

Application

Primarily used for overhead service applications such as street lighting, outdoor lighting, and temporary service for construction. To be used at voltages of 0.6/1kV and at conductor temperatures not to exceed 90°C for cross-linked polyethylene (XLPE) insulated conductors.

Specification

NFC 33-209 insulated cable assembled with harness for overhead network, with rated voltage of 0.6/1kV

Construction

Conductor: Stranded, Circular compacted, Circular compressed AAC or AAAC.

Insulation: Cross-linked polyethylene (XLPE), Black color, Weather and UV resistant.

Parameter

Designation		Conductor					Average Thickness of Insulation (prescribed value)	Core	
Nature	Nominal Section	No. of Wires	Max. DC Resistance at 20 °C	Conductor Diameter		Breaking Force		Outside Diameter	
	(mm ²)	No.	(Ω/km)	Min. (mm)	Max. (mm)	Min. (daN)	(mm)	Min. (mm)	Max. (mm)
Phase or neutral or public lighting	16	7	1.91	4.6	5.1	190	1.2	7	7.8
	25	7	1.2	5.8	6.3	300	1.4	8.6	9.4
	35	7	0.868	6.8	7.3	--	1.6	10	10.9
	50	7	0.641	7.9	8.4	--	1.6	11.1	12
	70	12	0.443	9.7	10.2	--	1.8	13.3	14.2
	95	19	0.32	11	12	--	1.8	14.6	15.7
	120	19	0.253	12	13.1	--	1.8	15.6	16.7
Neutral	150	19	0.206	13.9	15	--	1.8	17.3	18.6
	54.6	7	0.63	9.2	9.6	1660	1.6	12.3	13
	70	7	0.5	10	10.2	2050	1.6	12.9	13.6
Pilot	95	19	0.343	12.2	12.9	2750	1.6	15.3	16.3
	1.5	1	12.1	--	1.5	--	1.2	3.7	4.2

AAC/XLPE

No. of Cores and Section	No. of Wires	Nominal Insulation Thickness	Approx. Diameter	Max. DC. Resistance at 20 °C	Approx. Weight
			of Cable		
mm ²	No.	mm	mm	Ω/km	kg/km
2x16	7	1.2	14.4	1.91	131
2x25	7	1.4	17.6	1.2	200
2x35	7	1.6	20.4	0.868	273
2x50	7	1.6	22.6	0.641	350
2x70	12	1.8	26.8	0.443	495
2x95	19	1.8	30.4	0.32	656
2x120	19	1.8	32.8	0.253	799
4x16	7	1.2	17.4	1.91	262
4x25	7	1.4	21.3	1.2	399
4x35	7	1.6	24.7	0.868	547
4x50	7	1.6	27.3	0.641	699

4x70	12	1.8	32.4	0.443	990
4x95	19	1.8	36.8	0.32	1311
4x120	19	1.8	39.7	0.253	1597

AAC/XLPE+AAAC/XLPE

No. of Cores and Section	No. of Wires		Nominal Insulation Thickness		Approx. Diameter of Cable	Max. DC. Resistance at 20 °C		Approx. Weight
	Phase	Neutral	Phase	Neutral		Phase	Neutral	
mm ²	No.	No.	mm	mm	mm	Ω/km	Ω/km	kg/km
1x25+1x54.6	7	7	1.4	1.6	21.3	1.2	0.63	309
1x35+1x54.6	7	7	1.6	1.6	22.7	0.868	0.63	345
1x50+1x54.6	7	7	1.6	1.6	23.8	0.641	0.63	384
1x70+1x54.6	12	7	1.8	1.6	25.9	0.443	0.63	456
1x95+1x54.6	19	7	1.8	1.6	27.7	0.32	0.63	537
1x70+1x70	12	7	1.8	1.6	26.7	0.443	0.5	491
1x95+1x70	19	7	1.8	1.6	28.5	0.32	0.5	571
1x120+1x70	19	7	1.8	1.6	29.7	0.253	0.5	643
1x120+1x95	19	19	1.8	1.6	31.9	0.253	0.343	737
1x150+1x95	19	19	1.8	1.6	33.6	0.206	0.343	819
3x25+1x54.6	7	7	1.4	1.6	23.5	1.2	0.63	508
3x35+1x54.6	7	7	1.6	1.6	26.1	0.868	0.63	619
3x50+1x54.6	7	7	1.6	1.6	28.1	0.641	0.63	733
3x70+1x54.6	12	7	1.8	1.6	31.9	0.443	0.63	951
3x95+1x54.6	19	7	1.8	1.6	35.2	0.32	0.63	1192
3x70+1x70	12	7	1.8	1.6	32.4	0.443	0.5	986
3x95+1x70	19	7	1.8	1.6	35.6	0.32	0.5	1227
3x120+1x70	19	7	1.8	1.6	37.8	0.253	0.5	1441
3x120+1x95	19	19	1.8	1.6	39.1	0.253	0.343	1536
3x150+1x95	19	19	1.8	1.6	42.2	0.206	0.343	1779

