

PROFIBUS cables for applications in manufacturing and process automation

Process-automation application connecting sensors and actuators - including areas with risks of explosion. Temperature range from -30 $^{\circ}$ C bis +80 $^{\circ}$ C

Info

PA = Process Automation Variant with UL/CSA CMG



LAPP KABEL STUTTGART UNITRONIC" BUS PA (BK)







Supplementary automation components from Lapp



Mechanical and plant engineering



Oil-resistant



UV-resistant

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

Last Update (05.01.2025)
©2025 Lapp Group - Technical changes reserved
Product Management www.lappkabel.de
You can find the current technical data in the corresponding data sheet.
PN 0456 / 02_03.16



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 PAFC

Bare copper wire

Fast Connect inner sheath

Cu-Geflecht

Puter sheath: PVC, blue (RAL 5015), black (RAL 9005)

Technical Data

Classification ETIM 5: ETIM 5.0 Class-ID: EC000830

ETIM 5.0 Class-Description: Data cable

Classification ETIM 6: ETIM 6.0 Class-ID: EC000830

ETIM 6.0 Class-Description: Data cable

Peak operating voltage: (not for power applications) 250 V

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

Minimum bending radius: Fixed installation: 10 x outer diameter

Test voltage: Core/core: 1500 V rms

Characteristic impedance: 100 ± 20 Ohm

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

During installation: -5°C to +50°C

Note

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® is a registered trademark of Siemens AG

Armoured

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

Prices are net prices without VAT and surcharges. Sale to business customers only.

Article number Article designation Number of pairs and cable Outer diameter [mm] Copper index (kg/km) Weight (kg/km) diameter per conductor in mm Conventional cable makeup 8 45 84 UNITRONIC® BUS PA (BU) 1 x 2 x 1.3 2170234 2170235 UNITRONIC® BUS PA (BK) 1 x 2 x 1.3 8 45 84 Fast Connect cable makeup - UL/CSA CMG certification 8 45.5 103 2170334 UNITRONIC® BUS PA 1 x 2 x 1 FC (BU) UNITRONIC® BUS PA FC 8 2170335 1 x 2 x 1 45.5 103 (BK)





LAPP KABEL STUTIGART UNITRONIC" BUS PA FC