



UNITRONIC® BUS PB H FC 1 x 2 x 0,64

DB2170326

valid from: 15.08.2013

Application

Halogen free fieldbus cable for fixed installation with "fast connect" design.

Approval: UL/CSA type CM acc. to UL 444 and CSA C22.2 No. 214

Design

Conductor	bare copper wire, ca. 0,65 mm ϕ
Insulation	foam-skin PE, core ϕ ca. 2.55 mm
Core identification code	a-core red, b-core green
Stranding	2 cores stranded to pair
Wrapping	plastic tape, overlapping
Inner sheath	halogen free, flame retardant thermoplastic compound
Screening	aluminized foil, overlapping, longitudinally applied <u>on top:</u> braid of tinned copper wires, coverage ca. 55 %
Outer sheath	halogen free, flame retardant thermoplastic compound, violet, wall thickness ca. 0.9 mm, outer ϕ : ca. 8.0 mm

Electrical properties at 20° C

Resistance (loop)	max. 110 Ω /km
Insulation resistance	min. 16 G Ω xkm
Mutual capacitance	nom. 28.5 nF/km (at 1 kHz)
Characteristic impedance	9.6 kHz: 270 Ω \pm 27 Ω 38.4 kHz: 185 Ω \pm 18 Ω 3 up to 20 Mhz: 150 Ω \pm 15 Ω
Line attenuation	9.6 kHz: max. 0.25 dB/100 m 38.4 kHz: max. 0.4 dB/100 m 4 MHz: max. 2.2 dB/100 m 16 MHz: max. 4.2 dB/100 m
Velocity of propagation	ca. 81%
Operating voltage (rms-value)	max. 100 V
Test voltage DC, 3 sec.	3600 V
UI-rating	300 V



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Mechanical and thermal properties

Minimum bending radius	single: 5 x outer diameter repeated: 10 x outer diameter
Permissible temperature range	-25 °C up to +70 °C
Sunlight resistance	acc. to UL 1581 Sec. 1200
Flame propagation	flame retardant acc. to IEC 60332-3-24, UL 1685 (vertical tray)
Halogen free	halogen free acc. to IEC 60754-2
Smoke-density	acc. to IEC 61034
General requirements	Dangerous and forbidden substances acc. to RoHS directive 2002/95/EG regarding Restriction of the use of certain hazardous substances (RoHS) are not allowed to the manufacturing.