

TRONIC-CY (LiY-CY)

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



Technical data

- Special-PVC data cable adapted to DIN VDE 0812
- **Temperature range**
flexing -5°C to +80°C
fixed installation -40°C to +80°C
- **Operating peak voltage**
(not for heavy current installation purposes)
0,14 mm² 350 V
≥ 0,25 mm² 500 V
- **Test voltage**
core/core 1200 V
core/screen 800 V
- **Breakdown voltage**
min. 2400 V
- **Capacitance** at 800 Hz
core/core 0,14 mm² app. 120 pF/m
core/core 0,25 mm² app. 150 pF/m
core/screen 0,14 mm² app. 240 pF/m
core/screen 0,25 mm² app. 270 pF/m
- **Inductance**
approx. 0,65 mH/km
- **Impedance**
approx. 78 Ohm
- **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 conductor, from 0,5 mm² to DIN VDE 0295 cl.5, fine wire, BS 6360 cl.5, IEC 60228 cl.5
- Conductor construction:
0,14 mm² approx. 18x0,1 mm
0,25 mm² approx. 14x0,15 mm
0,34 mm² = 7x0,25 mm
- Core insulation of special PVC compound type T12 to DIN VDE 0207-363-3 / DIN EN 50363-3
- Core identification adapted to DIN 47100, without colour repetition
- Cores 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 7001)
- 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

- PVC self-extinguishing and flame retardant acc. to DIN VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1-2

Note

- Also available in paired version, see HELUKABEL®-PAAR-TRONIC-CY
- For 1 core cable screen of helically wound (LiY-DY).
- AWG sizes are approximate equivalent values. The actual cross section is in mm².
- Unscreened analogue type: **TRONIC (LiYY)**

Application

These screened 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, wherever the construction requirements call for a minimum outer diameter, TRONIC is the suitable cable to use. This applies especially to such areas as tool making and machine industries as well as electronic, computer, measurement and control sectors. The extremely small outer diameter make suitable for miniature plugs etc.

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. cores x cross-sec. mm ²	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
	1 x 0,14	2,6	6,1	16,0	26
	2 x 0,14	3,9	12,0	20,0	26
	3 x 0,14	4,0	13,0	27,0	26
	4 x 0,14	4,3	14,5	32,0	26
	5 x 0,14	4,7	15,5	37,0	26
	6 x 0,14	5,2	18,2	42,0	26
	7 x 0,14	5,2	19,0	48,0	26
	8 x 0,14	5,9	21,3	55,0	26
	10 x 0,14	6,5	28,7	65,0	26
	12 x 0,14	6,7	30,5	77,0	26
	14 x 0,14	6,9	32,0	79,0	26
	16 x 0,14	7,3	43,2	89,0	26
	18 x 0,14	7,6	51,0	103,0	26
	20 x 0,14	8,3	55,0	116,0	26

Part no.	No. cores x cross-sec. mm ²	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
	21 x 0,14	8,4	56,0	120,0	26
	24 x 0,14	8,9	62,0	131,0	26
	25 x 0,14	9,1	61,0	136,0	26
	27 x 0,14	9,2	65,0	142,0	26
	30 x 0,14	9,5	69,0	157,0	26
	32 x 0,14	9,9	76,0	163,0	26
	36 x 0,14	10,2	83,0	182,0	26
	40 x 0,14	11,1	88,0	209,0	26
	42 x 0,14	11,2	94,0	217,0	26
	44 x 0,14	11,5	110,0	226,0	26
	48 x 0,14	11,7	115,0	240,0	26
	52 x 0,14	12,3	124,0	270,0	26
	56 x 0,14	12,5	132,0	320,0	26
	61 x 0,14	12,8	146,0	370,0	26

