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| <b>0034230</b>                    | <b>DATA SHEET</b>             |  |
| <b>valid from:<br/>01.01.2019</b> | <b>UNITRONIC® LiFYCY (TP)</b> |   |

## Application

UNITRONIC® LiFYCY (TP) is a screened miniature data transmission cable with twisted pairs for low frequency applications. The cable 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                   | Design based on standard VDE 0812   |
| Conductor                | extra-fine wire strands of bare copper wires  |
| Insulation               | PVC compound TI52 according to VDE 0819-101 (EN 50290-2-21)                                 |
| 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             | PVC compound TM52 acc. to VDE 0819-102 (EN 50290-2-22)<br>colour: grey (similar RAL 7032)   |

## Electrical properties at 20°C

|                             |  |
|-----------------------------|--|
| Loop resistance             | max. 486 Ω/km  |
| Specific volume resistivity | > 20 G Ω x cm  |
| Mutual capacitance          | C/C: approx. 80 nF/km<br>C/S: approx. 120 nF/km<br>(at 800 Hz) |
| Inductance                  | approx. 0.65 mH/km   |
| Capacitive coupling         | 100 m at 1 kHz: approx. 300 pF                                 |
| Peak operating voltage      | 150 V (not for power applications)                             |
| Test voltage                | C/C: 800 V<br>C/S: 500 V                                       |

## Mechanical and thermal properties

|                        |  |
|------------------------|--|
| Minimum bending radius | Occasional flexing: 7.5 x cable Ø<br>Fixed installation: 4 x cable Ø   |
| Temperature range      | Occasional flexing: - 5 °C up to +70 °C<br>Fixed installation: - 40 °C up to +80 °C                                  |
| Flammability           | flame retardant acc. to IEC 60332-1-2  |
| General requirements   | This cable is conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances). |

AbN  
automation

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