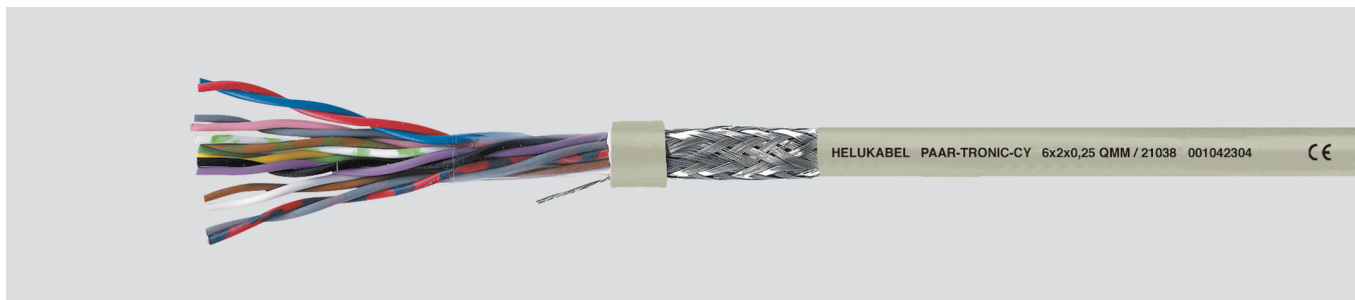


# PAAR-TRONIC-CY

EMC-preferred type, flexible, Cu-screened, colour coded to DIN 47100, meter marking



## Technical data

- Special PVC data cables for electronic control adapted to DIN VDE 0812 and 0814
- **Temperature range**  
flexing -5°C to +80°C  
fixed installation -30°C to +80°C
- **Operating peak voltage**  
(not for heavy current installation purposes)  
350 V
- **Test voltage**  
core/core 1200 V  
core/screen 800 V
- **Breakdown voltage**  
min. 2400 V
- **Insulation resistance**  
min. 20 MOhm x km
- **Plant capacity** (approx.-value) at 800 Hz  
core/core 0,14 mm<sup>2</sup> = 120 pF/m  
core/core 0,25 mm<sup>2</sup> = 150 pF/m  
core/screen 0,14 mm<sup>2</sup> = 240 pF/m  
core/screen 0,25 mm<sup>2</sup> = 270 pF/m
- **Inductance**  
approx. 0,65 mH/km
- **Impedance**  
approx. 78 Ohm
- **K<sub>1</sub>-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 80x10<sup>6</sup> cJ/kg (up to 80 Mrad)

## Cable structure

- Bare copper conductor, from 0,5 mm<sup>2</sup> to DIN VDE 0295 cl.5, fine wire, BS 6360 cl.5, IEC 60228 cl.5
- Conductor construction:  
0,14 mm<sup>2</sup> = 18x0,1 mm  
0,25 mm<sup>2</sup> = 14x0,15 mm  
0,34 mm<sup>2</sup> = 7x0,25 mm
- Core insulation of special PVC compound type T12 to DIN VDE 0207-363-3 / DIN EN 50363-3
- Core identification (pair) to DIN 47100
- Cores stranded in pairs with optimal lay length
- Pairs stranded in layers with optimal lay length
- Foil wrapping
- Drain wire, tinned
- Tinned copper braided screen, approx. 85% coverage
- Outer sheath of special PVC compound type TM2 to DIN VDE 0207-363-4-1/DIN EN 50363-4-1
- Sheath colour: grey (RAL 7032) also available in other colours on request
- With meter marking

## Properties

- Extensively oil resistant, oil-/chemical resistance see "Technical Informations"
- The materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

## Tests

- PCV self-extinguishing and flame retardant acc. to DIN VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1-2 (equivalent DIN VDE 0472 part 804 test method B)

## Note

- AWG sizes are approximate equivalent values. The actual cross section is in mm<sup>2</sup>.
- Unscreened analogue type:  
**PAAR-TRONIC**

## 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.

**EMC** = Electromagnetic compatibility

To optimize the EMC features we recommend a large round contact of the copper braiding on both ends.

