



Technical Specification

Cable Type: Nx22# PVC Insulated and Jacketed Shielded LF Outdoor Control Cable

Part Number: B-BF1xxF10

Revision: 03/23 Date: 05 March 2023



Basic wires

Conductors	Stranded 22# annealed tinned copper 7x0.23 mm nom.
Insulation type	PVC compound, rated at -30 to +80°C
Insulation thickness	0.25 mm nom.
Insulation OD	1.15 mm nom.

Color Code

1	Black	6	Blue	11	White/Black	16	White/Orange	21	Black/Green
2	Red	7	Orange	12	White/Red	17	White/Yellow	22	Black/Blue
3	Green	8	Yellow	13	White/Green	18	White/Purple	23	Black/Orange
4	White	9	Purple	14	White/Brown	19	White/Grey	24	Black/Yellow
5	Brown	10	Grey	15	White/Blue	20	Black/Red	25	Black/Gray

In dual-colored wires:

The first color is the base insulation color. The second is the color of the co-extruded longitudinal stripe

Individual Cable Specifications & Ordering information

Cable P/N	No. of Cores	Conductor arrangement	Inner Jacket thickness	Inner Jacket OD.	Outer Jacket thickness	Overall diameter	Total weight
B-BF102F10	2	Twisted together	0.50 mm	3.5 mm	1.2 mm	6.0 mm	55 kg/km
B-BF104F10	4	Cabled together concentrically	0.75 mm	4.5 mm	1.2 mm	7.0 mm	61 kg/km
B-BF106F10	6	Cabled together concentrically	0.80 mm	5.1 mm	1.2 mm	7.5 mm	91 kg/km
B-BF108F10	8	Concentrically (F+8)	0.90 mm	5.7 mm	1.2 mm	8.3 mm	101 kg/km
B-BF115F10	15	Concentrically (5+10)	1.0 mm	6.7 mm	1.2 mm	9.2 mm	156 kg/km
B-BF118F10	18	Concentrically (F+6+12)	1.3 mm	8.4 mm	1.3 mm	11.0 mm	183 kg/km

Notes: Other constructions are available upon demand. Both jackets are easily removable.

All diameter & weight values are nom. values and may vary.

Cable Buildup

Core wrap	Polyester tape, providing 100% coverage
Drain wire	Stranded 22# annealed tinned copper 7x0.23 mm nom.
Overall shield	Polyester-aluminum tape, foil face in, providing 100% coverage
Inner jacket	PVC compound, rated at -20 to +80°C
Inner jacket color	Grey, RAL 7005
Outer jacket	Heavy-duty, UV resistant PVC compound, rated at -20 to +80°C
Outer jacket color	Black, RAL 9005
Surface marking	WESTERN WIRE B-BF1xxF10 Nx22 AWG FOIL SHIELDED 60V OUTDOOR CONTROL CABLE FR IEC 60332-1 CE 2011/65/EU (RoHS-2) [Month, Year] [Batch Number] [Sequential Meter Mark] METER
Surface marking - Example	WESTERN WIRE B-BF115F10 15x22 AWG FOIL SHIELDED 60V OUTDOOR CONTROL CABLE FR IEC 60332-1 CE 2011/65/EU (RoHS-2) [Month, Year] [Batch Number] [Sequential Meter Mark] METER

Mechanical Properties

Minimum bend radius	20 x D
Storage temperature	-20 to +60°C
Operating temperature	-20 to +80°C
Flame test	IEC 60332-1

Electrical Properties @ 20°C

DC Resistance of conductors	73.8 Ohm /km max.
Insulation resistance	100 MOhm *km min.
Velocity of propagation	55% nom. @ 1 kHz
Dielectric strength	1500 V rms min/ 1 minute (between conductors & between conductors and shield)
Impedance	100-120 Ohm @ 10 kHz
Voltage rating	60V rms max.

This cables fully conforms to EU Directive 2011/65/EU (RoHS-2)