

UNITRONIC® BUS ASI FD (TPE) A
DB 2170830
 valid from: 02.02.2010

APPLICATION

UNITRONIC® BUS ASI FD (TPE) A is a field-bus cable with two cores for AS-INTERFACE (Actuator-Sensor Interface). Networking system for the lower field area.

Data transmission for AS-Interface telegrams and power supply for AS-Interface slaves, master, repeater, extender and sensors is done via this unscreened, geometrically-coded two-core flat cable. Contacting the conductors without stripping the insulation by insulation-displacement-system of AS-I modules.

The oil-resistant outer sheath of this field-bus cable recommends its use in typical industrial environment, especially in wet areas of automotive industry, machining centres, especially in combination with water-based and water-mixable cooling lubricants.

The cable is intended for flexible application and permanent installation in interiors by low and high temperatures.

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 wires, 1.5 mm ² , finest wires in acc. to VDE 0295 class 6		
Insulation	TPE, oil resistant		
	Coding: brown and blue		
Lay	two cores flat parallel. The brown core is on the side of the „nose“		
	The cores must be powdered with talc and the cores must not stick together with the sheath		
Sheath	TPE, oil resistant, flame retardant		
	Sheath colour yellow, RAL 1012	Part no. 2170830	printing ink: black
	Sheath colour black, RAL 9005	Part no. 2170831	printing ink: white

TECHNICAL DATA

Conductor resistance acc. to VDE 0295	≤ 13.7 Ω/km
Specific insulation resistance	≥ 1 M Ω x km
Capacitance at 1 kHz	≤ 80 nF/km
Inductance	0.5 ... 0.75 mH/km
Characteristic impedance 167 kHz	70 ... 140 Ω
Operating Voltage	~ 30 V
Operating Peak Voltage	
(not for power purposes)	300 V
Test voltage	2 kV
Temperature range, static	- 40 to + 105°C
Temperature range, for flexible use	- 30 to + 105°C
Minimum bending radius, static	12 mm
Minimum bending radius, for flexible use	60 mm
Flame propagation	flame retardant in acc. to IEC 60 332-1-2 / UL 1581 Sec. 1100 (FT-2 flame test) and Sec. 1060 (FT-1)
Oil resistance and cutting oil resistance	acc. to UL 758 Sec. 15 (60°C)

GENERAL REQUIREMENTS

RoHS: This cable is conform to RoHS directive (2002/95/EG)