



GUARANTY TABLE

Telephone cables according to Telecom Egypt specification TC 154

Copper conductors, PE foam-skin insulated, star quad stranded, Jelly filled, shielded with laminated Aluminum tape and sheathed with black PE.

Construction:

Bare copper conductor, diameter 0.4 mm, 0.5 mm, 0.6 mm or 0.9 mm, is covered with PE Foam-skin insulation or solid Polyethylene insulation for cables < 250 pairs. Each 4 conductors are twisted to form star quad, the quads are identified by its conductor insulation colors. For cables with pair capacity < 100 pairs, the specific number of quads are stranding in concentric layers.

For cables from 150 pairs to 400 pairs, 26 quads are stranding together in concentric layers to form one unit of 52 pairs. For cables over 400 pairs, 51 quads are stranding together in concentric layers to form one unit of 102 pairs. Units are identified by colored binder tapes. The needed units are stranding together to form the cable core.

The cable core is fully filled with petroleum jelly and wrapped with one polyester tape. One laminated aluminum tape is longitudinally applied over the cable core and an outer sheath of black PE which is both UV and stress-crack resistant is applied over the shielding.

Cable	No. of quads cable or unit	No. of units	Overall diameter approx., mm			
			0.4	0.5	0.6	0.9
Copper diameter						
10 pairs	5		8.1	8.5	9.2	12.4
20 pairs	10		10.0	10.5	11.5	16.5
30 pairs	15		11.4	12.0	13.7	19.3
50 pairs	26		13.6	15.0	16.8	24.8
100 pairs	51		18.0	19.6	22.0	32.9
150 pairs	26	3	21.4	23.3	26.9	40.0
200 pairs	26	4	24.0	27.0	30.3	45.9
250 pairs	26	5	27.0	29.5	33.4	50.6
300 pairs	26	6	29.0	31.9	36.5	55.3
400 pairs	26	8	33.6	41.4	48.8	72.4
500 pairs	51	5	37.0	45.8	53.4	80.7
600 pairs	51	6	40.0	49.6	58.4	87.6
800 pairs	51	8	46.0	56.8	67.4	
1000 pairs	51	10	50.7	62.8	74.5	
1200 pairs	51	12	55.0	69.0	82.2	
1500 pairs	51	15	61.3			
1800 pairs	51	18	67.4			
2000 pairs	51	20	70.6			
2400 pairs	51	24	76.7			

Electric Characteristics:

Cable, conductor diameter	mm	0.4	0.5	0.6	0.9	
Conductor loop resistance at 20°C, max.	Ω/km	298	186	129	56	
Insulation resistance at 20°C	Foam-skin	G.Ω.km	10	10	10	10
	PE solid	G.Ω.km	5			
Mutual capacitance						
Max. average up to 250 pairs	nF/km	55	55	55	55	
Max. average over 250 pairs	nF/km	45	45	45	45	
capacitance unbalance in the quad at 800 Hz For 160 m, (K1), max.	pF	300	300	300	300	
capacitance unbalance between 2 adjacent Quads at 800 Hz for 160 m (K9-K12), max.	pF	150	150	150	150	
capacitance unbalance quad to earth At 800 Hz for 160 m (E1 and E2), max.	pF	450	450	450	450	

We certify that the above mentioned data are guaranteed for the offered cable.

Technical Department