#### 2170323

# **DATA SHEET**

valid from: 01.01.2019

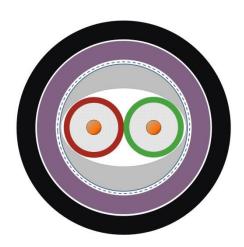
UNITRONIC® BUS PB BURIAL FC 1x2x0,64



#### **Application**

UNITRONIC® BUS PB BURIAL FC 1x2x0,64 is a field bus cable with 150  $\Omega$  nominal impedance and a length-related transmission rate by 93,75 kBit/s b to 12 MBit/s. The robust product is suitable for fixed installation in dry and wet rooms. Other characteristics are UV resistance and excellent shielding properties.

## Design



Conductor bare copper wire

AWG22/1, Ø approx. 0,643 mm

Insulation foamed skin polyethylene (02YS),

Ø 2,55 mm (nominal value)

Core identification code red/green

Stranding 2 cores stranded to pair

plastic tape (overlapping)

Inner sheath PVC, nature, outer Ø approx. 5,40mm

Screen aluminium laminated shield foil under braid, tinned coper wires, coverage 55 %  $\pm$ 5 %

Taping (optional) thin non-woven tape, longitudinally applied

Outer sheath PE, black (similar RAL 9005),

outer Ø: 10,4 mm ± 0,4 mm

#### Electrical properties at 20°C

Insulation resistance min. 5 G $\Omega$ xkm

Inductance nom. 1000  $\mu$ H/km (800 Hz) Characteristic impedance 270  $\Omega$  (±10%) (9,6 kHz)

185  $\Omega$  (±10%) (38,4 kHz) 150  $\Omega$  (±10%) (3-20) MHz

Attenuation max. 0,25 dB/100m (9,6 kHz)

max. 0,4 dB/100m (38,4 kHz) max. 0,8 dB/100m (200 kHz) max. 2,2 dB/100m (4 MHz) max. 4,2 dB/100m (16 MHz)

Near-end cross-talk nom. 0,75

Signal transit time nom. 450 ns/100m (3-20) MHz

Peak operating voltage 100 V

Test voltage core/core: 3600 V DC (3 seconds)

core/screen: 3600 V DC (3 seconds)

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# Mechanical and thermal properties

Minimum bending radius at installation: 3,5 x cable  $\emptyset$ 

fixed installation: 7,5 x cable  $\emptyset$ 

Temperature range fixed installation: -40 °C up to +60 °C

UV resistance acc. to EN 50289-4-17 (VDE 0819-289-4-17)

are cables with black sheath suitable for permanent outdoor use

General requirements This cable is conform to the EU-Directive 2011/65/EU

(RoHS, Restriction of the use of certain hazardous substances).