


2170561	DATA SHEET	
valid from: 01.01.2019	UNITRONIC® BUS IS PUR 2x6+2x2,5+1x4x0,5	

Application

UNITRONIC® BUS IS PUR 2x6+2x2,5+1x4x0,5 is a bus cable for ISOBUS for agricultural engines acc. to ISO 11783-2.

Design




Conductor	All bare copper, fine wire stranded 1) 1x4x0,50 mm ² : conductor ca. 0.50 mm ² 2) 2x2,50 mm ² : ca. 2.50 mm ² 3) 2x6 mm ² : ca. 6.00 mm ²
Insulation	1) 1x4x0,50 mm ² : PVC, core diameter ca. 2.5 mm 2) 2x2,50 mm ² : PVC, core diameter ca. 3.0 mm 3) 2x6 mm ² : PVC, core diameter ca. 4.8 mm
Core identification code	1) 1x4x0,50 mm ² : red, green, black, yellow 2) 2x2,50 mm ² : red, black 3) 2x6 mm ² : red, black
Stranding	1) 1x4x0,50 mm ² : four cores twisted together (contingent synthetic filler) Element (1) stranded together with the 2.5 mm ² cores of element (2) and the 6.00 mm ² cores of element (3) (contingent synthetic filler)
Taping	non-woven tape
Outer sheath	PVC, black (similar to RAL 9005), outer diameter: ca. 15.6 mm

Electrical properties at 20°C

Conductor resistance	1) 1x4x0,50 mm ² : max. 39.0 Ω/km 2) 2x2,50 mm ² : max. 7,98 Ω/km 3) 2x6 mm ² : max. 3,30 Ω/km
Specific volume resistivity	1) 1x4x0,50 mm ² : min. 20 GΩxcm 2) 2x2,50 mm ² : min. 20 GΩxcm 3) 2x6 mm ² : min. 20 GΩxcm
Mutual capacitance	1) 1x4x0,50 mm ² : CAN_H to CAN_L 75 pF/km to contiguous cores 110 pF/km
Characteristic impedance	1) 1x4x0,50 mm ² : 75 Ω (at 1 MHz)
Peak operating voltage	1) 1x4x0,50 mm ² : 40 V 2) 2x2,50 mm ² : max. 500 V 3) 2x6 mm ² : max. 500 V
Test voltage	1) 1x4x0,50 mm ² (AC, 5 min.): 2500 V 2) 2x2,50 mm ² (AC, 5 min.): 1500 V 3) 2x6 mm ² (AC, 5 min.): 2500 V

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Mechanical and thermal properties

Minimum bending radius	fixed installation: 10 x cable diameter moved: 15 x cable diameter
Temperature range	fixed installation: -40°C up to +85°C moved: -5°C up to +50°C
Flammability	flame retardant acc. to IEC 60332-1-2
UV resistance	acc. to UL 1581, Sec. 1200
Ozone resistance	acc. to VDE 0472-1
MUD resistance	acc. to IEC 61892-4, addendum D
Tests	Microbe resistance: acc. to VDE 0282-10
General requirements	This cable is conform to the EU-Directive 2011/65/EU (RoHS, Restriction of the use of certain hazardous substances).

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