

# T100 Series Central Office

## Product Description

The T100 Series Central Office (CO) Cables are designed for use between switching and transmission equipment for distances up to 450 feet. They are manufactured with a longitudinal aluminum-polyester foil shield with aluminum facing the jacket for additional Electromagnetic Interference (EMI) reduction. The pairs are stranded together utilizing distinctive colored insulation in combination with markings of colored ink. The outer jacket is a gray flame retardant PVC. T100 series meets or exceeds all applicable requirements of Telcordia GR-137 specifications.

## Applications

- T1/DS1
- T1C/DS1C

## Features

- 24 AWG tinned copper conductors
- CMR listed
- Solid PVC insulation
- 100 Ohm nominal impedance
- Standard pair lays
- Longitudinal aluminum/polyester foil shield with aluminum facing the jacket
- 24 AWG tinned copper drain wire
- Rip cord
- Band marked

## Benefits

- Small diameter and light weight result in smaller cable bundles and easier handling; tinned copper conductors minimize change in wire-wrap joint resistance
- Suitable for horizontal and riser installations
- Greater crush resistance and improved transmission characteristics
- Impedance mismatch with Outside Plant (OSP) cables is minimized
- Improved crosstalk performance and pair identification
- EMI isolation
- Easier termination and superior grounding
- Added ease of jacket removal
- Easy pair identification



## Specifications

|                             |  |
|-----------------------------|--|
| <b>Conductor</b>            | Tinned copper  |
| <b>AWG (mm)</b>             | 24 (0.5)   |
| <b>Insulation</b>           | PVC  |
| <b>Shield</b>               | Aluminum/polyester foil  |
| <b>Jacket</b>               | Gray PVC   |
| <b>Jacket Marking</b>       | Printed at 2 foot intervals on the jacket; information includes product identification, pair count, UL information and sequential lengths in feet and meters |
| <b>Package</b>              | Reel   |
| <b>Standards Compliance</b> | Telcordia GR-137-CORE (select sections)<br>UL 444 CMR (pulse shape compliance at 450 feet)<br>2005/717/EC<br>RoHS-compliant                                  |

## Part Numbers and Physical Characteristics

| Part Number | Product Code | Pair Count | Nominal Diameter in (mm) | Approx. Weight lbs/kft (kg/km) | Standard Length ft (m) |
|-------------|--------------|------------|--------------------------|--------------------------------|------------------------|
| 55-399-43   | T106         | 6          | 0.30 (7.6)               | 37 (55)                        | 6,644 (2,025)          |
| 55-F99-43   | T108         | 8          | 0.31 (7.9)               | 45 (67)                        | 5,578 (1,700)          |
| 55-499-43   | T112         | 12         | 0.34 (8.6)               | 59 (88)                        | 6,644 (2,025)          |
| 55-599-43   | T116         | 16         | 0.36 (9.1)               | 74 (110)                       | 6,644 (2,025)          |
| 55-699-43   | T120         | 20         | 0.41 (10)                | 91 (135)                       | 5,315 (1,620)          |
| 55-799-43   | T125         | 25         | 0.43 (11)                | 106 (158)                      | 5,315 (1,620)          |
| 55-899-43   | T128         | 28         | 0.44 (11)                | 114 (170)                      | 5,000 (1,524)          |
| 55-999-43   | T130         | 30         | 0.44 (11)                | 121 (180)                      | 4,429 (1,350)          |
| 55-A99-43   | T132         | 32         | 0.47 (12)                | 131 (195)                      | 3,937 (1,200)          |

## Electrical Specifications

| Conductor DC Resistance @ 68°F (20°C)<br>Maximum Individual Ohms/kft (Ohms/km) | Mutual Capacitance Nominal pF/ft (pF/m) | Characteristic Impedance @ 1 MHz Ohms | Maximum Average Attenuation @ 0.772 MHz @ 68°F (20°C) dB/kft (dB/km) |
|--|---|---------------------------------------|--|
| 28.6 (93.8)  | 20 (66)                                 | 100 ± 15                              | 7.2 (23.6)   |