UNITRONIC® BUS PB FD P

Halogenfree, highly flexible PROFIBUS cable

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







Halogen-free



Oil-resistant



Power chain

Benefits

Due double screening it is suitable for installation in electromagnetically demanding areas
Cables can be used for PROFIBUS-DP as well as PROFIBUS-FMS and FIP
For use where the combination of a halogen-free outer sheath with properties similar to PUR and enhanced flame-retardance is required

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

Last Update (31.12.2023)
©2023 Lapp Group - Technical changes reserved
Product Management www.lappkabel.de
You can find the current technical data in the corresponding data sheet.
PN 0456 / 02_03.16

UNITRONIC® BUS PB FD P

12.0 Mbit/s = 100 m

Product Make-up

Stranded bare copper wire
Core insulation: foam skin, (O2YS)
Overall screening with copper braid and plastic-laminated aluminium foil
Outer sheath: PUR, violet (RAL 4001)

Technical Data

Classification ETIM 5:	ETIM 5.0 Class-ID: EC000830 ETIM 5.0 Class-Description: Data cable
Classification ETIM 6:	ETIM 6.0 Class-ID: EC000830 ETIM 6.0 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
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 and graphics 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 only.

©2023 Lapp Group - Technical changes reserved

LAPP

UNITRONIC® BUS PB FD P

PRODUCT INFORMATION

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 (31.12.2023)
©2023 Lapp Group - Technical changes reserved
Product Management www.lappkabel.de
You can find the current technical data in the corresponding data sheet.
PN 0456 / 02_03.16