# Data communication systems

Bus system AS-Interface • Fixed Installation

# **UNITRONIC® BUS ASI**

AS-INTERFACE cables for networking systems in the field

LAPP KABEL STUTTGART UNITRONIC® BUS ASI

LAPP KABEL STUTIGART UNITRONIC<sup>®</sup> BUS ASI

LAPP KABEL STUTTGART UNITRONIC® BUS ASI

### Benefits

- 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
- 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 watersoluble 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).

## Norm references / Approvals

- ASI is standardised Europe-wide in EN 50295 and internationally in IEC 62026-2.
- PVC A version with UL/CSA (CMX) certification
- UL/CSA version: CMG c(UL)us or (UL)CL2 or AWM 300V FT4 certified

#### Product Make-up

- · Conductor: fine-wire tinned-copper strands
- · Core insulation: blue and brown
- Outer sheath:
- rubber (G), halogenfree thermoplastic elastomers (TPE) **PVC**
- Outer sheath: yellow (RAL 1023), black (RAL 9005), red (RAL 3000)



"LD" = Long Distance

#### **Technical data**

**Classification ETIM 5/6** ET I M ETIM 5.0/6.0 Class-ID: EC000830 ETIM 5.0/6.0 Class-Description: Data cable 4 ŀO

Article number	Article designation	Outer sheath colour	Application	Number of cores and mm <sup>2</sup> per conductor	Copper index (kg/km)	Weight (kg/km)	
Gummi/EPDM							
2170228	UNITRONIC <sup>®</sup> BUS ASI (G)	yellow	Data and power transmission	2 x 1,5	29	85	
2170229	UNITRONIC <sup>®</sup> BUS ASI (G)	black	Transmission of 30 V DC auxiliary power	2 x 1,5	29	85	
2170371	UNITRONIC <sup>®</sup> BUS ASI LD (G)	yellow	Data and power transmission	2 x 2,5	48	85	
2170372	UNITRONIC <sup>®</sup> BUS ASI LD (G)	black	Transmission of 30 V DC auxiliary power	2 x 2,5	48	85	
TPE							
2170230	UNITRONIC <sup>®</sup> BUS ASI (TPE)	yellow	Data and power transmission	2 x 1,5	29	64	
2170231	UNITRONIC <sup>®</sup> BUS ASI (TPE)	black	Transmission of 30 V DC auxiliary power	2 x 1,5	29	64	
2170232	UNITRONIC® BUS ASI (TPE)	red	Transmission of 230 V AC auxiliary power	2 x 1,5	29	64	
PVC							
2170842	UNITRONIC <sup>®</sup> BUS ASI (PVC) A	yellow	Data and power transmission	2 x 1,5	29	70	
2170843	UNITRONIC <sup>®</sup> BUS ASI (PVC) A	black	Transmission of 30 V DC auxiliary power	2 x 1,5	29	70	
2170844	UNITRONIC <sup>®</sup> BUS ASI (PVC) A	red	Transmission of 230 V AC auxiliary power	2 x 1,5	29	70	

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. 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 and graphics are not to scale and do not represent detailed images of the respective products.

# Accessories

SKINTOP<sup>®</sup> DIX-M AUTOMATION refer to page 719

· AS-I clip clamp / AS-I end sealing

• UNIVERSAL STRIP stripping tool refer to page 990

- AS-I STRIP special stripping tool refer to page 987
- AS-I STRIP special



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]	Peak operating voltage Yellow: 300 V (not for power applications) Black: 300 V (not for power applications) Red: 300 V
]	<b>Conductor resistance</b> 1.5 mm <sup>2</sup> : max. 13.7 Ω/km 2.5 mm <sup>2</sup> : max. 8.21 Ω/km
1	<b>Minimum bending radius</b> Fixed installation: 12 mm Flexible use 24 mm
]	Test voltage Core/core: 2000 V
]	Temperature range 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

SKINTOP<sup>®</sup> DIX ASI

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**ETHERLINE®** 



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**FLEXIMARK®**