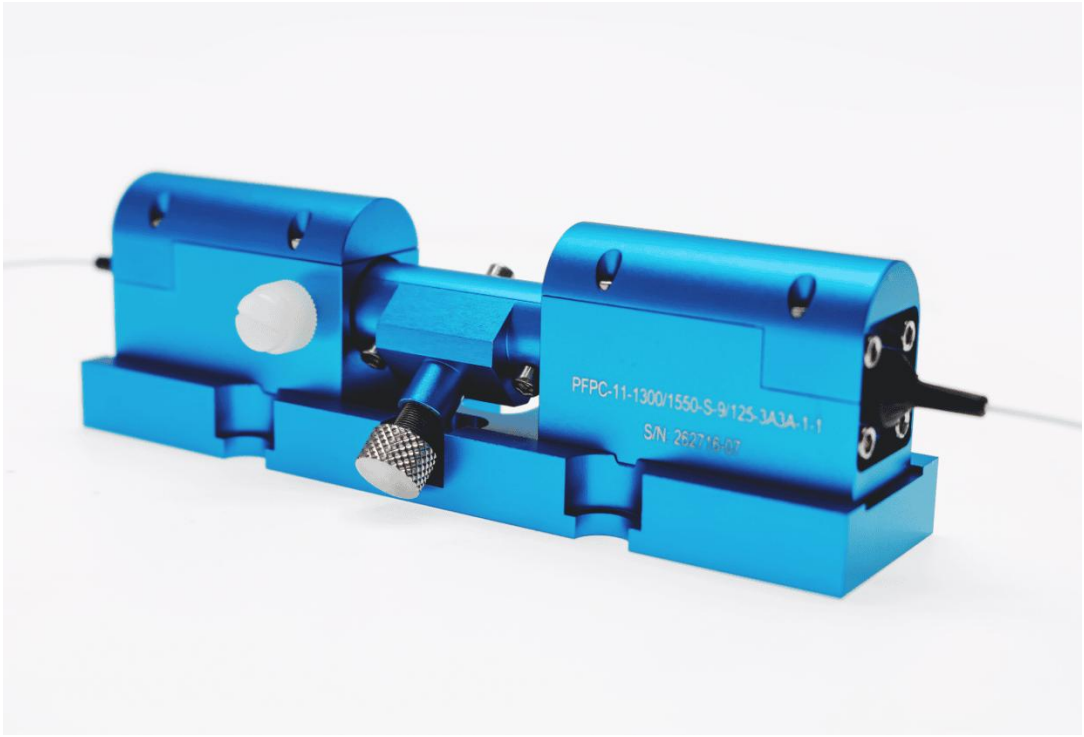
633nm All-Fiber Polarization Controller (Strain Type)



Product Description

The OZ Optics Polarization Controller allows users to convert any input polarization state into any desired output polarization state. The device combines compact size, ease of use with standard volume optical systems, and offers low cost, low loss, and low backreflection. The polarization controller works by applying pressure through an adjustable clamp. The pressure applied to the fiber induces birefringence in the core of the fiber, causing the fiber to act as a quarter-wave plate. Changing the pressure alters the delay between the fast and slow polarization components. Since the clamp is rotatable, the direction of the applied stress can be changed. This enables the achievement of any output polarization. The process is simple and quick, and output polarization exceeding 30 dB can typically be achieved in seconds.

Part Number

PFPC-11-633-S-4/125-3A3A-1-1

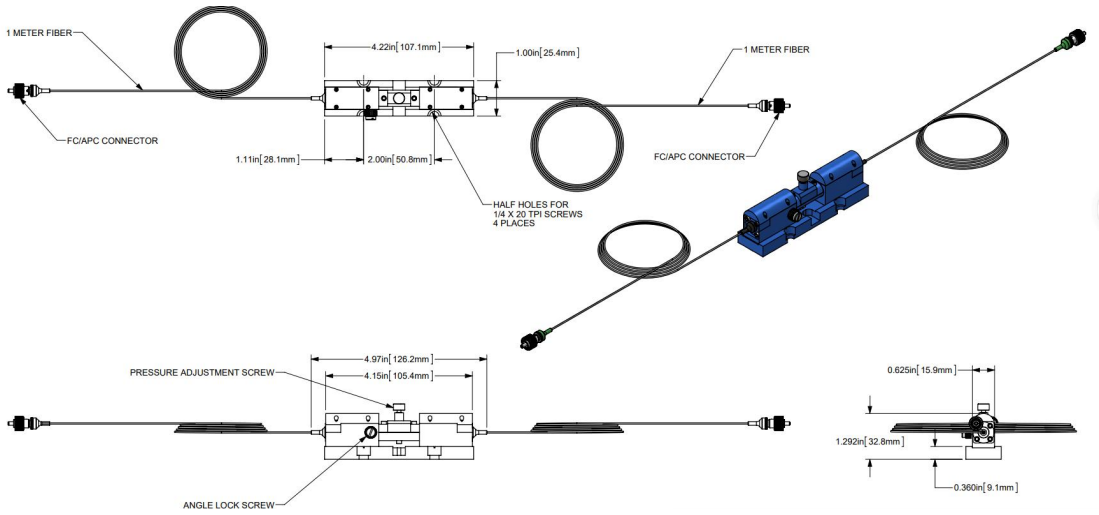
● Product features

No inherent loss、 No backreflection、 Compact - New: Miniature housing、 Easy to use、 Wavelength insensitive Low cost、 Available in a wavelength range of 400–2200nm

● Application area

SM to PM fiber transmission、 PDL measurement、 Fiber laser、 Fiber interferometer、 OCT (Optical Coherence Tomography) system

Dimensional Drawing



Parameters

Parameters	Specs
Wavelength	600-780nm
Connector Type	FC/APC
Type	Pigtail
Pigtail Length	1m
Jacket Outer Diameter	0.9mm

Jacket Material	Hytrel
Test Conditions	
Wavelength	600-780nm
Temperature	22℃
Input	9/125/900
Output	9/125/900
Test Results	
Insertion Loss	＜0.14dB
Output Power (mW)	N/A
Repeatability	Passed
Coupling Efficiency (%)	N/A
Backward Reflection (Return Loss) (dB)	N/A
Extinction Ratio (dB)	37
Stress Test (dB)	N/A
PDL(dB)	N/A