
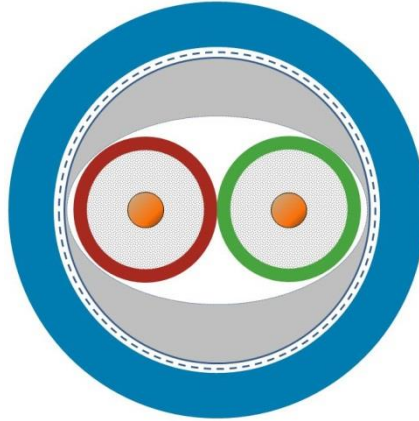


2170334	DATA SHEET	
valid from: 01.01.2019	UNITRONIC® BUS PA FC 1 x 2 x 1.0	

Application

Data cable for PROFIBUS PA field net according to IEC 61158-2. The cable is intended for fixed laying in dry and damp interiors and with the black outer sheath for laying outdoors.

Design




Certification	c(UL)us type CMG acc. to UL 444 CSA C22.2 No. 214-02 UL CL3 acc. to UL 13 UL AWM style 20201 (600 V, 60 °C) acc. to UL 758
Conductor	bare copper wire, nom. 1.05 mm Ø approx. 0.8 mm ²
Insulation	foam-skin PE, core Ø nom. 2.55 mm
Core identification code	cores red and green
Stranding	2 cores twisted to pair 1 layer plastic foil
Inner sheath	PVC
Screen	1 layer plastic-laminated aluminium foil (side with metal outwards), braid of tinned copper wires, coverage 85 % (nominal value)
Outer sheath	PVC lead-free Colour in accordance with part number outer Ø ca. 8.0 mm

Electrical properties at 20°C

Loop resistance	max. 44 Ω/km
Insulation resistance	min. 10 MΩxkm
Mutual capacitance	ca. 52 nF/km (at 800 Hz)
Inductance	ca. 0.65 mH/km (at 31.25 kHz)
Characteristic impedance	31,25 kHz: 100 Ω ± 20% ≥ 1 MHz: nom. 80 Ω
Attenuation	39 kHz: max. 0,3 dB/100 m 100 kHz: nom. 0,35 dB/100 m 1 MHz: nom. 1,2 dB/100 m
Velocity of propagation	nom. 81%
Transfer impedance	max. 10 mΩ/m
Peak operating voltage	100 V (not for power purposes)
Test voltage	3600 V

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Mechanical and thermal properties

Minimum bending radius	5 x cable Ø
Temperature range	during installation: -5° C up to +50° C static: -40° C up to +80° C
UV resistance	UV-resistant outer sheath acc. to EN 50283-4-17/ VDE 0819-289-4-17
Oil resistance	acc. to UL 1581 Sec. 480 (60 °C)
General requirements	This cable is conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).

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