

Bus system PROFIBUS-PA • Fixed Installation











UNITRONIC® BUS PA

PROFIBUS cables for applications in manufacturing and process automation





- PA = Process Automation
- Variant with UL/CSA CMG

Benefits

FC (Fast Connect) version is oil and **UV-resistant**

Application range

- · Process-automation application for connecting sensors and actuators including areas with risks of explosion.
- · Fixed Installation

Product features

- Bit rate = 31.25 kbit/s. Transmission technology RS485 also possible but bit rate is limited to 1.5 Mbit/s
- · Maximum cable length is dependent on several factors (e.g. supply voltage, current demand).
- · Technical Data: refer to the overview on "UNITRONIC® Bus Cables"
- Flame-retardant according IEC 60332-1-2

Norm references / Approvals

- PROFIBUS® PA is standardised in EN 50170 as PROFIBUS® DP and PROFIBUS® FMS
- Transmission technology for PROFIBUS-PA in accordance with international standard IEC 61158-2
- FC variant with UL/CSA certification (CMG / PLTC)

Product Make-up

- UNITRONIC® BUS PA Stranded conductor Copper braiding Outer sheath: PVC, blue, (RAL 5015) intrinsically safe area, black (RAL 9005)
- UNITRONIC® BUS PA FC Bare copper wire Fast Connect inner sheath Cu-Geflecht Puter sheath: PVC, blue (RAL 5015), black (RAL 9005)

Technical data

Classification ETIM 5/6

ETIM 5.0/6.0 Class-ID: EC000830 ETIM 5.0/6.0 Class-Description: Data cable

Peak operating voltage

(not for power applications) 250 V

Conductor resistance (loop): max. 44 Ω/km

Minimum bending radius

Fixed installation: 10 x outer diameter

Test voltage Core/core: 1500 V rms

Characteristic impedance

 $100 \pm 20 \Omega$

Temperature range Fixed installation: -30°C to +80°C During installation: -5°C to +50°C

Article number	Article designation	Number of pairs and cable diameter per conductor in mm	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
Conventional cable makeup					
2170234	UNITRONIC® BUS PA (BU)	1 x 2 x 1,3	8	45	84
2170235	UNITRONIC® BUS PA (BK)	1 x 2 x 1,3	8	45	84
Fast Connect cable makeup - UL/CSA CMG certification					
2170334	UNITRONIC® BUS PA FC (BU)	1 x 2 x 1.00	8	45.5	103
2170335	UNITRONIC® BUS PA FC (BK)	1 x 2 x 1.00	8	45.5	103

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. $1 \times 500 \text{ m}$ drum or $5 \times 100 \text{ m}$ coils).

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Accessories

- Multipurpose shears A and B
- STAR STRIP stripping tool refer to page 985

· FC STRIP stripping tool refer to page 986