



HELUKABEL® TRONIC (LiYY) 10x0,25 QMM / 18036 CE

## TECHNICAL DATA

### PVC data cable in alignment with DIN VDE 0812

<b>Temperature range</b>	flexible -5°C to +80°C fixed -40°C to +80°C
<b>Peak operating voltage</b>	0.14 mm <sup>2</sup> : 350 V 0.25 - 1.5 mm <sup>2</sup> : 500 V (not for high power current installation purposes)
<b>Test voltage core/core</b>	0.14 - 0.25 mm <sup>2</sup> : 1200 V 0.34 - 1.5 mm <sup>2</sup> : 2000 V
<b>Breakdown voltage</b>	0.14 - 0.25 mm <sup>2</sup> : 2400 V 0.34 - 1.5 mm <sup>2</sup> : 4000 V
<b>Mutual capacitance core/core</b>	at 800 Hz 0.14 - 0.25 mm <sup>2</sup> : approx. 100 pF/m 0.34 - 1.5 mm <sup>2</sup> : approx. 150 pF/m
<b>Characteristic impedance</b>	78 Ohm, (approx. value)
<b>Inductance</b>	approx. 0.65 mH/km
<b>Minimum bending radius</b>	flexible 7.5x Outer-Ø fixed 4x Outer-Ø

## ■ CABLE STRUCTURE

- Copper wire bare, 0.5 - 1.5 mm<sup>2</sup>: finely stranded acc. to DIN VDE 0295 Class 5 / IEC 60228 Class 5
- Wire structure:  
0.14 mm<sup>2</sup>: approx. 18 x 0.1 mm  
0.25 mm<sup>2</sup>: approx. 14 x 0.15 mm  
0.34 mm<sup>2</sup>: 7 x 0.25 mm
- Core insulation: PVC acc. to DIN VDE 0207-363-3 / DIN EN 50363-3 (compound type T12)
- Core identification in alignment with DIN 47100, colour coded without colour repetition from the 45th core

- x = without protective conductor
- Cores stranded in layers with optimal lay lengths
- Outer sheath: PVC acc. to DIN VDE 0207-363-4-1 / DIN EN 50363-4-1 (compound type TM2)
- Sheath colour: grey (RAL 7001)
- Length marking: in metres

## ■ PROPERTIES

- largely resistant to: oil, for details, see "Technical Information"
- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

## ■ TESTS

- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2

## ■ APPLICATION

Suitable for flexible applications with free movement, without tensile stress and without forced motion control in dry, damp and wet rooms, however, not suitable for outdoor use. For use where design or constructional measures in the outer diameter require the smallest possible control and signal cables; machine, tool and plant construction, as well as in electronic engineering. Also used in computer systems, scales and in measurement and control technology.

## ■ NOTES

- the conductor is metrically (mm<sup>2</sup>) constructed, AWG numbers are approximated, and are for reference only

Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
18001	2 x 0.14	26	3.2	2.7	13.0
18002	3 x 0.14	26	3.4	4.0	16.0
18003	4 x 0.14	26	3.6	5.4	19.0
18004	5 x 0.14	26	3.9	6.7	22.0
18005	6 x 0.14	26	4.4	8.1	25.0
18006	7 x 0.14	26	4.4	9.4	28.0
18007	8 x 0.14	26	5.0	10.7	35.0
18008	10 x 0.14	26	5.4	13.4	41.0
18009	12 x 0.14	26	5.6	16.1	48.0
18010	14 x 0.14	26	6.0	18.8	53.0
18011	16 x 0.14	26	6.3	21.5	59.0
18012	18 x 0.14	26	6.6	24.2	65.0
18013	20 x 0.14	26	6.9	26.9	70.0
18014	21 x 0.14	26	6.9	28.2	77.0
18015	24 x 0.14	26	7.8	32.3	87.0
18117	25 x 0.14	26	7.8	33.6	91.0
18016	27 x 0.14	26	7.8	36.3	97.0

Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
18017	30 x 0.14	26	8.2	40.3	108.0
18018	32 x 0.14	26	8.5	43.0	114.0
18019	36 x 0.14	26	8.8	48.4	126.0
18020	40 x 0.14	26	9.7	54.0	139.0
18021	42 x 0.14	26	9.7	56.0	146.0
18022	44 x 0.14	26	10.0	59.0	153.0
18023	48 x 0.14	26	10.2	65.0	164.0
18024	52 x 0.14	26	10.4	70.0	173.0
18025	56 x 0.14	26	10.9	75.0	187.0
18026	61 x 0.14	26	11.2	82.0	204.0
18029	2 x 0.25	24	3.8	4.8	18.0
18030	3 x 0.25	24	4.0	7.2	22.0
18031	4 x 0.25	24	4.5	9.6	26.0
18032	5 x 0.25	24	4.9	12.0	30.0
18033	6 x 0.25	24	5.3	14.4	36.0
18034	7 x 0.25	24	5.3	16.8	42.0
18035	8 x 0.25	24	6.3	19.2	49.0

