



# TRONIC (LiYY)

colour code DIN 47100, without colour repetition



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 0.10 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

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	3.5	2.7	13.0
18002	3 x 0.14	26	3.7	4.0	16.0
18003	4 x 0.14	26	3.9	5.4	19.0
18004	5 x 0.14	26	4.3	6.7	22.0
18005	6 x 0.14	26	4.6	8.1	25.0
18006	7 x 0.14	26	4.6	9.4	28.0
18007	8 x 0.14	26	5.5	10.7	35.0
18008	10 x 0.14	26	5.9	13.4	41.0
18009	12 x 0.14	26	6.1	16.1	48.0
<b>18010</b>	<b>14 x 0.14</b>	<b>26</b>	<b>6.3</b>	<b>18.8</b>	<b>53.0</b>
18011	16 x 0.14	26	6.9	21.5	59.0
18012	18 x 0.14	26	7.2	24.2	65.0
18013	20 x 0.14	26	7.5	26.9	70.0
18014	21 x 0.14	26	7.6	28.2	77.0
18015	24 x 0.14	26	8.5	32.3	87.0
18117	25 x 0.14	26	8.6	33.6	91.0
18016	27 x 0.14	26	8.7	36.3	97.0
18017	30 x 0.14	26	8.9	40.3	108.0

- 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.
18018	32 x 0.14	26	9.3	43.0	114.0
18019	36 x 0.14	26	9.8	48.4	126.0
18020	40 x 0.14	26	10.4	54.0	139.0
18021	42 x 0.14	26	10.5	56.0	146.0
18022	44 x 0.14	26	11.1	59.0	153.0
18023	48 x 0.14	26	11.2	65.0	164.0
18024	52 x 0.14	26	11.5	70.0	173.0
18025	56 x 0.14	26	11.8	75.0	187.0
18026	61 x 0.14	26	12.1	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	4.3	9.6	26.0
18032	5 x 0.25	24	4.7	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	6.1	19.2	49.0
18036	10 x 0.25	24	6.8	24.0	57.0
18037	12 x 0.25	24	7.0	28.8	66.0