



UNITRONIC® BUS LD FD P

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

Info

- LD is a LAPP abbreviation for long distance



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)

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 5/6**
ETIM 5.0/6.0 Class-ID: EC000830
ETIM 5.0/6.0 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 Ω/km
- Minimum bending radius**
One bend at end of core:
3 x cable diameter
Flexing: 15 x outer diameter
- Test voltage**
Fixed installation: 6 core diameter
Core/core: 1500 V rms
- Characteristic impedance**
100 - 120 Ω
- Temperature range**
Fixed installation: -40°C to +80°C
Flexing: -30°C to +70°C

| 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 |

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).
 Modbus 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.

Accessories

- SMART STRIP stripping tool

ÖLFLEX®
UNITRONIC®
ETHERLINE®
HITRONIC®
EPIC®
SKINTOP®
SILVYN®
FLEXIMARK®
ACCESSORIES
APPENDIX