For serial transmission of safety-oriented data



RoHS

Automation

Industrial machinery and plant engineering

Power chain

Application range

For fixed installation and highly flexible applications
For systems such as SafetyBUS p®, based on the well-known CAN bus system

Design

Stranded conductor, 3 cores twisted, colour-coded in accordance with DIN 47100 (white, brown, green), copper braiding, halogen-free outer sheath
UNITRONIC® BUS SAFETY FD P isas per UNITRONIC® BUS SAFETY, but also suitable for highly flexible applications
Flame-retardant according IEC 60332-1-2

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

Remark

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
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.
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Technical Data

Approvals:	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: 10 x cable diameter
Test voltage:	Core/core: 3000 V Core/core: 1500 V (FD- version)
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
Characteristic impedance:	120 ohm

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Part number	Article designation	Number of cores and mm² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
for fixed installation					
2170295	UNITRONIC® BUS SAFETY	3 x 0,75	7.6	49.0	68
For highly flexible applications (e.g. power chains)					
2170885	UNITRONIC® BUS SAFETY FD P	3 x 0,75	7.8	49.0	68

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