

## UNITRONIC® BUS SAFETY

SafetyBUS cables for transmission of safety-oriented data

For systems e.g. SafetyBUS, based on CAN bus. Colour-coded in acc. with DIN 47100. Halogen free outer sheath, flame retardant. Temp. range from -40°C bis +80°C



Supplementary automation components from Lapp



Mechanical and plant engineering



Halogen-free



Power chain

### Benefits

For serial transmission of safety-oriented data

### Application range

UNITRONIC® BUS SAEFTY - fixed Installation

UNITRONIC® BUS SAEFTY FD P - highly flexible applications

For systems such as SafetyBUS p®, based on the well-known CAN bus system

### Product features

The stated bit rates result in the following cable lengths (maximum) for a bus segment:

500 kbit/s = max. 100 m

250 kbit/s = max. 250 m

125 kbit/s = max. 500 m

50 kbit/s = max. 1,000 m

### Norm references / Approvals

Flame retardant acc. to IEC 60332-1-2

### Product Make-up

Bare stranded copper wires

Last Update (13.12.2022)

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Product Management [www.lappkabel.de](http://www.lappkabel.de)

You can find the current technical data in the corresponding data sheet.

PN 0456 / 02\_03.16

## UNITRONIC® BUS SAFETY

Core insulation: foam skin  
Tin-plated copper wire braiding  
Outer sheath: halogen-free, flame-retardant compound  
Outer sheath: yellow

### Technical Data

Classification ETIM 5:	ETIM 5.0 Class-ID: EC000830 ETIM 5.0 Class-Description: Data cable
Classification ETIM 6:	ETIM 6.0 Class-ID: EC000830 ETIM 6.0 Class-Description: Data cable
Certifications:	Version UNITRONIC® BUS SAFETY FC: AWM Style 2464 (80 °C 300 V)
Mutual capacitance:	(800 Hz): max. 45 nF/km
Peak operating voltage:	(not for power applications) 250 V
Conductor resistance:	(loop): max. 52 ohm/km
Minimum bending radius:	Fixed installation: 5 x outer diameter
Test voltage:	Core/core: 3000 V Core/core: 1500 V (FD- version)
Characteristic impedance:	120 ohm
Temperature range:	UNITRONIC BUS SAFETY: Fixed installation: -30 °C to +80 °C UNITRONIC BUS SAFETY FD P: Fixed installation -40 °C to +80 °C Moved: -30 to +80 °C

### Note

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](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

SafetyBUS p® is a registered trademark of Pilz GmbH & Co.

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

Prices are net prices without VAT and surcharges. Sale to business customers only.

**UNITRONIC® BUS SAFETY**

Article number	Article designation	Number of cores and mm <sup>2</sup> per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
Fixed Installation					
2170295	UNITRONIC® BUS SAFETY	3 x 0.75	7.6	49	68
For highly flexible applications					
2170885	UNITRONIC® BUS SAFETY FD P	3 x 0.75	7.8	49	68

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