



**UNITRONIC® BUS PB**

PROFIBUS cables for fixed applications

**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)



**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
  - 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 5/6**  
ETIM 5.0/6.0 Class-ID: EC000830  
ETIM 5.0/6.0 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.  
see also datasheet
- 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)
<b>Conventional cable makeup</b>					
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
<b>Conventional cable makeup - UL/CSA CMX certification</b>					
2170219	UNITRONIC® BUS PB A	1 x 2 x 0.64	8	30.1	57
<b>Conventional cable makeup - UL/CSA CMG certification</b>					
2170824	UNITRONIC® BUS PB 7-W A	1 x 2 x 0.64	8	30.1	55
<b>Fast Connect</b>					
2170333	UNITRONIC® BUS PB PE FC	1 x 2 x 0.64	8	26	67
<b>Fast Connect - UL/CSA CMX certification</b>					
2170330	UNITRONIC® BUS PB P FC	1 x 2 x 0.64	8	26	71
<b>Fast Connect cable makeup - UL/CSA CMG certification</b>					
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

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

**Similar products**

- UNITRONIC® BUS PB ROBUST refer to page 330
- UNITRONIC® BUS PB 105 refer to page 331

**Accessories**

- Sub-D Bus-Connectors
- FC STRIP stripping tool refer to page 960
- SENSOR STRIP stripping tool refer to page 961