2170357

DATA SHEET

valid from: 01.01.2019

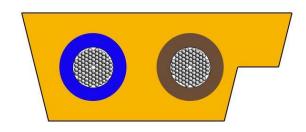
UNITRONIC® BUS ASI FD P FRNC



Application

UNITRONIC® BUS ASI FD P FRNC is a two-core and flat actuator/sensor bus cable for the AS-INTERFACE (actuator-sensor-interface) networking system for the lower field area. The cable is particularly suitable for applications with high mechanical stress and which require a high oil resistance. It is suitable for power chains, halogen free and flame retardant. It is acc. to the UL-AWM-Styles 10586 and 20549. Data transmission for AS-INTERFACE telegrams and power supply for AS-I slaves, master, repeater, extender and sensors is done via this unscreened, geometrically-coded two-core flat cable. The contacting of the conductors by the insulationdisplacement-system of the AS-I modules is possible without stripping the insulation.

Design



Certification AWM Style 10586 and 20549

Conductor tinned copper,

ca. 1,5 mm², super-fine-wire stranded, acc. To IEC 60228 (class 6)

Insulation halogen free compound,

core Ø ca. 2.5 mm

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

Stranding 2 cores parallel deviation, brown core assembled in line with leading edge

Outer sheath halogen free, flame retardant PUR compound

dimensions and tolerances acc. to ASI specification

sheath colors: art.no. 2170357: yellow (RAL 1012) art.no. 2170358: black (RAL 9005)

Electrical properties at 20°C

Conductor resistance max. 13,7 Ω /km Specific volume resistivity min. 1 M Ω xkm Mutual capacitance max. 80 nF/km

 $\begin{array}{ll} \mbox{Inductance} & 0.5 \mbox{ mH up to } 0.75 \mbox{ mH/km} \\ \mbox{Characteristic impedance} & 167 \mbox{ kHz: } 70 \ \Omega \mbox{ up to } 140 \ \Omega \\ \mbox{Peak operating voltage} & 300 \mbox{ V (not for power purposes)} \end{array}$

Rated voltage ca. 30 V
Test voltage 2000 V

Mechanical and thermal properties

Minimum bending radius fixed installation: 12 mm

moved without forcible control: 24 mm moved with forcible control: 60 mm

Temperature range fixed installation: $-40 \, ^{\circ}\text{C}$ up to $+80 \, ^{\circ}\text{C}$

moved without forcible control: -30 °C up to +80 °C moved with forcible control: -30 °C up to +70 °C

Flammability flame retardant acc. to IEC 60332-1-2 and FT2 acc. to UL

Halogen free halogen free acc. to IEC 60754-1
Oil resistance oil resistant acc. to EN 50363-10-2

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: DB2170357EN
Released: ALTE / PDC Version: 02
Page 1 of 1