



## 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) for 0,34 mm<sup>2</sup>
- **Nominal voltage** U<sub>0</sub>/U 300/500 V ≥ 0,5 mm<sup>2</sup>
- **Test voltage**

core/core	1200 V
core/screen	800 V
- **Insulation resistance** min. 200 MOhm x km
 

conductor cross-section (mm <sup>2</sup> )	0,14	0,25
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- **Conductor resistance**

Ohm/km	138	75,5
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- **Capacitance** (approx.-value) at 800 Hz (pF/m)
 

core/core	120	150
core/screen	240	270
- **Load** (A)
 

	1,5	2,5
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- **Inductance** approx. 0,65 mH/km
- **Impedance** approx. 78 Ohm
- **K<sub>r</sub>-coupling** approx. 300 pF/100 m
- **Coupling resistance** max. 250 Ohm/km
- **Minimum bending radius** approx. 10 x cable Ø
- **Radiation resistance** up to 80 x 10<sup>6</sup> 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,
- Special PVC core insulation Y12, to DIN VDE 0207 part 4
- Colours coded to DIN 47100 with colour repetition, see page T 47
- 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
- Extensively oil resistant
- Chemical Resistance – see table Technical Informations
- PVC self-extinguishing and flame retardant, test method B according to DIN VDE 0472 part 804 and IEC 60332-1
- The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

## Application

These data control cables are used for flexible use with forced 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  
**Note** To optimise the EMC features we recommend a large round contact of the copper braiding on both ends.

\*) **Note**  
 AWG sizes are approximate equivalent values. The actual cross-section is in mm<sup>2</sup> – see page T 15.

CE = The product is conformed with the EC Low-Voltage Directive 73/23/EEC and 93/68/EEC.

Part No.	No. pairs x cross-sec. mm <sup>2</sup>	Outer Ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-no. *)
21001	1 x 2 x 0,14	4,0	15,6	34	26
21002	2 x 2 x 0,14	5,2	18,5	40	26
21003	3 x 2 x 0,14	5,6	23,0	49	26
21004	4 x 2 x 0,14	5,8	26,6	55	26
21005	5 x 2 x 0,14	6,5	30,7	66	26
21006	6 x 2 x 0,14	7,3	48,5	86	26
21007	7 x 2 x 0,14	7,3	51,1	91	26
21008	8 x 2 x 0,14	7,8	53,7	97	26
21009	10 x 2 x 0,14	8,5	59,0	109	26
21010	12 x 2 x 0,14	9,3	66,0	141	26
21011	14 x 2 x 0,14	10,0	74,0	148	26
21012	15 x 2 x 0,14	10,3	76,0	152	26
21013	16 x 2 x 0,14	10,7	79,0	155	26
21014	18 x 2 x 0,14	11,0	83,0	171	26
21015	20 x 2 x 0,14	11,2	97,0	183	26
21016	22 x 2 x 0,14	11,6	103,0	205	26
21017	24 x 2 x 0,14	12,6	111,0	228	26
21018	25 x 2 x 0,14	12,8	113,0	239	26
21019	26 x 2 x 0,14	12,8	122,0	245	26
21020	27 x 2 x 0,14	13,0	125,0	251	26
21021	28 x 2 x 0,14	13,2	128,0	258	26
21022	30 x 2 x 0,14	13,6	140,0	270	26
21023	32 x 2 x 0,14	14,2	145,0	284	26
21024	34 x 2 x 0,14	14,6	150,0	300	26
21025	36 x 2 x 0,14	14,8	156,0	316	26
21026	38 x 2 x 0,14	15,0	162,0	350	26
21027	40 x 2 x 0,14	15,4	177,0	370	26
21028	44 x 2 x 0,14	16,0	181,0	390	26

Part No.	No. pairs x cross-sec. mm <sup>2</sup>	Outer Ø ca. mm	Cop. weight kg / km	Weight ca. kg / km	AWG-no. *)
21029	46 x 2 x 0,14	16,4	195,0	430	26
21030	50 x 2 x 0,14	17,8	202,0	440	26
21031	52 x 2 x 0,14	18,0	206,0	460	26
21032	55 x 2 x 0,14	18,8	210,0	480	26
21033	1 x 2 x 0,25	4,8	15,0	45	24
21034	2 x 2 x 0,25	6,3	28,0	53	24
21035	3 x 2 x 0,25	6,7	32,0	65	24
21036	4 x 2 x 0,25	6,8	38,0	80	24
21037	5 x 2 x 0,25	7,8	55,0	98	24
21038	6 x 2 x 0,25	8,8	65,0	114	24
21039	7 x 2 x 0,25	8,9	70,0	121	24
21040	8 x 2 x 0,25	9,6	75,0	129	24
21041	10 x 2 x 0,25	10,6	110,0	157	24
21042	12 x 2 x 0,25	11,6	117,0	189	24
21043	14 x 2 x 0,25	12,0	122,0	213	24
21044	15 x 2 x 0,25	12,5	134,0	225	24
21045	16 x 2 x 0,25	13,0	143,0	237	24
21046	18 x 2 x 0,25	13,2	148,0	248	24
21047	20 x 2 x 0,25	13,7	162,0	275	24
21048	22 x 2 x 0,25	14,4	172,0	303	24
21049	24 x 2 x 0,25	15,0	223,0	330	24
21050	25 x 2 x 0,25	15,4	233,0	343	24
21051	26 x 2 x 0,25	15,8	238,0	345	24
21052	27 x 2 x 0,25	16,2	244,0	350	24
21053	28 x 2 x 0,25	16,3	249,0	360	24
21054	30 x 2 x 0,25	16,7	254,0	375	24
21055	32 x 2 x 0,25	16,9	290,0	400	24

Also available in other sheath colours.

PVC cables will be changed to lead free PVC successively.

Continuation ►