## Bus cable & connectors

# **UNITRONIC® BUS CAN FD P**

## For CAN bus systems; continuous flex applications; 120 $\boldsymbol{\Omega}$

### LAPP KABEL STUTTGART UNITRONIC® BUS CAN FD P

UNITRONIC<sup>®</sup> BUS CAN FD P is designed to the CAN open and ISO11898 standard. It is well suited for high-speed motion control and feedback loop applications, providing high reliability and efficient use of network bandwidth.

### Recommended applications

Motion control systems; assembly, welding, and material handling machines; single cable wiring of multi-input sensor blocks; smart sensors; pneumatic valves; barcode readers; drives and operator interfaces

#### Rate table

Technical data

| Distance (m) | AWG    | Max. rate        |  |  |  |  |
|--------------|--------|------------------|--|--|--|--|
| 0 - 40       | 22     | 1 Mbps @ 40 m    |  |  |  |  |
| 40 - 300     | 22, 20 | 50 kbps @ 100 m  |  |  |  |  |
| 300 - 600    | 20     | 100 kbps @ 500 m |  |  |  |  |
| 600 - 1000   | 19     | 50 kbps @1 km    |  |  |  |  |

| Cable attribute | page 648 |         |       |
|-----------------|----------|---------|-------|
| 📋 OIL           | OR-04    | 🙆 FLAME | FR-02 |
|                 | CF-02*   | 🚫 месн. | MP-05 |

#### Construction

<u>Conductors:</u> finely stranded bare copper <u>Insulation:</u> polyethylene <u>Shielding:</u> tinned copper braid shield <u>Jacket:</u> halogen-free polyurethane; violet

### Application advantage

- Designed for continuous flex applications
- · Signal integrity in stationary motion applications
- Flame retardant
- Oil-resistant jacket
- · Flexible for ease of routing

## Approvals



| 🔨 Minimum bend radius:                           | 15 x cable diameter               | + Nominal capacitance:                | 18 pF/ft<br>DIN 47100: chart 8, page 682<br>white & brown<br>green & yellow |  |  |  |
|--|-----------------------------------|---------------------------------------|---|--|--|--|
| • for installation:<br>- for continuous flexing: | -40°C to +80°C<br>-30°C to +70°C  | Color code:<br>- pair 1:<br>- pair 2: |   |  |  |  |
| 7 Nominal voltage:                               | 250V (not for power applications) | Approvals: UL:                        | СМХ   |  |  |  |
| z <sub>∞</sub> Characteristic impedance:         | 120 Ω ± 15Ω                       | Additional:                           | c(UL) CMX<br>Continuous Flex Test Method Verified                           |  |  |  |
|  |                                   | OL Vernied ID A522492.                | Continuous riex rest method verme   |  |  |  |

|   | Part<br>Nnmber |            | Nominal<br>outer diameter |     | Copper<br>weight | Approx.<br>weight | SKINTOP®<br>MS-SC | Part<br>Nnmber | Conductor<br>description | Nominal<br>outer diameter |      | Copper<br>weight | Approx.<br>weight | SKINTOP®<br>MS-SC |
|---|----------------|------------|---------------------------|-----|------------------|-------------------|-------------------|----------------|--------------------------|---------------------------|------|------------------|-------------------|-------------------|
|   | Nimber         |            | in                        | mm  | lbs/mft          | lbs/mft           | PG thread         | Nimber         | uescription              | in                        | mm   | lbs/mft          | lbs/mft           | PG thread         |
| ľ | 2170272        | 24 AWG/1pr | 0.252                     | 6.4 | 16               | 27                | 53112210          | 2170276        | 22 AWG/2pr               | 0.378                     | 9.6  | 35               | 59                | 53112230          |
|   | 2170273        | 24 AWG/2pr | 0.331                     | 8.4 | 22               | 44                | 53112220          | 2170278        | 20 AWG/1pr               | 0.315                     | 8.0  | 28               | 50                | 53112220          |
|   | 2170275        | 22 AWG/1pr | 0.268                     | 6.8 | 22               | 40                | 53112210          | 2170279        | 20 AWG/2pr               | 0.426                     | 10.8 | 40               | 67                | 53112230          |

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.