



for fixed installation & flexible applications, UL/CSA



APPLICATION

Fieldbus cables for CAN (Controller Area Network) systems, in the field of factory automation, for fixed installation & flexible applications.

This Bus system has its origins in the automotive sector and has established itself in the field of production automation.

Standard acc. to CAN Spec.: ISO 11898



SPECIAL FEATURES

- Largely resistant to grease, coolant fluids and lubricants.
- Oil-resistant: acc. to DIN EN 60811-2-1 (Mineral oil)
- Optimized EMC compliant shielding.

REMARKS

- Complies with RoHS and the 2014/35/EU Directive (Low Voltage Directive) CE.
- LABS-/silicone-free (during production).
- DESINA-compliant (violet)
- PI = Profibus & Profinet International
- max. transmission rate: 1 Mbit/s at 40m segment length
- max. cable lengths for a bus segment depending on the cross section

0- 40 m AWG24, AWG22 | 40-300 m AWG22, AWG20 |
300-600 m AWG20 | 600-1.000 m AWG19

PRODUCT DETAILS

DESIGN

Conductor material	bare copper wire
Conductor class	AWG 24, AWG22, AWG20: 7-wired; AWG 19: fine wired acc. to IEC 60228 cl. 5
Core insulation	foamed PE/PP
Core identification	acc. to DIN VDE 47100 (wh, bn, gn, ye)
Stranding	stranded to pairs
Overall shielding	copper braid tinned
Outer sheath material	PVC
Outer sheath color	violet, RAL4001 (VT)

ELECTRICAL PROPERTIES

Rated voltage	250 V (not for high voltage purposes)
Testing voltage	1,5 kV
Loop resistance	max. 175,2 Ω /km - AWG20, max. 110,8 Ω /km - AWG 22; max. 68,8 Ω /km - AWG 20; max 55,0 Ω /km - AWG 19
Capacity	nom. 40 nF/km
Characteristic impedance	120 +/- 12 Ω

MECHANICAL & DYNAMIC PROPERTIES

Min. bending radius fixed	7,5 x d
Min. bending radius moved	15 x d

THERMAL PROPERTIES

Operat. temp. fixed min/max	-40 °C / +80 °C
Operat. temp. moved min/max	-10 °C / +70 °C

FIRE BEHAVIOR

Burning behavior	flame retardant acc. to IEC 60332-1-2, VW-1
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CHEMICAL RESISTANCE & OTHER

Oil resistance acc. to DIN EN 60811-2-1 (Mineral oil)

STANDARDS & APPROVALS

Standards Approvals acc. to CAN Spec.: ISO 11898
UL/CSA types : cULus 300V, 75°C, CMX

ITEM OVERVIEW**CAN BUS C-PVC UL/CSA - cULus - CMX DESINA**

Item no.	Type	Dimension [n x 2 x mm]	Conductor structure	Outer-Ø [mm] nom.	Outer-Ø. [inch] nom.	Weight [≈lbs/mft]
2003675	C-PVC UL/CSA - VT	1 X 2 X AWG 24/7 (0,22 mm ²)	▶ AWG 24 (7/AWG 32) - 0,22mm ²	5,7	0,225	26,9
2003676	C-PVC UL/CSA - VT	2 X 2 X AWG 24/7 (0,22 mm ²)	▶ AWG 24 (7/AWG 32) - 0,22mm ²	7,4	0,292	40,3
2003677	C-PVC UL/CSA - VT	1 X 2 X AWG 22/7 (0,34 mm ²)	▶ AWG 22 (7/AWG 30) - 0,34mm ²	6,7	0,264	37,6
2003678	C-PVC UL/CSA - VT	2 X 2 X AWG 22/7 (0,34 mm ²)	▶ AWG 22 (7/AWG 30) - 0,34mm ²	8,5	0,335	57,1
2003679	C-PVC UL/CSA - VT	1 X 2 X AWG 20/7 (0,5 mm ²)	▶ AWG 20 (7/AWG 28) - 0,5mm ²	7,5	0,296	49,1
2003680	C-PVC UL/CSA - VT	2 X 2 X AWG 20/7 (0,5 mm ²)	▶ AWG 20 (7/AWG 28) - 0,5mm ²	9,6	0,378	71,9
2003681	C-PVC UL/CSA - VT	1 X 2 X AWG 19 (0,75 mm ²)	▶ AWG 19 (~ 24/AWG 32) - 0,75 mm ²	8,7	0,343	62,5
2003682	C-PVC UL/CSA - VT	2 X 2 X AWG 19 (0,75 mm ²)	▶ AWG 19 (~ 24/AWG 32) - 0,75 mm ²	11,6	0,457	105,5