



B

## 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 mm<sup>2</sup> = 350 V  
≥0,25 mm<sup>2</sup> = 500 V
- **Test voltage**  
up to 0,25 mm<sup>2</sup> 1200 V  
from 0,34 mm<sup>2</sup> 2000 V
- **Breakdown voltage**  
up to 0,25 mm<sup>2</sup> 2400 V  
from 0,34 mm<sup>2</sup> 4000 V
- **Insulation resistance**  
min. 20 MOhm x km
- **Capacitance** (approx.-value) at 800 Hz  
0,14 mm<sup>2</sup> 120 pF/m  
≥0,25 mm<sup>2</sup> 150 pF/m
- **Inductance** approx. 0,65 mH/km
- **Impedance** approx. 78 Ohm
- **Minimum bending radius**  
flexing 7,5x cable ø  
fixed installation 4x cable ø
- **Radiation resistance**  
up to 80x10<sup>6</sup> 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 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
- 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 mm<sup>2</sup>.
- HELUKABEL®-TRONIC is also available in paired version (e.g. HELUKABEL®-PAAR-TRONIC 20x2x0,14 mm<sup>2</sup>).
- **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.

Part no.	No. cores x cross-sec. mm <sup>2</sup>	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.	Part no.	No. cores x cross-sec. mm <sup>2</sup>	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
18001	2 x 0,14	3,3	2,7	13,0	26	18029	2 x 0,25	3,8	4,8	18,0	24
18002	3 x 0,14	3,5	4,0	16,0	26	18030	3 x 0,25	3,9	7,2	22,0	24
18003	4 x 0,14	3,7	5,4	19,0	26	18031	4 x 0,25	4,3	9,6	26,0	24
18004	5 x 0,14	4,0	6,7	22,0	26	18032	5 x 0,25	4,7	12,0	30,0	24
18005	6 x 0,14	4,3	8,1	25,0	26	18033	6 x 0,25	5,3	14,4	36,0	24
18006	7 x 0,14	4,3	9,4	28,0	26	18034	7 x 0,25	5,3	16,8	42,0	24
18007	8 x 0,14	5,1	10,7	35,0	26	18035	8 x 0,25	5,7	19,2	49,0	24
18008	10 x 0,14	5,6	13,4	41,0	26	18036	10 x 0,25	6,6	24,0	57,0	24
18009	12 x 0,14	5,7	16,1	48,0	26	18037	12 x 0,25	6,8	28,8	66,0	24
18010	14 x 0,14	6,0	18,8	53,0	26	18038	14 x 0,25	7,2	33,6	75,0	24
18011	16 x 0,14	6,5	21,5	59,0	26	18039	16 x 0,25	7,6	38,4	84,0	24
18012	18 x 0,14	6,8	24,2	65,0	26	18040	18 x 0,25	8,1	43,2	72,0	24
18013	20 x 0,14	7,1	26,9	70,0	26	18114	19 x 0,25	8,1	46,0	84,0	24
18014	21 x 0,14	7,1	28,2	77,0	26	18041	20 x 0,25	8,6	48,0	101,0	24
18015	24 x 0,14	7,5	32,3	87,0	26	18042	21 x 0,25	8,6	50,0	107,0	24
18117	25 x 0,14	7,7	33,6	91,0	26	18043	24 x 0,25	9,4	60,0	120,0	24
18016	27 x 0,14	7,7	36,3	97,0	26	18118	25 x 0,25	9,5	61,0	132,0	24
18017	30 x 0,14	8,5	40,3	108,0	26	18044	27 x 0,25	9,5	65,0	140,0	24
18018	32 x 0,14	8,8	43,0	114,0	26	18045	30 x 0,25	10,3	72,0	156,0	24
18019	36 x 0,14	9,3	48,4	126,0	26	18046	32 x 0,25	10,9	77,0	164,0	24
18020	40 x 0,14	9,6	54,0	139,0	26	18047	36 x 0,25	11,3	86,0	182,0	24
18021	42 x 0,14	9,9	56,0	146,0	26	18115	37 x 0,25	11,3	89,0	190,0	24
18022	44 x 0,14	10,4	59,0	153,0	26	18048	40 x 0,25	11,6	96,0	200,0	24
18023	48 x 0,14	10,5	65,0	164,0	26	18049	42 x 0,25	12,0	101,0	211,0	24
18024	52 x 0,14	11,0	70,0	173,0	26	18050	44 x 0,25	12,6	106,0	225,0	24
18025	56 x 0,14	11,3	75,0	187,0	26	18051	48 x 0,25	12,7	115,0	245,0	24
18026	61 x 0,14	11,6	82,0	204,0	26	18052	52 x 0,25	13,3	125,0	263,0	24
18027	80 x 0,14	13,0	108,0	280,0	26	18053	56 x 0,25	13,9	134,0	280,0	24
18028	100 x 0,14	14,7	135,0	370,0	26	18054	61 x 0,25	14,3	146,0	305,0	24

