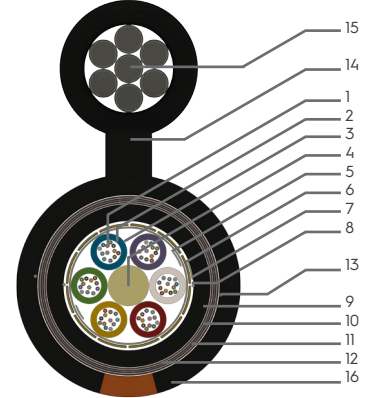
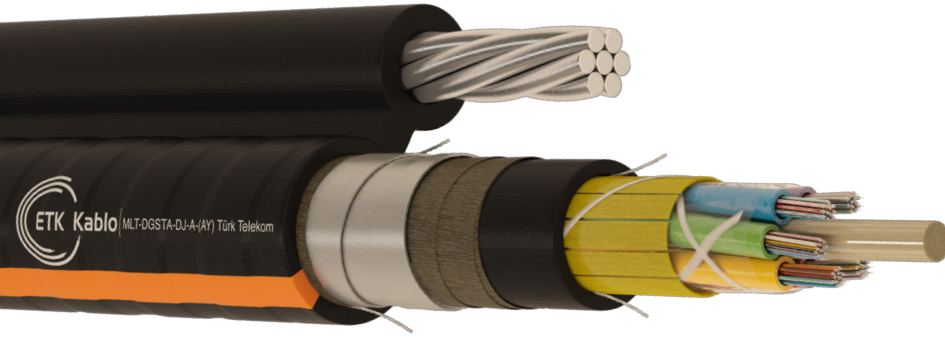


## Fiber Optic Cables

# MLT-DGSTA-DJ-A(M)-(AY50) Türk Telekom TRFO-10

A-DF(ZN)2Y2BT2Y Türk Telekom TRFO-10

Multi loose tube, double galvanized steel tape armor, aerial fiber optic cable.



### Application

- For aerial applications.
- In heavy duty environments.
- As a backbone cable in telecommunication lines.
- Rodent protection.
- Extra strength due to double layer of galvanized steel.

### Cable Construction

- 1 - Optical fiber core <sup>1</sup>
- 2 - Waterproof thixotropic jelly
- 3 - PBT Tube
- 4 - Non-metallic central strength member (FRP)
- 5- Jelly filling
- 6 - Core Wrapping (Polyester Tape)
- 7 - Non-metallic strength member (Aramid yarn)
- 8 - Ripcord
- 9 - UV resistant polyethylene (LLDPE) black inner jacket
- 10 - Crepe paper
- 11 - Two ballistic proof, helically laid galvanized steel tape
- 12 - Crepe paper
- 13 - Ripcord
- 14 - Web
- 15 - Steel messenger wire (7x1.75 mm)
- 16 - UV resistant polyethylene (MDPE) black outer jacket with orange tracer.

### Mechanical and Environmental Characteristics

|   | Test Standard     | Specified Value                | Acceptance Criteria           |
|---|-------------------|--------------------------------|-------------------------------|
| Maximum Installation Tension <sup>2</sup> | IEC 60794-1-2-E1  | 3.0 x W(N), min. 5000 N        | Fiber strain ≤ 0.33%          |
| Maximum Operation Tension                 | IEC 60794-1-2-E1  | 1.0 x W(N), min. 1500 N        | Δa ≤ 0.05 dB, No fiber strain |
| Crush Strength                            | IEC 60794-1-2-E3  | 5000 N / 100 mm, max. 15 min.  | Δa ≤ 0.05 dB, No damage       |
| Impact                                    | IEC 60794-1-2-E4  | 10 Nm, 3 impacts, R= 300 mm    | Δa ≤ 0.05 dB after the test   |
| Torsion                                   | IEC 60794-1-2-E7  | 1 m. 100N, +/- 180°, 10 cycles | Δa ≤ 0.05 dB, No damage       |
| Repeated Bending                          | IEC 60794-1-2-E6  | R=20x D, 100 N, 35 cycles      | No damage                     |
| Bending Radius                            | IEC 60794-1-2-E11 | R=20x D, 4 turns, 3 cycles     | Δa ≤ 0.05 dB, No damage       |
| Temperature Cycling                       | IEC 60794-1-2-F1  | -20°C to +70°C                 | Δa ≤ 0.05 dB/km               |
| Waterproofness                            | IEC 60794-1-2-F5B | Sample= 3 m, water column= 1 m | No water leakage in 24 hours. |

### Application

|           | Minimum Bending Radius |           | Temperature Range |              |                |
|-----------|------------------------|-----------|-------------------|--------------|----------------|
| Operation | 20 x cable Ø           | Storage   | -40°C to +70°C    | Installation | -30 to +60°C   |
| Fixed     | 15 x cable Ø           | Transport | -40°C to +70°C    | Operating    | -20°C to +70°C |

### Marking, Packing, Delivery Lengths

|                  |   |
|------------------|---|
| Marking          | ETK Kablo <Date of Manufacture> <Fiber Count and Type> <Length Marking> |
| Packing          | Wooden drum with protection   |
| Delivery Lengths | 2 km, 4 km ± %5 tolerance   |

#### Notes

<sup>1</sup> Optical fiber core could be applied as G.652.D, G.655, G.657.A1, G.657.A2, OM1, OM2, OM3, OM4 according to customer demand.

<sup>2</sup> Maximum tensile strength could be changed according to customer demand.

Manufacturing Standard: Turkish Telecom Technical Specification

## MLT-DGSTA-DJ-A(M)-(AY50) Türk Telekom TRFO-10

| Part Number             | Core Type  | Fiber Count | Tube Count | Filler Count | Tube Diameter (mm) | FRP Diameter (mm) | Cable Diameter (mm) | Cable Weight (kg/km) |
|-------------------------|------------|-------------|------------|--------------|--------------------|-------------------|---------------------|----------------------|
| 3.848.0.6.1.0900.0.0004 | SM G.652.D | 4           | 2          | 4            | 2.05               | 2.2               | 16.4                | 545                  |
| 3.848.0.6.1.0900.0.0006 | SM G.652.D | 6           | 3          | 3            | 2.05               | 2.2               | 16.4                | 545                  |
| 3.848.0.6.1.0900.0.0012 | SM G.652.D | 12          | 6          | 0            | 2.05               | 2.2               | 16.4                | 548                  |
| 3.848.0.6.1.0900.0.0024 | SM G.652.D | 24          | 6          | 0            | 2.05               | 2.2               | 16.4                | 547                  |
| 3.848.0.6.1.0900.0.0036 | SM G.652.D | 36          | 6          | 0            | 2.05               | 2.2               | 16.4                | 547                  |
| 3.848.0.6.1.0900.0.0048 | SM G.652.D | 48          | 6          | 0            | 2.05               | 2.2               | 16.4                | 546                  |