2170830

DATA SHEET

valid from: 01.01.2019

UNITRONIC® BUS ASI FD TPE A

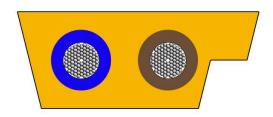


Application

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.

Design



Certification UL AWM Style 2103, CSA AWM II A/B 105 °C 300V FT1 Conductor tinned copper, ca. 1.5 mm Ø, super-fine-wire stranded

Insulation TPE, core diameter ca. 2.5 mm

Core identification code colors of the cores: brown (+), blue (-)

Stranding core identification:

two 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

Conductor resistance max. $13.7~\Omega/km$ Insulation resistance min. $1~M\Omega xkm$ Mutual capacitance 1~kHz: max.~80~nF/kmInductance 0.5~mH up to 0.75~mH/kmCharacteristic impedance $167~kHz: 70~\Omega$ up to $140~\Omega$ Peak operating voltage 300~V (not for power purposes)

Rated voltage ca. 30 V

Test voltage rms, 50 Hz, 1 min.: core /core 2000 V

Mechanical and thermal properties

Minimum bending radius on broadside:

power chain horizontal: 75 mm power chain vertical: 50 mm multiple bendings: ≥ 24 mm

single: ≥ 12 mm

Temperature range during installation: -30 °C up to +105 °C

before and after installation: -40 °C up to +105 °C

Flammability 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 This cable is conform to the EU-Directive 2011/65/EU

(RoHS, Restriction of the use of certain hazardous substances).

Creator: TOST / PDC Document: DB2170830EN
Released: ALTE / PDC Version: 05