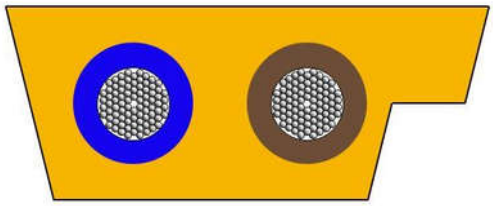
2170830	DATA SHEET	LAPP
valid from: 01.01.2019	UNITRONIC® BUS ASI FD TPE A	

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 ∅, 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 Ω/km
Insulation resistance	min. 1 MΩxkm
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
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).

We reserve all rights according to DIN ISO 16016.