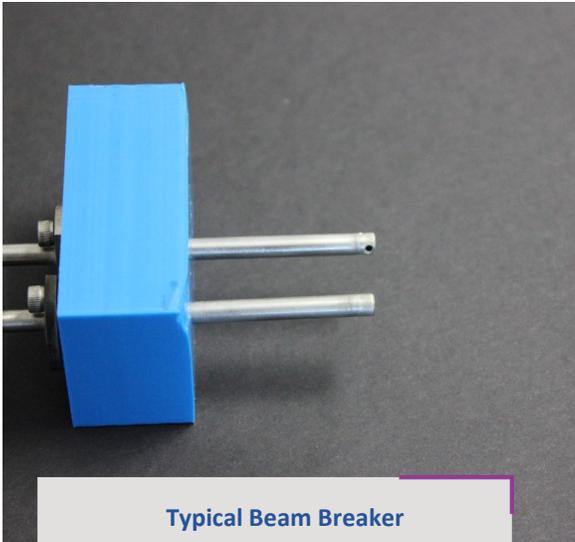




OPTICAL BEAM BREAKER

For Measurement By Interruption of the Optical Signal



Typical Beam Breaker Mounting Arrangement

Prime Photonics' optical beam breakers detect the passage of a moving target which interrupts the laser beam. They are used in blade vibration measurement applications to detect the passage of blades for which the tip of the blade is not accessible, such as shrouded blades. They can also be used in applications other than tip timing to detect the passage of an object on industrial production lines.

Optical beam breakers are made of two separate probes, one send and one receive. The optical signal is projected at 90 degrees from the axial direction of the probe.

Environmental Conditions

The probe tips can be made to resist high temperatures up to 590 degrees C (1100 deg F) without cooling. Optional gas purge lines can be built into the probes for cooling purposes.

Optical beam breakers can be inserted in the gas path. Windows help reduce fouling and make these probes easy to clean. Optional gas lines also help keep the probe tips clean.

KEY PARAMETERS

- 2 separate probes (1 send and 1 receive)
- Rated for high temperatures
- Physical dimensions (length, diameter) tailored to each application
- Working range can be tailored to the application
- FC, ST, SMA connectors available
- Custom Mounting Flanges
- Choice of hard or flexible cable exiting the probe head

How To Specify An Optical Beam Breaker

Prime Photonics makes custom probes for each application.

Please specify the physical dimensions required (length and diameter of the tip, length of the probe, mounting interface), the distance between the two probes, the type of laser and photodetector that it must interface with, and the environmental conditions that the probes will be installed in.

Prime Photonics will provide a custom design and submit it for customer approval before building the probe.

All probes are rigorously tested before shipment to ensure the highest optical quality.

