

Adjustable Focus Aspherical Fiber Coupler 400-700nm (Focal Length: 4.5mm, Waist Beam Diameter: 0.86, 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 anti-reflection coating aspherical lens options: 350-700nm, 650-1050nm, 1050-1620nm. When used with compatible connectors, it can achieve diffraction-limited performance. Alignment error during adjustment <math><15\text{mrad}</math>

● Part Number

MP-CLM-VL-0.86-PA

● Application area

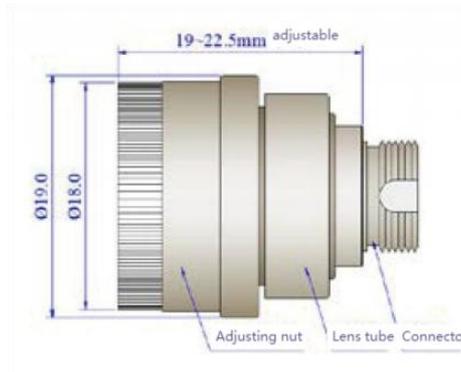
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● Core parameters

Wavelength	Focal Length	Beam Waist Diameter
400-700nm	4.5mm	0.86



● Dimension Drawing



● General Parameters

Technical Parameters

F=4.5m Adjustable Focus Aspherical Collimator									
Focus Length	NM A Lens	Waist Diameter	Lens Coating Wavelength	Collimated Beam Far-Field Divergence Angle	Maximum Waist Distance	Input Fiber MFD	Fiber to Lens Distance	Connector Type	Transmittance
4.5m	0.54	0.86	400~700nmR <0.5%	0.045°	530mm	3.5um	2.4-4.9mm	FC/PC F	>90%
4.5m	0.54	0.98	650~1050nm R<0.5%	0.062°	453mm	5um	2.4-4.9mm	C/APC	



4.5m	0.54	0.87	1050~1700nm mR<0.5%	0.12°	194mm	10.4um	2.4-4.9mm		
F=7.5m Adjustable Focus Aspherical Collimator									
Focal Length	NA Lens	Waist Diameter	Lens Coating Wavelength	Collimated Beam Far-Field Divergence Angle	Maximum Waist Distance	Input Fiber MFD	Fiber to Lens Distance	Connector Type	Transmittance
7.5m	0.3	1.35	400-700nmR <0.5%	0.027°	1435mm	3.5um	4.2-6.8mm	FC/PC F C/APC	>90%
7.5m	0.3	1.6	650~1050nm R<0.5%	0.038°	1225mm	5um	4.2-6.8mm		
7.5m	0.3	1.44	1050~1700nm mR<0.5%	0.08°	521mm	10.4um	4.2-6.8mm		
F=11mm Adjustable Focus Aspherical Collimator									



Focal Length	NA Lens	Waist Diameter	Lens Coating Wavelength	Collimated Beam Far-Field Divergence Angle	Maximum Waist Distance	Input Fiber MFD	Fiber to Lens Distance	Connector Type	Transmittance
11mm	0.3	1.96	400-700nm R<0.5%	0.018°	3080mm	3.5um	8.6-10.9mm	FC/PC F C/APC	>90%
11mm	0.3	2.35	650~1050nm R<0.5%	0.026°	2631mm	5um	8.6-10.9mm		
11mm	0.3	2.1	1050-1700nm mR<0.5%	0.055°	1115mm	10.4um	8.6-10.9mm		