UNITRONIC® BUS LD FD P

Highly flexible buscable with PUR outer sheath, for use in different bussystems

For bus systems like e.g. Modbus, SUCOnet, Modulink, VariNet. Flame retardant, UL- approval, Core indet. code DIN 47100.
Temperature range from -40 °C bis +80 °C

Info
LD is a LAPP abbreviation for long distance



Supplementary automation components from Lapp

Mechanical and plant engineering

Power chain

Benefits
Suitable for multiple Bus systems based on RS485 / RS422
PUR outer sheath, tear and notch-resistant, resistant to mineral oils and abrasion when used in power chains
Under consideration of the temperature range also suitable for outdoor use

Application range
For highly flexible applications (power chains, moving machine parts)
Bus cables for bus systems such as e.g. Modbus, SUCOnet P, Modulink P, VariNet-P)

Product features
The stated bit rates result in the following cable lengths (maximum) of one bus segment:
9.6-93.75 kbit/s = 1200m
187.5 kbit/s = max. 1,000 m
500 kbit/s = max. 400 m
UV-resistant (but colour may change after some time)

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Product Management www.lappkabel.de
You can find the current technical data in the corresponding data sheet.
PN 0456 / 02_03.16

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Norm references / Approvals

UNITRONIC® BUS LD FD P A:
UL versions with certification:
UL/CSA type CMX acc. to UL 444
and CSA C22.2 no. 214-02
Flame-retardant according IEC 60332-1-2

Product Make-up

Extra-fine wire strand made of bare copper
Colour code DIN 47100
Core insulation: PE
Overall screening of braided tinned-copper strands
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. 60 nF/km
Peak operating voltage:	(not for power applications) 250 V
Conductor resistance:	(loop): max. 159.8 ohm/km
Minimum bending radius:	Fixed installation: 6 x core diameter One bend at end of core: 3 x cable diameter Flexing: 15 x outer diameter
Test voltage:	Core/core: 1500 V rms
Characteristic impedance:	100 - 120 Ohm
Temperature range:	Fixed installation: -40 °C to +80 °C Flexing: -30 °C to +70 °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).
Modubus is owned by the Modbus-IDA Organisation. SUCOnet P is a registered trademark of the Moeller Group. Modulink P is a registered trademark of Weidmüller GmbH & Co. VariNet is a registered trademark of Pepperl+Fuchs GmbH.
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.

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PRODUCT INFORMATION

Article number	Article designation	Number of pairs and mm² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
For highly flexible applications					
2170213	UNITRONIC® BUS LD FD P	1 x 2 x 0.25	6	18	39
2170214	UNITRONIC® BUS LD FD P	2 x 2 x 0.25	7.9	33	65
2170215	UNITRONIC® BUS LD FD P	3 x 2 x 0.25	8	39	77
For highly flexible applications - with UL/CSA CMX certification					
2170813	UNITRONIC® BUS LD FD P A	1 x 2 x 0.25	6.2	18	39
2170814	UNITRONIC® BUS LD FD P A	2 x 2 x 0.25	8.3	33	65
2170815	UNITRONIC® BUS LD FD P A	3 x 2 x 0.25	8.4	39	77

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