

## UNITRONIC® BUS CAN

For CAN bus systems; stationary applications; 120 Ω

LAPP KABEL STUTTGART UNITRONIC® BUS CAN



UNITRONIC® BUS CAN 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.

### Construction

**Conductors:** 7-wire strands of bare copper

**Insulation:** polyethylene

**Shielding:** foil wrap; tinned copper braid shield

**Jacket:** PVC; violet • reinforced jacket: PE; black

### 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

| 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   |

### Application advantage

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

### Approvals



| Cable attributes |       | page 648 |       |
|------------------|-------|----------|-------|
| OIL              | OR-00 | FLAME    | FR-02 |
| MOTION           | FL-02 | MECH.    | MP-01 |

| Complete the installation  |                                   |
|----------------------------|-----------------------------------|
| SKINTOP® MS-SC<br>page 522 | EPIC® DATA connectors<br>page 186 |

### Technical data

|                                  |                                   |                             |   |
|----------------------------------|-----------------------------------|-----------------------------|---|
| <b>Minimum bend radius:</b>      | 10 x cable diameter               | <b>Nominal capacitance:</b> | 12 pF/ft  |
| <b>Temperature range:</b>        | -30°C to +80°C                    | <b>Color code:</b>          | DIN 47100: chart 8, page 682<br>- pair 1: white & brown<br>- pair 2: green & yellow |
| <b>Nominal voltage:</b>          | 250V (not for power applications) | <b>Approvals:</b>           | UL: CMX<br>Canada: c(UL) CMX<br>*not for 2170500                                    |
| <b>Characteristic impedance:</b> | 120 Ω ± 15Ω                       |                             |   |

| Part Number | Conductor description | Nominal outer diameter |     | Copper weight | Approx. weight | SKINTOP® MS-SC |
|-------------|-----------------------|------------------------|-----|---------------|----------------|----------------|
|             |                       | in                     | mm  | lbs/mft       | lbs/mft        | PG thread      |
| 2170260     | 24 AWG/1pr            | 0.224                  | 5.7 | 11            | 28             | 53112220       |
| 2170261     | 24 AWG/2pr            | 0.299                  | 7.6 | 23            | 46             | 53112220       |
| 2170263     | 22 AWG/1pr            | 0.268                  | 6.8 | 17            | 37             | 53112220       |
| 2170264     | 22 AWG/2pr            | 0.335                  | 8.5 | 31            | 59             | 53112220       |
| 2170266     | 20 AWG/1pr            | 0.296                  | 7.5 | 28            | 60             | 53112220       |

| Part Number                    | Conductor description | Nominal outer diameter |      | Copper weight | Approx. weight | SKINTOP® MS-SC |
|--------------------------------|-----------------------|------------------------|------|---------------|----------------|----------------|
|                                |                       | in                     | mm   | lbs/mft       | lbs/mft        | PG thread      |
| 2170267                        | 20 AWG/2pr            | 0.382                  | 9.7  | 40            | 71             | 53112230       |
| 2170269                        | 19 AWG/1pr            | 0.343                  | 8.7  | 35            | 73             | 53112220       |
| 2170270                        | 19 AWG/2pr            | 0.453                  | 11.5 | 54            | 95             | 53112230       |
| <b>Reinforced black jacket</b> |                       |                        |      |               |                |                |
| 2170500                        | 20 AWG/2pr            | 0.354                  | 9.0  | 28            | 61             | 53112220       |