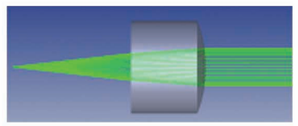
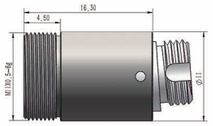
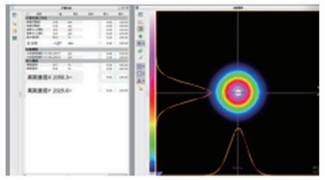
非球面准直器
Aspheric Lenses Collimators

采用固定焦距的非球面透镜，非球面透镜的消像差设计使其能够对光束进行高效且精准的准直处理，从而使出射光束的能量呈现出理想的高斯分布状态。透镜的双面均镀有增透膜，这一工艺能够最大限度地降低表面反射损耗，有效提升光的透过率。然而，非球面透镜存在一定的固有特性，即存在色差现象，其有效焦距（EFL）与波长之间存在着紧密的关联关系。在制造过程中，透镜与光纤的相对位置经过了极为精密的调试，确保了出射光束的偏角控制在0.5° 的极小范围之内。同时，标准化且严格的制作工艺贯穿整个生产流程，不仅保证了产品在性能上具有高度的稳定性和一致性，还使其具备了良好的互配性能，能够更好地适配不同的应用场景和系统需求。

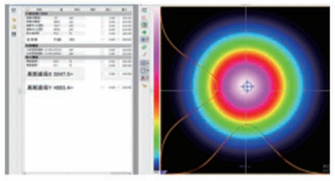
The aspherical lens's unique aberration-correction design empowers it to execute highly efficient and accurate collimation of light beams. As a result, the energy of the output light beam assumes a Gaussian distribution. Both surfaces of the lens are coated with anti-reflection films, that significantly decrease surface reflection losses and substantially improve the light transmittance. Nevertheless, the aspherical lens possesses certain inherent characteristics. Specifically, it exhibits a chromatic aberration phenomenon, with a strong correlation existing between its effective focal length (EFL) and the wavelength. During the manufacturing , the relative positioning of the lens and the optical fiber has undergone extremely precise adjustments. This ensures that the deflection angle of the emitted light beam is maintained within an exceedingly narrow range of 0.5°. Consequently, it is better equipped to adapt to diverse application scenarios and system requirements.







Beam Quality @ 0mm



Beam Quality @ 5M

特征 Features：

- 接头类型可选
  Three Connector Options：FC/PC、FC/APC、SMA905
- 兼容宽键和窄键的接头
  Compatible with Narrow and Wide Key Connectors
- 结构紧凑，便于安装
  Compact structure, Convenient for installation
- 接受定制波长
  Custom Options including wavelengths

参数表 Parameter

Wavelength	Bandwidth	Export beam Size	Divergence Angle	EFL	NA	Pakage Dia.	SM Fiber Type	Transmittance
405nm	±5nm	0.8mm	0.06°+0.01°	4.45mm	0.25	Φ11mm	405HP	>95%
	±5nm	0.89mm	0.03° +0.01°	6.02mm	0.41	Φ11mm		
	±5nm	1.13mm	0.03° +0.01°	7.70mm	0.51	Φ12mm		
	±5nm	2.2mm	0.02° +0.01°	10.67mm	0.26	Φ11mm		
	±5nm	2.17mm	0.01° +0.01°	14.71mm	0.17	Φ11mm		
	±5nm	2.61mm	0.01° +0.01°	17.71mm	0.16	Φ11mm		
	±5nm	3.39mm	0.01° +0.01°	23.00mm	0.17	Φ12mm		
450nm	±5nm	0.82mm	0.05°+0.01°	4.50mm	0.25	Φ11mm	460HP	
	±5nm	0.94mm	0.04° +0.01°	6.07mm	0.41	Φ11mm		
	±5nm	1.2mm	0.03° +0.01°	7.77mm	0.51	Φ12mm		
	±5nm	2.3mm	0.02° +0.01°	10.77mm	0.26	Φ11mm		
	±5nm	2.30mm	0.01° +0.01°	14.86mm	0.17	Φ11mm		
	±5nm	2.77mm	0.01° +0.01°	17.88mm	0.16	Φ11mm		
	±5nm	3.60mm	0.01° +0.01°	23.24mm	0.17	Φ12mm		
520nm	±5nm	0.84mm	0.05°+0.01°	4.55mm	0.25	Φ11mm		
	±5nm	1.07mm	0.04°+0.01°	6.13mm	0.41	Φ11mm		
	±5nm	1.37nn	0.03°+0.01°	7.86mm	0.51	Φ12mm		
	±5nm	2.3mm	0.02° +0.01°	10.89mm	0.25	Φ11mm		
	±5nm	2.62mm	0.015° +0.01°	15.01mm	0.16	Φ11mm		
	±5nm	3.15mm	0.01° +0.01°	18.07mm	0.15	Φ11mm		
	±5nm	4.09mm	0.01° +0.01°	23.49mm	0.17	Φ12mm		
633nm	±5nm	0.86mm	0.05°+0.01°	4.59mm	0.24	Φ11mm	630HP	
	±5nm	1.25mm	0.04°+0.01°	6.19mm	0.4	Φ11mm		
	±5nm	1.60mm	0.03°+0.01°	7.94mm	0.5	Φ12mm		
	±5nm	2.3mm	0.02° +0.01°	10.99mm	0.25	Φ11mm		
	±5nm	3.06mm	0.015° +0.01°	15.17mm	0.16	Φ11mm		
	±5nm	3.68mm	0.01° +0.01°	18.26mm	0.15	Φ11mm		
	±5nm	4.78mm	0.01° +0.01°	23.74mm	0.16	Φ12mm		
780nm	±5nm	1.0mm	0.06°+0.01°	4.63mm	0.24	Φ11mm	780HP	
	±5nm	1.29mm	0.04°+0.01°	6.23mm	0.4	Φ11mm		
	±5nm	1.65mm	0.03°+0.01°	8.0mm	0.5	Φ12mm		
	±5nm	2.4mm	0.025° +0.01°	11.09mm	0.25	Φ11mm		
	±5nm	3.16mm	0.02° +0.01°	15.29mm	0.16	Φ11mm		
	±5nm	3.81mm	0.015° +0.01°	18.40mm	0.15	Φ11mm		
	±5nm	4.95mm	0.01° +0.01°	23.93mm	0.16	Φ12mm		