Continuation ►

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Part no.	No. cores x cross-sec. mm ²	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.	Part no.	No. cores x cross-sec. mm ²	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km	AWG-No.
PLU030482	1 x 0,25	3,0	7,2	27,0	24		16 x 0,5	10,6	129,0	210,0	20
	2 x 0,25	4,3	15,8	31,0	24		18 x 0,5	11,3	152,0	217,0	20
	3 x 0,25	4,5	18,6	36,0	24		19 x 0,5	11,3	156,0	246,0	20
	4 x 0,25	4,8	22,0	40,0	24		20 x 0,5	12,0	173,0	275,0	20
	5 x 0,25	5,4	26,5	51,0	24		24 x 0,5	13,2	236,0	337,0	20
	6 x 0,25	5,8	32,4	58,0	24		25 x 0,5	13,7	250,0	351,0	20
	7 x 0,25	5,8	35,0	64,0	24		27 x 0,5	13,8	265,0	373,0	20
	8 x 0,25	7,0	42,1	82,0	24		30 x 0,5	14,2	297,0	396,0	20
	10 x 0,25	7,3	49,9	85,0	24		32 x 0,5	14,7	301,0	431,0	20
	12 x 0,25	7,5	58,0	90,0	24		34 x 0,5	15,4	312,0	440,0	20
	14 x 0,25	8,1	62,0	98,0	24		36 x 0,5	15,5	320,0	445,0	20
	16 x 0,25	8,5	67,0	110,0	24		37 x 0,5	15,5	325,0	458,0	20
	18 x 0,25	9,1	78,0	142,0	24		40 x 0,5	16,4	345,0	470,0	20
	19 x 0,25	9,1	79,0	146,0	24		50 x 0,5	18,2	407,0	570,0	20
	20 x 0,25	9,5	88,0	152,0	24		61 x 0,5	19,2	508,0	650,0	20
	21 x 0,25	9,6	91,0	150,0	24		1 x 0,75	4,0	19,0	41,0	19
	24 x 0,25	10,4	96,0	163,0	24		2 x 0,75	5,8	38,0	59,0	19
	25 x 0,25	10,6	99,0	169,0	24		3 x 0,75	6,3	50,0	66,0	19
	27 x 0,25	10,7	122,0	176,0	24		4 x 0,75	6,8	57,0	77,0	19
	30 x 0,25	11,1	132,0	189,0	24		5 x 0,75	7,4	70,0	93,0	19
	32 x 0,25	11,5	138,0	204,0	24		6 x 0,75	8,2	87,0	113,0	19
	36 x 0,25	11,9	146,0	219,0	24		7 x 0,75	8,2	96,0	130,0	19
	37 x 0,25	11,9	152,0	230,0	24		8 x 0,75	9,7	110,0	145,0	19
	40 x 0,25	12,9	157,0	247,0	24		10 x 0,75	10,3	140,0	180,0	19
	42 x 0,25	13,0	160,0	269,0	24		12 x 0,75	10,5	151,0	202,0	19
	44 x 0,25	13,7	162,0	292,0	24		14 x 0,75	11,3	167,0	225,0	19
	48 x 0,25	13,9	168,0	317,0	24		16 x 0,75	11,9	183,0	275,0	19
	52 x 0,25	14,3	175,0	330,0	24		18 x 0,75	12,7	207,0	292,0	19
	56 x 0,25	14,7	189,0	343,0	24		19 x 0,75	12,7	221,0	322,0	19
	61 x 0,25	15,2	204,0	365,0	24		20 x 0,75	13,6	238,0	362,0	19
	1 x 0,34	3,2	13,5	24,0	22		24 x 0,75	14,9	270,0	435,0	19
	2 x 0,34	4,9	18,0	30,0	22		25 x 0,75	15,0	278,0	415,0	19
	3 x 0,34	5,1	22,0	37,0	22		27 x 0,75	15,1	287,0	467,0	19
