

TRONIC (LiYY) flexible, colour coded to DIN 47100, meter marking



Technical data

Special PVC data cables, adapted to
DIN VDE 0812
Temperature range
flexing -5 °C to +80 °C
fixed installation -40 °C to +80 °C
Nominal voltage
(not for purposes of high current and
power installation)
0,14 mm² = 350 V
0,25 mm² = 500 V
Test voltage
up to 0,25 mm² 1200 V
from 0,34 mm² 2000 V
Breakdown voltage
up to 0,25 mm² 2400 V
from 0,34 mm² 4000 V
Insulation resistance
min. 20 MΩm x km
Capacitance (approx.-value) at 800 Hz
0,14 mm² 120 pF/m
0,25 mm² 150 pF/m
Inductance approx. 0,65 mH/km
Impedance approx. 78 Ωm
Minimum bending radius
flexing 7,5x cable ø
fixed installation 4x 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 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 TI2, to
DIN VDE 0281 part 1
Colour coded to DIN 47100, but without
colour repetition
Cores stranded in layers with optimal
lay-length
Special PVC outer sheath TM2, to
DIN VDE 0281 part 1
Colour grey (RAL 7001)
with meter marking, change-over in 2011

Properties

Extremely oil resistant, oil-/ 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

AWG sizes are approximate equivalent
values. The actual cross-section is in mm².
HELUKABEL®-TRONIC is also available in
paired version (e.g.
HELUKABEL®-PAAR-TRONIC 20x2x0,14 mm²).
screened analogue type:
TRONIC-CY (LiY-CY), see page B 9

Application

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

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Part no.	No. cores x cross-sec. mm ²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
	80 x 0,25	16,5	192,0	450,0	24
	100 x 0,25	18,2	240,0	590,0	24
	2 x 0,34	4,2	6,5	22,0	22
PLU030368	3 x 0,34	4,4	9,8	30,0	22
	4 x 0,34	4,8	13,1	43,0	22
	5 x 0,34	5,4	16,3	54,0	22
	6 x 0,34	5,9	19,6	58,0	22
	7 x 0,34	5,9	22,8	61,0	22
	8 x 0,34	7,0	26,1	73,0	22
	10 x 0,34	7,6	32,6	82,0	22
	12 x 0,34	7,7	39,2	102,0	22
	14 x 0,34	8,4	45,7	108,0	22
	16 x 0,34	8,8	52,0	126,0	22
	18 x 0,34	9,3	59,0	143,0	22
	20 x 0,34	9,9	65,0	160,0	22
	21 x 0,34	9,9	69,0	166,0	22
	24 x 0,34	10,5	78,0	186,0	22
	25 x 0,34	10,7	82,0	192,0	22
	27 x 0,34	10,7	88,0	206,0	22
	30 x 0,34	11,8	98,0	226,0	22
	32 x 0,34	11,8	104,0	245,0	22
	36 x 0,34	12,9	118,0	285,0	22
	37 x 0,34	12,9	121,0	292,0	22
	40 x 0,34	13,3	131,0	318,0	22
	42 x 0,34	14,0	137,0	330,0	22
	44 x 0,34	14,0	144,0	370,0	22
	48 x 0,34	14,7	157,0	405,0	22
	52 x 0,34	15,4	170,0	430,0	22
	53 x 0,34	15,4	183,0	440,0	22
	61 x 0,34	16,3	199,0	610,0	22
	80 x 0,34	18,8	264,0	880,0	22
	100 x 0,34	21,0	327,0	1050,0	22

Part no.	No. cores x cross-sec. mm ²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
	2 x 0,5	4,6	9,6	40,0	20
	3 x 0,5	4,8	14,4	46,0	20
	4 x 0,5	5,4	19,2	55,0	20
	5 x 0,5	5,9	24,0	64,0	20
	6 x 0,5	6,4	28,8	73,0	20
	7 x 0,5	6,4	33,6	81,0	20
	8 x 0,5	7,2	38,4	97,0	20
	10 x 0,5	8,4	48,0	116,0	20
	12 x 0,5	8,4	58,0	135,0	20
	16 x 0,5	10,0	77,0	168,0	20
	20 x 0,5	11,2	96,0	213,0	20
	24 x 0,5	11,8	116,0	241,0	20
	30 x 0,5	13,2	144,0	303,0	20
	40 x 0,5	15,2	192,0	391,0	20
	2 x 0,75	5,2	14,4	47,0	18
	3 x 0,75	5,4	21,6	54,0	18
	4 x 0,75	5,9	29,0	66,0	18
	5 x 0,75	6,7	36,0	80,0	18
	7 x 0,75	7,3	50,0	110,0	18
	8 x 0,75	8,6	58,0	125,0	18
	10 x 0,75	9,6	72,0	148,0	18
	12 x 0,75	9,7	86,0	176,0	18
	16 x 0,75	11,1	115,0	220,0	18
	20 x 0,75	12,4	144,0	276,0	18
	2 x 1	5,5	19,2	56,0	17
	3 x 1	5,8	29,0	71,0	17
	2 x 1,5	6,2	29,0	75,0	16
	3 x 1,5	6,7	43,0	90,0	16

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