

aeroGAIN-FLEX

DC-200/40-PZ-Yb assemblies with high power terminations



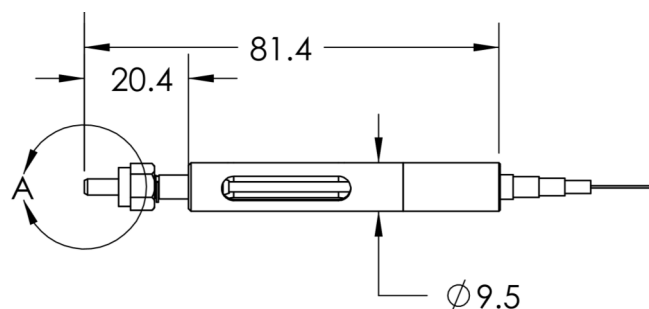
- Single-mode with very large mode area
- Easy to use SMA-905 termination
- Configurations for 915 nm and 975 nm pumping
- End-sealed for high reliability
- Coil Control ensuring excellent stability

The *aeroGAIN-FLEX* assemblies include our most popular flexible fiber used for high power 1 micron amplification. The fiber offers performance beyond conventional fibers, with truly single mode operation, large mode area for high power handling and low nonlinearities, superior beam quality, and polarization features. The fibers are sealed and connectorized with SMA-905 high power connectors, offering a hermetic and robust end treatment.

These assemblies are offered in several standard configurations based on the most common customer requests, and are off-the-shelf for reduced lead times. Please contact us if you are interested in an alternative configuration.

Applications

- High pulse energy fiber amplifiers
- Fiber lasers



The High Power SMA-905 Connector (dimensions in mm— see separate data sheet for more details)

End sealing

As a part of the connectorization process, the fiber is hermetically sealed at the end. This is done by collapsing the air-filled microstructure. The sealing prevents contamination from entering the fiber through the holes and provides a cleanable solid interface.

The sealing length is $50 \pm 49 \mu\text{m}$ and does not affect the high NA of the pump cladding.

Configuration Parameters

Configuration	<i>aeroGAIN-FLEX</i> 1.5	<i>aeroGAIN-FLEX</i> 2.5	<i>aeroGAIN-FLEX</i> 3.0	<i>aeroGAIN-FLEX</i> 5.0
Fiber Type*	DC-200/40-PZ-Yb-03	DC-200/40-PZ-Yb-03	DC-200/40-PZ-Yb-03	DC-200/40-PZ-Yb-03
Fiber Length	1.5m +5/-2 cm	2.5m ± 5 cm	3.0m ± 5 cm	5.0m ± 10 cm
End 1 Termination*	Sealing + SMA-905 5 ± 1°	Sealing + SMA-905 5 ± 1°	Sealing + SMA-905 5 ± 1°	Sealing + SMA-905 5 ± 1°
End 2 Termination*	Sealing + SMA-905 5 ± 1°	Sealing + SMA-905 5 ± 1°	Sealing + SMA-905 5 ± 1°	Sealing + SMA-905 5 ± 1°

* Please refer to the individual fiber and termination product sheets for detailed specifications

aeroGAIN-FLEX-110902