Bus system PROFIBUS-DP/FMS/FIP • Fixed installation

# **UNITRONIC® BUS PB**

**Fixed installation** 

## Info

- · Lapp Kabel is a member of the PROFIBUS User Organisation (PNO)
- A for Advanced here: UL and CSA certifications

LAPP KABEL STUTTGART	UNITRONIC <sup>®</sup> BUS PB PE FC	
LAPP KABEL STUत्तेGART	UNITRONIC <sup>®</sup> BUS PB FC	
LAPP KABEL STUTIGART	UNITRONIC <sup>®</sup> BUS PB COMBI 7-W	
LAPP KABEL STUTIGART	UNITRONIC <sup>®</sup> BUS PB H 7-W	
LAPP KABEL STUTTGART	UNITRONIC <sup>®</sup> BUS PB P FC	
LAPP KABEL STUTTGART	UNITRONIC <sup>®</sup> BUS PB	

### 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, 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**

ETIM	ETIM 5.0 Class-ID: EC000830 ETIM 5.0 Class-Description: Data cab
<b>+</b>	Mutual capacitance (800 Hz): max. 30 nF/km
4	Peak operating voltage (not for power applications) 250 V
Ð	Conductor resistance

(loop): max. 186 Ohm/km. see also datasheet

Minimum bending radius Fixed installation: see data sheet

Z

Test voltage

Core/core: 1500 V rms

٦	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)
For fixed installati	on - conventional cable assembly	· · · · · · · · · · · · · · · · · · ·			
2170220	UNITRONIC <sup>®</sup> BUS PB	1 x 2 x 0.64	8	30.1	74
2170233	UNITRONIC <sup>®</sup> PB PE	1 x 2 x 0.64	8	30.1	57
2170226	UNITRONIC <sup>®</sup> BUS PB H 7-W	1 x 2 x 0.64	8	30.1	55
2170225	UNITRONIC <sup>®</sup> BUS PB COMBI 7-W	1 x 2 x 0,64 Ø + 3 x 1,0 mm <sup>2</sup>	9.8	59	92
For fixed installati	on - UL/CSA CMX certification				
2170219	UNITRONIC <sup>®</sup> BUS PB A	1 x 2 x 0.64	8	30.1	57
For fixed installati	on - UL/CSA CMG certification				
2170824	UNITRONIC <sup>®</sup> BUS PB 7-W A	1 x 2 x 0.64	8	30.1	55
For fixed installati	on - "Fast Connect" cable assembly				
2170333	UNITRONIC <sup>®</sup> BUS PB PE FC	1 x 2 x 0.64	8	26	67
For fixed installati	on - UL/CSA CMX certification				
2170330	UNITRONIC <sup>®</sup> BUS PB P FC	1 x 2 x 0.64	8	26	71
For fixed installati	on - "Fast Connect" cable assembly -	UL/CSA CMG certification			
2170820	UNITRONIC <sup>®</sup> BUS PB FC	1 x 2 x 0.64	8	26	84
2170826	UNITRONIC <sup>®</sup> BUS PB 7-W FC	1 x 2 x 0.64	8	26	67
2170326	UNITRONIC <sup>®</sup> 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

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

#### Similar products

- UNITRONIC<sup>®</sup> 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 1002
- SENSOR STRIP stripping tool refer to page 1003

**ETHERLINE®** 

ÖLFLEX®

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APPENDIX