**CE** = Product conforms with Low-Voltage Directive 2014/35/EU.

Part no.	No.pairs x cross-sec. mm <sup>2</sup>	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.	Part no.	No.pairs x cross-sec. mm <sup>2</sup>	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
21001	1 x 2 x 0,14	4,0	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	5,0	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	5,7	23,0	49,0	26	21008	8 x 2 x 0,14	8,2	53,7	97,0	26
21004	4 x 2 x 0,14	6,1	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	6,8	30,7	66,0	26	21010	12 x 2 x 0,14	9,6	66,0	141,0	26

Continuation ▶

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Part no.	No.pairs x cross-sec. mm <sup>2</sup>	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.	Part no.	No.pairs x cross-sec. mm <sup>2</sup>	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
21011	14 x 2 x 0,14	10,4	74,0	148,0	26	19972	3 x 2 x 0,34	7,2	44,9	78,0	22
21012	15 x 2 x 0,14	10,6	76,0	152,0	26	19973	4 x 2 x 0,34	8,1	54,2	90,0	22
21013	16 x 2 x 0,14	10,7	79,0	155,0	26	19974	5 x 2 x 0,34	9,0	63,5	110,0	22
21014	18 x 2 x 0,14	11,2	83,0	171,0	26	19975	6 x 2 x 0,34	10,0	73,1	130,0	22
21015	20 x 2 x 0,14	11,4	97,0	183,0	26	19976	7 x 2 x 0,34	10,0	79,5	145,0	22
21016	22 x 2 x 0,14	12,3	103,0	205,0	26	19977	8 x 2 x 0,34	10,8	88,4	150,0	22
21017	24 x 2 x 0,14	12,8	111,0	228,0	26	19978	9 x 2 x 0,34	11,1	99,3	170,0	22
21018	25 x 2 x 0,14	12,9	113,0	239,0	26	19979	10 x 2 x 0,34	12,2	106,9	190,0	22
21019	26 x 2 x 0,14	13,0	122,0	245,0	26	19980	12 x 2 x 0,34	12,9	122,1	220,0	22
21020	27 x 2 x 0,14	13,1	125,0	251,0	26	19981	14 x 2 x 0,34	13,9	138,2	245,0	22
21021	28 x 2 x 0,14	14,0	128,0	258,0	26	19982	16 x 2 x 0,34	14,5	154,2	250,0	22
21022	30 x 2 x 0,14	14,1	140,0	270,0	26	19983	18 x 2 x 0,34	15,3	197,9	275,0	22
21023	32 x 2 x 0,14	14,8	145,0	284,0	26	19984	21 x 2 x 0,34	16,3	214,4	300,0	22
21024	34 x 2 x 0,14	14,9	150,0	300,0	26	19985	25 x 2 x 0,34	17,6	238,5	400,0	22
21025	36 x 2 x 0,14	15,6	156,0	316,0	26	19986	27 x 2 x 0,34	18,0	262,5	410,0	22
21026	38 x 2 x 0,14	16,4	162,0	350,0	26	19987	30 x 2 x 0,34	19,5	286,6	440,0	22
21027	40 x 2 x 0,14	16,8	177,0	370,0	26	19988	34 x 2 x 0,34	20,8	310,1	510,0	22
21028	44 x 2 x 0,14	17,0	181,0	390,0	26	19989	37 x 2 x 0,34	21,4	368,7	550,0	22
21029	46 x 2 x 0,14	17,2	195,0	430,0	26	19990	40 x 2 x 0,34	22,1	392,6	590,0	22
21030	50 x 2 x 0,14	18,0	202,0	440,0	26	19991	44 x 2 x 0,34	23,0	424,3	600,0	22
21031	52 x 2 x 0,14	18,2	206,0	460,0	26	19992	50 x 2 x 0,34	24,5	455,9	650,0	22
21032	55 x 2 x 0,14	18,7	210,0	480,0	26	19993	52 x 2 x 0,34	24,7	487,6	680,0	22
