

Adjustable Focus Aspheric Fiber Collimator 650-1050nm (Focal Length 4.5mm Beam Waist Diameter 0.98 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.

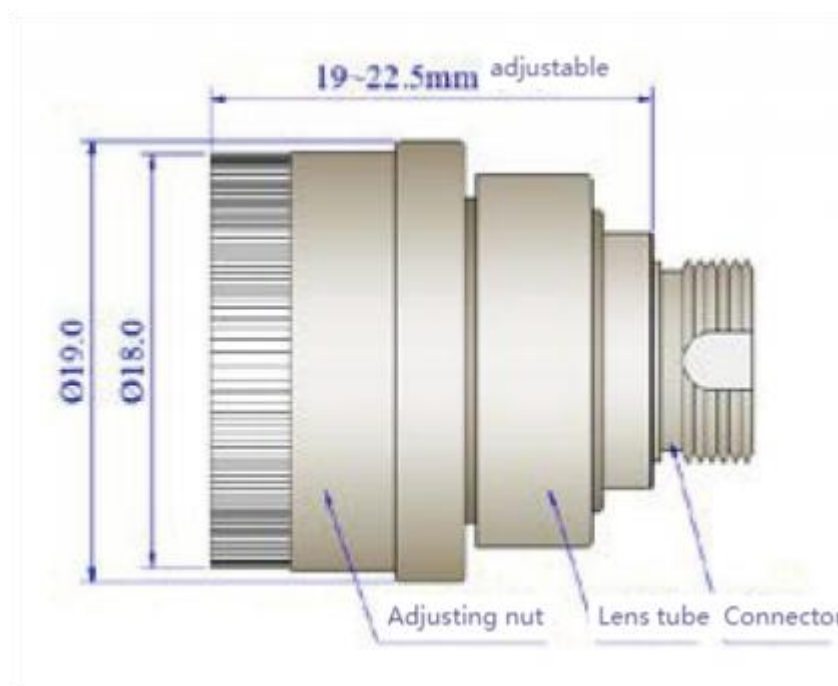
● **Part Number**

NIR-CLM-650/1050-4.5-0.98-FA

● 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 <15mrad

Dimensional Drawing



Parameters

F=4.5m adjustable focus aspheric collimator

Focal length	NA Lens	Waist diameter	Lens coating wavelength	Far-field divergence angle of collimated light beam	Maximum waist distance	Input Fiber MF D	Distance from optical fiber to lens	Connector Type	Transmittance
4.5mm	0.54	0.86	400~700nm R<0.5%	0.045°	530mm	3.5 μm	2.4-4.9 mm	FC/PC FC/APC	>90%
4.5mm	0.54	0.98	650~1050nm R<0.5%	0.062°	453mm	5 μm	2.4-4.9 mm		
4.5mm	0.54	0.87	1050~1700nm R<0.5%	0.12°	194mm	10.4 μm	2.4-4.9 mm		

F=7.5m adjustable focus aspheric collimator

focal length	NA Lens	Waist diameter	Lens coating wavelength	Far-field divergence angle of collimated beam	Maximum waist distance	Input Fiber MF D	Distance from optical fiber to lens	Connector Type	Transmittance
7.5mm	0.3	1.35	400-700nm R<0.5%	0.027°	1435m	3.5 μm	4.2-6.8 mm	FC/PC FC/APC	>90%
7.5mm	0.3	1.6	650~1050nm R<0.5%	0.038°	1225m	5 μm	4.2-6.8 mm		
7.5mm	0.3	1.44	1050~1700nm R<0.5%	0.08°	521mm	10.4 μm	4.2-6.8 mm		

F=11mm adjustable focus aspheric collimator

focal length	NA Lens	Waist diameter	Lens coating wavelength	Far-field divergence angle of collimated light beam	Maximum waist distance	Input Fiber MF D	Distance from optical fiber to lens	Connector Type	Transmittance

11mm	0.3	1.96	400-700nm R<0.5%	0.018°	3080m m	3.5 μ m	8.6- 10.9 mm	FC/PC FC/APC	>90%
11 mm	0.3	2.35	650~1050nm R<0.5%	0.026°	2631m m	5 μ m	8.6-10. 9 mm		
11 mm	0.3	2.1	1050-1700nm R<0.5%	0.055°	1115m m	10.4 μ m	8.6-10. 9 mm		