

0034250	DATA SHEET	
valid from: 20.01.2025	UNITRONIC® CY PiDY (TP)	

Application

UNITRONIC® CY PiDY (TP) is a screened data cable with individually screened and sheathed twisted pairs for fixed installation. The cable is used for data processing and control systems in process control. Due to the double shielding, the cable is suitable for laying in electromagnetically loaded areas.

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	screened and sheathed twisted pairs stranded in layers, optionally with fillers wrapping with foil on the outer layer
Screen	over each twisted core: wrapping with plastic foil Spinning with tinned copper wires, coverage 90 % (nominal value) final screen: Braiding with tinned copper wires, coverage 85 % (nominal value)
Outer sheath	Sheath over each screened twisted pair: special PVC-based compound colour: grey (similar RAL 7032) Complete cable: special PVC-based compound colour: grey (similar RAL 7032)

Electrical properties at 20 °C

Specific volume resistivity	> 20 G Ω x cm
Mutual capacitance	C/C: approx. 140 nF/km C/S (pair): approx. 280 nF/km C/S (outer): approx. 150 nF/km (at 800 Hz)
Inductance	approx. 0.65 mH/km
Maximum operating voltage	250 V (not intended to be used in conjunction with low impedance sources, such as power grids)
Test voltage	1200 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

General requirements These cables 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).

Creator: PESA/PDC	Document: DB0034250EN	Page 1 of 1
Released: ALTE/PDC	Version: 04	