

UNITRONIC® BUS ASI

For Actuator Sensor Interface (AS-i) bus systems; stationary & flexible applications; 140 Ω

LAPP KABEL STUTTGART UNITRONIC® BUS ASI

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UNITRONIC® BUS ASI is a geometrically-coded, 2-conductor flat cable designed for data and power transfer between simple I/O devices on the sensor/actuator level. The cable is available with 3 different jackets: PVC, rubber, or TPE. The voltage drop on the long distance version is smaller due to larger conductor cross-sections.

Recommended applications

Data and power transmission between sensors, actuators, slaves, repeaters and master; TPE version suitable for wet areas and cooling lubricants

Cable attributes page 648

See attribute list by part number on page 166

Technical data

Minimum bend radius:

- for stationary use: 12 mm
- for flexible use:
 - PVC & rubber: 24 mm
 - TPE: 16 mm

Temperature range:

- PVC:
 - during use: -30°C to +90°C
 - during installation: -20°C to +90°C
- rubber & TPE:
 - during use: -40°C to +85°C
 - during installation: -30°C to +85°C

Peak voltage:

- yellow & black: 300V (not for power applications)
- red: 300V

Test voltage: 2000V

Characteristic impedance: 70 - 140 Ω (@ 167 KHz)

Nominal capacitance: 24 pF/ft

Color code: blue & brown

Approvals:

- UL: CMG (PVC jacket)
CL2 (PVC jacket)
AWM 2095 (PVC jacket)
- Canada: c(UL) CMG (PVC jacket)
- Additional: ASI
CE & RoHS

Construction

Conductors: stranded tinned copper

Insulation: PVC, rubber, or TPE

Jacket: PVC, EPDM (rubber), or TPE

Application advantage

- Data and power transmission in one cable
- Quick connections to ASi-module due to piercing technology
- Protection against polarity reversal
- UNITRONIC® BUS ASI LD (Long Distance) allows even longer cable runs; more devices or devices with higher power demand can be connected to the network.

Approvals



Complete the installation



SKINTOP® strain relief page 492



SKINTOP® DIX-ASI page 547

| Part number | Jacket construction | | Conductor description | Approvals | Application | Copper weight lbs/mft | Approx. weight lbs/mft |
|-------------|---------------------|--------|-----------------------|------------|--|-----------------------|------------------------|
| | material | color | | | | | |
| 2170842 | PVC | yellow | 2 x 16 AWG | UL/CSA CMG | data & power transmission | 19 | 47 |
| 2170843 | PVC | black | 2 x 16 AWG | UL/CSA CMG | transmission of 30V DC auxiliary power | 19 | 47 |
| 2170228 | EPDM rubber | yellow | 2 x 16 AWG | — | data & power transmission | 19 | 57 |
| 2170229 | EPDM rubber | black | 2 x 16 AWG | — | transmission of 30V DC auxiliary power | 19 | 57 |
| 2170371 | EPDM rubber | yellow | 2 x 14 AWG | — | long distance data & power transmission | 32 | 57 |
| 2170372 | EPDM rubber | black | 2 x 14 AWG | — | long distance transmission of 30V DC auxiliary power | 32 | 57 |
| 2170230 | TPE | yellow | 2 x 16 AWG | — | data & power transmission | 19 | 43 |
| 2170231 | TPE | black | 2 x 16 AWG | — | transmission of 30V DC auxiliary power | 19 | 43 |
| 2170232 | TPE | red | 2 x 16 AWG | — | transmission of 230V AC auxiliary power | 19 | 43 |

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.