

0066202	DATA SHEET	
valid from: 2026-01-29	UNITRONIC® LiYCY (TP) A	

Application

UNITRONIC® LiYCY (TP) A is a screened, twisted pair data cable for low frequency applications designed for the European, North American and Canadian market. It is designed for fixed installation and for conditional flexible use. It is used in dry and damp interiors but not appropriate for outside usage.

The twisted pairs with short lay lengths provides good decoupling of the conductor circuits. The screen provides protection against electromagnetic interferences.

USE acc. to : Internal wiring.

USE acc. to : Cables for internal or external interconnection with or without mechanical abuse.

Design

Design	based on standard VDE 0812 and EN 50288-7 acc. to UL AWM Style 2464, UL 758 acc. to on CSA AWM, C22.2 No. 210
Certification	 UL AWM Style 2464 (File No. E63634), UL 758  AWM I/II A/B (File No. E63634)
Conductor	multi-wire strands of tinned copper wires
Insulation	PVC compound (UL/CSA 80°C rating)
Core identification code	acc. to DIN 47100
Cable assembly	cores twisted to pairs, pairs are stranded in layers, optionally with fillers wrapping with foil on the outer layer
Screen	braid of tinned copper, coverage 85 % (nominal value)
Outer sheath	PVC compound TM52 acc. to EN 50290-2-22 colour: dark grey (similar RAL 7031)

Electrical properties at 20 °C

Conductor resistance	0.14 mm ² : max. 150 Ω/km 0.23 mm ² : max. 94.2 Ω/km 0.34 mm ² : max. 59.4 Ω/km 0.5 mm ² : max. 36.7 Ω/km 0.75 mm ² : max. 29.1 Ω/km 1.0 mm ² : max. 23.2 Ω/km 1.5 mm ² : max. 14.6 Ω/km
Specific volume resistivity	> 20 G Ω x cm
Mutual capacitance	C/C: approx. 120 nF/km C/S: approx. 160 nF/km (at 800 Hz)
Inductance	approx. 0.65 mH/km
Maximum operating voltage	300 V (not intended to be used in conjunction with low impedance sources, such as power grids)
Test voltage	C/C: 2000 V C/S: 2000 V

Mechanical and thermal properties

Minimum bending radius	occasional flexing: 15 x outer diameter fixed installation: 6 x outer diameter
Temperature range	occasional flexing: EN: -5 °C up to +70 °C UL/CSA: up to +80 °C fixed installation: EN: -40 °C up to +80 °C UL/CSA: up to +80 °C
Flammability	flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2 UL: Vertical flame test VW-1 acc. to UL 1581 § 1080 CSA: FT1 acc. to CSA C22.2 No. 2556

General requirements

These cables are conform to EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).

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Environmental information

These cables meet the substance-specific requirements of the EU Directive 2011/65/EU (RoHS).

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