

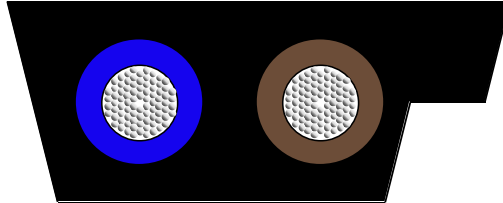
2170831	<b>DATA SHEET</b>	
valid from: 2025-12-17	<b>UNITRONIC® BUS ASI FD Y BK 2x1.5</b>	

## Application

Field of use: Communication at sensor/actuator level. Suitable for highly flexible applications. The black cable is used to carry auxiliary power supply to the system components.

Performance: UNITRONIC BUS ASI FD Y A is a field-bus cable with two cores for ASINTERFACE (Actuator-Sensor Interface). The cable is intended for flexible application and permanent installation in interiors. The cable can be used in power chains.

Characteristics: flame retardant, oil resistant and largely resistant to acids, alkalis and certain oils



## Design

Certification	UL AWM Style 2103, CSA AWM I/II A/B 105°C 300V FT1 acc. to. UL 758 & CSA C22.2 No. 210
Conductor	2.5 mm <sup>2</sup> extra fine-wire stranded tinned copper
Insulation	PVC core diameter ca. 2.5 mm
Core identification code	brown, blue
Stranding	2 cores parallel deviation, brown core assembled in line with leading edge
Outer sheath	PVC black, similar RAL 9005

## Electrical properties at 20 °C

Conductor resistance	max. 13.7 Ω/km
Insulation resistance	min. 1 MΩxkm
Mutual capacitance	max. 80 nF/km (at 167 kHz)
Inductance	0.85 mH/km ± 0.45 mH/km (at 167 kHz)
Characteristic impedance	105 Ω ± 35 Ω (at 167 kHz)
Signal propagation time	≤ 8.3 ns/m (at 167 kHz)
Maximum operating voltage	AS-i: 300 V UL/CSA: 300 V
Nominal voltage	≤ 30 V DC
Test voltage	core/core: 2000 V AC

## Mechanical and thermal properties

Minimum bending radius	fixed installation: 3x outer diameter occasional flexing: 6x outer diameter continuous flexing: 15x outer diameter
Temperature range	during installation: -30 °C up to +105 °C before and after installation: -40 °C up to +105 °C UL/CSA: 105 °C
Flammability	flame retardant acc. to. IEC 60332-1-2 resp. EN 60332-1-2 HFT acc. to UL 1581 § 1090 FT1 acc. to UL 1581 Sec. § 1060
Oil resistance	oil resistant acc. to UL 1581, Sec. 480 (60°C)
General requirements	This cable is conform to EU-Directive 2014/35/EU (Low Voltage Directive) and to EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).

**Environmental information** These cables meet the substance-specific requirements of the EU Directive 2011/65/EU (RoHS).

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