

BO-DEVICENET FLEX PVC

DeviceNet™ cables for fixed and flexible installation



Image for illustration only

Conductor:	Stranded tinned copper complying with CEI EN 60228
Insulation: Signal AWG 18 or AWG 24 Power AWG 15 or AWG 22	Foam skin PE Solid PE
Colour Code: Signal AWG 18 or AWG 24 Power AWG 15 or AWG 22	white and blue black and red
Pair shielding:	Aluminium/polyester tape on each pair and common drain wire
Screen:	Tinned copper wire braid having coverage 85%
Outer Sheath:	PVC class 43 according to UL1581 and C22.2 n°210. Colour violet RAL 4001
Technical Data & Standard References	Product features: Flame retardant: Horizontal flame test per UL758, FT2 test acc. to CSA C.22.2 n°210 Halogen gas emission: ≤ 18% IEC 60754, CEI EN 50267-2 Industrial oil resistance: IEC 60811-404 Water resistance: IEC 60811-402
	Norm references / Approvals: Reference Standards: IEC 61158 EIA RS485 IEC 62026-3. DESINA Approved UL/CSA Approved: AWM Style 20601 300V/80°C.
Electrical & Mechanical Data	Operating temperature: Fixed application -30 to 80 °C Dynamic installation -5 to 70 °C Minimum bending radius: Fixed application 8 x D Dynamic appl. into chain 12 x D Electrical and transmission properties at 20°C Max operating voltage: 300 V Test voltage: 1500 V

Max DC conductor resistance:

78,0 Ω/km

54,0 Ω/km

21,8 Ω/km

11,3 Ω/km

Capacitance core/core (nom):

≤ 50 pF/m (data pair) at 800 Hz

Characteristic impedance:

120 Ω (data pair) 1 to 20 MHz

Attenuation TRUNK:

max 0,4 dB/100m at 100 kHz

max 0,8 dB/100m at 500 kHz

max 1,3 dB/100m at 1 MHz

Attenuation DROP:

max 0,9 dB/100m at 100 kHz

max 1,6 dB/100m at 500 kHz

max 1,9 dB/100m at 1 MHz

Min. insulation resistance:

5,0 GΩ x km

Transfer impedance TRUNK:

10 mΩ/m at 100 kHz

10 mΩ/m at 1 MHz

5 mΩ/m at 10 MHz

10 mΩ/m at 30 MHz

30 mΩ/m at 100 MHz

Transfer impedance DROP:

11 mΩ/m at 100 kHz

10 mΩ/m at 1 MHz

7 mΩ/m at 10 MHz

5 mΩ/m at 30 MHz

30 mΩ/m at 100 MHz

Application:

The DeviceNet cable for mobile installation is designed to operate on two CAN connection systems. The transmission protocol used is the standard EIA RS 485. The DeviceNet standards require a cable with two shielded pairs and two types of connections, Trunk and Drop, dedicated to data transmission and power supply for the devices.

Botec P/N	assembly	outer diameter [mm ± 10%]	Cu mass [Kg/km]	cable mass [Kg/km]
	(2xAWG18)+(2xAWG15) TRUNK	11,9	104	195
	(2xAWG24)+(2xAWG22) DROP	7,0	38	72