

Multi Loose Tube Fiber Optic Cables

Applications:

Long distance outside telephone, CATV, Data, communications.

Installations:

Installed in duct, self supporting (Figure 8 self supporting or ADSS All dielectric self supporting) and direct burial (with armoring).

Construction:

The cable consists of 5 to 36 elements stranded in up to 3 layers around a central strength member and bound in a jacket. The elements are usually fiber containing tubes. However, fillers are also used, when needed to preserve cable geometry. Two to twelve color coded fibers are loosely laid in each tubes filled with water-blocking gel.

Technical Parameters:

- ☆ Maximum Transmission Distance: 6km (Single Mode); 0.3km (Multimode)
- ☆ Maximum Pulling Load: 1500-2700 N (Short Term Installation); 900-1500N (Long Term Installation)
- ☆ Minimum Bending Radius:
 - Short Term Installation: 20 x Overall Diameter
 - Long Term Installation: 10 x Overall Diameter (Non Armored); 20 x Overall Diameter (Armored)
- ☆ Twist (Torsion Length): 125 x Overall Diameter
- ☆ Working Temperature: -40°C ~ +70°C (PE sheath)
- ☆ Storage Temperature: -50°C ~ +70°C (PE sheath)

Product Highlights:

- ☆ All the fiber containing tubes are placed in concentric layers around the central member; through the control of the twist length, the fiber cable can achieve better pulling load and operating temperature.
- ☆ Tube Materials are water resistant and can sustain high tension. Being filled with special water-blocking gel, the tube can provide water protection for the fibers inside the tube.
- ☆ Central Member, which is usually either made of dielectric FRP, or solid/ stranded steel coated with polyethylene, are placed at the centre of the cables.

Ordering Information:

AD-MLA-B-C- D-E-F-G-H-I-J-K-L

A: Loose Tube Diameter

B = 2.1 mm; C = 2.5 mm; D = 2.8 mm; E = 3.0 mm; F = 3.2 mm

B: Fiber Types

0=Fibers and copper conductors in cable; 1=Two or more fiber types in a cable
 4=50/125 Multimode (OM3); 5=50/125 Multimode (OM2);
 6=62.5/125 Multimode (OM1); 7= NZDS SM fiber per G.656;
 8=NZDS SM fiber per G.655; 9=Standard SM fiber per G.652D

C: No. of Tubes: 1-36

D: No. of Fibers per Tube: 2 - 12

E: Central Member: S=Solid steel; SR=Stranded Steel; F=Dielectric (FRP)

F: Inner jacket options

2Y =PE; Y =PVC; H =LSZH

G: Armour options

Blank=No armour; T=Corrugated steel tape armour; W=Steel wire armour
 B=Bronze armour; D=Fiber glass armour; TW= Steel tape + Steel wire armour

H: Jacket material options

2Y =PE; Y =PVC; H =LSZH; 8Y= PA

11Y=PU; A=Aluminium moisture barrier; T=Anti-termites protection

I: Water-blocking options for cable core

X=No water-blocking; J= Water-blocking gel in tubes; JD=Water-blocking gel in tubes+ dry water-blocking in cable core interstices; JJ= Water-blocking gel in tubes and cable core interstices

J: Water-blocking options or cables with more than one jacket

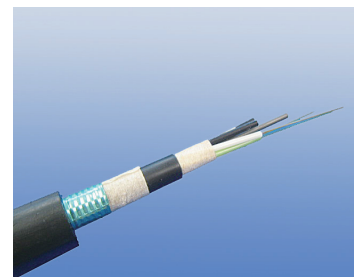
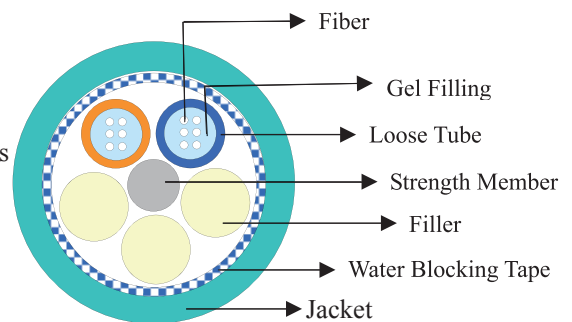
X=No water-blocking; J=Water-blocking gel between jackets; D=Dry water-blocking between cable jackets;

