



UNITRONIC® BUS ASI FD (TPE) A

DB2170830

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Application

UNITRONIC® BUS ASI FD (TPE) A is a field-bus cable with two cores for AS-INTERFACE (Actuator-Sensor Interface). The cable is oil and cutting oil resistant and has a good resistance against chemicals in general.

The cable is intended for flexible application and permanent installation in interiors. The cable can be used in power chains.

Approvals: UL AWM Style 2103, CSA AWM II A/B 105°C 300V FT1

Design

Conductor	tinned copper, ca. 1.5 mm \varnothing , super-fine-wire stranded
Insulation	TPE, core \varnothing ca. 2.5 mm
Core identification	colors of the cores: brown (+), blue (-)
Core assembly	2 cores parallel deviation brown core assembled in line with leading edge
Outer sheath	TPE, dimensions and tolerances acc. to ASI specification sheath colors: art.no. 2170830: yellow (similar to RAL 1012) art.no. 2170831: black (similar to RAL 9005)

Electrical properties at 20° C

Resistance	max. 13.7 Ω /km
Mutual capacitance	1 kHz: max. 80 nF/km
Inductance	0.5 mH up to 0.75 mH/km
Characteristic impedance	167 kHz: 70 Ω up to 140 Ω
Volume resistivity	min. 1 M Ω xkm
Operating voltage	ca. 30 V
Operating peak voltage	300 V (not for power purposes)
Test voltage core/core (rms, 50 Hz, 1 min.)	2000 V

Mechanical and thermal properties

Minimum bending radius (on broadside)	power chain horizontal: 75 mm power chain vertical: 50 mm multiple bendings: \geq 24 mm single: \geq 12 mm
Permissible temperature range	during installation: -30 °C up to +105 °C before and after installation: -40 °C up to +105 °C
Flame resistance	flame retardant acc. to IEC 60332-1-2 flame retardant acc. to UL 1581 Sec. 1061 (Cable Flame)
Oil resistance	oil resistant acc. to UL 758, Sec. 15 (60 °C)
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.