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