
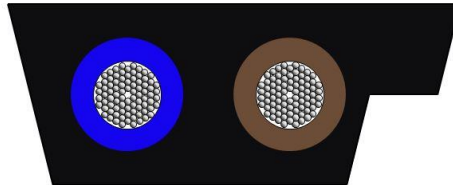


2170843	DATA SHEET	
valid from: 16.02.2021	UNITRONIC® BUS ASI (PVC) A BK 2x1,5	

Application

UNITRONIC® BUS ASI (PVC) A BK is a two-core and flat actuator/sensor bus cable acc. to IEC 62026-2 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 which require a high oil resistance. It is suitable for fixed installation and flexible applications, flame retardant and UL approved. 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 insulation displacement system of the AS-I modules is possible without stripping the insulation. The cable is designed for indoor applications.

Design




Certification	E236660 c(UL)us CMG 90 °C acc. to UL 444 and CSA C22.2 No. 214 E224262 (UL) CL 2 acc. to UL 13 E63634 c(RU)us AWM Style 2095 acc. to UL 758 and AWM I A/B FT2 acc. to CSA 22.2 No. 210
Conductor	fine-wire stranded, tinned copper 1.5 mm ²
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 outline and dimensions acc. to IEC 62026-2

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	≤ 8.3ns/m (at 167 kHz)	
Nominal voltage	48 V DC	
Rated voltage	AS-i:	300 V
	UL:	300 V acc. to UL 444 and UL 758
Test voltage	core/core:	1500 V

Creator: KIOS / PDC	Document: DB2170843EN	Page 1 of 2
Released: ALTE / PDC	Version: 05	

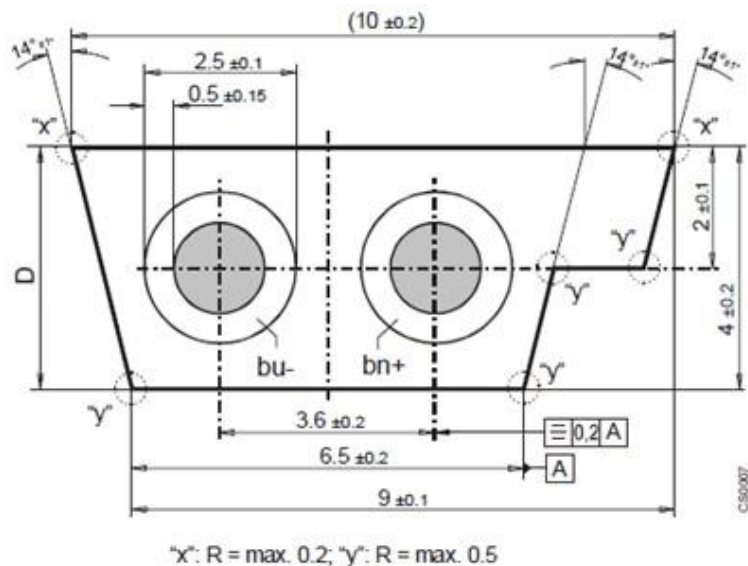
2170843	DATA SHEET	
valid from: 16.02.2021	UNITRONIC® BUS ASI (PVC) A BK 2x1,5	

Mechanical and thermal properties

Minimum bending radius	fixed installation:	3x outer diameter
	occasional flexing:	6x outer diameter
Temperature range	fixed installation:	-40 °C up to +85 °C
	occasional flexing:	-25 °C up to +85 °C
	UL:	90 °C acc. to UL 444 80 °C acc. to UL 758
Bending cycles and power chain operation parameters	bending radius:	75 mm
	travel distance:	5 m
	Acceleration:	3 m/s ²
	Velocity:	3 m/s
	Cycles:	8.000.000
Flammability	flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2 FT4 acc. to UL 1685 §12 - §19 (smoke measurements are not applicable) Horizontal Flame Test acc. to UL 758 §40	
Oil resistance	OIL RES I acc. to UL 13 §40.2	
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).	

Dimensions

Dimensions acc. to IEC 62026-2



Creator: KIOS / PDC	Document: DB2170843EN	Page 2 of 2
Released: ALTE / PDC	Version: 05	