4 x 0,34	5,5	28,0	48,0	22		30 x 0,75	16,0	315,0	486,0	19	
5 x 0,34	6,0	31,0	54,0	22		32 x 0,75	16,5	330,0	530,0	19	
6 x 0,34	6,6	45,0	61,0	22		34 x 0,75	17,1	350,0	570,0	19	
7 x 0,34	6,6	51,0	67,0	22		36 x 0,75	17,4	370,0	600,0	19	
8 x 0,34	7,7	54,0	81,0	22		37 x 0,75	17,4	386,0	640,0	19	
10 x 0,34	8,4	65,0	103,0	22		40 x 0,75	18,7	395,0	680,0	19	
12 x 0,34	8,6	70,0	110,0	22		42 x 0,75	18,9	408,0	714,0	19	
14 x 0,34	9,0	81,0	153,0	22		61 x 0,75	22,0	555,0	900,0	19	
16 x 0,34	9,6	88,0	159,0	22		2 x 1	6,4	46,0	65,0	18	
18 x 0,34	10,1	103,0	172,0	22		3 x 1	6,7	56,0	80,0	18	
19 x 0,34	10,1	106,0	181,0	22		4 x 1	7,2	69,0	98,0	18	
20 x 0,34	10,8	112,0	191,0	22		5 x 1	8,0	89,0	127,0	18	
21 x 0,34	10,9	116,0	199,0	22		6 x 1	8,7	105,0	144,0	18	
24 x 0,34	11,7	129,0	229,0	22		7 x 1	8,7	111,0	158,0	18	
25 x 0,34	12,0	120,0	241,0	22		8 x 1	10,3	130,0	197,0	18	
27 x 0,34	12,1	138,0	258,0	22		10 x 1	11,2	140,0	232,0	18	
30 x 0,34	12,6	158,0	290,0	22		12 x 1	11,4	168,0	260,0	18	
32 x 0,34	13,0	163,0	305,0	22		14 x 1	12,0	198,0	302,0	18	
36 x 0,34	13,8	178,0	330,0	22		16 x 1	12,8	218,0	346,0	18	
37 x 0,34	13,8	192,0	348,0	22		19 x 1	13,6	268,0	412,0	18	
40 x 0,34	14,8	198,0	364,0	22		24 x 1	16,0	320,0	493,0	18	
42 x 0,34	14,9	203,0	389,0	22		27 x 1	16,4	360,0	562,0	18	
44 x 0,34	15,6	214,0	414,0	22		37 x 1	18,6	485,0	790,0	18	
48 x 0,34	15,8	227,0	420,0	22		2 x 1,5	7,0	63,0	88,0	16	
52 x 0,34	16,3	242,0	450,0	22		3 x 1,5	7,4	76,0	100,0	16	
56 x 0,34	16,8	267,0	480,0	22		4 x 1,5	8,1	98,0	126,0	16	
61 x 0,34	17,2	295,0	520,0	22		5 x 1,5	9,0	116,0	160,0	16	
1 x 0,5	3,5	15,0	40,0	20		6 x 1,5	9,8	140,0	192,0	16	
2 x 0,5	5,3	29,0	45,0	20		7 x 1,5	9,8	152,0	208,0	16	
3 x 0,5	5,6	39,0	55,0	20		8 x 1,5	11,0	172,0	244,0	16	
4 x 0,5	6,3	46,0	61,0	20		10 x 1,5	12,6	193,0	315,0	16	
5 x 0,5	6,8	52,0	76,0	20		12 x 1,5	12,8	254,0	338,0	16	
6 x 0,5	7,3	66,0	89,0	20		14 x 1,5	13,5	272,0	383,0	16	
7 x 0,5	7,3	68,0	98,0	20		16 x 1,5	14,6	285,0	424,0	16	
8 x 0,5	8,6	80,0	117,0	20		19 x 1,5	15,6	387,0	506,0	16	
10 x 0,5	9,4	93,0	135,0	20		24 x 1,5	18,1	448,0	690,0	16	
12 x 0,5	9,6	117,0	157,0	20		27 x 1,5	18,7	506,0	781,0	16	
14 x 0,5	10,1	122,0	190,0	20		37 x 1,5	21,4	682,0	941,0	16	

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