# Data communication systems

Low frequency data transmission cables • DIN colour code

**⊗ LAPP**

# UNITRONIC® CY PiDY (TP)

Screened data transmission cable with copper-wrapped twisted pairs



### Info

- PiDY = Pairs with copper wire wrapping and PVC sheath

## Benefits

- Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects)
- Individually screened pairs and the overall braid minimise electrical interference

## Application range

- Cable should be used in areas with high levels of electromagnetic interferences
- Data processing, process control systems, machining centres, security systems and electronics
- Suitable for the transmission with varying in frequency and voltage or sensitive signals
- For fixed installation and flexible use
- Dry or damp rooms

## Product features

- The cable remains flexible despite multiple screening
- Flame-retardant according IEC 60332-1-2

## Norm references / Approvals

- Based on VDE 0812

## Product Make-up

- Fine-wire strand made of bare copper wires
- Core insulation made of PVC
- Cores twisted into pairs
- Copper wrapping over pairs
- Inner sheath made of PVC over screened pairs
- Tinned-copper braiding
- Outer sheath made of PVC
  Outer sheath colour: pebble grey (RAL 7032)

## Technical data

**Classification ETIM 5/6**
ETIM 5.0/6.0 Class-ID: EC000104
ETIM 5.0/6.0 Class-Description: Control cable

**Core identification code**
DIN 47100, refer to Appendix T9

**Mutual capacitance**
C/C: approx. 120 nF/km
C/S: approx. 160 nF/km

**Peak operating voltage**
(not for power applications)
350 V

**Inductivity**
approx. 0.65 mH/km

**Conductor stranding**
Stranded conductor, fine-wire

**Minimum bending radius**
Fixed installation: 6 x outer diameter

**Loop resistance**
< 160 Ω/km

**Characteristic impedance**
Approx. 65 Ω

**Temperature range**
Occasional flexing: -5°C to +70°C
Fixed installation: -40°C to +80°C

| Article number | Dimension and cross section in mm² | Outer diameter [mm] | Copper index [kg/km] | Weight [kg/km] |
|---|---|---|---|---|
| **UNITRONIC® CY PiDY (TP)** | | | | |
| 0034250 | 2 x 2 x 0.25 | 9.3 | 59.6 | 112 |
| 0034251 | 3 x 2 x 0.25 | 9.8 | 72.7 | 136 |
| 0034252 | 4 x 2 x 0.25 | 10.7 | 88.2 | 168 |
| 0034253 | 5 x 2 x 0.25 | 11.7 | 103.8 | 201 |
| 0034254 | 6 x 2 x 0.25 | 13.1 | 125.7 | 244 |
| 0034256 | 8 x 2 x 0.25 | 15.7 | 161 | 325 |
| 0034257 | 10 x 2 x 0.25 | 16.9 | 186.8 | 342 |
| 0034258 | 12 x 2 x 0.25 | 17.4 | 239.5 | 416 |
| 0034259 | 16 x 2 x 0.25 | 19.3 | 316.7 | 542 |

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.
Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths
Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum
Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).
Photographs and graphics are not to scale and do not represent detailed images of the respective products.

## Similar products

- UNITRONIC® Li2YCY PiMF refer to page 293

## Accessories