

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









# UNITRONIC® BUS PB FD P COMBI

Highly flexible, halogenfree PROFIBUS HYBRID cables

LAPP KABEL STUTTGART UNITRONIC® BUS PB FD P COMBI



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### **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).

### Product features

- · HYBRID: cable for data transmission + power supply
- Flame-retardant according IEC 60332-1-2

### Product Make-up

#### UNITRONIC® BUS PB FD P COMBI

- · Fine-wire, bare copper strand
- 1x2x0.64: red, green 3x1.0 (AWG18): grenn/yellow, black, blue
- · Core insulation: PE
- · Tin-plated copper wire braiding
- Outer sheath: PUR, violet (RAL 4001)

#### **UNITRONIC® BUS PB FD P HYBRID**

- · Fine-wire, bare copper strand
- 1x2x0.64 : red, green 4 x 1.5 (AWG16): black with white numbers
- · Core insulation: PE
- · Tin-plated copper wire braiding
- Outer sheath: PUR, violet (RAL 4001)

### **Technical data**

Classification ETIM 5/6

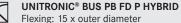
ETIM 5.0/6.0 Class-ID: EC000830 ETIM 5.0/6.0 Class-Description: Data cable



Mutual capacitance (800 Hz): max. 30 nF/km



Peak operating voltage (not for power applications) 100 V



Test voltage UNITRONIC® BUS PB FD P COMBI

Core/core: 600 V **UNITRONIC® BUS PB FD P HYBRID** 

Core/core: 600 V Core/screen: 600 V

Characteristic impedance Z∞  $150 \pm 15 \Omega$ 

Temperature range UNITRONIC® BUS PB FD P COMBI

Flexing: -5°C to +50°C Fixed installation: -40°C to +80°C UNITRONIC® BUS PB FD P HYBRID

Flexing: -30°C to +60°C Fixed installation: -40°C to +70°C

Article number	Article designation	Number of pairs and conductor diameter (mm)	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
UNITRONIC® BUS PB FD P COMBI					
2170227	UNITRONIC® BUS PB FD P COMBI	1 x 2 x 0.64 Ø + 3 x 1.0 mm <sup>2</sup>	10.1	59	125
UNITRONIC® BUS PB FD P HYBRID					
2170495	UNITRONIC® BUS PB FD P HYBRID	1 x 2 x 0.64 Ø + 4 x 1.5 mm <sup>2</sup>	11.3	89	148

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  $\le$  30 kg or  $\le$  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)

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