

## UNITRONIC® BUS PB FD P A

Halogenfree, highly flexible PROFIBUS cable - UL/CSA certified

Bus cable for PROFIBUS-DP, -FMS and FIP. UL/CSA approved, Halogen free and enhanced flame retardance. Temperature range from -40°C bis +80°C

### Info

A for Advanced  
here: UL and CSA certifications



Halogen-free



Oil-resistant



Power chain

### Benefits

For use where the combination of a halogen-free outer sheath with properties similar to PUR and enhanced flame-retardance is required

Cables can be used for PROFIBUS-DP as well as PROFIBUS-FMS and FIP

### Application range

PROFIBUS DP (in accordance with DIN 19245 and EN 50170, e.g. for SIEMENS SIMATIC® NET, also suitable for FIP - Factory Instrumentation Protocol).

For highly flexible applications (power chains, moving machine parts)

Suitable for torsional applications which are typical for the loop in wind turbine generators (WTG)

### Product features

Halogen-free

Flame-retardant according IEC 60332-1-2

Oil-resistant

Last Update (03.01.2023)

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Product Management [www.lappkabel.de](http://www.lappkabel.de)

You can find the current technical data in the corresponding data sheet.

PN 0456 / 02\_03.16

## UNITRONIC® BUS PB FD P A

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

Certification: UL/CSA type CMX in accordance with UL 444 and CSA C22.2 no. 214

### Product Make-up

Stranded bare copper wire

Core insulation: foam skin, (O2YS)

Overall screening with copper braid and plastic-laminated aluminium foil

Outer sheath: PUR, violet (RAL 4001)

### 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
Mutual capacitance:	(800 Hz): max. 30 nF/km
Peak operating voltage:	(not for power applications) 250 V
Torsion movement in WTG (wind turbine generator):	TW-0 & TW-2, refer to Appendix T0
Minimum bending radius:	65 mm
Test voltage:	Core/core: 1500 V rms
Characteristic impedance:	150 ± 15 Ohm
Temperature range:	Flexing: -30 °C to +70 °C Fixed installation: -40 °C to +80 °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](http://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. FIP is a registered trademark of World FIP

Lapp Kabel is a member of the PROFIBUS user organisation (PNO)

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.

**UNITRONIC® BUS PB FD P A**

Article number	Article designation	Number of pairs and conductor diameter (mm)	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
Highly flexible application					
2170822	UNITRONIC® BUS PB FD P A	1 x 2 x 0.64	8	30.1	58

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