® LAPP GROUP

Bus system PROFIBUS-PA • Fixed installation





UNITRONIC® BUS PA





- 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®
- 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 (BU/BK)
 Stranded conductor, core colours: red and green, copper braiding, PVC sheath, colour: blue (intrinsically safe area), colour: black (non-instrinsically safe area)
- UNITRONIC® BUS PA FC (BU/BK)
 Solid core, UL/CSA CMG certification
 and "Fast Connect" cable design, which
 enables rapid connection of the IDC
 connector (Insulation Displacement
 Connection).

Technical data

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

Peak operating voltage (not for power applications) 250 V

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

Minimum bending radiusFixed installation: 10 x outer diameter

Core/core: 1500 V rms
Characteristic impedance

100 ± 20 Ohm

Test voltage

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

Number of pairs and cable diameter Copper index Article number Article designation Outer diameter (mm) Weight (kg/km) per conductor in mm (kg/km) For fixed installation - conventional cable assembly UNITRONIC® BUS PA (BU) UNITRONIC® BUS PA (BK) 2170234 1 x 2 x 1,3 8 45 84 2170235 1 x 2 x 1.3 8 45 84 For fixed installation - "Fast Connect" cable assembly - UL/CSA CMG certification 2170334 UNITRONIC® BUS PA FC (BU) 1 x 2 x 1.00 45.5 103 UNITRONIC® BUS PA FC (BK) 2170335 103 1 x 2 x 1.00 45.5

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).

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Armoured

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

Accessories

- Multipurpose shears A and B refer to page 998
- STAR STRIP stripping tool refer to page 1000
- FC STRIP stripping tool refer to page 1002