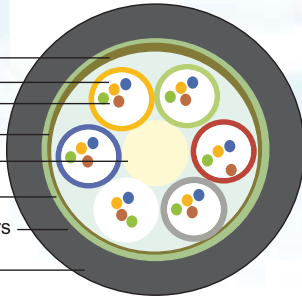


Duct Type (Metallic) Optical Fiber Cable

Cable Construction

Cable cross-section

- Al. Moisture Barrier Tape
- Loose Tube
- Optical Fibers
- Identification Tape
- Central Strength Member
- Core Wrap
- Peripheral Strength Members
- 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
192	12/24	16/8	1.5 ± 0.2
288	12/24	24/12	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, G657, G655, or Combination specifications (Hybrid Cable).
- CSM:** Fiber Reinforced Plastic is used as Central Strength Member.
- Loose Tube:** Polybutylene Terephthalate (PBT).
- Moisture barrier:** Aluminum Moisture Barrier Tape.
- Flooding Compound:** Interstices all filled with gel to protect ingress of water (Not required in dry cable).
- 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.
- Outer Sheath:** HDPE.
- Application:** Inter Office, Data, Voice & video transmission, Security & control systems having light weight & flexible characteristics for inside duct 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 DUCT (Metallic) OFC - XXXX	
SM/MM DUCT Metallic OFC	: Multi Mode or Single Mode Duct 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.

