



UNITRONIC® BUS SAFETY 3x0,75

DB2170295
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Application

Fieldbus cable with a nominal impedance of 120 Ω. The cable is designed for limited flexible applications and fixed installation for inner and outdoor areas.

Design

Conductor	stranded bare copper, 24 x 0.2 mm, ca. 0.75 mm ²
Insulation	foam-skin PE or PP, core ø ca. 2.7 mm
Core identification code	white, brown, green
Stranding	3 cores stranded together
Wrapping	plastic tape
Screening	braid of tinned copper wires coverage ca. 85 % ±5 %
Outer sheath	halogen free, flame retardant compound, yellow (similar to RAL 1003), wall thickness ca. 0.75 mm, outer ø: ca. 7.6 mm

Electrical properties at 20° C

Resistance	max. 26 Ω/km
Insulation resistance	min. 5 GΩxkm
Mutual capacitance	800 Hz: 42 nF/km
Characteristic impedance (core/core)	>1 MHz: 120 Ω ± 15 Ω
Line attenuation	100 kHz: nom. 0.3 dB/100 m 250 kHz: nom. 0.5 dB/100 m 500 kHz: nom. 0.7 dB/100 m 1 MHz: nom. 1.1 dB/100 m 10 MHz: nom. 4.2 dB/100 m
Velocity of propagation	ca. 75%
Signal run time	16 MHz: 4.5 ns/m ±0.2 ns/m
Operating peak voltage	250 V (not for power purposes)
Test voltage U _{eff.}	core/core: 3000 V core/screen: 1500 V

Mechanical and thermal properties

Minimum bending radius	7.5 x outer ø
Permissible temperature range (fixed)	-30 °C up to +80 °C
Flame propagation	flame retardant acc. to IEC 60332-1-2
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.