HITRONIC®

Data communication systems

Cables for bus systems PROFIBUS-DP/FMS/FIP

Characteristic impedance: 135 - 165 ohm















® LAPP GROUP



UNITRONIC® BUS PB

Fixed installation





- Lapp Kabel is a member of the PROFI-**BUS User Organisation (PNO)**
- A for Advanced here: UL and CSA approvals

Application range

- For fixed installation Maximum electromagnetic screening
- Dry or damp rooms
- Item nos. 2170233, 2170333, 2170820, 2170824, 2170826 are all UV-resistant

Product features

- These bus cables can be used for PROFI-BUS-DP as well as for PROFIBUS-FMS and
- · Based on the bit rates listed, in accordance with PNO specifications the following maximum cable lengths for a bus segment apply

(cable type A, PROFIBUS-DP):

93.75 kbit/s = 1200 m

187.5 kbit/s = 1000 m

500 kbit/s = 400 m 1.5 Mbit/s = 200 m

12.0 Mbit/s = 100 m

■ Norm references / Approvals

- In accordance with DIN 19245 and EN 50170, e.g. for SIEMENS SIMATIC NET, also suitable for FIP (Factory Instrumentation Protocol)
- See below for UL approval type

■ Product make-up

- FC: "Fast Connect" cable design
- P: Polyurethane H: Halogen-free
- PE: polyethylene, black Outer sheath, e.g. for the food and beverage industry
- 7-W: 7-wire, e.g. for applications where vibrations occur
- COMBI: Data transmission and power supply in one cable

Technical data

Mutual capacitance (800 Hz): max. 30 nF/km

Peak operating voltage (not for power applications) 250 V

Conductor resistance (loop): max. 133 ohm/km

Minimum bending radius

Fixed installation: see data sheet Test voltage

Core/core: 1500 V rms Characteristic impedance 150 ± 15 Ohm

| Article number | Article designation | Number of pairs and conductor diameter (mm) | Outer diameter (mm) | Copper index (kg/km) | Weight (kg/km) |
|------------------------|--|---|---------------------|----------------------|----------------|
| Fau fived installation | on - conventional cable assembly | | | | |
| 2170220 | UNITRONIC® BUS PB | 1 x 2 x 0.64 | 8.0 | 30.1 | 74 |
| 2170233 | UNITRONIC® PB PE | 1 x 2 x 0.64 | 8.0 | 30.1 | 57 |
| 2170226 | UNITRONIC® BUS PB H 7-W | 1 x 2 x 0.64 | 8.0 | 30.1 | 55 |
| 2170225 | UNITRONIC® BUS PB COMBI 7-W | 1 x 2 x 0,64 Ø + 3 x 1,0 mm ² | 9.8 | 59.0 | 92 |
| For fixed installation | on - UL/CSA CMX approval | , | | | |
| 2170219 | UNITRONIC® BUS PB A | 1 x 2 x 0.64 | 8.0 | 30.1 | 57 |
| For fixed installation | on - UL/CSA CMG approval | | | | |
| 2170824 | UNITRONIC® BUS PB 7-W A | 1 x 2 x 0.64 | 8.0 | 30.1 | 55 |
| For fixed installation | on - "Fast Connect" cable assembly | | | | |
| 2170333 | UNITRONIC® BUS PB PE FC | 1 x 2 x 0.64 | 8.0 | 26.0 | 67 |
| For fixed installation | on - UL/CSA CMX approval | | | | |
| 2170330 | UNITRONIC® BUS PB P FC | 1 x 2 x 0.64 | 8.0 | 26.0 | 71 |
| For fixed installation | on - "Fast Connect" cable assembly - UL/ | CSA CMG approval | | | |
| 2170820 | UNITRONIC® BUS PB FC | 1 x 2 x 0.64 | 8.0 | 26.0 | 84 |
| 2170826 | UNITRONIC® BUS PB 7-W FC | 1 x 2 x 0.64 | 8.0 | 26.0 | 67 |
| 2170326 | UNITRONIC® BUS PB-H FC | 1 x 2 x 0.64 | 8.0 | 26.0 | 72 |

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request. Copper price basis: EUR 150/100kg. 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).

SIMATIC NET® is a registered trademark of Siemens AG

Lapp Kabel is a member of the PROFIBUS user organisation (PNO) Photographs are not to scale and do not represent detailed images of the respective products.

■ Similar products

- UNITRONIC® BUS PB ROBUST refer to page 289
- UNITRONIC® BUS PB 105 refer to page 290

■ Accessories

- EPIC® Data Connectors refer to page 302
- FC STRIP stripping tool refer to page 912
- SENSOR STRIP stripping tool refer to page 912