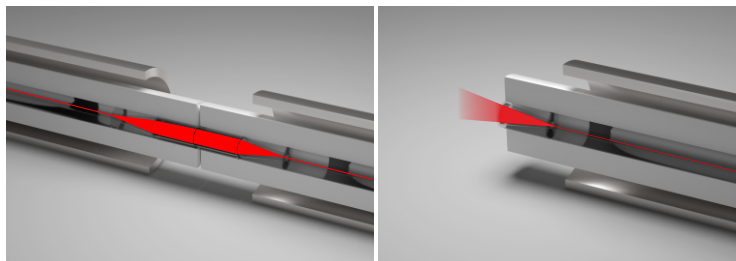




High Power Fiber Optic Connection

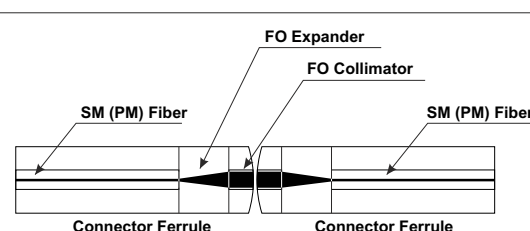
for DWDM, CATV, Optical Amplifiers, Free Space Optics Applications



SQS solution of single-mode (SM) high-power (HP) optical connections for transmission of optical power up to 5 W. The SQS solution is based on expanded beam technology, either through an expanding element and collimating lens (Lensed Fiber Technology), or through terminating of SM fiber by a "cap" from a coreless fiber (End Cap Technology). Both solutions ensure expansion of Mode Field Diameter (MFD) and thus reducing the power density at the plug connection. SQS HP technology is compatible with most fiber optic connectors and fiber arrays. Available also in combination with SM fibers for short wavelengths (400 nm), polarization maintaining fibers (PM), and versions with antireflection coating (ARC) on fiber endface.

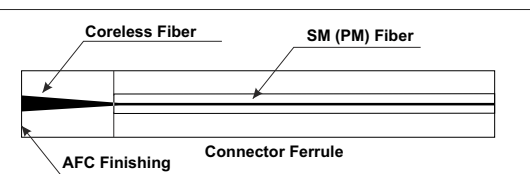
Lensed Fiber

Fiber type:	SM, PM
Fiber interface:	FC, E2000, ST, SMA, SC, fiber array, 2D matrix...
Signal power:	Up to 5 W
*Insertion loss (typ/max):	0.3 dB / 0.4 dB
Return loss (min/typ) PC °0:	50 dB / 55 dB
Return loss (min/typ) APC °8:	60 dB / 68 dB
PM fiber extinction ratio:	> 23 dB (PM version)
MFD:	25 ~ 50 μm
Repeatability (500 mating):	+/- 0.2 dB
Wavelengths :	400 up to 1620 nm
Operating temperature :	-40 + 85 °C



End Capped Fiber

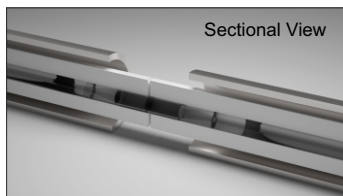
Fiber type:	SM, PM
Connector type :	FC, E2000, SC, Fiber array, 2D fiber matrix...
PM fiber extinction ratio:	> 23 dB (PM version)
MFD length of End Cap:	Upon request
Wavelengths:	400 up to 1620nm
Operating temperature:	-40 + 85 °C



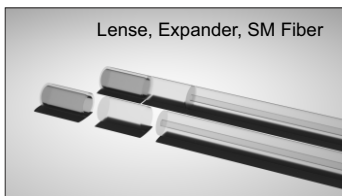
*Measured Against Reference at 1310 and 1550nm. Fiber Type SMF G657 A1(A2).

Note: useful for fiber to free space applications

Lensed SM Fiber

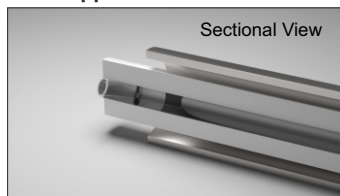


Sectional View

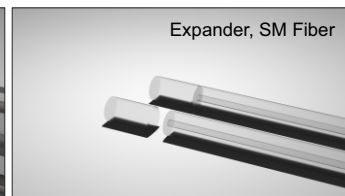


Lense, Expander, SM Fiber

End Capped SM Fiber



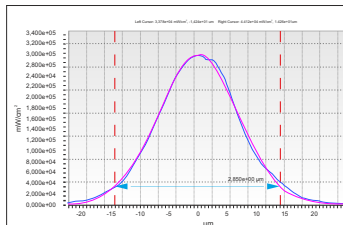
Sectional View



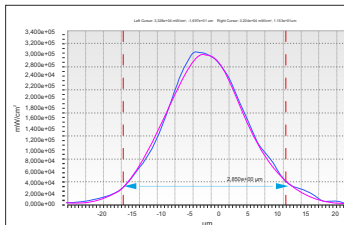
Expander, SM Fiber

Near field measurement of HP connectors

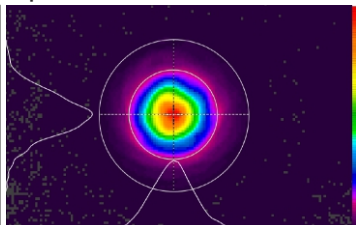
Beam Profile X



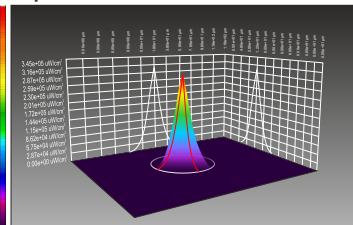
Beam Profile Y



Expanded Beam



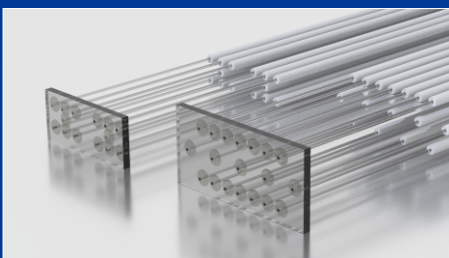
Expanded Beam 3D Visualization



HP FC Connectors



HP Matrix Arrays



HP E2000 Connectors

