

G-SST Vapor Probe, 50 cm Pathlength

Next Generation Design For Easy Servicing and Repairs

For hydrogen peroxide or other vapor applications, the 50 cm G-SST Vapor Probe provides an efficient, simple and easy interface between the vapor chamber, and Guided Wave's Hydrogen Peroxide Vapor (HPV) analyzers or other spectrometer or photometer. The probe clamps into a standard 2 inch Tri-Clover® sanitary fitting and can be mounted in the vapor chamber, feed line, or return line. Since both source and return fibers are on the same end of the probe, and external to the process, there are no fiber cables to seal. The optical path is folded, providing 50 cm of interaction with the gas in a compact 25 cm probe body. This means more accuracy and stability for low vapor concentrations. An optional flip in/out polymer validation filter can be added to check analyzer performance.



Vapor Probe Features

- Glass windows protect optical surfaces
- High optical efficiency, > 50% transmission
- Long pathlength, 50 cm for greater accuracy and stability
- Rugged design
- Electropolished 316 stainless steel construction or clear anodized aluminum
- SMA 905 fiber optic interface, all fiber sizes
- Single-sided design, no need for fiber cable feed-throughs
- Can be installed in vapor feed or return lines
- Works in vacuum (10^{-5} Torr) or up to 2 atm absolute
- Operates in environment from 0°C to 90°C
- P/N 19360-11050 with integrated validation filter

Options

- 2 inch (50.8 mm) Tri-Clover port or 2 inch (50.8 mm) KF port
- Electropolished 316 stainless steel or anodized aluminum
- Integrated validation filter

Specifications

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| Standard Probe Lengths (inches) | 11.61in (29.49 cm), Insertion length: 11.01 in (27.96 cm) |
| Pathlength (cm) | 50 cm; double pass 25cm |
| Probe Diameter (inches) | Flange: 2.52 in, Probe Body: 1.5 in, Insertion Body: 1.74 in |
| Flange mount | 2 in (50.8 mm) Tri-Clover or 2 in (50.8 mm) KF Flange Mount |
| Spectral Range | NIR (600 - 2100 nm) |
| Optics | Glass is gold-coated mirror |
| Fiber Diameter (µm)/Connector | 200 µm – 600 µm; SMA 905 |
| Efficiency | ≥ 50% (900 nm – 1650 nm) |
| Temperature Range | 0 °C to 90 °C |
| Pressure Range | 1×10^{-5} Torr to 1520 Torr (2 atm) |
| Body Material | SS316 standard, Electropolished or Anodized Aluminum |
| Window Material | BK-7 glass |
| Seal | Viton Sanitary Flange Gasket, Viton O-rings |