**® LAPP GROUP** 

Bus system PROFIBUS-DP/FMS/FIP • Continuous flexing application









# UNITRONIC® BUS PB FD P

Highly flexible application

### LAPP KABEL STUTTGART UNITRONIC BUS PB FD P



#### **Benefits**

- For use where the combination of a halogen-free outer sheath with properties similar to PUR and enhanced flameretardance 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)

#### **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**



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

Article number	Article designation	Number of cores and mm² per conductor	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 1x2x0,64	1 x 2 x 0.64	8	30.1	64

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. 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.

# Accessories

• Sub-D Bus-Connectors