Steel Tape Armored Aerial "Fig 8" Optical Fiber Cable

Cable Construction

Cable cross-section Messenger Wire Outer Jacket Inner Sheath Optical Fibers Loose Tube Central Strength Member Polyester/water swellable Core Wrap Water Blocking Compound (Not Required in dry core) Corrugated Steel Tape

Cable structure and parameter

No. of Fibers	Max Fiber Per tube	No. of Loose Tubes	Cable Outer Sheath Thickness mm				
			111111				
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				

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).

Messenger wire: 7 wire strand to make it self-supporting figure 8" Type cable suitable for aerial application

with high mechanical strength characteristics

Flooding Compound: Jelly Filled construction with Core wrap or water swellable tape to stop ingress of water.

Armoring: Two Corrugated Steel Tapes helps to give cable more ruggedness and extra rodent

protection.

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: Data, Video & voice transmission with extra rodent protection and strength.

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 – XXX FIBER XX AERIAL F8 OFC – XXXX					
AERIAL F8 OFC : Multi Mode or Single Mode aerial figure 8 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.