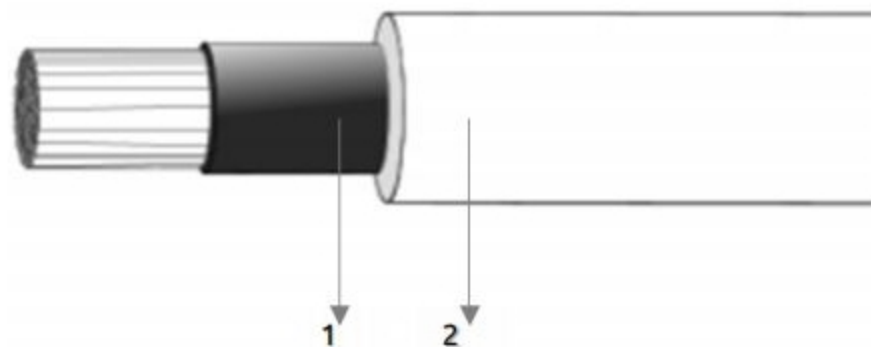


Aerial Insulated Protected Cables Application

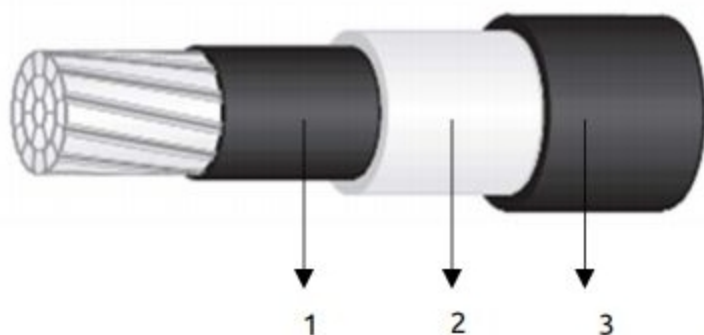
Aerial Insulated Cables/Protected Cables with voltages from 13.8kV - 34.5kV of spacer cable. Protected Cables is suitable for compact primary networks of medium voltage power distribution. The protected cable coverage is resistant to electrical tracking and weather. This increases the reliability of the overhead line distribution, which prevents discharges and shutdowns, in occasional contacts with grounded objects and trees.

Aerial Insulated Protected Cables Construction



1. Cross-linkable semiconductor

2. Protective cover, outer layer



1. Cross-linkable semiconductor

2. Inner layer of protective cover

3. Outer layer of protective cover

Conductor: 1350 aluminum wires, compact class 2 cording, with longitudinal moisture blocking, according to NBR NM 280.

Semiconductor layer: Thermostable material (XLPE) or thermoplastic (PE) (even for 35 kV cables, optional for 15 and 25kV cables).

Protective layer: This cover, applied simultaneously with the semiconductor layer, can be made up of one or two layers of thermostable material (XLPE), or two layers of polyethylene LDPE/HDPE or XLPE/HDPE. In the case of cables that have two layers, the internal one will be colorless and the external one will be the one that has the indicated coloration.

Aerial Insulated Protected Cables Maximum Operating Temperatures

In continuous regime: 90°C

In overload: 100°C

In short circuit: 250°C

Aerial Insulated Protected Cables Reference Standards

ABNT NBR 11873 - Cables covered with polymeric material for power distribution networks fixed in spacers, in voltages from 13,8 to 34.5 kV.

ABNT NBR NM280-Conductors of insulated cables (IEC 60228, MOD).

Aerial Insulated Protected Cables 15kV

Section (mm)	Conductor Diameter (mm)	Coverage - Thickness (mm)	Coverage - Diameter (mm)	Nominal Weight (kg/km)
35	6,95	3	13,3	184
50	8,15	3	14,6	226
70	9,65	3	16,1	297
95	11,45	3	18	384
120	12,95	3	19,5	462
150	14,4	3	21	546

Section (mm)	Conductor Diameter (mm)	Coverage - Thickness (mm)	Coverage - Diameter (mm)	Nominal Weight (kg/km)
185	16,15	3	22,8	672
240	18,29	3	25	843
300	20,65	3	27,4	1021

Aerial Insulated Cables Protected Cables 25kV

Section (mm)	Conductor Diameter (mm)	Coverage - Thickness (mm)	Coverage - Diameter (mm)	Nominal Weight (kg/km)
35	6,95	4	15,4	225
50	8,15	4	16,6	271
70	9,65	4	18,2	346
95	11,45	4	20	437
120	12,95	4	21,6	520
150	14,4	4	23,1	608
185	16,15	4	24,9	739
240	18,29	4	27,1	916
300	20,65	4	29,5	1101

Aerial Insulated Cables Protected Cables 35kV

Section (mm)	Conductor Diameter (mm)	Coverage - Thickness (mm)	Coverage - Diameter (mm)	Nominal Weight (kg/km)
70	9,65	7,6	26,8	879
95	11,45	7,6	28,7	953
120	12,95	7,6	30,2	1028
150	14,4	7,6	31,7	1129
185	16,15	7,6	33,5	1230
240	18,29	7,6	35,7	1333
300	20,65	7,6	38,2	1437