K: Strength member options

A=Aramid yarn; AG=Aramid yarn and fiber glass yarn; G=Fiber glass yarn

L: General options

SS=Fig-8 self-supporting; UW=Under Water



Central Loose Tube Fiber Optic Cables

Applications:

Long distance telephone, CATV, Data communications.

Installations:

Installed in duct, self supporting (Figure 8 self supporting or ADSS All dielectric self supporting) and direct burial (with armouring).

Construction:

The cable consists of a single tube containing 2 up to 24 fibers, which is filled with water-blocking gel. When the cable contains more than 12 fibers, they are divided in two groups. A colored thread identifies each group. Physical protection and tensile strength are provided by aramid yarn or fiberglass wound around the tube. Either PE or LSZH jacket can be used. A ripcord is located under the jacket to facilitate jacket removal.

Technical Parameters:

- ☆ Maximum Transmission Distance: 6km (Single Mode); 0.3km (Multimode)
- ☆ Maximum Pulling Load: 1500N (Short Term Installation); 900N (Long Term Installation)
- ☆ Maximum Compressive load: 3000N (3.3mm loose tube diameter); 5000N (4.5mm loose tube diameter)
- ☆ Twist (Torsion Length): 125 x Overall Diameter
- ☆ Working Temperature: -20°C ~ +70°C (PE sheath)
- ☆ Storage Temperature: -40°C ~ +70°C (PE sheath)

Product Highlights:

- ☆ Small diameter and light weight.
- ☆ Through the control of the fiber exceed length which is the key technology in optical fiber manufacture, the fiber cable can achieve better pulling load and operating temperature.
- ☆ Tube Materials are water resistant and can sustain high tension. Being filled with special water-blocking gel, the tube can provide water protection for the fibers inside the tube.
- ☆ Compact construction of the fiber cores can prevent the fiber to shrink back. This can sustain higher tensile stress and achieve better flexibility.
- ☆ Wide operating temperature range.

Ordering Information:

AD-CLA-B-C-D-E-F-G-H-I-J

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A = 2.1 mm; B = 2.5 mm

B: Fiber Types:

0=Fibers and copper conductors in cable; 1=Two or more fiber types in a cable

4=50/125 Multimode (OM3); 5=50/125 Multimode (OM2);

6=62.5/125 Multimode (OM1); 7= NZDS SM fiber per G.656;

8=NZDS SM fiber per G.655; 9=Standard SM fiber per G.652D

C: No of Tubes: 1-24

D: Inner jacket options

2Y =PE; Y =PVC; H =LSZH

E: Armour options

Blank=No armour; T=Corrugated steel tape armour; W=Steel wire armour;

B=Bronze armour; D=Fiber glass armour; TW= Steel tape + Steel wire armour

F: Jacket material options

2Y =PE; Y =PVC; H =LSZH; 8 Y =PA; 11Y =PU;

A=Aluminium moisture barrier; T=Anti-termite protection

G: Water-blocking options for Cable Cores

X=No water-blocking; J= Water-blocking gel in tubes; JD=Water-blocking gel in tubes + dry water-blocking in cable core interstices; JJ= Water-blocking gel in tubes and cable core interstices.

H: Water-blocking options for Cables with more than one Jacket

X=No water-blocking; J=Water-blocking gel between jackets; D=Dry water-blocking between cable jackets

I: Strength member options

A=Aramid yarn; AG=Aramid yarn and fiberglass yarn; G=Fiberglass yarn

J: General options :

SS=Fig-8 self-supporting; UW=Under Water

