

Cables for bus systems PROFIBUS-DP/FMS/FIP Characteristic impedance: 135 - 165 ohm

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# UNITRONIC<sup>®</sup> BUS PB **Fixed installation**



LAPP KABEL STUTIGART UNITRONIC® BUS PB COMBI 7-W

## LAPP KABEL STUTIGART UNITRONIC<sup>®</sup> BUS PB P FC

LAPP KABEL STUTIGART UNITRONIC<sup>®</sup> BUS PB H 7-W

#### LAPP KABEL STUTTGART UNITRONIC® BUS PE

#### 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 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 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

- Lapp Kabel is a member of the PROFI-**BUS User Organisation (PNO)**
- A for Advanced

Technical data

here: UL and CSA approvals

<b>+</b>	Mutual capacitance (800 Hz): max. 30 nF/km
4	<b>Peak operating voltage</b> (not for power applications) 250 V
Ð	Conductor resistance (loop): max. 133 ohm/km
$\square$	Minimum bending radius Fixed installation: see data sheet
4	Test voltage

- Core/core: 1500 V rms
- **Characteristic impedance** Ζ 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 installation	on - conventional cable assembly						
2170220	UNITRONIC <sup>®</sup> 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 <sup>®</sup> BUS PB H 7-W	1 x 2 x 0.64	8.0	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	59.0	92		
For fixed installation - UL/CSA CMX approval							
2170219	UNITRONIC <sup>®</sup> BUS PB A	1 x 2 x 0.64	8.0	30.1	57		
For fixed installation - UL/CSA CMG approval							
2170824	UNITRONIC <sup>®</sup> BUS PB 7-W A	1 x 2 x 0.64	8.0	30.1	55		
For fixed installation - "Fast Connect" cable assembly							
2170333	UNITRONIC <sup>®</sup> BUS PB PE FC	1 x 2 x 0.64	8.0	26.0	67		
For fixed installation - UL/CSA CMX approval							
2170330	UNITRONIC <sup>®</sup> BUS PB P FC	1 x 2 x 0.64	8.0	26.0	71		
For fixed installation - "Fast Connect" cable assembly - UL/CSA CMG approval							
2170820	UNITRONIC <sup>®</sup> BUS PB FC	1 x 2 x 0.64	8.0	26.0	84		
2170826	UNITRONIC <sup>®</sup> BUS PB 7-W FC	1 x 2 x 0.64	8.0	26.0	67		
2170326	UNITRONIC <sup>®</sup> 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  $\leq$  30 kg or  $\leq$  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<sup>®</sup> BUS PB ROBUST refer to page 289
- UNITRONIC<sup>®</sup> BUS PB 105 refer to page 290

# Accessories

- EPIC<sup>®</sup> Data Connectors refer to page 302
- FC STRIP stripping tool refer to page 912
- SENSOR STRIP stripping tool refer to page 912

**LAPP GROUP** 

RoHS

**UNITRONIC®** 

**ETHERLINE®** 

SILVYN®

**FLEXIMARK®** 

ACCESSORIES

APPENDIX

EPIC