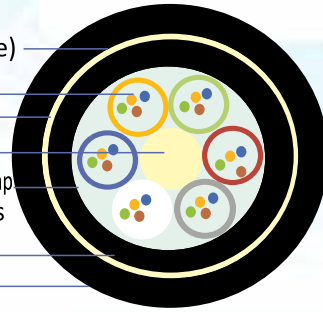


Direct Buried (Non Metallic) Optical Fiber Cable

Cable Construction

Cable cross-section

- Water Blocking Material (Gel/Water Swellable Tape)
- Optical Fibers
- Loose Tube
- Central Strength Member
- Polyester/Water Swellable Core Wrap
- Peripheral Strength Members
- Inner Sheath
- Outer Jacket



Cable structure and parameter

No. of Fibers	Max Fiber Per tube	No. of Loose Tubes	Cable Outer Sheath Thickness mm
4	4	1	1.5 ± 0.2
8	8	1	1.5 ± 0.2
12	12	1	1.5 ± 0.2
24	12	2	1.5 ± 0.2
36	12	3	1.5 ± 0.2
48	12	4	1.5 ± 0.2
96	12	8	1.5 ± 0.2
144	12/24	12/6	1.5 ± 0.2

Cable Design

- Fiber:** The Cable can be based on Multimode OM1, OM2, OM3 or Single Mode Fiber as per ITU-T G.652.D, G.657, G.655, or Combination specifications (Hybrid Cable).
- CSM:** Fiber Reinforced Plastic is used as Central Strength Member.
- Loose Tube:** Polybutylene Terephthalate (PBT).
- Flooding Compound:** Jelly filled Construction with wrap (Not required in dry cable) or water swell able blocking Tape to stop ingress of water.
- Filling Compound:** Loose Tube is filled with Thixotropic Jelly, the filling compound gives protection to the fiber in case of strains etc.
- Stranding:** The Loose Buffer Tubes are stranded around the Central Strength Member through SZ Stranding which is a reverse lay method i.e. the direction of stranding reverses after a predetermined no. of revolutions, at the reverse points, the elements are parallel to the axis of cable, a binding yarn is wound around the elements to retain and keep them in proper position.
- Peripheral Strength:** Glass Yarns will be used to give extra strength to the cable.
- Inner Sheath:** LDPE/MDPE.
- Outer Sheath:** HDPE.
- Application:** Suitable for Junction communication system, Data, Voice transmission & Subscriber Network system for direct buried Installation.

Further details of the fiber material and mechanical/environmental characteristics are also available in the Catalogue.

Fiber Color Code is as per given specification

No.	1	2	3	4	5	6	7	8	9	10	11	12
Color	Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow	Violet	Pink	Aqua

If 24 Fiber tube required, ring marked fibers will be used.

Color Code for Loose Tube (LT) is as per given specification

No.	1	2	3	4	5	6	7	8	9	10	11	12
Color	Blue	Orange	Green	Brown	Grey	White	Red	Black	Yellow	Violet	Pink	Aqua

Any other specific color coding can also be used as per customer requirement.

Printing / Marking

Sheath Marking as below or as required.

ATC - YEAR - XXXXX - XX FIBER XX DB (Non Metallic) OFC - XXXX	
DB OFC	: Multi Mode or Single Mode Direct buried Non metallic Type Optical Fiber Cable
XXXX	: Length of Marking (* The Marking is Printed every 1 meter)
XXX	: Number of Fibers
XXXXX	: Customer Name

The color of marking is **White / Yellow**.

The both cable ends are sealed with heat shrinkable end caps to prevent water ingress.

