mm² = 6 A
at 0,75 mm² = 9 A
- **Inductance** approx. 0,65 mH/km
- **Impedance** approx. 78 Ohm
- **K₁-coupling** approx. 300 pF/100 m
- **Coupling resistance**
max. 250 Ohm/km
- **Minimum bending radius**
flexing 10x cable Ø
fixed installation 5x cable Ø
- **Radiation resistance**
up to 80x10⁶ cJ/kg (up to 80 Mrad)

Cable structure

- Bare copper, fine wire conductors, bunch stranded to DIN VDE 0295 cl. 5, 0245 and IEC 60228 cl. 5
- Conductor make-up for
0,14 mm² = 18x0,1 mm
0,25 mm² = 14x0,15 mm
0,34 mm² = 7x0,25 mm
- Special PVC core insulation Y12, to DIN VDE 0207 part 4
- Colours coded to DIN 47100 with colour repetition
- Cores stranded in pairs with optimal lay-length
- Pairs stranded in layers with optimal lay-length
- Core wrapping with foil
- Tinned copper braided screening, coverage approx. 85%
- Special PVC outer sheath YM2, to DIN VDE 0207 part 5
- Sheath colour grey (RAL 7032)
- with meter marking, change-over in 2009

Properties

- Extensively oil resistant.
Chemical Resistance - see table Technical Informations
- PVC self-extinguishing and flame retardant according to VDE 0482-332-1-2, DIN EN 60332-1-2/ 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

- Also available in other sheath colours.
- **unscreened analogue type:**
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Application

These data control cables are used for flexible use with free movement without tensile stress or forced movements in dry, moist and wet rooms but not suitable for open air.

PAAR-TRONIC-CY is well suited for use in areas subject to signal interference. The high level of screening reduces substantially the effects of electrical disturbances from parallel running wiring etc. The copper screening is also often used as an "earth".

The twisted pairs conform favourable cross-talk attenuation values. These cables are suitable for dry and wet rooms, yet not for open air.

EMC = Electromagnetic compatibility

CE = The product is conformed with the EC Low-Voltage Directive 2006/95/EG.

Part No.	No. pairs x cross-sec. mm ²	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.	Part No.	No. pairs x cross-sec. mm ²	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
21001	1 x 2 x 0,14	3,5	15,6	34,0	26	21006	6 x 2 x 0,14	7,2	48,5	86,0	26
21002	2 x 2 x 0,14	5,6	18,5	40,0	26	21007	7 x 2 x 0,14	7,2	51,1	91,0	26
21003	3 x 2 x 0,14	5,6	23,0	49,0	26	21008	8 x 2 x 0,14	8,4	53,7	97,0	26
21004	4 x 2 x 0,14	6,0	26,6	55,0	26	21009	10 x 2 x 0,14	9,1	59,0	109,0	26
21005	5 x 2 x 0,14	6,7	30,7	66,0	26	21010	12 x 2 x 0,14	9,2	66,0	141,0	26

Dimensions and specifications may be changed without prior notice. (RB01)

Continuation ▶

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Part No.	No.pairs x cross-sec. mm ²	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
21011	14 x 2 x 0,14	9,9	74,0	148,0	26
21012	15 x 2 x 0,14	10,4	76,0	152,0	26
21013	16 x 2 x 0,14	10,4	79,0	155,0	26
21014	18 x 2 x 0,14	11,0	83,0	171,0	26
21015	20 x 2 x 0,14	11,5	97,0	183,0	26
21016	22 x 2 x 0,14	12,3	103,0	205,0	26
21017	24 x 2 x 0,14	12,3	111,0	228,0	26
21018	25 x 2 x 0,14	12,5	113,0	239,0	26
21019	26 x 2 x 0,14	12,5	122,0	245,0	26
21020	27 x 2 x 0,14	12,5	125,0	251,0	26
21021	28 x 2 x 0,14	13,7	128,0	258,0	26
21022	30 x 2 x 0,14	13,7	140,0	270,0	26
21023	32 x 2 x 0,14	14,2	145,0	284,0	26
21024	34 x 2 x 0,14	14,7	150,0	300,0	26
21025	36 x 2 x 0,14	14,9	156,0	316,0	26
21026	38 x 2 x 0,14	15,6	162,0	350,0	26
21027	40 x 2 x 0,14	16,1	177,0	370,0	26
21028	44 x 2 x 0,14	16,8	181,0	390,0	26
21029	46 x 2 x 0,14	17,0	195,0	430,0	26
21030	50 x 2 x 0,14	17,7	202,0	440,0	26
21031	52 x 2 x 0,14	17,7	206,0	460,0	26
21032	55 x 2 x 0,14	18,2	210,0	480,0	26
21033	1 x 2 x 0,25	4,1	15,0	45,0	24
21034	2 x 2 x 0,25	6,3	28,0	53,0	24
21035	3 x 2 x 0,25	6,6	32,0	65,0	24
21036	4 x 2 x 0,25	7,0	38,0	80,0	24
21037	5 x 2 x 0,25	7,8	55,0	98,0	24
21038	6 x 2 x 0,25	8,6	65,0	114,0	24
21039	7 x 2 x 0,25	8,6	70,0	121,0	24
21040	8 x 2 x 0,25	9,8	75,0	129,0	24
21041	10 x 2 x 0,25	11,0	110,0	157,0	24
21042	12 x 2 x 0,25	11,2	117,0	189,0	24
21043	14 x 2 x 0,25	12,2	122,0	213,0	24
21044	15 x 2 x 0,25	12,8	134,0	225,0	24
21045	16 x 2 x 0,25	12,8	143,0	237,0	24
21046	18 x 2 x 0,25	13,5	148,0	248,0	24
21047	20 x 2 x 0,25	14,1	162,0	275,0	24
21048	22 x 2 x 0,25	14,9	172,0	303,0	24
21049	24 x 2 x 0,25	15,3	223,0	350,0	24
21050	25 x 2 x 0,25	15,5	233,0	343,0	24
21051	26 x 2 x 0,25	15,5	238,0	345,0	24
21052	27 x 2 x 0,25	15,5	244,0	350,0	24
21053	28 x 2 x 0,25	17,0	249,0	360,0	24
21054	30 x 2 x 0,25	17,0	254,0	375,0	24
21055	32 x 2 x 0,25	17,6	290,0	400,0	24
21056	34 x 2 x 0,25	18,2	312,0	410,0	24
21057	36 x 2 x 0,25	18,2	322,0	420,0	24
21058	38 x 2 x 0,25	19,0	339,0	450,0	24
21059	40 x 2 x 0,25	19,7	349,0	485,0	24
21060	44 x 2 x 0,25	20,5	359,0	500,0	24
21061	46 x 2 x 0,25	20,7	398,0	540,0	24
21062	50 x 2 x 0,25	21,5	403,0	550,0	24
21063	52 x 2 x 0,25	21,5	435,0	580,0	24
21064	55 x 2 x 0,25	22,1	464,0	630,0	24

