

JELLY FILLED SELF SUPPORTED AERIAL TELEPHONE CABLES

Application

These type cables are used for aerial installation. The cable structure is completed by the application of a suitable core wrapping material, flooding compound, copolymer coated moisture barrier, a parallel support messenger that with the core are covered by an overall the black outer jacketing. Outer jacketing material is MDPE LDPE or HDPE in accordance with ASTM D 1248. These types of cables have excellent mechanical performance. The cable cross section is illustrated in figure 8.

Construction



Conductor

Solid annealed electrolytic copper. The conductor size 0.4- 0.5- 0.6 and 0.9 mm

Insulation

Colored foam skin polyethylene insulation or solid insulation in according to ASTM 1248, foam skin insulation with cellular polyethylene covered with skin layer of high-density polyethylene compound. Solid insulation is made medium or high-density polyethylene compound.

Color Coding

Fully color-coding. Please refer to annex for detailed information of pair color code and sub units color codes.

Twisting/Quadding

Two or four insulated wire twisted together. The twist length specially designed to minimize the capacitance unbalance and cross talk.

Cable Core

Twisted wires are assembled to form substantially cylindrical groups of ten pairs (called unit). Super units that are assembled with suitable number of units, which are binded with durable colored tapes and cabled to complete cable core.



Filling Compound

The water resistance-filling compound, which is 85°C drop point, is applied to the cable core to provide water resistance.

Core Wrapping

Anon-hydroscopic and dielectric polyester tape is applied helically over the cable core. Applied polyester tape at least overlaps 5%.

Identification

A plastic tape, durable marked with the manufacturer name, year of manufacture, and cable size (if required) is placed under the core wrapping.

Flooding Compound / Water blocking Tape

In order to prevent the water resistance-flooding compound applied over the cable core. In customer request water blocking tape could be applied between core wrapping and aluminum tape in helically or longitudinally

<u>Screen</u>

A single flat aluminum tape (0,2 mm thickness of aluminum) coated both side 50 micron polyethylene film applied longitudinally over core covering with an min 5 mm overlap. In customer request 0,15 mm thickness aluminum tape could be used.

Support Messenger

According to ASTM A 475-66T galvanized 7 steel wires stranded rope having minimum 120 kg/mm² is used as holding rope.

Outer Jacket

Over the corrugated steel tape , Outer jacket is extruded black low-density polyethylene or medium density polyethylene in accordance with ASTM D 1248. Outer jacket polyethylene is include %2,5 ±0,5carbon black for sunrise resistance. Color of outer sheath is black.

Length Marking

Sequentially numbered lengths marking are printed on the outside of cable jacket with hot foil printing method. The outer sheath marked in every one meter as follows;

TURKUAZ Cable <year of manufacturing> <cable size and diameter of copper> <customer name> length marking in meter> <telephone handset>

Packing

Shipment will be done with non-returnable wooden drums with protection.

Type Code of Cables

A-02YF(L) T 2Y mxn

Refer to the type code of the copper cable for the description of the cable code.



Additional Information

Number of Pair	Outer Diameter of Cable (mm)	Weight of Copper Kg/km (Nom)	Apr. Cable Weight Kg/km	Reel Length (m) ± %5
0,4 mm Conductor				
10	8,3x7,5	22,6	150	2000
20	10,0x19,5	45,3	190	2000
30	11,5x20,5	67,9	230	2000
50	13,5x23,5	115,5	330	1000
100	17,5x27,5	231,0	540	1000
150	20,8x31,8	346,5	765	500
200	23,5x35,7	462,0	1025	500
0,5 mm Conductor				
10	9,3x19,1	35,5	195	2000
20	11,4x21,2	71,1	255	2000
30	13,0x22,8	106,6	315	1000
50	15,6x26,0	181,2	460	1000
100	20,5x31,5	362,4	770	500
150	24,9x37,1	543,6	1135	500
200	28,4x42,7	724,8	1435	500
0,6 mm Conductor				
10	10,7x20,0	51,2	210	1200
20	13,4x23,2	102,3	320	1200
30	15,5x25,9	153,5	430	1200
50	18,7x30,0	260,9	624	1200
100	25,0x40,0	521,8	1110	800
150	31,0x45,5	782,8	1570	400
200	35,2x50,5	1043,7	2060	400
0,9 mm Conductor				
10	14,1x24,0	115,2	350	1200
20	18,2x28,0	230,2	540	1200
30	21,3x32,3	345,3	770	800
50	26,3x38,5	587,1	1200	800
100	36,0x51,5	1174,1	2200	400

Other delivery length is available in customer request



Electrical Requirements at 20°C

Conductor Size			0,4	0,5	0,6	0,9
Resistance (Ω/km)		Max	150,0	95,9	66,6	30,0
		Avg.	144,0	92,1	63,9	28,0
Resistance Unbalance(%)		Max	5,0		5,0	
		Avg.	2,0		2,0	
Mutual Capacitance @800 Hz (nf/km)		Avr	50		45	
		Max	56		51	
Capacitance Unbalance PF/ 500 mt	Between pair	Avg.	125		60	
		Max	500		325	
	Between Adjacent	Avg.	125		60	
	Pairs	Max	375		370	
	To Ground	Avg.	500		325	
		Max	2000		1300	
Insulation Resistance 500 V DC (G Ohm km)		Min	10		15	
		IVIIII				
Dielectric Strength (KV DC for 1 min) Pair to Pair		Min	1,4		2,0	
Dielectric Strength (KV DC for 3 sec.)		Min	6		10	
Pair to Ground						