ETHERLINE®



Cables for bus system CAN UL/CSA-approved

Characteristic impedance: 120 ohm

















CAN = Controller Area Network

UNITRONIC® BUS CAN

LAPP KABEL STUTTGART UNITRONIC® BUS CAN

■ Technical data



Mutual capacitance UNITRONIC® BUS CAN (800 Hz): max. 40 nF/km **UNITRONIC® BUS CAN FD P** (800 Hz): max. 60 nF/km

Peak operating voltage UNITRONIC® BUS CAN (not for power applications) 250 V UNITRONIC® BUS CAN FD P 250 V (not for power transmission)

Conductor resistance UNITRONIC® BUS CAN (loop): max. 186 ohm/km **UNITRONIC® BUS CAN FD P** (loop): max. 159.8 ohm/km

Minimum bending radius UNITRONIC® BUS CAN Fixed installation: 8 x outer diameter UNITRONIC® BUS CAN FD P Flexing: 15 x outer diameter

Test voltage Core/core: 1500 V rms Temperature range

UNITRONIC® BUS CAN Fixed installation: -30°C to +80°C Flexing: -5°C to +70°C UNITRONIC® BUS CAN FD P Fixed installation: -40°C to +80°C Flexing: -30°C to +70°C

Characteristic impedance 120 ohm

LAPP KABEL STUTTGART UNITRONIC® BUS CAN FD P

Application range UNITRONIC® BUS CAN

Fixed installation

UNITRONIC® BUS CAN FD P

For highly flexible applications

Product features

UNITRONIC® BUS CAN

- Maximum bit rate: 1 Mbit/s for 40 m segment length
- · Larger conductor cross-section is necessary with increasing length. Refer to the table below (reference values from ISO
- ISO 11898 makes recommendations for the segment length, cable cross section and bit rate
- Flame-retardant according IEC 60332-1-2

UNITRONIC® BUS CAN FD P

- Halogen-free
- Maximum bit rate: 1 Mbit/s for 40 m segment length
- · Larger conductor cross-section is necessary with increasing length. Refer to the table below (reference values from ISO
- ISO 11898 makes recommendations for the segment length, cable cross section
- Flame-retardant according IEC 60332-1-2

■ Norm references / Approvals

UNITRONIC® BUS CAN FD P

- Standardised internationally in ISO 11898
- UL/CSA type CMX (UL 444)

■ Product make-up

UNITRONIC® BUS CAN

- 0.22 + 0.34 + 0.5: bare stranded conductor, 7-wire 0.75: bare stranded conductor, fine-wire
- Colour-coded in accordance with DIN
- Copper braid
- PVC sheath
- Colour: violet (RAL 4001)

UNITRONIC® BUS CAN FD P

- Stranded bare conductor
- Screening: wrapped with braided copper wires
- PUR outer sheath
- Colour: violet (RAL 4001)
- UV-resistant (but colour may change after some time)

Suitable connectors

UNITRONIC® BUS CAN

- EPIC® Data CAN-Bus Connectors Page 317
- EPIC® Data CAN-Bus Connectors (full-metal) Page 318

Article number	Article designation	Number of pairs/conductor cross section (mm²)	Outer diameter (mm)	Conductor resistance	Copper index (kg/km)	Weight (kg/km)
for fixed installation						
2170260	UNITRONIC® BUS CAN	1 x 2 x 0,22	5.7	186.0	16.7	42.0
2170261	UNITRONIC® BUS CAN	2 x 2 x 0,22	7.6	186.0	34.8	68.0
2170263	UNITRONIC® BUS CAN	1 x 2 x 0,34	6.8	115.0	25.0	55.0
2170264	UNITRONIC® BUS CAN	2 x 2 x 0,34	8.5	115.0	46.4	88.0
2170266	UNITRONIC® BUS CAN	1 x 2 x 0,5	7.5	78.0	41.6	90.0
2170267	UNITRONIC® BUS CAN	2 x 2 x 0,5	9.6	78.0	59.4	106.0
2170269	UNITRONIC® BUS CAN	1 x 2 x 0,75	8.7	52.0	52.7	108.0
2170270	UNITRONIC® BUS CAN	2 x 2 x 0,75	11.5	52.0	80.6	142.0
For highly flexible applications (power chains, moving machine parts)						
2170272	UNITRONIC® BUS CAN FD P	1 x 2 x 0,25	6.4	159.8	24.0	40.0
2170273	UNITRONIC® BUS CAN FD P	2 x 2 x 0,25	8.4	159.8	33.0	65.0
2170275	UNITRONIC® BUS CAN FD P	1 x 2 x 0,34	6.8	122.0	32.8	60.0
2170276	UNITRONIC® BUS CAN FD P	2 x 2 x 0,34	9.6	122.0	52.4	88.0
2170278	UNITRONIC® BUS CAN FD P	1 x 2 x 0,5	8.0	72.8	41.9	74.0
2170279	UNITRONIC® BUS CAN FD P	2 x 2 x 0,5	10.8	72.8	59.4	100.0

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).

Photographs are not to scale and do not represent detailed images of the respective products.

■ Accessories

UNITRONIC® BUS CAN

- Multipurpose shears A and B refer to page 907
- SMART STRIP stripping tool refer to page 911
- SENSOR STRIP stripping tool refer to page 912

UNITRONIC® BUS CAN FD P

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