

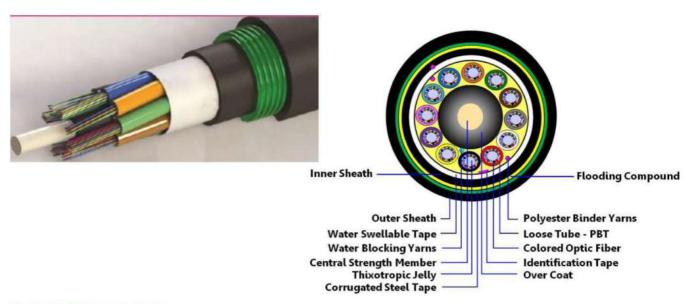
## **TECHNICAL DATA SHEET**

## SINGLE MODE G.652.D DIRECT BURIED OPTICAL FIBER CABLE

Steel Tape Armored Optical Fiber Cables for Direct Burial has been popular cabling solution for Outside Plant Applications. Corrugated Steel Tape and a Robust Polyethylene Outer Jacket combine to deliver rugged durability and added rodent resistance. These cables are manufactured according to international standard.

Applications: Direct Buried Installation - Data, Video, Voice Transmission - Rodent Resistant.

Cable Constructions: Loose Tube filled with Gel - Stranded around Central Strength Member - Water Blocking Material - Polyethylene Inner Sheath - Corrugated Steel Tape Armour and a Robust Polyethylene Outer Jacket.



## **Technical Characteristics**

- · The unique extruding technology provides the fibers in the tube with good flexibility and bending endurance
- The unique fiber excess length control method provides the cable with excellent mechanical and environmental properties
- · Multiple water blocking material filling provides dual water blocking function
- Provides good crush resistance

## Features & Benefits

- Supports all grades of single Mode & Multimode Fibers
- Offers excellent Crush Resistance
- · Protects from rodent attacks

| CONSTRUCTION PARAMETERS                  |                                                    |
|------------------------------------------|----------------------------------------------------|
| Fiber Type                               | ITU-T G.652.D                                      |
| Fiber Count                              | 02 to 144 Fibers                                   |
| Loose Tube Material                      | PBT                                                |
| Loose Tube Filling Material              | Thixotropic Jelly Terephthalate (PBT)              |
| Central Strength Member                  | Fiber Reinforced Plastic (FRP)                     |
| Peripheral Strength Member (if required) | Glass Yarn                                         |
| Filler Material                          | Polyethylene                                       |
| Core Moisture Protection Methodology     | Dry Block Design, Water Blocking Yarns/Tapes       |
| Armouring                                | Corrugated ECCS (Electro Chrome Coated Steel Tape) |
| Outer Sheath Material                    | Medium/High Density Polyethylene (HDPE/MDPE)       |
| Printing on Outer Sheath                 | Engraved Hot Foil Ink or Inkjet Printing           |
| Drum Length                              | 2000m or 4000m ± 5%                                |

| OPTICAL CHARACTERISTICS                |                         |
|----------------------------------------|-------------------------|
| Single Mode Fiber                      | CORNING SMF-28e+ G.652D |
| Fiber Colour Coding                    | As per TIA/EIA-598A&C   |
| Mode Field Diameter, µm                | 8.6 to 9.5 ± 0.7        |
| Cladding Diameter, µm                  | 125 ± 1                 |
| Core Clad Concentricity error, µm      | ≤ 0.8 µm                |
| Cladding Non-Circularity, %            | ≤ 2 %                   |
| Cable Cut-off Wavelength, nm           | ≤1260 nm                |
| Chromatic Dispersion (ps/nm.km)        | ≤ 3.5 @ 1310nm          |
|                                        | ≤ 18 @ 1550nm           |
| Cabled Attenuation @ 1310 nm (dB/km)   | ≤ 0.35 (average)        |
| Cabled Attenuation @ 1550 nm (dB/km)   | ≤ 0.21 (average)        |
| Polarized Mode Dispersion (PMD) ps/√km | ≤ 0.2                   |

| MECHANICAL CHARACTERISTICS |                         |
|----------------------------|-------------------------|
| Tensile Strength (N) (Max) | 3000                    |
| Minimum Bending Radius     | 10 x outer without load |
| Diameter of cable (mm)     | 20 x outer with load    |
| Crush Strength (N) (max)   | 2500                    |
| Temperature Range          | -20 °C to +70 °C        |