

High-temperature High-power Metal Fiber Connector

Product Description

The high-temperature high-power metal fiber connector is designed with a high-precision metal connector that offers excellent heat dissipation performance. It utilizes a metal fiber optic ferrule that is precisely polished into a curved surface (UPC) or an angled surface (APC). The connector is manufactured using techniques such as high-temperature resistant adhesive, adhesive-free fiber, and air gaps to ensure optimal performance in transmission and environmental conditions. It finds wide applications in fields such as medical, industrial, highly complex communication, and fiber laser systems.



Features

- Utilizes a high-temperature resistant stainless steel metal connector and metal jacket, capable of withstanding temperatures up to 280°C and operating long-term below 200°C.
- Compatible with various energy transmission fibers with core diameters ranging from 80-1000μm.
- Available in different standard connector types such as FC, SMA905, D80, and can be customized according to customer requirements.
- Features floating ferrule, adhesive-free assembly, suitable for high-power laser applications.
- Designed with waterproof sealing, oil resistance, and a protection rating of up to IP68.

Applications

- Power industry
- Smelting and forging
- Temperature sensing
- High-power laser transmission
- Measurement and testing instruments.



Product Parameter

Categories	Indicators
Insertion Loss	Single Mode $\leq 0.30\text{dB}$
Mutuality	$\leq 0.1\text{dB}$
Operating Temperature	$-40^{\circ}\text{C} \sim 200^{\circ}\text{C}$
Fiber Connector Type	FC、D80、SMA905 are optional
Ferrule Type	PC、APC、PC are optional
Jacket	PVC、mini-armored loose tube.
Degree of Protection	IP68

Model Naming

Model	ZL A	-	F C	/	PC	-	F C	/	P C	-	U I	20 0/2 30	-	P 6	-	L
Connector	FC SMA905 D80 XX--other customization															
Ferrule Types	PC-PC rounded surface APC-8° angle PCX- Floating PC surface															
Other end connector type	FC SMA905 D80 XX--other customization															
Ferrule Types	PC-PC rounded surface APC-8° angle PCX-Floating PC surface															
Fiber type	UI - UV quartz fiber HI-- UV quartz fiber XX--other customized fiber															
Cable type	200/230--200fiber core 230 cladding 400/440--400 fiber core 440 cladding XX--other customization															
Jacket type	P-TPU jacket K-stainless steel metal hose															
Jacket Dia.	6-diameter 6.0mm 5-diameter 5.0mm															
Length	Total length of the product															

