

CONNECTORS:

The connectors are vital components of the optical fiber system both from performance and economic point of view.

Connectorization of two fibers are involved in the installation process. This is done by splicing them permanently and linking them temporarily through connectors. Since connectors are part of end of fiber link so attaching connector is called cable termination.

Connector is mainly needed to connect an optical fiber to another fiber or to a transmitter/receiver.

Thus a connection system includes a connector and receptacle whose function is to accept an optical signal with minimum loss, for this reason, a connector is also called a Plug.

PREPARED BY:

BASIC COMPONENT OF OPTICAL FIBER CONNECTOR.

Following are the basic component of connector:

1. Ferrule
2. Latching mechanism
3. Back shell
4. Crimp sleeve
5. Boot.

The structure of an assembled connector in Figure

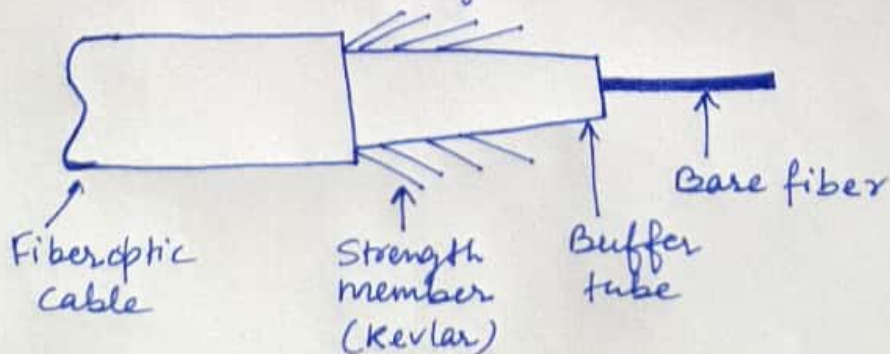


Fig.: optical fiber cable prepared for termination.

TYPES OF OPTICAL FIBER CONNECTORS

Features of few connectors are given below:

1. Biconic Connector

- Rugged Prevx hardware
- Conical Ferrule design
- High precision, tapered ends
- Low insertion loss

2. D4 Connector

- Cylindrical metal coupling nut with Keyed sleeves.
- 2.0mm Ceramic
- Full-Proof ferrule for durability
- For long-haul and local network application.

3. SC Connector

- Square, Push-pull latching mechanism
- Keyed, mated housing provide optimum protection
- 2.5mm ferrule, Pull-Proof design
- Available as duplex connector

4. FC Connector

- Cylindrical metal coupling nut with Keyed sleeves
- 2.5mm Ceramic ferrule
- Pull-Proof ferrule for durability
- For long-haul and local network applications

5. MT-RJ Connector

- Two fiber, dual connect, single ferrule design
- R-J style snag free latch
- Multimode and single mode performance to telecom industries association (TIA) specification.