

## UNITRONIC® BUS PB FD P

Highly flexible application

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



Power chain



Oil-resistant



Halogen-free

### Benefits

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

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

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).

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

## UNITRONIC® BUS PB FD P

### Product features

Halogen-free

Flame-retardant according IEC 60332-1-2

Oil-resistant

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

### Product Make-up

Foam Skin - core isolation (O2YS)

Overall screening with copper braid and plastic-laminated aluminium foil

Tin-plated copper wire braiding

Outer sheath: PUR compound

### Technical Data

Classification:	ETIM 5.0 Class-ID: EC000830 ETIM 5.0 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 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.



**UNITRONIC® BUS PB FD P**

Article number	Article designation	Number of pairs and conductor diameter (mm)	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
For highly flexible applications (e.g. power chains) - conventional cable assembly					
2170222	UNITRONIC® BUS PB FD P	1 x 2 x 0.64	8	30.1	64

Last Update (30.11.2016)

©2016 Lapp Group - Technical changes reserved

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