



UNITRONIC® BUS PB ARM 1x2x0.65 mm

DB2170247

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Application

UNITRONIC® BUS PB ARM is a cable for field bus systems with 150 Ω impedance for installation in harsh industrial environments. This cable is UV resistant.

Design

Conductor	Solid bare copper conductor Ø 0.65 mm (0.03 in)
Insulation	foam-Skin PE, core Ø ca. 2.55 mm (0.10 in) acc. To EN 50290-2-23, table 2/A
Core identification code	a-core red, b-core green
Stranding	2 cores twisted to pair with fillers in gaps plastic tape, overlapped
Screen	tinned copper drain wire, Ø 0.65 mm aluminated foil, overlapped plastic tape, overlapped Ø 6.2 mm (0.244 in) outer conductor: copper-tape (thickness 0.25 mm) longitudinal welded, spiral corrugated
Outer sheath	special PVC-based compound acc. to EN 50290-2-22, compound type TM 52 colour: violet wall thickness approx. 1.0 mm, Ø 11.1 mm ± 0.3 mm (0.437 in ± 0.012 in)

Electrical properties at 20°C

Loop resistance	max. 110 Ω/km
Insulation resistance	min. 16000 MΩxkm
Mutual capacitance	28 nF/km (1 kHz) unbalance to ground max. 1500 pF/km
Inductance	approx. 750 µH/km (31.25 kHz)
Characteristic impedance	150±15 Ω (3-20 MHz) 185±18.5 Ω (31.25-38.4 MHz) 270±27 Ω (9.6 MHz)
Attenuation	max. 42 dB/km (16 MHz) max. 22 dB/km (4 MHz) max. 4 dB/km (38.4 kHz) max. 2.5 dB/km (9.6 kHz)
Peak operating voltage	100 V (not for power applications)
Test voltage	3600 V DC 3 sec

Mechanical and thermal properties

Minimum bending radius	repeated: 7.5 x cable Ø single: 3.75 x cable Ø
Temperature range	- 40 °C up to +70 °C
Flammability	flame retardant acc. to IEC 60332-1-2
General requirements	This cable is conform to the EC-Directive 2011/65/EC (RoHS, Restriction of the use of certain hazardous substances).