Continuation ▶

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



Part no.	No. cores x cross-sec. mm <sup>2</sup>	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
18055	80 x 0,25	16,5	192,0	450,0	24
18056	100 x 0,25	18,2	240,0	590,0	24
18057	2 x 0,34	4,2	6,5	22,0	22
18058	3 x 0,34	4,4	9,8	30,0	22
18059	4 x 0,34	4,8	13,1	43,0	22
18060	5 x 0,34	5,4	16,3	54,0	22
18061	6 x 0,34	5,9	19,6	58,0	22
18062	7 x 0,34	5,9	22,8	61,0	22
18063	8 x 0,34	7,0	26,1	73,0	22
18064	10 x 0,34	7,6	32,6	82,0	22
18065	12 x 0,34	7,7	39,2	102,0	22
18066	14 x 0,34	8,4	45,7	108,0	22
18067	16 x 0,34	8,8	52,0	126,0	22
18068	18 x 0,34	9,3	59,0	143,0	22
18069	20 x 0,34	9,9	65,0	160,0	22
18070	21 x 0,34	9,9	69,0	166,0	22
18071	24 x 0,34	10,5	78,0	186,0	22
18096	25 x 0,34	10,7	82,0	192,0	22
18072	27 x 0,34	10,7	88,0	206,0	22
18073	30 x 0,34	11,8	98,0	226,0	22
18074	32 x 0,34	11,8	104,0	245,0	22
18075	36 x 0,34	12,9	118,0	285,0	22
18116	37 x 0,34	12,9	121,0	292,0	22
18076	40 x 0,34	13,3	131,0	318,0	22
18077	42 x 0,34	14,0	137,0	330,0	22
18078	44 x 0,34	14,0	144,0	370,0	22
18079	48 x 0,34	14,7	157,0	405,0	22
18080	52 x 0,34	15,4	170,0	430,0	22
18081	53 x 0,34	15,4	183,0	440,0	22
18082	61 x 0,34	16,3	199,0	610,0	22
18083	80 x 0,34	18,8	264,0	880,0	22
18084	100 x 0,34	21,0	327,0	1050,0	22

Part no.	No. cores x cross-sec. mm <sup>2</sup>	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
18085	2 x 0,5	4,6	9,6	40,0	20
18086	3 x 0,5	4,8	14,4	46,0	20
18087	4 x 0,5	5,4	19,2	55,0	20
18088	5 x 0,5	5,9	24,0	64,0	20
18089	6 x 0,5	6,4	28,8	73,0	20
18090	7 x 0,5	6,4	33,6	81,0	20
18091	8 x 0,5	7,2	38,4	97,0	20
18092	10 x 0,5	8,4	48,0	116,0	20
18093	12 x 0,5	8,4	58,0	135,0	20
18103	16 x 0,5	10,0	77,0	168,0	20
18101	20 x 0,5	11,2	96,0	213,0	20
18094	24 x 0,5	11,8	116,0	241,0	20
18102	30 x 0,5	13,2	144,0	303,0	20
18095	40 x 0,5	15,2	192,0	391,0	20
18104	2 x 0,75	5,2	14,4	47,0	18
18097	3 x 0,75	5,4	21,6	54,0	18
18098	4 x 0,75	5,9	29,0	66,0	18
18099	5 x 0,75	6,7	36,0	80,0	18
18100	7 x 0,75	7,3	50,0	110,0	18
18105	8 x 0,75	8,6	58,0	125,0	18
18106	10 x 0,75	9,6	72,0	148,0	18
18107	12 x 0,75	9,7	86,0	176,0	18
18108	16 x 0,75	11,1	115,0	220,0	18
18109	20 x 0,75	12,4	144,0	276,0	18
18110	2 x 1	5,5	19,2	56,0	17
18111	3 x 1	5,8	29,0	71,0	17
18112	2 x 1,5	6,2	29,0	75,0	16
18113	3 x 1,5	6,7	43,0	90,0	16

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



Standardised process control and visualisation of an extrusion system at our Windsbach factory.