Suitable for multiple Bus systems based on RS485 / RS422



Automation

Industrial machinery and plant engineering

Info
LD is a LAPP abbreviation for long distance

Application range
For fixed installationMaximum electromagnetic screening
Bus cables for bus systems such as e.g. Modbus, SUCOnet P, Modulink P, VariNet-P)
Dry or damp rooms

Design
Stranded bare 7-wire conductor, colour-coded according to DIN 47100
Copper braid
PVC sheath
Colour: violet (RAL 4001)
UNITRONIC® BUS LD A as UNITRONIC® BUS LD, but with UL/CSA approval

Norm references / Approvals
UL variant has approval: UL/CSA type CMX acc. to UL 444and CSA C22.2 no. 214-02

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
Flame-retardant according IEC 60332-1-2

Remark
Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.
Copper price basis: EUR 150/100kg. 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 are not to scale and do not represent detailed images of the respective products.

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Technical Data

Mutual capacitance:	(800 Hz): max. 60 nF/km
Peak operating voltage:	(not for power applications) 250 V
Conductor resistance:	(loop): max. 186 ohm/km
Minimum bending radius:	Fixed installation: 8 x outer diameter
Test voltage:	Core/core: 1500 V rms
Temperature range:	Fixed installation: -40°C to +80°C Flexing: -5°C to +70°C
Characteristic impedance:	100 - 120 Ohm

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Part number	Article designation	Number of pairs and mm² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
for fixed installation					
2170203	UNITRONIC® BUS LD	1 x 2 x 0,22	5.7	18.0	37
2170204	UNITRONIC® BUS LD	2 x 2 x 0,22	7.1	28.0	45
2170205	UNITRONIC® BUS LD	3 x 2 x 0,22	7.2	37.0	72
For fixed installation - UL/CSA CMX approval					
2170803	UNITRONIC® BUS LD A	1 x 2 x 0,22	5.7	18.0	39

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