Part No.	No.pairs x cross-sec. mm ²	Outer ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-No.
19970	1 x 2 x 0,34	5,4	16,0	58,0	22
19971	2 x 2 x 0,34	7,0	36,9	65,0	22
19972	3 x 2 x 0,34	7,3	44,9	78,0	22
19973	4 x 2 x 0,34	8,1	54,2	90,0	22
19974	5 x 2 x 0,34	8,8	63,5	110,0	22
19975	6 x 2 x 0,34	9,8	73,1	130,0	22
19976	7 x 2 x 0,34	9,8	79,5	145,0	22
19977	8 x 2 x 0,34	11,2	88,4	150,0	22
19978	9 x 2 x 0,34	12,6	99,3	170,0	22
19979	10 x 2 x 0,34	12,6	106,9	190,0	22
19980	12 x 2 x 0,34	12,8	122,1	220,0	22
19981	14 x 2 x 0,34	13,3	138,2	245,0	22
19982	16 x 2 x 0,34	14,3	154,2	250,0	22
19983	18 x 2 x 0,34	15,2	197,9	275,0	22
19984	21 x 2 x 0,34	15,9	214,4	300,0	22
19985	25 x 2 x 0,34	17,5	238,5	400,0	22
19986	27 x 2 x 0,34	17,5	262,5	410,0	22
19987	30 x 2 x 0,34	19,1	286,6	440,0	22
19988	34 x 2 x 0,34	20,8	310,1	510,0	22
19989	37 x 2 x 0,34	21,5	368,7	550,0	22
19990	40 x 2 x 0,34	22,4	392,6	590,0	22
19991	44 x 2 x 0,34	23,6	424,3	600,0	22
19992	50 x 2 x 0,34	24,8	455,9	650,0	22
19993	52 x 2 x 0,34	24,8	487,6	680,0	22
19994	56 x 2 x 0,34	25,4	518,5	750,0	22
19995	61 x 2 x 0,34	26,2	557,2	840,0	22
17047	1 x 2 x 0,5	4,9	24,0	60,0	20
17001	2 x 2 x 0,5	7,8	54,0	89,0	20
17002	3 x 2 x 0,5	8,2	70,0	104,0	20
17003	4 x 2 x 0,5	9,1	91,0	126,0	20
17004	5 x 2 x 0,5	9,9	105,0	148,0	20
17005	6 x 2 x 0,5	10,7	120,0	171,0	20
17006	8 x 2 x 0,5	12,8	144,0	290,0	20
17007	10 x 2 x 0,5	14,0	178,0	320,0	20
17008	12 x 2 x 0,5	14,3	199,0	361,0	20
17009	16 x 2 x 0,5	16,1	254,0	421,0	20
17010	20 x 2 x 0,5	17,2	302,0	580,0	20
17011	25 x 2 x 0,5	17,9	344,0	740,0	20
17048	1 x 2 x 0,75	5,2	28,0	71,0	19
17012	2 x 2 x 0,75	8,4	58,0	105,0	19
17013	3 x 2 x 0,75	8,9	84,0	128,0	19
17014	4 x 2 x 0,75	9,8	108,0	156,0	19
17015	5 x 2 x 0,75	10,8	126,0	189,0	19
17016	6 x 2 x 0,75	12,1	146,0	216,0	19
17017	8 x 2 x 0,75	13,4	180,0	309,0	19
17018	10 x 2 x 0,75	15,5	220,0	355,0	19
17019	12 x 2 x 0,75	15,8	261,0	405,0	19
17020	16 x 2 x 0,75	18,0	328,0	565,0	19
17021	20 x 2 x 0,75	19,2	392,0	700,0	19
17022	25 x 2 x 0,75	21,8	470,0	950,0	19
17049	1 x 2 x 1	5,3	46,0	75,0	18
17050	2 x 2 x 1	8,9	82,0	116,0	18
17051	3 x 2 x 1	9,4	103,0	140,0	18
17052	4 x 2 x 1	10,4	132,0	191,0	18
17053	1 x 2 x 1,5	5,8	63,0	84,0	16
17054	2 x 2 x 1,5	10,2	111,0	122,0	16
17055	3 x 2 x 1,5	10,8	136,0	194,0	16
17056	4 x 2 x 1,5	12,0	172,0	240,0	16

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