
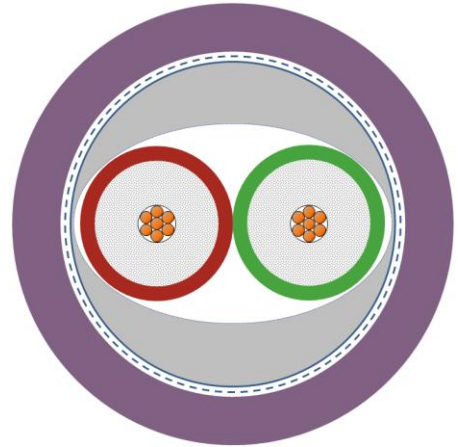


2170826	<b>DATA SHEET</b>	
Valid from: 01.05.2018	<b>UNITRONIC® BUS PB 7-W FC</b>	

## Description

Data cable for the field-bus system PROFIBUS with UL and CSA approval. The cable is intended for limited flexible use and permanent installation in dry and damp interiors.



## Approval

c(UL)us type CMG acc. to UL 444  
CSA C22.2 No. 214-02


## General characteristics

Conductor	stranded bare copper wire 24/7 AWG conductor Ø nom. 0.64 mm or approx. 0.22 mm <sup>2</sup>
Insulation	foam-skin PE, core Ø nom. 2.55 mm
Core identification code	red and green
Stranding	2 cores twisted
Wrapping	layer of plastic foil
Inner sheath	PVC compound outer Ø approx. 5.4 mm
Screening	layer plastic-laminated aluminium foil (side with metal outwards), braid of tinned copper wires, coverage approx.. 65 % (nominal value)
Outer sheath	PVC lead-free, TM52 acc. to DIN EN 50290-2-22 colour: violet similar RAL4001 outer Ø approx. 8.0 mm

## Mechanical characteristics

Minimum bending radius	during installation: 6 x cable Ø fixed: 8,5 x cable Ø
Permissible temperature range	during installation: -5° C up to +50° C fixed: -40° C up to +80° C
Flame propagation	flame retardant acc. to IEC 60332-3-24, UL1685 (CSA FT4)
Sunlight resistance	acc. to UL 1581 Sec. 1200

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### Electrical characteristics

Resistance (loop)	max. 160 Ω/km
Insulation resistance	min. 16 MΩxkm
Mutual capacitance	ca. 28 nF/km
Characteristic impedance	(at 800 Hz)
	9.6 kHz: 270 Ω ± 27
	38.4 kHz: 185 Ω ± 18.5
	3 up to 20 MHz: 150 Ω ± 15
Line attenuation	9.6 kHz: max. 0.3 dB/100 m
	38.4 kHz: nom. 0.4 dB/100 m
	4 MHz: max. 2.5 dB/100 m
	16 MHz: nom. 4.9 dB/100 m
Velocity of propagation	nom. 0,81c
Operating peak voltage	225 V (not for power purposes)
UL-rating	600 V
Test voltage (DC, 3 seconds)	core/core: 3600 V

### Standard

EU-Directive	Dangerous and forbidden substances acc. to RoHS directive (2011/65/EU) are not allowed to the manufacturing.
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