AAC/XLPE+AAAC/XLPE+AAC/XLPE

No. of Cores and Section	No. of Wires			Nominal Insulation Thickness			Approx. Diameter of Cable	Max. DC. Resistance at 20 °C			Approx. Weight
	Phase	Neutral	Street Light	Phase	Neutral	Street Light		Phase	Neutral	Public lighting	
mm ²	No.	No.	No.	mm	mm	mm	mm	Ω/km	Ω/km	Ω/km	kg/km

3x25+1x54.6+1x16	7	7	7	1.4	1.6	1.2	30.1	1.2	0.63	1.91	571
3x35+1x54.6+1x16	7	7	7	1.6	1.6	1.2	32.9	0.86 ₈	0.63	1.91	682
3x50+1x54.6+1x16	7	7	7	1.6	1.6	1.2	35.1	0.64 ₁	0.63	1.91	797
3x70+1x54.6+1x16	12	7	7	1.8	1.6	1.2	39.3	0.44 ₃	0.63	1.91	1014
3x70+1x54.6+1x25	12	7	7	1.8	1.6	1.4	39.3	0.44 ₃	0.63	1.2	1049
3x70+1x70+1x16	12	7	7	1.8	1.6	1.2	40.1	0.44 ₃	0.5	1.91	1049
3x95+1x70+1x16	19	7	7	1.8	1.6	1.2	43.7	0.32	0.5	1.91	1290
3x120+1x70+1x16	19	7	7	1.8	1.6	1.2	46.1	0.25 ₃	0.5	1.91	1504
3x120+1x95+1x16	19	19	7	1.8	1.6	1.2	48.3	0.25 ₃	0.343	1.91	1598
3x150+1x95+1x16	19	19	7	1.8	1.6	1.2	51.7	0.20 ₆	0.343	1.91	1842
3x25+1x54.6+2x16	7	7	7	1.4	1.6	1.2	30.1	1.2	0.63	1.91	637
3x35+1x54.6+2x16	7	7	7	1.6	1.6	1.2	32.9	0.86 ₈	0.63	1.91	748
3x50+1x54.6+2x16	7	7	7	1.6	1.6	1.2	35.1	0.64 ₁	0.63	1.91	862
3x70+1x54.6+2x16	12	7	7	1.8	1.6	1.2	39.3	0.44 ₃	0.63	1.91	1080
3x70+1x54.6+2x25	12	7	7	1.8	1.6	1.4	39.3	0.44 ₃	0.63	1.2	1148
3x70+1x70+2x16	12	7	7	1.8	1.6	1.2	40.1	0.44 ₃	0.5	1.91	1114
3x95+1x70+2x16	19	7	7	1.8	1.6	1.2	43.7	0.32	0.5	1.91	1356

3x120+1x70+2x 16	19	7	7	1.8	1.6	1.2	46.1	0.25 3	0.5	1.91	1570
3x120+1x95+2x 16	19	19	7	1.8	1.6	1.2	48.3	0.25 3	0.343	1.91	1664
3x150+1x95+2x 16	19	19	7	1.8	1.6	1.2	51.7	0.20 6	0.343	1.91	1907