ETHERLINE®

## **Data communication systems**

# Cables for bus system AS-INTERFACE

Sensor/actuator communication

















**® LAPP GROUP** 



## New

# **UNITRONIC® BUS ASI**

LAPP KABEL STUπGART UNITRONIC® BUS ASI

LAPP KABEL STUTTGART UNITRONIC® BUS ASI

#### LAPP KABEL STUTTGART UNITRONIC® BUS ASI

# ■ Norm references / Approvals

- ASI is standardised Europe-wide in EN 50295 and internationally in IEC 62026-2.
- PVC version has UL/CSA (CMG) approval.
- UL/CSA version: CMGc(UL)us or (UL)CL2 or AWM 300V FT4 approval

### ■ Product make-up

- Extra-fine wire, tinned copper strands
- Core insulation: blue and brown
- Profiled outer sheath made of rubber (G), thermoplastic elastomers (TPE) or PVC
- Colour: yellow (RAL 1023) or black (RAL 9005)
- Colour: red (RAL 3000)

# ■ Technical data

# Peak operating voltage

"LD" = Long Distance

Yellow: 300 V (not for power applications)

Black: 300 V (not for power applications) Red: 300 V

## Conductor resistance

1.5 mm<sup>2</sup>: max. 13.7 Ohm/km 2.5 mm<sup>2</sup>: max. 8.21 Ohm/km

## Minimum bending radius Fixed installation: 12 mm

Flexible use 24 mm Test voltage

Temperature range

#### 4/4 Core/core: 2000 V

Dependent on outer sheath material: PVC: -30°C to +90°C

Other materials: -40°C to +85°C During installation: PVC -20 °C to +90 °C

Other materials: -30 °C to +85 °C

• The new BUS ASI LD 2 x 2.5 (Long Distance) allows even modules located further away to be connected.

AS-I power supplies can be reduced. The BUS ASI LD is downwards-compatible with version 1.5.

• The rubber versions are halogen-free

#### Application range

- Communication at sensor/actuator level
- UNITRONIC® Fieldbus sensor-/actuator wiring
- For fixed installation as well as occasional flexing at free, non-continuously recurring movement without tensile load
- The TPE version has an oil-resistant outer sheath. It is suitable for wet areas, in particular in conjunction with water-soluble cooling lubricants.

# Product features

- Data and power are transmitted via an unscreened, geometrically coded two-core flat cable (protection against polarity reversal).
- The conductor is contacted by "piercing technology" within the ASI modules.
- The sensors are connected to the ASI modules (coupling modules) using round cables (connection cables).

Article number		Outer sheath material	Outer sheath colour	Application	Number of cores and mm² per conductor	Copper index (kg/km)	Weight (kg/km)
For fixed and flexible applications (19-wire stranded conductor)							
2170228	UNITRONIC® BUS ASI (G)	EPDM (rubber)	yellow	Data and power transmission	2 x 1,5	29.0	85
2170229	UNITRONIC® BUS ASI (G)	EPDM (rubber)	black	Transmission of 30 V DC auxiliary power	2 x 1,5	29.0	85
2170371	UNITRONIC® BUS ASI LD (G)	EPDM (rubber)	yellow	Data and power transmission	2 x 2,5	48.0	85
2170372	UNITRONIC® BUS ASI LD (G)	EPDM (rubber)	black	Transmission of 30 V DC auxiliary power	2 x 2,5	48.0	85
2170230	UNITRONIC® BUS ASI (TPE)	TPE	yellow	Data and power transmission	2 x 1,5	29.0	64
2170231	UNITRONIC® BUS ASI (TPE)	TPE	black	Transmission of 30 V DC auxiliary power	2 x 1,5	29.0	64
2170232	UNITRONIC® BUS ASI (TPE)	TPE	red	Transmission of 230 V AC auxiliary power	2 x 1,5	29.0	64
2170842	UNITRONIC® BUS ASI (PVC) A	PVC UL/CSA (CMG)	yellow	Data and power transmission	2 x 1,5	29.0	70
2170843	UNITRONIC® BUS ASI (PVC) A	PVC UL/CSA (CMG)	black	Transmission of 30 V DC auxiliary power	2 x 1,5	29.0	70
2170844	UNITRONIC® BUS ASI (PVC) A	PVC UL/CSA (CMG)	red	Transmission of 230 V AC auxiliary power	2 x 1,5	29.0	70

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

Lapp Kabel is a member of the AS-International Association

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

# **■** Accessories

- SKINTOP® DIX-M AUTOMATION refer to page 681
- UNIVERSAL STRIP stripping and cutting tool refer to page 910
- AS-I clip clamp / AS-I end sealing refer to page 968
- AS-I STRIP special stripping tool refer to page 912
- AS-I STRIP special
- SKINTOP® DIX ASI