

UNITRONIC® BUS AS-INTERFACE (TPE)**DB2170230**

valid from: 16.05.2012

Application

Field bus cable for AS-Interface (actuator-sensor interface) networking system for the lower field area. Data transmission for AS-Interface telegrams and power supply for AS-I slaves, master, repeater, extender and sensors is done via this un-screened, 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 oil-resistant outer sheath of this field bus cable recommends its use in typical industrial environment, especially in wet areas of automotive industry and machining centers in combination with water-based and water-mixable cooling lubricants. The cable is intended for flexible application and permanent installation in dry and damp interiors.

Design

Conductor	tinned copper, fine-wire stranded, nom. 1.5 mm ² acc. to IEC 60228/VDE 0295 (class 6)
Insulation	oil resistant TPE, core Ø nom. 2.5 mm
Core identification code	cores brown and blue
Core assembly	2 cores parallel deviation, the brown core is assembled inline with the leading edge
Outer sheath	oil resistant TPE, yellow similar to RAL1021 (article number 2170230), black similar to RAL 9005 (article number 2170231) or red similar to RAL 3000 (article number 2170232)

Electrical properties at 20° C

Resistance (loop)	max. 27.4 Ω/km
Insulation resistance	min. 10 GΩxcm
Mutual capacitance	max. 80 nF/km
Inductance	0.5 mH/km up to 0.75 mH/km
Characteristic impedance	70 Ω up to 140 Ω (at 167 kHz)
Operating voltage	ca. 30 V (DC) (230 V (AC) for the red version)
Operating peak voltage	300 V (not for power purposes)
Test voltage U _{eff.} core/core	2000 V

Mechanical and thermal properties

Minimum bending radius	moved: 16 mm in center line static: 12 mm in center line
Permissible temperature range	moved: -30° C up to +85° C static: -40° C up to +85° C
Halogen free	acc. to VDE 0472-815
General requirements	Dangerous and forbidden substances acc. to RoHS directive (2002/95/EG) are not allowed to the manufacturing.