


0066202	DATA SHEET	
valid from: 27.03.2019	UNITRONIC® LiYCY (TP) A	

Application

UNITRONIC® LiYCY (TP) A is a screened, twisted pair data cable for low frequency applications with UL and CSA approval. The cable is intended for internal and external wiring of devices, machines and plants for export to the North American market or countries where UL-/CSA approved cables are used. 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.

Design

Design	based on UL AWM Style 2464, UL 758, CSA C22.2 No. 210 (80°C, 300 V) and according to VDE 0812
Certification	UL AWM Style 2464 (File No. E63634), UL 758 RU AWM I/II A/B (File No. E63634) CSA AWM I A/B II A/B (File No. LL53776)
Conductor	multi-wire strands of tinned copper wires
Insulation	special PVC-based compound
Core identification code	according to DIN 47100
Stranding	cores twisted to pairs, pairs are stranded in layers, wrapping with foil on the outer layer
Screen	Braiding with tinned copper wires
Outer sheath	special PVC-based compound 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. 29.1 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
Peak operating voltage	300 V (not for power applications)
Test voltage	A/A: 1500 V

Mechanical and thermal properties

Minimum bending radius	Flexing: 15 x cable Ø Fixed installation: 6 x cable Ø
Temperature range	Flexing: VDE: - 5°C up to +70°C UL AWM: up to +80°C Fixed installation: VDE: - 40°C up to +80°C UL AWM: up to +80°C
Flammability	flame retardant acc. to IEC 60332-1-2 UL: FT1 and VW1 CSA: FT1
General requirements	This cable is conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).

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