

# **Adjustable Focus Aspheric Fiber Collimator**

## **1050-1700nm (Focal Length 7.5mm Beam Waist Diameter 1.44 FC/APC)**



### ● **Product Description**

The design uses springs to assemble a suitable optical lens inside the mechanical part, which is used for the collimator output of the optical fiber beam and can also be used for fiber-to-fiber coupling. By rotating the sleeve outside the collimator, the internal optical lens can be translated forward and backward along the optical axis, thereby adjusting the distance between the lens and the end face of the optical fiber to obtain different spot sizes.



## ● Product features

Three AR-coated aspheric lens options: 350- 700nm, 650-1050nm, 1050-1620nm 、 Use with compatible connectors to achieve diffraction-limited performance 、 Alignment error during adjustment <math><15\text{mrad}</math>

## ● Part Number

MP-CLM-NIR-1.44-PA

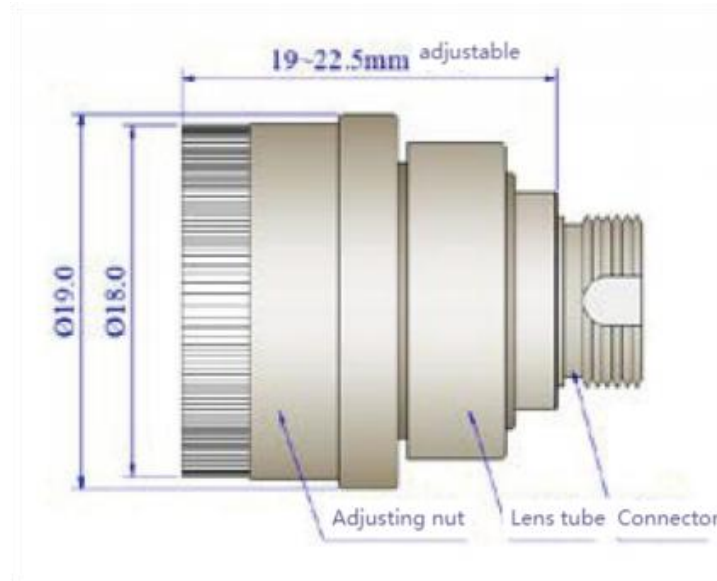
## ● Application area

Fiber Laser Systems | Optical Communication & Sensing | Industrial Inspection | Medical Equipment | Scientific Optical Platforms

## ● Core parameters

Wavelength	Focal Length	Beam Waist Diameter
1050-1700nm	7.5mm	1.44

## ● Dimension Drawing



## ● General Parameters

F=4.5m adjustable focus aspheric collimator

Focal length	NA	Waist diameter	Lens coating wavelength	Far-field divergence angle of collimated light beam	Maximum waist distance	Input Fiber MFD	Distance from optical fiber to lens	Connector Type	Transmittance
4.5m	0.54	0.86	400~700nm R<0.5%	0.045°	530mm	3.5μm	2.4-4.9mm	FC/PC	>90%
4.5m	0.54	0.98	650~1050nm R<0.5%	0.062°	453mm	5μm	2.4-4.9mm	FC/APC	



4.5m	0.5		1050~1			10.4	2.4-4.9		
m	4	0.87	700nm	0.12°	194mm	μm	mm		
			R<0.5%						
<b>F=7.5m adjustable focus aspheric collimator</b>									
focal length	NA Lens	Waist diameter	Lens coating wavelength	Far-field divergence angle of collimated beam	Maximum waist distance	Input Fiber MFD	Distance from optical fiber to lens	Connector Type	Transmittance
7.5m	0.3	1.35	400-700nm	0.027°	1435mm	3.5μm	4.2-6.8mm		
			R<0.5%						
7.5m	0.3	1.6	650~1050nm	0.038°	1225mm	5μm	4.2-6.8mm	FC/PC FC/APC	>90%
			R<0.5%						
7.5m	0.3	1.44	1050~1700nm	0.08°	521mm	10.4μm	4.2-6.8mm		
			R<0.5%						
<b>F=11mm adjustable focus aspheric collimator</b>									
focal length	NA Lens	Waist diameter	Lens coating	Far-field divergence	Maximum waist	Input Fiber	Distance from	Connector	Transmittance



th	ns	eter	wavele ngth	angle of collimated light beam	distance	MFD	optical fiber to lens	Type	nce
11m m	0.3	1.96	400-70 0nm R<0.5%	0.018°	3080mm	3.5μ m	8.6- 10.9 mm	FC/PC FC/APC	>90%
11 mm	0.3	2.35	650~10 50nm R<0.5%	0.026°	2631mm	5μm	8.6-10.9 mm		
11 mm	0.3	2.1	1050-1 700nm R<0.5%	0.055°	1115mm	10.4 μm	8.6-10.9 mm		