

# UNITRONIC® BUS LD/LD FD P

For RS485/RS422 bus systems; stationary & continuous flex applications; 100 - 120 Ω

LAPP KABEL STUTTGART UNITRONIC® BUS LD

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UNITRONIC® BUS Long Distance (LD) cables are built after the RS-422 and RS-485 standards and are robust solutions for transmitting data over long distances and noisy environments. Stranded copper conductors and high-performance insulation optimize flexing endurance. Tinned copper braid provides superior EMI protection.

## Recommended applications

Bus systems such as Modbus, SUCOnet P, Modulink P, VariNet-P; dry or damp rooms; FD version suitable for continuous flex applications like cable tracks and moving machine parts

## Approvals



## Stationary construction

**Conductors:** stranded bare copper

**Insulation:** polyethylene

**Shielding:** copper braid

**Jacket:** PVC; violet

## Continuous flex construction

**Conductors:** stranded bare copper

**Insulation:** polyethylene

**Shielding:** copper braid

**Jacket:** polyurethane; violet

## Application advantage

- Maximum EMI protection
- PUR jacket resistant to tear, abrasion & mineral oils
- Flexible for ease of routing

Cable attributes

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See attribute list by part number on page 166

Complete the installation



SKINTOP®  
MS-SC  
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ÖLFLEX® CONNECT solution



ÖLFLEX® CONNECT CABLES  
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## Technical data

### Minimum bend radius:

- stationary: 8 x cable diameter
- continuous flex:
  - for installation: 6 x cable diameter
  - for continuous flexing: 15 x cable diameter

### Temperature range:

- stationary: -40°C to +80°C
- continuous flex:
  - for installation: -40°C to +80°C
  - for flexible use: -30°C to +70°C

### Nominal voltage:

250V

**Characteristic impedance:** 100 - 120 Ω

**Nominal capacitance:** 18 pF/ft (800 Hz)

**Color code:** DIN 47100: chart 8, page 682

- pair 1: white & brown
- pair 2: green & yellow
- pair 3: gray & pink

**Approvals:** UL: CMX (see below)  
Canada: CSA CMX (see below)

Part number	Jacket material	Conductor description	Approvals	Nominal outer diameter		Copper weight lbs/mft	Approx. weight lbs/mft	SKINTOP® MS-SC PG thread
				in	mm			
<b>Stationary</b>								
2170203	PVC	24 AWG/1pr	—	0.225	5.7	12	25	53112210
2170803	PVC	24 AWG/1pr	UL/CSA CMX	0.225	5.7	12	26	53112210
2170204	PVC	24 AWG/2pr	—	0.280	7.1	19	30	53112210
2170205	PVC	24 AWG/3pr	—	0.284	7.2	25	48	53112210
<b>Continuous flex</b>								
2170213	PUR	24 AWG/1pr	—	0.236	6.0	12	26	53112210
2170813	PUR	24 AWG/1pr	UL/CSA CMX	0.244	6.2	12	26	53112210
2170214	PUR	24 AWG/2pr	—	0.311	7.9	22	44	53112220
2170814	PUR	24 AWG/2pr	UL/CSA CMX	0.327	8.3	22	44	53112220
2170215	PUR	24 AWG/3pr	—	0.315	8.0	26	52	53112220
2170815	PUR	24 AWG/3pr	UL/CSA CMX	0.331	8.4	26	52	53112220

Recommended SKINTOP® assumes minimal OD variance. Additional configurations are available; please see our SKINTOP® section.

If not otherwise specified, all values relating to the product are nominal values.

Photographs are not to scale and are not true representations of the products in question.