TRONIC-CY (LiY-CY) flexible, Cu-screened, colour coded to DIN 47100,

EMC-preferred type, meter marking

Technical data

- Special-PVC data cable for electronic control 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
- **Insulation resistance**
  min. 20 MOhm x km
- **Capacitance** (approx.-value) at 800 Hz
  core/core at 0,14 mm² = 120 pF/m
  core/core 0,25 mm² = 150 pF/m
  core/screen at 0,14 mm² = 240 pF/m
  core/screen 0,25 mm² = 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 = 18x0,1 mm
  0,25 mm² = 14x0,15 mm
  0,34 mm² = 7x0,25 mm
- Core insulation of special PVC compound type TI2 to DIN VDE 0207-363-3 / DIN EN 50363-3
- Core identification 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 table Technical Informations
- The materials used in manufacture are cadmium-free and contain no silicone and 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 (equivalent DIN VDE 0472 part 804 test method B)

Note

- Also available in paired version, see HELUKABEL®-PAAR-TRONIC-CY
- For 1 core cable screen of helically wound.
- AWG sizes are approximate equivalent values. The actual cross-section is in mm².
- unscreened analogue type:
  TRONIC (LiYY), confer page 124

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 compatibillity

To optimize the EMC features we recommend a large round contact of the copper braiding on both ends.

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

Part no.	No.cores x cross-sec. mm²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
20139	1 x 0,14	2,6	6,1	16,0	26
20001	2 x 0,14	3,9	12,0	20,0	26
20002	3 x 0,14	4,0	13,0	27,0	26
20003	4 x 0,14	4,3	14,5	32,0	26
20004	5 x 0,14	4,7	15,5	37,0	26
20005	6 x 0,14	5,2	18,2	42,0	26
20006	7 x 0,14	5,2	19,0	48,0	26
20007	8 x 0,14	5,9	21,3	55,0	26
20008	10 x 0,14	6,5	28,7	65,0	26
20009	12 x 0,14	6,7	30,5	77,0	26
20010	14 x 0,14	6,9	32,0	79,0	26
20011	16 x 0,14	7,3	43,2	89,0	26
20012	18 x 0,14	7,6	51,0	103,0	26
20013	20 x 0,14	8,3	55,0	116,0	26
20014	21 x 0,14	8,4	56,0	120,0	26

Part no.	No.cores x cross-sec. mm²	Outer Ø approx. mm	Cop. weight kg / km	Weight approx. kg / km	AWG-No.
20015	24 x 0,14	8,9	62,0	131,0	26
20091	25 x 0,14	9,1	61,0	136,0	26
20016	27 x 0,14	9,2	65,0	142,0	26
20017	30 x 0,14	9,5	69,0	157,0	26
20018	32 x 0,14	9,9	76,0	163,0	26
20019	36 x 0,14	10,2	83,0	182,0	26
20020	40 x 0,14	11,1	88,0	209,0	26
20021	42 x 0,14	11,2	94,0	217,0	26
20022	44 x 0,14	11,5	110,0	226,0	26
20023	48 x 0,14	11,7	115,0	240,0	26
20024	52 x 0,14	12,3	124,0	270,0	26
20025	56 x 0,14	12,5	132,0	320,0	26
20026	61 x 0,14	12,8	146,0	370,0	26
20027	80 x 0,14	14,7	226,0	510,0	26
20028	100 x 0,14	16,3	267,0	580,0	26

Continuation ▸