# TRONIC (LiYY)

colour code DIN 47100, without colour repetition



Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
18036	10 x 0.25	24	6.8	24.0	57.0
18037	12 x 0.25	24	7.0	28.8	66.0
18038	14 x 0.25	24	7.3	33.6	75.0
18039	16 x 0.25	24	7.9	38.4	84.0
18040	18 x 0.25	24	8.3	43.2	94.0
18114	19 x 0.25	24	8.3	46.0	98.0
18041	20 x 0.25	24	8.7	48.0	103.0
18042	21 x 0.25	24	8.7	50.0	107.0
18043	24 x 0.25	24	9.8	60.0	120.0
18118	25 x 0.25	24	9.8	61.0	132.0
18044	27 x 0.25	24	9.8	65.0	140.0
18045	30 x 0.25	24	10.3	72.0	156.0
18046	32 x 0.25	24	10.9	77.0	164.0
18047	36 x 0.25	24	11.3	86.0	182.0
18115	37 x 0.25	24	11.3	89.0	190.0
18048	40 x 0.25	24	12.4	96.0	200.0
18049	42 x 0.25	24	12.4	101.0	211.0
18050	44 x 0.25	24	12.8	106.0	225.0
18051	48 x 0.25	24	13.0	115.0	245.0
18052	52 x 0.25	24	13.3	125.0	263.0
18053	56 x 0.25	24	13.7	134.0	280.0
18054	61 x 0.25	24	14.3	146.0	305.0
18057	2 x 0.34	22	4.0	6.5	22.0
18058	3 x 0.34	22	4.4	9.8	30.0
18059	4 x 0.34	22	4.8	13.1	43.0
18060	5 x 0.34	22	5.2	16.3	54.0
18061	6 x 0.34	22	5.6	19.6	58.0
18062	7 x 0.34	22	5.6	22.8	61.0
18063	8 x 0.34	22	6.7	26.1	73.0
18064	10 x 0.34	22	7.2	32.6	82.0
18065	12 x 0.34	22	7.6	39.2	102.0
18066	14 x 0.34	22	8.0	45.7	108.0
18067	16 x 0.34	22	8.4	52.0	126.0
18068	18 x 0.34	22	8.8	59.0	143.0
18069	20 x 0.34	22	9.5	65.0	160.0
18070	21 x 0.34	22	9.5	69.0	166.0
18071	24 x 0.34	22	10.4	78.0	186.0
18096	25 x 0.34	22	10.4	82.0	192.0
18072	27 x 0.34	22	10.4	88.0	206.0

Part no.	No. cores x cross-sec. mm <sup>2</sup>	AWG, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
18073	30 x 0.34	22	11.2	98.0	226.0
18074	32 x 0.34	22	11.6	104.0	245.0
18075	36 x 0.34	22	12.0	118.0	285.0
18116	37 x 0.34	22	12.0	121.0	292.0
18076	40 x 0.34	22	13.1	131.0	318.0
18077	42 x 0.34	22	13.1	137.0	330.0
18078	44 x 0.34	22	13.6	144.0	370.0
18079	48 x 0.34	22	14.0	157.0	405.0
18080	52 x 0.34	22	14.4	170.0	430.0
18081	53 x 0.34	22	14.8	183.0	440.0
18082	61 x 0.34	22	15.2	199.0	610.0
18085	2 x 0.5	20	4.8	9.6	40.0
18086	3 x 0.5	20	5.1	14.4	46.0
18087	4 x 0.5	20	5.5	19.2	55.0
18088	5 x 0.5	20	6.2	24.0	64.0
18089	6 x 0.5	20	6.7	28.8	73.0
18090	7 x 0.5	20	6.7	33.6	81.0
18091	8 x 0.5	20	7.9	38.4	97.0
18092	10 x 0.5	20	8.6	48.0	116.0
18093	12 x 0.5	20	8.9	58.0	135.0
18103	16 x 0.5	20	10.0	77.0	168.0
18101	20 x 0.5	20	11.3	96.0	213.0
18094	24 x 0.5	20	12.6	116.0	241.0
18102	30 x 0.5	20	13.3	144.0	303.0
18095	40 x 0.5	20	15.8	192.0	391.0
18104	2 x 0.75	19	5.3	14.4	47.0
18097	3 x 0.75	19	5.6	21.6	54.0
18098	4 x 0.75	19	6.3	29.0	66.0
18099	5 x 0.75	19	6.9	36.0	80.0
18100	7 x 0.75	19	7.7	50.0	110.0
18105	8 x 0.75	19	8.8	58.0	125.0
18106	10 x 0.75	19	9.8	72.0	148.0
18107	12 x 0.75	19	10.1	86.0	176.0
18108	16 x 0.75	19	11.4	115.0	220.0
18109	20 x 0.75	19	12.8	144.0	276.0
18110	2 x 1	18	5.6	19.2	56.0
18111	3 x 1	18	6.1	29.0	71.0
18112	2 x 1.5	16	6.8	29.0	75.0
18113	3 x 1.5	16	7.2	43.0	90.0