

High Power Transmission Fiber Patchcord

Everfoton high power transmission fiber patchcord uses special cladding with large-core diameter energy optical fibers, protected by high-quality stainless steel hoses. According to customer needs, match the fiber core and cladding diameter, design the fiber-connector-sheath connection process, we achieve high efficiency coupling and high-power stable transmission through precise polishing and efficient cleaning of the end face.

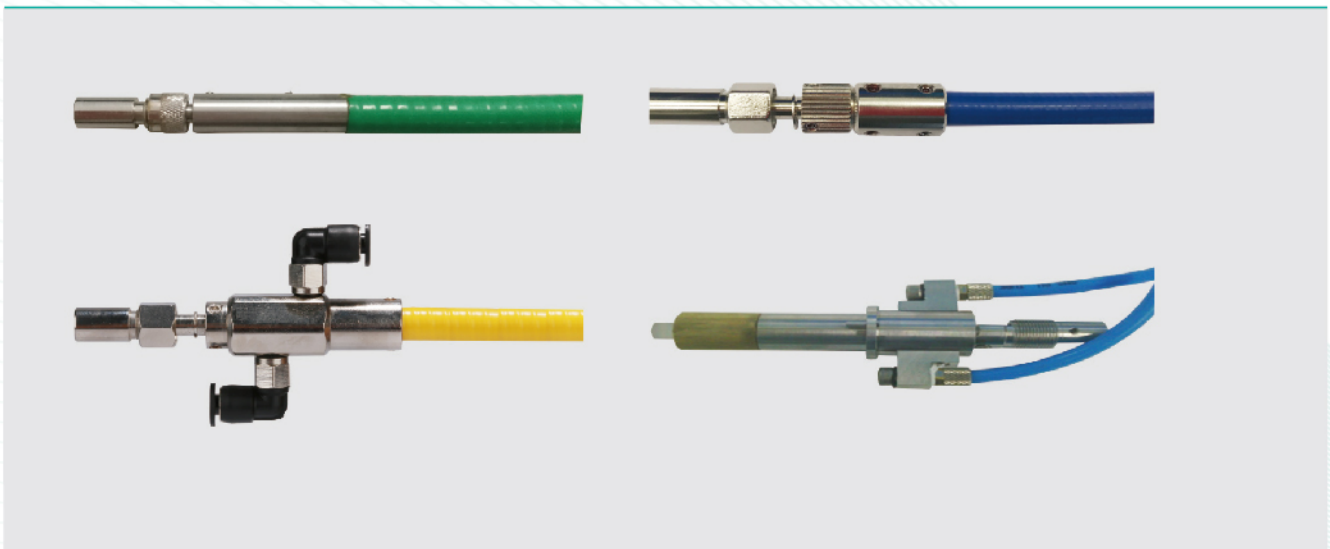
Everfoton refers to industrial standards and practical applications in various industries, providing energy transfer jumper products of different powers and pulses. It has excellent characteristics such as good clamping force, high concentricity, and stable transmission efficiency. At the same time, the connector type can be freely selected or customized according to needs, and the end face can be customized with coating.

Characteristics

- Core-cladding matching, high damage threshold
- Stable clamping and high concentricity
- High quality stainless steel hose protection
- Transmission efficiency greater than 90% @ 1064nm, stable performance
- Organic adhesive/inorganic adhesive/adhesive free process optional
- D80/SMA905 connector optional, water-cooled optional

Applications

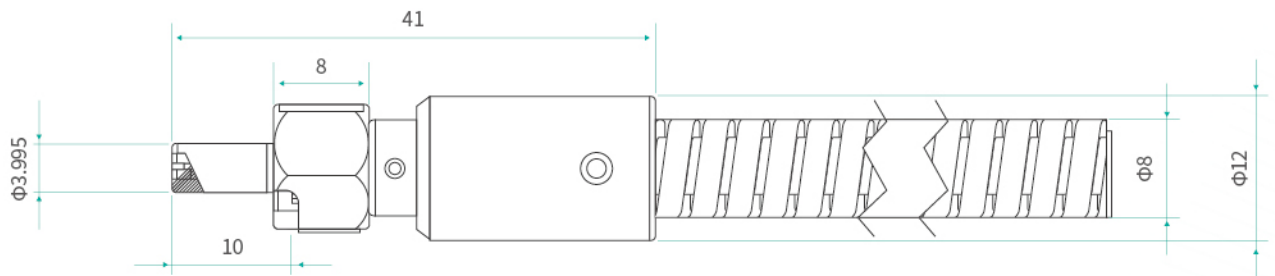
- Semiconductor pump output
- Silicon wafer/ceramic/glass cutting
- Precision drilling of substrate/film
- Marking
- Precision carving
- Spectral measurement/sensing



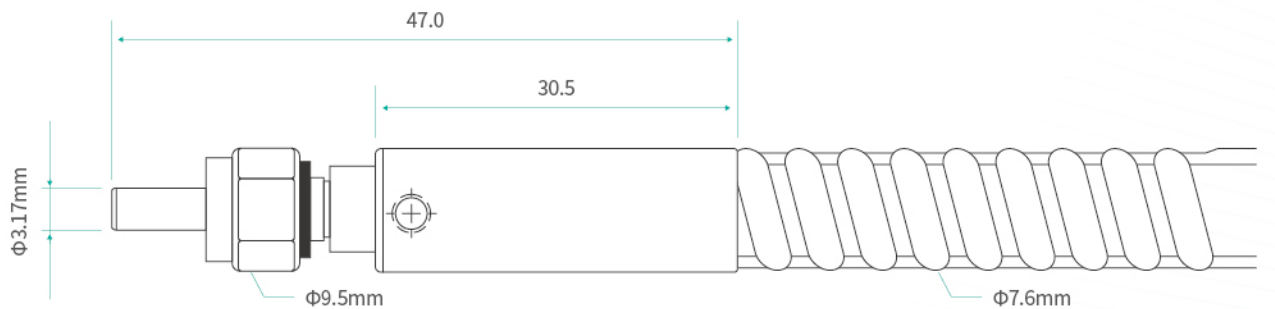
Specifications

Performance	Parameter	Remarks
Size	Single/Multi mode, 40/125~910/1000	Customizable
NA	0.22 ± 0.02(typical value)	Customizable
Characteristics	Step/gradient, high/low OH, acrylic resin coating/ETFE tight sleeve layer	Customizable
Connector type	D80, SMA905, FC, SC, LC, ST, etc.	Customizable
Number of fibers	Single/Double	Customizable
Length	0.1m~25m	Customizable
Operating wavelength	300~1200nm	Customizable
Power	500W(SI 600/750 fiber D80 patchcord for example)	Customizable
Transmission efficiency	>90%@1064nm(10m)	Customizable
Power stability	±1.5%@1064nm	Customizable
Power consistency	≥95%@1064nm	-
End face cleanliness	<2μm dirty quantity≤10(SI 600/750 fiber D80 jumper for example)	-
Collimation	Divergence angle 13.4±3°	-
Clamping force	≥60N	-
Tensile	≥1000N	-
Damage threshold	36.2J/cm ² @1064nm(10.4ns, 1Hz)	-

Dimension Drawing for Connector Structure



D80 Connector



SMA 905 Connector