

BDV SERIES

High Performance Devicenet E.L.V BUS Cable



APPLICATIONS:

Devicenet Devicenet is a BUS system developed by Allen Bradley (Rockwell Automation). These cables are used to interconnect various industrial devices, such as SPS controls or limit switches.

Devicenet Indoor Suitable for indoor fixed applications.

Devicenet Drag Chain (Industrial) Suitable for drag/energy chain applications.

PRODUCT FEATURES:

- ▶ Low capacitance special foam skin polyethylene insulation
- ▶ Special oil resistant SPVC (BDV fixed wiring series)
- ▶ Good reverse bending strength microbe and hydrolysis resistant PUR Sheath (BDVDC drag chain series)
- ▶ UV stabilised
- ▶ Flame retardant
- ▶ Good tensile strength, tearing strength and abrasion resistance (BDVDC drag chain series)
- ▶ Good elongation at break (BDVDC drag chain series)
- ▶ Good dielectric properties (BDVDC drag chain series)
- ▶ Heat, oil and chemical resistant (*See Technical Section*)

CONSTRUCTION:

Conductor Annealed tinned copper stranded high flexibility (Class 5).

Insulation Data pair: Polyethylene. Power supply pair: SPVC or PUR.

Screening Collective shield of aluminium/polyester tape c/w tinned copper stranded drain wire and overall tinned copper braided screen.

Sheath PVC or PUR.

CHARACTERISTICS:

Operating Temperature Range -20°C to 80°C (PVC Sheath)
-40°C to 80°C (PUR Sheath).

Maximum Conductor Temperature 80°C.

Nominal Voltage 300V.

Minimum Bending Radius Fixed 15 x cable diameter.
(Fixed wiring devicenet cables) / Flexible 5 x cable diameter
(Devicenet drag chain cables).

Sheath Colour Grey (also available in intrinsically safe Blue).

Standard Core Colours 1 Pair – Blue, White.

1 Pair Power – Red, Black.

Relevant Standards ODVA Devicenet, UL Style: CMG 750C PLTC FT4 (PVC Sheath), UL Style: CMX 750C CL2X (PUR Sheath), CSA Standard CEC:CMG FT4 (1 Pair 18AWG+ 1 Pair 15AWG), CSA Standard CSA FT4 (1Pair 24AWG+ 1 Pair 22AWG), **RoHS** Compliant.

Electrical Data	Devicenet (Trunk) 1 Pair 18AWG + 1 Pair 15AWG	Devicenet (Drop) 1 Pair 24AWG + 1 Pair 22AWG
Characteristic Impedance	120 Ω +/- 10%	120 Ω +/- 10%
Conductor Resistance	45 Ω/km (Loop)	184 Ω/km (Loop)
Insulation Resistance	0.20 GΩ x km min	0.20 GΩ x km min
Mutual Capacitance	39.8 nF/km nom	39.4 nF/km nom
Test Voltage	2.0kV	2.0kV
Attenuation	125 kHz < 0.42 dB/km 125 kHz < dB/km	500 kHz < 0.81 dB/km 500 kHz < dB/km

Code	No. of Cores x Size (mm ²)	Nearest AWG	Approx. Overall Diameter (mm)	Approx. Weight (Kg/Km)	Outer Sheath Material
DEVICENET FIXED WIRING (INDOOR)					
BDV18/15	1 Pair 0.8 (DATA) + 1 Pair 1.6 (POWER)	1 Pair 18AWG + 1 Pair 15AWG	12.2	185	SPVC
BDV24/22	1 Pair 0.22 (DATA) + 1 Pair 0.34 (POWER)	1 Pair 24AWG + 1 Pair 22AWG	6.9	68	SPVC
DEVICENET DRAG CHAIN (INDUSTRIAL)					
BDVDC18/15	1 Pair 0.8 (DATA) + 1 Pair 1.6 (POWER)	1 Pair 18AWG + 1 Pair 15AWG	12	185	PUR
BDVDC24/22	1 Pair 0.22 (DATA) + 1 Pair 0.34 (POWER)	1 Pair 24AWG + 1 Pair 22AWG	7.0	68	PUR

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