

PRESENTATION

Aerial self supporting cables for local distribution telecommunication network.

REFERENCE STANDARDS

International Electro-technical Commission, Publication 708- 4 and 708 - 1

STRUCTURE**1- Conductors**

Conductors consist of solid copper having a diameter of 0.4, 0.6 or 0.8 mm

2- Insulation of conductors

Conductors are insulated by a colored solid polyethylene layer.
The insulation thickness is such as the electrical requirements are met.

3- Stranding

- Element of cabling:

Cables having a capacity Equal to or lower than 5 pairs are assembled in pairs.

- Cabling elements:

- Five Quads are assembled to make up a sub-bundle. Quads are identified by the insulated conductor color.
- Cables having a capacity lower than or equal to 100 pairs are assembled in concentric layers of sub-bundles of 5 Quads (10 pairs).
- Cables having a capacity equal to or higher than 100 pairs are made up of bundles of 50 pairs.
- Sub-bundles and bundles are identified with colored ropes.

4- Core wrapping

A dielectric polyester tape is applied over the cable core

5- Screen

On the cable core cover is applied an aluminum tape.

6- Drain wire

It consists of tinned copper with 0.5 mm diameter.

7- External sheath

The sheath consists of low density polyethylene. It is black and contains 2.5 ± 0.5 % of carbon black in compliance with the European standards requirements EN 50290-2-24.

8- Suspension wire

Steel wires assembled galvanized.



Number of pairs	Conductor diameter	Suspension strand diameter	Sheath thickness	Diameter on sheath	Web		Diameter over the suspension strand
					height	width	
5	0,6	2,4	1,30	8,5	2,0	2,0	5,6
10	0,4	2,4	1,30	8,1	2,0	2,0	5,2
	0,6	3,0	1,30	9,8	2,0	2,5	6,2
20	0,8	3,0	1,40	11,5	2,0	2,5	6,2
	0,4	2,4	1,40	9,7	2,0	2,5	6,2
	0,6	3,0	1,40	12,1	2,0	2,5	6,2
30	0,8	3,0	1,50	15,6	2,0	2,5	6,2
	0,4	3,0	1,50	10,9	2,0	2,5	6,2
	0,6	3,0	1,50	14,0	2,0	2,5	6,2
50	0,8	4,0	1,50	17,9	2,0	3,5	8,0
	0,4	3,0	1,50	12,7	2,0	2,5	6,2
	0,6	4,0	1,60	18,2	2,0	3,5	8,0
70	0,8	5,5	1,60	22,1	4,0	3,5	9,9
	0,4	4,0	1,60	15,5	2,0	3,5	8,0
	0,6	4,0	1,60	20,5	4,0	3,5	8,0
100	0,6	7,5	1,70	25,3	4,0	4,5	12,3
	0,4	4,0	1,60	17,5	2,0	3,5	8,0
	0,6	5,5	1,70	22,8	4,0	3,5	9,9
	0,8	7,5	1,80	29,9	4,0	4,5	12,3

ELECTRICAL CHARACTERISTICS

Test	0,4 mm diameter	0,6 mm diameter	0,8 mm diameter
Electrical resistance max. /km	150	66,6	36,8
Voltage test Conductor/Conductor Kv	0,6	1,15	1,5
Voltage test Conductor/SCREEN Kv	1,5	1,5	2,25
Insulation resistance M? .Km	5000		
Mutual capacitance max. nF/Km	57,5		