



AERIAL ARMoured TELEPHONE CABLES

Description : Polyethylene insulated, double steel tape armoured, polyethylene sheathed, along with steel messenger

Construction

- Conductor : Solid bare annealed copper wire of nominal diameter 0.4, 0.5, 0.65 or 0.9 mm
- Insulation : Solid, cellular or foam-skin polyolefin material*
- Identification : Colour coded (see Technical Appendix)
- Twisting : Two conductors are twisted into pair
- Stranding : In sub units of 5 or 10 pairs in units of 50 or 100 pairs, and units of 50 or 100 pair of cables of more than 100 pairs
- Moisture barrier : Screen of longitudinally applied smooth copolymer coated aluminum tape
- Inner Sheath : Black PE
- Armour : Double steel tape helically applied
- Messenger : Strand of galvanized steel wires
- Sheath : Black weather resistant PE

Specification : to IEC 60708

Characteristics: Dielectric strength : 500V

: Min Insulation Resistance at 20°C : 1500MΩ.km

: Max Individual Mutual Capacitance : 64 nF/km

: Max average Mutual Capacitance for cables more than or equal to 20 pairs : 56 nF/km

: Max Capacitance unbalance at 800 Hz per 500m length of cable : 275 pF

: Max Conductor loop Resistance at 20°C

size, mm	0.4	0.5	0.65	0.9
Resistance, Ω / km:	300	191.8	114	60

Technical Data

Conductor Diameter : 0.4 mm				
Number of Pairs	Msngr. Dim. Nr x Dia.	Approx O.D mm	Approx Weight kg/km	Code Number
10	7 X 0.9	20 X 12	250	MSATE 10 X 2 X 0.4
20	7 X 0.9	22 X 13.5	305	MSATE 20 X 2 X 0.4
30	7 X 1.2	24 X 15	319	MSATE 30 X 2 X 0.4
50	7 X 1.2	26 X 17	419	MSATE 50 X 2 X 0.4
70	7 X 1.2	28 X 19	518	MSATE 70 X 2 X 0.4
100	7 X 1.2	30 X 21	700	MSATE 100 X 2 X 0.4
150	7 X 1.6	35 X 26	980	MSATE 150 X 2 X 0.4
200	7 X 1.6	38 X 28	1195	MSATE 200 X 2 X 0.4

Conductor Diameter : 0.65 mm				
Number of Pairs	Msngr. Dim. Nr x Dia.	Approx O.D mm	Approx Weight kg/km	Code Number
10	7 X 1.2	23 X 14	360	MSATE 10 X 2 X 0.65
20	7 X 1.2	25 X 16	466	MSATE 20 X 2 X 0.65
30	7 X 1.2	27 X 18	568	MSATE 30 X 2 X 0.65
50	7 X 1.2	30 X 21	767	MSATE 50 X 2 X 0.65
70	7 X 1.6	35 X 25	1030	MSATE 70 X 2 X 0.65
100	7 X 1.6	39 X 29	1335	MSATE 100 X 2 X 0.65
150	7 X 1.6	43 X 32	1772	MSATE 150 X 2 X 0.65
200	7 X 1.6	47 X 37	2185	MSATE 200 X 2 X 0.65

Conductor Diameter : 0.5 mm				
Number of Pairs	Msngr. Dim. Nr x Dia.	Approx O.D mm	Approx Weight kg/km	Code Number
10	7 X 0.9	21 X 13	270	MSATE 10 X 2 X 0.5
20	7 X 0.9	23 X 14.5	350	MSATE 20 X 2 X 0.5
30	7 X 1.2	25 X 16	450	MSATE 30 X 2 X 0.5
50	7 X 1.2	27 X 18.5	580	MSATE 50 X 2 X 0.5
70	7 X 1.2	29 X 21	695	MSATE 70 X 2 X 0.5
100	7 X 1.2	33 X 25	890	MSATE 100 X 2 X 0.5
150	7 X 1.6	37 X 28	1225	MSATE 150 X 2 X 0.5
200	7 X 1.6	41 X 30	1515	MSATE 200 X 2 X 0.5

Conductor Diameter : 0.9 mm				
Number of Pairs	Msngr. Dim. Nr x Dia.	Approx O.D mm	Approx Weight kg/km	Code Number
10	7 X 1.2	25 X 16.2	465	MSATE 10 X 2 X 0.9
20	7 X 1.2	28 X 19.2	650	MSATE 20 X 2 X 0.9
30	7 X 1.2	31 X 22.3	830	MSATE 30 X 2 X 0.9
50	7 X 1.6	37 X 27	1270	MSATE 50 X 2 X 0.9
70	7 X 1.6	41 X 31.5	1630	MSATE 70 X 2 X 0.9
100	7 X 1.6	46 X 35	2130	MSATE 100 X 2 X 0.9
150	7 X 2.0	53 X 41.5	3000	MSATE 150 X 2 X 0.9

*Above code is for foam skin insulation 'M' • If Solid PE insulation: ESATE --- X 2 X (Conductor Size) • If Cellular PE insulation : CSATE --- X 2 X (Conductor Size)