21033	1 x 2 x 0,25	4,4	15,0	45,0	24	19994	56 x 2 x 0,34	26,1	518,5	750,0	22
21034	2 x 2 x 0,25	5,8	28,0	53,0	24	19995	61 x 2 x 0,34	27,5	557,2	840,0	22
21035	3 x 2 x 0,25	6,4	32,0	65,0	24	17047	1 x 2 x 0,5	5,3	24,0	60,0	20
21036	4 x 2 x 0,25	7,2	38,0	80,0	24	17001	2 x 2 x 0,5	7,6	54,0	89,0	20
21037	5 x 2 x 0,25	8,1	55,0	98,0	24	17002	3 x 2 x 0,5	8,2	70,0	104,0	20
21038	6 x 2 x 0,25	8,8	65,0	114,0	24	17003	4 x 2 x 0,5	9,0	91,0	126,0	20
21039	7 x 2 x 0,25	8,8	70,0	121,0	24	17004	5 x 2 x 0,5	9,9	105,0	148,0	20
21040	8 x 2 x 0,25	9,4	75,0	129,0	24	17005	6 x 2 x 0,5	10,9	120,0	171,0	20
21041	10 x 2 x 0,25	10,8	110,0	157,0	24	17006	8 x 2 x 0,5	12,0	144,0	290,0	20
21042	12 x 2 x 0,25	11,4	117,0	189,0	24	17007	10 x 2 x 0,5	13,8	178,0	320,0	20
21043	14 x 2 x 0,25	12,0	122,0	213,0	24	17008	12 x 2 x 0,5	14,5	199,0	361,0	20
21044	15 x 2 x 0,25	12,5	134,0	225,0	24	17009	16 x 2 x 0,5	16,1	254,0	421,0	20
21045	16 x 2 x 0,25	12,6	143,0	237,0	24	17010	20 x 2 x 0,5	18,4	302,0	580,0	20
21046	18 x 2 x 0,25	13,3	148,0	248,0	24	17011	25 x 2 x 0,5	21,0	344,0	740,0	20
21047	20 x 2 x 0,25	14,0	162,0	275,0	24	17048	1 x 2 x 0,75	6,0	28,0	71,0	19
21048	22 x 2 x 0,25	15,0	172,0	303,0	24	17012	2 x 2 x 0,75	8,7	58,0	105,0	19
21049	24 x 2 x 0,25	15,7	223,0	330,0	24	17013	3 x 2 x 0,75	9,3	84,0	128,0	19
21050	25 x 2 x 0,25	15,8	233,0	343,0	24	17014	4 x 2 x 0,75	10,6	108,0	156,0	19
21051	26 x 2 x 0,25	15,9	238,0	345,0	24	17015	5 x 2 x 0,75	11,7	126,0	189,0	19
21052	27 x 2 x 0,25	16,0	244,0	350,0	24	17016	6 x 2 x 0,75	12,7	146,0	216,0	19
21053	28 x 2 x 0,25	16,6	249,0	360,0	24	17017	8 x 2 x 0,75	14,4	180,0	309,0	19
21054	30 x 2 x 0,25	17,0	254,0	375,0	24	17018	10 x 2 x 0,75	15,6	220,0	355,0	19
21055	32 x 2 x 0,25	17,6	290,0	400,0	24	17019	12 x 2 x 0,75	16,8	261,0	405,0	19
21056	34 x 2 x 0,25	17,9	312,0	410,0	24	17020	16 x 2 x 0,75	18,7	328,0	565,0	19
21057	36 x 2 x 0,25	18,6	322,0	420,0	24	17021	20 x 2 x 0,75	20,9	392,0	700,0	19
21058	38 x 2 x 0,25	19,0	339,0	450,0	24	17022	25 x 2 x 0,75	23,2	470,0	950,0	19
21059	40 x 2 x 0,25	19,7	349,0	485,0	24	17049	1 x 2 x 1	6,3	46,0	75,0	18
21060	44 x 2 x 0,25	20,7	359,0	500,0	24	17050	2 x 2 x 1	9,1	82,0	116,0	18
21061	46 x 2 x 0,25	21,2	398,0	540,0	24	17051	3 x 2 x 1	9,8	103,0	140,0	18
21062	50 x 2 x 0,25	22,0	403,0	550,0	24	17052	4 x 2 x 1	10,9	132,0	191,0	18
21063	52 x 2 x 0,25	22,0	435,0	580,0	24	17053	1 x 2 x 1,5	7,2	63,0	84,0	16
21064	55 x 2 x 0,25	22,5	464,0	630,0	24	17054	2 x 2 x 1,5	10,7	111,0	122,0	16
19970	1 x 2 x 0,34	5,0	16,0	58,0	22	17055	3 x 2 x 1,5	11,4	136,0	194,0	16
19971	2 x 2 x 0,34	6,7	36,9	65,0	22	17056	4 x 2 x 1,5	12,8	172,0	240,0	16

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