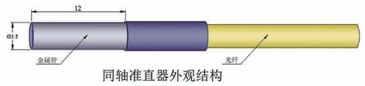
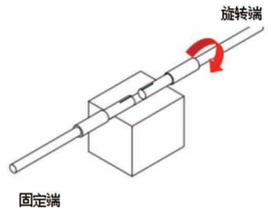
同轴光纤准直器
Coaxial fiber collimator

又名无偏角光纤准直器，其核心特性在于准直器的出光光轴与机械轴近乎完美重合。这种设计使得在安装过程中，无需对光束出光偏角进行精密调节，极大地简化了安装流程。在工作距离范围内，同轴光纤准直器能够始终保持优异的准直性能，确保光信号的稳定传输。特别是在配对安装场景下，该准直器可实现快速精准的对准，显著降低光路的插入损耗，有效提升光信号的传输效率。此外，同轴光纤准直器支持随机装配方式，大幅提高了安装效率，不仅减少了人工调节的复杂程度，还降低了对调试人员专业技能的要求，使安装过程更加便捷高效。

It also known as the non-deviation angle fiber optic collimator, its core characteristic lies in the nearly perfect coincidence between the output optical axis of the collimator and the mechanical axis. This design eliminates the need for precise adjustment of the output angle of the light beam during the installation process, greatly simplifying the installation procedure.Within the working distance range, the coaxial fiber collimator can always maintain excellent collimation performance, ensuring the stable transmission of optical signals. Especially in the paired installation, this collimator can achieve rapid and precise alignment, significantly reducing the insertion loss of the optical path and effectively improving the transmission efficiency of optical signals.



同轴准直器外观结构



特征 Features：

- 单模、多模光纤均可制作
  Both single-mode and multi-mode optical fibers can be fabricated
- 支持随机装配，无需复杂调试
  It supports flexible configuration without the need for in-depth calibration
- 光纤滑环（旋转关节）的核心光学器件
  The core optical components of the optical fiber rotary joint
- 抗辐照同轴准直器可定制
  The radiation-resistant coaxial collimator can be customized.
- 光纤连接器可选
  Connector Options：FC/APC、FC/PC、LC、ST、SMA905

应用场景Application：

光纤扩束连接器、光电混合滑环、光纤旋转云台、智能机器人、光电流互感器等即插即用光准直链路

Fiber bundle connectors ,Opto-electric rotary Jumper,Fiber rotation platforms,Intelligent robotsOopto-electric current transformers with plug-and-play optical axis alignment.

参数表 Parameter

Wavelength	Working Distance	Waist Beam	Deflection Angle	Divergence Angle	Package Dia.	Fiber Type	IL for a Pair	Return Loss
1310nm	0~20mm	0.36mm	< 0.1°	< 5mrad	3.5mm	G625D G657A1 G657A2	≤1.5dB	≥50dB
	10~50mm	0.38mm	< 0.1°	< 5.5mrad	3.5mm			
	50-80mm	0.43mm	< 0.1°	< 4.5mrad	3.5mm			
1550nm	0~20mm	0.36mm	< 0.1°	< 5.5mrad	3.5mm			
	10~50mm	0.38mm	< 0.1°	< 6mrad	3.5mm			
	50-80mm	0.43mm	< 0.1°	< 4.5mrad	3.5mm			
850nm	0-20mm	0.75mm	< 0.1°	< 9mrad	3.5mm	OM2-OM4	≤1.2dB	≥25dB
1300nm	0-20mm	0.7mm	< 0.1°	< 12mrad	3.5mm			