



TEKAB

## AIR CORE TELEPHONE DUCT CABLES

**Description** : Polyethylene insulated, Polyethylene sheathed

**Construction**

- Conductor : Solid bare annealed copper wire of nominal diameter 0.4, 0.5, 0.6 or 0.8 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
- 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   | 0.6   | 0.8  |
| Resistance, Ω / km: | 300 | 191.8 | 133.2 | 73.6 |

### Technical Data

| Conductor Diameter : 0.4 mm |               |                     |                    |
|-----------------------------|---------------|---------------------|--------------------|
| Number of Pairs             | Approx O.D mm | Approx Weight kg/km | Code Number        |
| 10                          | 9             | 71                  | ESE 10 X 2 X 0.4   |
| 20                          | 10            | 108                 | ESE 20 X 2 X 0.4   |
| 30                          | 11            | 145                 | ESE 30 X 2 X 0.4   |
| 50                          | 14            | 210                 | ESE 50 X 2 X 0.4   |
| 70                          | 15            | 280                 | ESE 70 X 2 X 0.4   |
| 100                         | 18            | 380                 | ESE 100 X 2 X 0.4  |
| 150                         | 22            | 550                 | ESE 150 X 2 X 0.4  |
| 200                         | 25            | 710                 | ESE 200 X 2 X 0.4  |
| 300                         | 30            | 1035                | ESE 300 X 2 X 0.4  |
| 400                         | 32            | 1360                | ESE 400 X 2 X 0.4  |
| 500                         | 36            | 1705                | ESE 500 X 2 X 0.4  |
| 600                         | 40            | 2015                | ESE 600 X 2 X 0.4  |
| 800                         | 44            | 2640                | ESE 800 X 2 X 0.4  |
| 900                         | 46            | 2962                | ESE 900 X 2 X 0.4  |
| 1000                        | 50            | 3265                | ESE 1000 X 2 X 0.4 |
| 1200                        | 53            | 3875                | ESE 1200 X 2 X 0.4 |
| 1500                        | 60            | 4820                | ESE 1500 X 2 X 0.4 |
| 1800                        | 65            | 5777                | ESE 1800 X 2 X 0.4 |
| 2100                        | 70            | 6730                | ESE 2100 X 2 X 0.4 |
| 2400                        | 75            | 7645                | ESE 2400 X 2 X 0.4 |
| 2700                        | 78            | 8556                | ESE 2700 X 2 X 0.4 |
| 3000                        | 80            | 9468                | ESE 3000 X 2 X 0.4 |

| Conductor Diameter : 0.5 mm |               |                     |                    |
|-----------------------------|---------------|---------------------|--------------------|
| Number of Pairs             | Approx O.D mm | Approx Weight kg/km | Code Number        |
| 10                          | 10            | 94                  | ESE 10 X 2 X 0.5   |
| 20                          | 12            | 147                 | ESE 20 X 2 X 0.5   |
| 30                          | 13            | 201                 | ESE 30 X 2 X 0.5   |
| 50                          | 15            | 305                 | ESE 50 X 2 X 0.5   |
| 70                          | 19            | 405                 | ESE 70 X 2 X 0.5   |
| 100                         | 20            | 560                 | ESE 100 X 2 X 0.5  |
| 150                         | 25            | 830                 | ESE 150 X 2 X 0.5  |
| 200                         | 30            | 1074                | ESE 200 X 2 X 0.5  |
| 300                         | 35            | 1580                | ESE 300 X 2 X 0.5  |
| 400                         | 40            | 2095                | ESE 400 X 2 X 0.5  |
| 500                         | 43            | 2577                | ESE 500 X 2 X 0.5  |
| 600                         | 48            | 3075                | ESE 600 X 2 X 0.5  |
| 800                         | 54            | 4035                | ESE 800 X 2 X 0.5  |
| 900                         | 58            | 4540                | ESE 900 X 2 X 0.5  |
| 1000                        | 60            | 5020                | ESE 1000 X 2 X 0.5 |
| 1200                        | 65            | 5960                | ESE 1200 X 2 X 0.5 |
| 1500                        | 73            | 7415                | ESE 1500 X 2 X 0.5 |

\*Above code is for Solid PE insulation \*E\* • If foam skin insulation : MSE --- X 2 X (Conductor Size) • If Cellular PE insulation : CSE --- X 2 X (Conductor Size)



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| Conductor Diameter : 0.6 mm |               |                     |                   |
|-----------------------------|---------------|---------------------|-------------------|
| Number of Pairs             | Approx O.D mm | Approx Weight kg/km | Code Number       |
| 10                          | 11            | 120                 | ESE 10 X 2 X 0.6  |
| 20                          | 13            | 195                 | ESE 20 X 2 X 0.6  |
| 30                          | 15            | 270                 | ESE 30 X 2 X 0.6  |
| 50                          | 20            | 420                 | ESE 50 X 2 X 0.6  |
| 70                          | 22            | 560                 | ESE 70 X 2 X 0.6  |
| 100                         | 25            | 785                 | ESE 100 X 2 X 0.6 |
| 150                         | 30            | 1145                | ESE 150 X 2 X 0.6 |
| 200                         | 35            | 1505                | ESE 200 X 2 X 0.6 |
| 300                         | 40            | 2240                | ESE 300 X 2 X 0.6 |
| 400                         | 45            | 2945                | ESE 400 X 2 X 0.6 |
| 500                         | 50            | 3635                | ESE 500 X 2 X 0.6 |
| 600                         | 55            | 4355                | ESE 600 X 2 X 0.6 |
| 800                         | 65            | 5725                | ESE 800 X 2 X 0.6 |

| Conductor Diameter : 0.8 mm |               |                     |                   |
|-----------------------------|---------------|---------------------|-------------------|
| Number of Pairs             | Approx O.D mm | Approx Weight kg/km | Code Number       |
| 10                          | 13            | 180                 | ESE 10 X 2 X 0.8  |
| 20                          | 16            | 305                 | ESE 20 X 2 X 0.8  |
| 30                          | 20            | 430                 | ESE 30 X 2 X 0.8  |
| 50                          | 25            | 680                 | ESE 50 X 2 X 0.8  |
| 70                          | 28            | 930                 | ESE 70 X 2 X 0.8  |
| 100                         | 32            | 1315                | ESE 100 X 2 X 0.8 |
| 150                         | 40            | 1965                | ESE 150 X 2 X 0.8 |
| 200                         | 45            | 2575                | ESE 200 X 2 X 0.8 |
| 300                         | 55            | 3790                | ESE 300 X 2 X 0.8 |
| 400                         | 60            | 5020                | ESE 400 X 2 X 0.8 |
| 500                         | 68            | 6250                | ESE 500 X 2 X 0.8 |

\*Above code is for Solid PE insulation "E" • If foam skin insulation : MSE --- X 2 X (Conductor Size) • If Cellular PE insulation : CSE --- X 2 X (Conductor Size)

