Data communication systems

Cables for bus system PROFIBUS-PA Characteristic impedance: 100 ohm

UNITRONIC® BUS PA



Benefits

 FC (Fast Connect) version is oil and UVresistant

Application range

- Process-automation application for connecting sensors and actuators - including areas with risks of explosion.
- Fixed installation

Product features

- Bit rate = 31.25 kbit/s. Transmission technology RS485 also possible but bit rate is limited to 1.5 Mbit/s
- Maximum cable length is dependent on several factors (e.g. supply voltage, current demand).
- Technical Data: refer to the overview on "UNITRONIC® Bus Cables"
- Flame-retardant according IEC 60332-1-2

Norm references / Approvals

- PROFIBUS[®] PA is standardised in EN 50170 as PROFIBUS® DP and PROFI-**BUS® FMS**
- Transmission technology for PROFIBUS-PA in accordance with international standard IEC 61158-2
- FC variant with UL/CSA approval (CMG / PLTC)

Product make-up

- UNITRONIC[®] BUS PA (BU/BK) Stranded conductor, core colours: red and green, copper braiding, PVC sheath, colour: blue (intrinsically safe area), colour: black (non-instrinsically safe area)
- UNITRONIC[®] BUS PA FC (BU/BK) Solid core, UL/CSA CMG approval and "Fast Connect" cable design, which enables rapid connection of the IDC connector (Insulation Displacement Connection).

Technical data					
4	Peak operating voltage (not for power applications) 250 V				
0	Conductor resistance (loop): max. 44 ohm/km				
\square	Minimum bending radius Fixed installation: 10 x outer diameter				
4 /2	Test voltage Core/core: 1500 V rms				
•	Temperature range Fixed installation: -30°C to +80°C During installation: -5°C to +50°C				
Z∞	Characteristic impedance 100 ± 20 Ohm				

Article number	Article designation	Number of pairs and cable diameter per conductor in mm	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)		
For fixed installation - conventional cable assembly							
2170234	UNITRONIC [®] BUS PA (BU)	1 x 2 x 1,3	8.0	45.0	84		
2170235	UNITRONIC® BUS PA (BK)	1 x 2 x 1,3	8.0	45.0	84		
For fixed installation - "Fast Connect" cable assembly - UL/CSA CMG approval							
2170334	UNITRONIC [®] BUS PA FC (BU)	1 x 2 x 1.00	8.0	45.5	103		
2170335	UNITRONIC [®] BUS PA FC (BK)	1 x 2 x 1.00	8.0	45.5	103		

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request. Copper price basis: EUR 150/100kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: www.lapkabel.de/en/cable-standardlengths Packaging size: coil < 30 kg or < 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils). SIMATIC® is a registered trademark of Siemens AG

Armoured

Photographs are not to scale and do not represent detailed images of the respective products.

Accessories

• Multipurpose shears A and B refer to page 907

STAR STRIP stripping tool refer to page 910

• FC STRIP stripping tool refer to page 912

EPIC

ACCESSORIES