
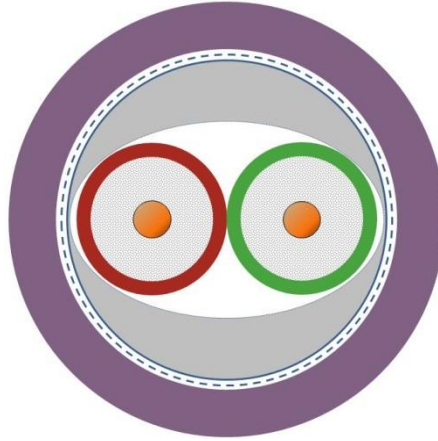


2170330	<b>DATA SHEET</b>	
valid from: 01.01.2019	<b>UNITRONIC® BUS PB P FC</b> <b>1x2x0,64</b>	

## Application

UNITRONIC® BUS PB P FC 1x2x0,64 is a field bus cable with 150 Ω nominal impedance and a length-related transmission rate by 93,75 kBit/s to 12 MBit/s. The product has excellent shielding properties and is suitable for fixed installation in dry and wet rooms.

## Design




Certification	UL/CSA Typ CMX acc. to UL 444 and CSA C22.2 no. 214
Conductor	bare copper wire AWG22/1, $\phi$ approx. 0,643 mm
Insulation	foamed skin polyethylene (02YS), $\phi$ 2,55 mm (nominal value)
Core identification code	red/green
Stranding	2 cores stranded to pair plastic tape (overlapping)
Inner sheath	PVC, nature, outer $\phi$ approx. 5,40mm
Screen	aluminium laminated shield foil under braid, tinned copper wires, coverage 55 % $\pm$ 5 %
Taping	(optional) thin non-woven tape, longitudinally applied
Outer sheath	PUR (TMPU), violet (similar RAL 4001), outer $\phi$ : 7,8 mm $\pm$ 0,2 mm

## Electrical properties at 20°C

Insulation resistance	min. 5 G $\Omega$ km
Characteristic impedance	270 $\Omega$ ( $\pm$ 10%) (9,6 kHz) 185 $\Omega$ ( $\pm$ 10%) (38,4 kHz) 150 $\Omega$ ( $\pm$ 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)
Velocity of propagation	nom. 0,75
Signal transit time	nom. 450 ns/100m (3-20) MHz
Transfer impedance	max. 10 m $\Omega$ /m (up to 20,0 MHz)

Creator: TOST / PDC	Document: DB2170330EN	Page 1 of 2
Released: ALTE / PDC	Version: 03	

2170330	<b>DATA SHEET</b>	
valid from: 01.01.2019	<b>UNITRONIC® BUS PB P FC</b> <b>1x2x0,64</b>	

### Mechanical and thermal properties

Minimum bending radius	fixed installation: 8 x outside diameter cable
Temperature range	fixed installation: -40 °C up to +80 °C
General requirements	This cable is conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).

Creator: TOST / PDC Released: ALTE / PDC	Document: DB2170330EN Version: 03	Page 2 of 2
---	--------------------------------------	-------------