

## UNITRONIC® BUS PB

PROFIBUS cables for fixed applications

Various bus cable for PROFIBUS-DP, -FMS and FIP. E.g. Fast Connect and halogen free available.

### Info

Lapp Kabel is a member of the PROFIBUS User Organisation (PNO)

A for Advanced

here: UL and CSA certifications

CPR: Article number choice under [www.lappkabel.com/cpr](http://www.lappkabel.com/cpr)



Supplementary automation components from Lapp



Mechanical and plant engineering



Halogen-free



UV-resistant

### 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 PROFIBUS-DP as well as for PROFIBUS-FMS and FIP

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

Last Update (05.08.2022)

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Product Management [www.lappkabel.de](http://www.lappkabel.de)

You can find the current technical data in the corresponding data sheet.

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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 certification type

### Product Make-up

FC: Fast Connect cable design

P: Polyurethane

H: Halogen-free

PE: polyethylene outer sheath, black

7-W: 7-wire, e.g. for applications where vibrations occur

COMBI: Data transmission and  
power supply in one cable

### Technical Data

|                           |   |
|---------------------------|---|
| Classification ETIM 5:    | ETIM 5.0 Class-ID: EC000830<br>ETIM 5.0 Class-Description: Data cable |
| Classification ETIM 6:    | ETIM 6.0 Class-ID: EC000830<br>ETIM 6.0 Class-Description: Data cable |
| Mutual capacitance:       | (800 Hz): max. 30 nF/km   |
| Peak operating voltage:   | (not for power applications) 250 V                                    |
| Conductor resistance:     | (loop): max. 186 Ohm/km.<br>see also datasheet                        |
| Minimum bending radius:   | Fixed installation: see data sheet                                    |
| Test voltage:             | Core/core: 1500 V rms   |
| Characteristic impedance: | 150 ± 15 Ohm  |

### Note

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](http://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

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Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Prices are net prices without VAT and surcharges. Sale to business customers only.

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| Article number                                       | Article designation         | Number of pairs and conductor diameter (mm) | Outer diameter [mm] | Copper index (kg/km) | Weight (kg/km) |
|--|-----------------------------|---|---------------------|----------------------|----------------|
| Conventional cable makeup                            |                             |   |                     |                      |                |
| 2170220  | UNITRONIC® BUS PB           | 1 x 2 x 0.64                                | 8                   | 30.1                 | 74             |
| 2170233  | UNITRONIC® PB PE            | 1 x 2 x 0.64                                | 8                   | 30.1                 | 57             |
| 2170226  | UNITRONIC® BUS PB H 7-W     | 1 x 2 x 0.64                                | 8                   | 30.1                 | 55             |
| 2170225  | UNITRONIC® BUS PB COMBI 7-W | 1 x 2 x 0,64 Ø + 3 x 1,0 mm <sup>2</sup>    | 9.8                 | 59                   | 92             |
| Conventional cable makeup - UL/CSA CMX certification |                             |   |                     |                      |                |
| 2170219  | UNITRONIC® BUS PB A         | 1 x 2 x 0.64                                | 8                   | 30.1                 | 57             |
| Conventional cable makeup - UL/CSA CMG certification |                             |   |                     |                      |                |
| 2170824  | UNITRONIC® BUS PB 7-W A     | 1 x 2 x 0.64                                | 8                   | 30.1                 | 55             |
| Fast Connect   |                             |   |                     |                      |                |
| 2170333  | UNITRONIC® BUS PB PE FC     | 1 x 2 x 0.64                                | 8                   | 26                   | 67             |
| Fast Connect - UL/CSA CMX certification              |                             |   |                     |                      |                |
| 2170330  | UNITRONIC® BUS PB P FC      | 1 x 2 x 0.64                                | 8                   | 26                   | 71             |
| Fast Connect cable makeup - UL/CSA CMG certification |                             |   |                     |                      |                |
| 2170820  | UNITRONIC® BUS PB FC        | 1 x 2 x 0.64                                | 8                   | 26                   | 84             |
| 2170826  | UNITRONIC® BUS PB 7-W FC    | 1 x 2 x 0.64                                | 8                   | 26                   | 67             |
| 2170326  | UNITRONIC® BUS PB-H FC      | 1 x 2 x 0.64                                | 8                   | 26                   | 72             |

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