Wavelength	Bandwidth	Export beam Size	Divergence Angle	EFL	NA	Pakage Dia.	SM Fiber Type	Transmittance
850nm	±5nm	1.0mm	0.06°+0.01°	4.64mm	0.24	Φ11mm	780HP	>95%
	±5nm	1.35mm	0.05°+0.01°	6.25mm	0.4	Φ11mm		
	±5nm	1.74mm	0.04°+0.01°	8.02mm	0.5	Φ12mm		
	±5nm	2.4mm	0.03° +0.01°	11.12mm	0.25	Φ11mm		
	±5nm	3.32mm	0.02° +0.01°	15.33mm	0.16	Φ11mm		
	±5nm	3.99mm	0.015° +0.01°	18.45mm	0.15	Φ11mm		
	±5nm	5.19mm	0.01° +0.01°	24.00mm	0.16	Φ12mm		
980nm	±5nm	1.0mm	0.07°+0.01°	4.66mm	0.24	Φ11mm	HI1060	
	±5nm	1.45mm	0.05°+0.01°	6.27mm	0.4	Φ11mm		
	±5nm	1.86mm	0.04°+0.01°	8.05mm	0.5	Φ12mm		
	±5nm	2.3mm	0.03° +0.01°	11.16mm	0.25	Φ11mm		
	±5nm	3.56mm	0.02° +0.01°	15.39mm	0.16	Φ11mm		
	±5nm	4.28mm	0.02° +0.01°	18.53mm	0.15	Φ11mm		
	±5nm	5.57mm	0.01° +0.01°	24.10mm	0.16	Φ12mm		
1064nm	±5nm	1.0mm	0.08°+0.01°	4.67mm	0.24	Φ11mm		
	±5nm	1.42mm	0.055°+0.01°	6.29mm	0.4	Φ11mm		
	±5nm	1.82mm	0.04°+0.01°	8.07mm	0.5	Φ12mm		
	±5nm	2.3mm	0.03° +0.01°	11.19mm	0.25	Φ11mm		
	±5nm	3.48mm	0.02° +0.01°	15.43mm	0.16	Φ11mm		
	±5nm	4.19mm	0.02° +0.01°	18.57mm	0.15	Φ11mm		
	±5nm	5.45mm	0.01° +0.01°	24.15mm	0.16	Φ12mm		
1310nm	±5nm	0.84mm	0.11°+0.01°	4.70mm	0.24	Φ11mm	Smf-28e	
	±5nm	1.10mm	0.09° +0.01°	6.32mm	0.4	Φ11mm		
	±5nm	1.41mm	0.07°+0.01°	8.12mm	0.49	Φ12mm		
	±5nm	2.1mm	0.05° +0.01°	11.26mm	0.25	Φ11mm		
	±5nm	2.70mm	0.035° +0.01°	15.52mm	0.16	Φ11mm		
	±5nm	3.25mm	0.03° +0.01°	18.68mm	0.15	Φ11mm		
	±5nm	4.22mm	0.02° +0.01°	24.29mm	0.16	Φ12mm		
1550nm	±5nm	0.87mm	0.11°+0.01°	4.74mm	0.24	Φ11mm	Smf-28e	
	±5nm	1.24mm	0.09°+0.01°	6.36mm	0.39	Φ11mm		
	±5nm	1.60mm	0.07°+0.01°	8.17mm	0.49	Φ12mm		
	±5nm	2.1mm	0.05° +0.01°	11.32mm	0.24	Φ11mm		
	±5nm	3.05mm	0.04° +0.01°	15.61mm	0.16	Φ11mm		
	±5nm	3.67mm	0.03° +0.01°	18.79mm	0.15	Φ11mm		
	±5nm	4.77mm	0.02° +0.01°	24.42mm	0.16	Φ12mm		

Wavelength	Bandwidth	Export beam Size	Divergence Angle	EFL	NA	Pakage Dia.	SM Fiber Type	Transmittance
1650nm	±5nm	0.90mm	0.11°+0.01°	4.74mm	0.24	Φ11mm	Smf-28e	>95%
	±5nm	1.26mm	0.10°+0.01°	6.37mm	0.39	Φ11mm		
	±5nm	1.62mm	0.07°+0.01°	8.19mm	0.49	Φ12mm		
	±5nm	2.15mm	0.05° +0.01°	11.35mm	0.24	Φ11mm		
	±5nm	3.10mm	0.04° +0.01°	15.65mm	0.16	Φ11mm		
	±5nm	3.73mm	0.03° +0.01°	18.84mm	0.15	Φ11mm		
	±5nm	4.85mm	0.025° +0.01°	24.47mm	0.16	Φ12mm		

* 所有光斑、发散角的测试数据均由远讯标准跳线接入测试
All testing data for beam size and divergence angle are obtained by connecting the standard jumpers from Ysenser.
* 也适用于相应波长的保偏单模光纤接入
Also applicable for polarization maintaining fiber with corresponding wavelength.
* 可定制应用于无磁、真空、高温环境的产品
Products suitable for non - magnetic , vacuum or high Temperature environments can be customized.