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| 2170352 | DATA SHEET |  |
| valid from: 01.02.2019 | UNITRONIC® BUS FF 2 1X2X1.1 | |

Application

FOUNDATION Fieldbus cable for use in Process Automation - UL-verified
Used in intrinsically safe areas, especially in the field of Process Automatio. UL/CSA-approval.
This cable has an armouring which provides a safe solution taking mechanical stress etc. into account.
Temperature range from -40 °C up to +105°C

Design

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|--------------------------|---|
| Certification | C(UL)US CMG or (UL) CL3 FT4 SUN RES |
| Conductor | bare copper, stranded wire (37 x 0.17 mm), approx. 1.15 mm Ø |
| Insulation | irradiated Polyethylene XLPE, core Ø approx. 2.85 mm |
| Core identification code | blue and brown |
| Stranding | 2 cores twisted to pairs |
| Screen | 1 layer plastic-laminated aluminium foil (overlapping) on top: stranded, tinned copper drain wire, approx. 0.5 mm ² on top: braid of tinned copper wires, coverage approx. 85% |
| Taping | plastic tape |
| Outer sheath | PVC, yellow, outer Ø: approx. 7.9 mm |

Electrical properties at 20°C

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|-----------------------------|---|
| Conductor resistance | max. 24 Ω/km |
| Specific volume resistivity | min. 20 MΩ*km |
| Inductance | approx. 0.75 µH/m (31.25 kHz) |
| Capacitive coupling | conductor/conductor nom. 65 nF/km (1 kHz) |
| | conductor/screen nom. 125 nF/km (1 kHz) |
| Characteristic impedance | 100 Ω (±20) (31.25 kHz) |
| Attenuation | nom. < 3,4 dB/km (39 kHz) |
| Peak operating voltage | 300 V (not for power applications) |
| Test voltage | conductor/conductor 1500 V conductor/screen 1500 V |

Mechanical and thermal properties

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|------------------------|---|
| Minimum bending radius | fixed use 5 x cable Ø flexible use 10 x cable Ø |
| Temperature range | - 40° C up to +105° C |
| Flammability | flame retardant acc. to UL1685 / CSA FT4 |
| UV resistance | Sunlight resistance acc. to UL1581 Sec. 1200 |
| Oil resistance | acc. To UL1581 Sec.480 (60°) |
| General requirements | This cable is conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances). |

AbN
automation

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| Released: ALTE / PDC | Version: 3 | |