

0032850	DATA SHEET	 LAPP
valid from: 20.01.2025	UNITRONIC® PUR CP (TP)	

Application

UNITRONIC® PUR CP (TP) is a screened, twisted pair data cable for low frequency applications. The cable is designed for fixed installation and for conditional flexible use. It is used in dry, damp and wet interiors and 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.

This data and signal cable is used in computer systems, electronic control and office equipment.

The outer sheath of Polyurethane is resistant to a multitude of oils and chemicals.

Design

Design	Design based on standard VDE 0812
Conductor	fine wire strands of bare copper acc. to IEC 60228 resp. EN IEC 60228, class 5
Insulation	PVC compound TI52 acc. to EN 50290-2-21
Core identification code	acc. to DIN 47100
Cable assembly	cores twisted to pairs, pairs are stranded in layers, wrapping with foil on the outer layer
Screen	Braiding with tinned copper wires, coverage 85 % (nominal value)
Taping	wrapping with fleece on the screen
Outer sheath	special TPU-based compound colour: pebble grey (similar RAL 7032)

Electrical properties at 20 °C

Conductor resistance	0.14 mm ² : max. 148.0 Ω/km 0.25 mm ² : max. 79.9 Ω/km 0.34 mm ² : max. 57.5 Ω/km 0.5 mm ² : class 5 0.75 mm ² : class 5
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	0.14 mm ² : 350 V ≥ 0.25 mm ² : 500 V (not intended to be used in conjunction with low impedance sources, such as power grids)
Test voltage	0.14 mm ² : 1200 V ≥ 0.25 mm ² : 1500 V

Mechanical and thermal properties

Minimum bending radius	occasional flexing: 15 x outer diameter fixed installation: 6 x outer diameter
Temperature range	occasional flexing: -5 °C up to +70 °C fixed installation: -40 °C up to +80 °C
Flammability	flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2
Weather and UV resistance	acc. to ISO 4892-2, method A (change of colour allowed)
Ozone resistance	acc. to EN 50396, method B

General requirements

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

Environmental information

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

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