

# High Power Transmission Fiber Patchcord

Everfoton High Power Transmission Fiber Patchcord is manufactured with special cladding and large-core power delivery fiber. By optimizing the diameter of fiber core and cladding, combining with the connection process of connector and energy transmission cable, as well as precision polishing process of fiber end face, the characteristics of high-efficiency coupling and high power transmission are achieved.

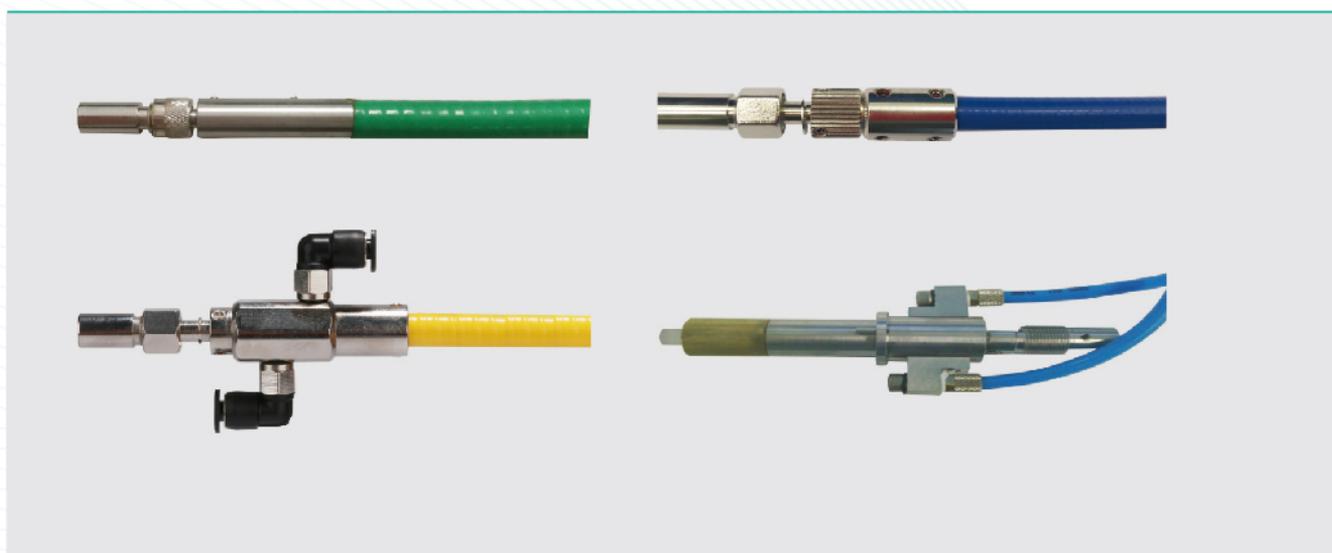
Based on standard applications of various industry, Everfoton can provide high power components which have high concentricity, high-quality stainless steel hose protective layer and excellent characteristics of YLD80/SMA905 connector. And the product can support different power levels and has stable transmission efficiency.

## Characteristics

- Clamping in the center of fiber, excellent concentricity
- Excellent soft stainless steel tube for protection
- High core NA 0.22
- High laser damage threshold
- Stable and higher than 90% transmission efficiency@1064nm
- Adhesive-free product available for option
- D80/SMA905 connector for option
- Water-cooling for option
- Excellent large core power delivery fiber S1200/S1400/S1600 for selection

## Applications

- High power transmission
- Laser precision machining
- Atmospheric spectral measurement
- Laser lithotripsy

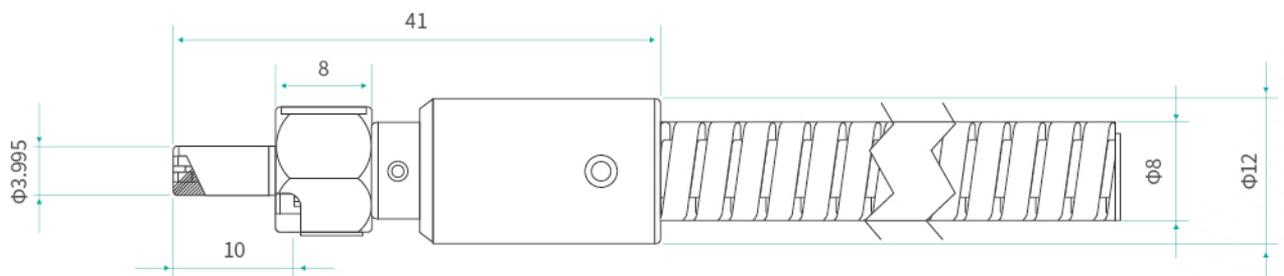


## Specifications

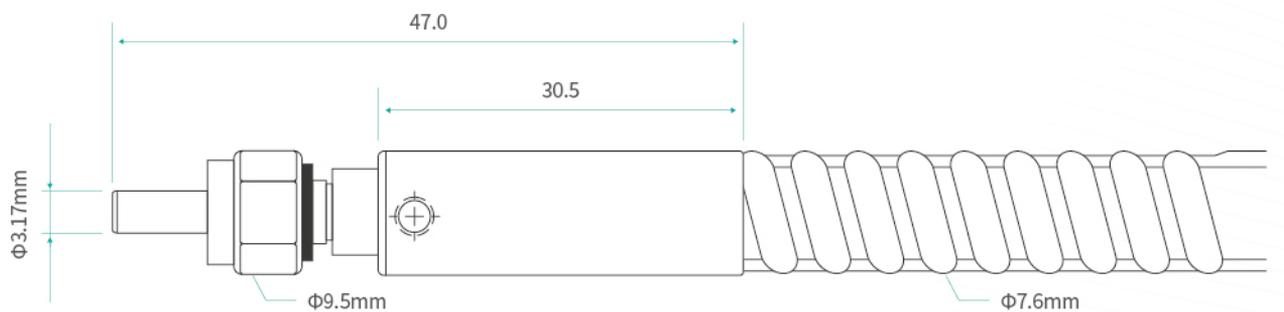
Product Type	D80-D80-SI200/500-22/1400E(DC)-1×A80-5m	D80-D80-SI600/750-22/1700E(DC)-1×A80-5m	SMA905-SMA905-SI400/440-22/730-1×A30-5m
<b>Optical Properties</b>			
Operating Wavelength (nm)	400 - 2400		
NA	0.22 ± 0.02		
Fiber Type	Step Index		
<b>Geometric Properties</b>			
Core Diameter (μm)	200.0 ± 5.0	600.0 ± 10.0	400.0 ± 8.0
Cladding Diameter (μm)	500.0 ± 5.0	750.0 ± 10.0	440.0 ± 8.0
Jacket Diameter (μm)	1400.0 ± 50.0	1700.0 ± 50.0	730.0 ± 30.0
<b>Material</b>			
Core Material	Low OH fused silica		
Jacket Material	ETFE		Acrylate or ETFE
<b>Patch Cord Properties</b>			
Transmission Efficiency (%)	> 90 @ 1.06μm,length5m		> 90 @ 0.98μm,length5m
Laser Resistance (CW) (W)	150 @ 1.06μm	600 @ 1.06μm	150 @ 0.98μm

\*Fiber geometric ,numerical aperture and fiber length can be customized, SMA905 high power hanging /flat head is optional, and water-cooled connector is also optional

## Dimension Drawing for Connector Structure



D80 Connector



SMA 905 Connector