

## D80 Fiber Optic Connector

### Description

D80 laser energy transfer fiber end face precision grinding large core diameter energy fiber, with air gap and sapphire protection of high-precision D80 connector, to achieve single fiber 600w and below high-power laser flexible transmission. The transmission efficiency can reach more than 90% and the working performance is stable. The connector can be used inside the ring protection process without glue process to further increase the energy fiber heat dissipation effect and service life, to meet the higher power transmission needs of laser welding, cutting, etc.



### Features

- High-performance glueless process, optional with sapphire protection connector, more reliable stability;
- Excellent high temperature resistance characteristics;
- High quality stainless steel armored hose protection layer;
- Large core diameter energy line, a variety of specifications to choose from

### Applications

- High power laser flexible transmission
- Laser welding, cutting, marking
- Spectral measurement



### Technical parameter

|                                    |                                        |      |      |      |      |
|------------------------------------|----------------------------------------|------|------|------|------|
| Core diameter (um)                 | 200                                    | 300  | 400  | 600  | 800  |
| Cladding diameter (um)             | 500                                    | 500  | 500  | 750  | 1000 |
| Coating diameter (um)              | 780                                    | 780  | 780  | 1100 | 1100 |
| Tight cladding diameter (um)       | 1300                                   | 1300 | 1300 | 1700 | 1700 |
| Fiber optic cable armor protection | Metal soft armored tube                |      |      |      |      |
| NA (numerical aperture)            | 0.22 ± 0.02                            |      |      |      |      |
| Operating wavelength (nm)          | 300nm-2400nm                           |      |      |      |      |
| Core material                      | Low OH quartz core                     |      |      |      |      |
| Core cladding material             | Fluorine-doped quartz inner cladding   |      |      |      |      |
|                                    | Quartz cladding                        |      |      |      |      |
| Coating layer material             | Silicone rubber material               |      |      |      |      |
| Tight cladding material            | Nylon tight cladding                   |      |      |      |      |
| Minimum bending radius             | $> 60D(D=Cladding)/< 200D(D=Cladding)$ |      |      |      |      |
| Screening intensity                | 100 kpsi                               |      |      |      |      |
| Light acceptance angle             | 25.4°                                  |      |      |      |      |
| Operating temperature(°C)          | - 65 - 105 °C                          |      |      |      |      |
| Fiber type                         | SI (Step type)                         |      |      |      |      |
| Length(M)                          | Standard 5m, 10m (can be customized)   |      |      |      |      |

