

BPB SERIES

High Performance Profibus E.L.V L2 BUS Cable

APPLICATIONS:

Process Field BUS (Profibus) Used for interconnection for L2-BUS components. Suitable for use in cell and field areas. Used for the information exchange between different automation systems as well as communication with the connected decentralized field units and where serial BUS systems are used.

Industrial Suitable for use in the textile or construction machine industry and medical industries.

Profibus L2 Indoor Suitable for indoor fixed applications.

Profibus L2 Drag Chain (Industrial) Suitable for drag/energy chain applications.

Profibus L2 Torsion & Festoon Suitable for robotic, crane and hoist applications.

Profibus L2 Long Distance & Hazardous Areas Suitable for use for fixed installation over long distances such as PA installations. Also suitable for hazardous areas requiring an intrinsically safe circuit.

PRODUCT FEATURES:

- ▶ Low capacitance special foam skin polyethylene insulation
- ▶ Special oil resistant SPVC (BPBI series)
- ▶ Tear, notch, pressure and wear resistance PUR sheath (BPBDC & BPBTF Series)
- ▶ Good reverse bending strength microbe and hydrolysis resistant (BPBDC & BPBTF Series)
- ▶ Good tensile strength, tearing strength and abrasion resistance (BPBTF Series)
- ▶ UV stabilised
- ▶ Flame retardant
- ▶ Good elongation at break (BPBTF Series)
- ▶ Good dielectric properties (BPBTF Series)
- ▶ Heat, oil and chemical resistant (See *Technical Section*)

See over for full product table ▶



CONSTRUCTION:

Conductor Annealed plain copper stranded (Class 2).

Insulation Polyethylene.

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

Sheath SPVC or PUR.

CHARACTERISTICS:

Operating Temperature Range Fixed -40°C to 70°C.

Maximum Conductor Temperature 70°C.

Nominal Voltage 250V.

Minimum Bending Radius Fixed 10 x cable diameter (single strand profibus cables) / Flexible 15 x cable diameter (multi stranded profibus cables).

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

Standard Core Colours Red and Green.

Relevant Standards Profibus acc. To DIN 19245 T3 and EN50170, UL Style 2571, **RoHS** Compliant.

BPB SERIES continued

Electrical Data	Profibus L2 Indoor	Profibus L2 Drag Chain	Profibus L2 Torsion & Festoon
Characteristic Impedance	150 Ω +/- 10%	150 Ω +/- 10%	150 Ω +/- 10%
Conductor Resistance	55 Ω/km	55 Ω/km	49 Ω/km
Insulation Resistance	1.0 GΩ x km min	1.0 GΩ x km min	1.0 GΩ x km min
Mutual Capacitance	30.0 nF/km nom	30.0 nF/km nom	29.0 nF/km nom
Test Voltage	1.5kV	1.5kV	3.6kV
Attenuation	9.6 kHz < 2.5 dB/km	9.6 kHz < 3.0 dB/km	9.6 kHz < 3.0 dB/km
	36.4 kHz < 4.0 dB/km	36.4 kHz < 5.0 dB/km	38.4 kHz < 4.0 dB/km
	4.0 MHz < 22.0 dB/km	4.0 MHz < 25.0 dB/km	4.0 MHz < 25.0 dB/km
	16.0 MHz < 42.0 dB/km	16.0 MHz < 52.0 dB/km	16.0 MHz < 49.0 dB/km

Code	No. of Cores x Size (mm ²)	Nearest AWG	Approx. Overall Diameter (mm)	Approx. Weight (Kg/Km)	Outer Sheath Material
PROFIBUS FIXED WIRING (INDOOR)					
BPBI01/2/0.64	1PAIR 0.64	19	7.8	70	SPVC
PROFIBUS L2 DRAG CHAIN (INDUSTRIAL)					
BPBDC01/2/0.64	1PAIR 0.64	19	8.0	65	PUR
PROFIBUS L2 TORSION AND FESTOON					
BPBTF01/2/0.80	1PAIR 0.80	18	8.0	66	PUR