



## UNITRONIC® BUS PB FD FRNC FC

Highly flexible application



### Benefits

- Fast Connect (FC) system
- 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

- For highly flexible use in energy supply chains or permanently moving machines and linear robots
- This cable provides special advantages for use in sensitive areas where fire propagation must be avoided and the presence of toxic fumes would cause personal injury and damage to equipment.

### Product features

- The cable is UL/CSA-approved (CMG)
- Halogen-free
- High flame retardancy in accordance with IEC 60332-3 and FT4
- 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

- Stranded bare copper wire
- Foam Skin - core isolation (O2YS)
- Overall screening with copper braid and plastic-laminated aluminium foil
- Screening: wrapped with braided tinned-copper wires
- Outer sheath: PUR compound

### Technical data

- Mutual capacitance**  
nom. 28 nF/km
- Peak operating voltage**  
(not for power applications) 250 V
- Minimum bending radius**  
Fixed installation: 10 x outer diameter  
Flexing: 15 x outer diameter
- Test voltage**  
Core/core: 1500 V rms
- Temperature range**  
Flexing: -30°C to +70°C  
Fixed installation: -40°C to +80°C
- Characteristic impedance**  
(3 - 20 MHz): 150 ± 15 Ohm

Article number	Article designation	Number of pairs and conductor diameter (mm)	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
2170854	UNITRONIC® BUS PB FD FRNC FC	1x2x0,64	8.0	26.0	75

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.  
 Copper price basis: EUR 150/100kg. 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).  
 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

- EPIC® Data Connectors refer to page 302
- FC STRIP stripping tool refer to page 912

ÖLFLEX®  
 UNITRONIC®  
 ETHERLINE®  
 HITRONIC®  
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