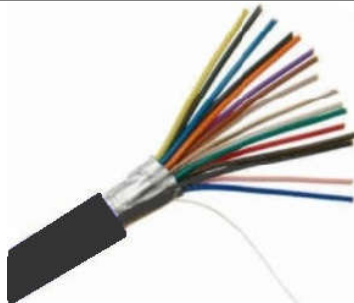


Technical Specification

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

Western Wire Part Number: **B-AF1xxF90**

Revision: 03/22 Date: 27 February 2022



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	1.30 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 Constructions

Cable P/N	No. of Cores	Conductor arrangement	Jacket thickness	Overall diameter	Total weight
B-AF102F90	2	Twisted together	0.60 mm nom.	4.0 mm nom.	25 kg/km nom.
B-AF104F90	4	Cabled together concentrically	0.60 mm nom.	4.6 mm nom.	32 kg/km nom.
B-AF106F90	6	Cabled together concentrically	0.65 mm nom.	5.5 mm nom.	49 kg/km nom.
B-AF108F90	8	Cabled together concentrically	0.70 mm nom.	6.0 mm nom.	62 kg/km nom.
B-AF110F90	10	Concentrically (2+Filler+8)	0.75 mm nom.	7.0 mm nom.	71 kg/km nom.
B-AF112F90	12	Concentrically (3+9)	0.8 mm nom.	7.0 mm nom.	82 kg/km nom.
B-AF115F90	15	Concentrically (5+10)	1.0 mm nom.	8.3 mm nom.	105 kg/km nom.
B-AF120F90	20	Concentrically (1+6+13)	1.0 mm nom.	9.0 mm nom.	130 kg/km nom.
B-AF125F90	25	Concentrically (2+8+15)	1.0 mm nom.	10.0 mm nom.	155 kg/km nom.

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
Outer Jacket	PVC compound, rated at -20 to +80°C
Color	Gray, RAL 7005
Surface Marking	WESTERN WIRE B-AF1xxF90 Nx22AWG FOIL SHIELDED 60V 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-AF125F90 25x22AWG FOIL SHIELDED 60V CONTROL CABLE FR IEC 60332-1 CE 2011/65/EU (RoHS-2) [Month, Year] [Batch Number] [Sequential Meter Mark] METER
Notes	The jacket is easily removable

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 & UL 1581 VW-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)
Voltage rating	60 V rms max.

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