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





UNITRONIC® BUS PB TORSION

Flame retardant, highly flexible PROFIBUS cable for torsion load

LAPP KABEL STUTIGART UNITRONIC® BUS PB TORSION

Benefits

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

Product features

- TORSION: for torsional stress, e.g. robot application; \pm 180 $^{\circ}$ per 1 m
- Halogen-free
- Flame-retardant according IEC 60332-1-2 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 type CMX in accordance with UL 444

Product Make-up

- Stranded bare copper wire
- Core insulation: PE
- Overall screening with copper braid and plastic-laminated aluminium foil
- Outer sheath: PUR, violet (RAL 4001)
 - Torsion movement in WTG (wind ¢[)\$ turbine generator) Max. torsion load ± 180°/m Minimum bending radius Fixed installation: 4 x outer diameter Flexing: 7.5 x outer diameter Test voltage 4 3600 V DC (3 sec.) **Characteristic impedance** Z∞ $150 \pm 15 \Omega$ **Temperature range** 01 Operating temperature: -25°C to 75°C Storage temp.: -40°C to 80°C

Article number	Article designation	Number of cores and mm ² per conductor	Dimension and cross section in mm ²	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
Highly flexible application						
2170332	UNITRONIC [®] BUS PB	1 x 2 x 0.38	1 x 2 x 0.38	8	31	66

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 \leq 30 kg or \leq 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.

Accessories

• Sub-D Bus-Connectors

SILVYN

348



Technical data

Data cable

300 V

ET I M

4

Classification ETIM 5/6

Mutual capacitance

(800 Hz): max. 30 nF/km

Peak operating voltage

(not for power applications)

ETIM 5.0/6.0 Class-ID: EC000830

ETIM 5.0/6.0 Class-Description:

X ÖLFL