Vacuum Feedthrough

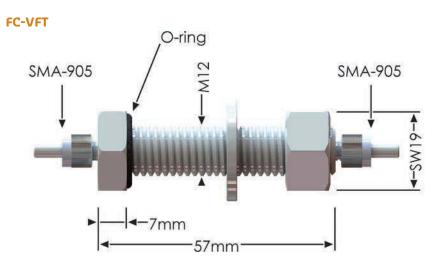


These feedthroughs are designed for the use with fiber-optics in vacuum chambers, such as for plasma and coating deposition monitoring. They can be used in chambers with wall thicknesses of 5-40 mm and vacuum levels up to 10^{-7} millibar.

The feedthrough assembly consists of an M12 housing with Viton® O-ring and two SMA fiber-optic interconnects to allow easy coupling to fiber-optic cables and probes. In order to connect these assemblies to fiber-optic cables

inside/outside the chamber, two extra SMA fiber interconnects (ME-FI-SM-MM) should be ordered separately.

The vacuum feedthrough can be delivered for all fiber diameters, from $50\mu m$ up to 1000 µm for UV/VIS/NIR. A high temperature version of the vacuum feedthrough(-HT) is also available enabling the device to withstand temperatures up to 200°C.



Technical Data

Fibers

Wavelength range

Connectors

Wall thickness of vacuum chamber

Vacuum

Temperature

1 fiber, diameter 50 μm, 100 μm, 200 μm, 400 μm, 600 μm, 800 μm or 1000 μm

200-800 nm (UV/VIS), 350-2500 (VIS/NIR) or 200-2500 nm (UV/VIS/NIR)

Standard SMA-905 connectors (2x)

5-40 mm

Max. 10⁻⁷ mbar

-40°C to 100°C (-HT version 200°C)

Ordering Information

FC-VFT-xx50

• Vacuum feedthrough for 50 µm fibers, incl. SMA adapter, needs 2 extra SMA interconnects

FC-VFT-UVIR100

• As FC-VFT-xx50, for 100 µm broadband fibers

FC-VFT-UVIR200

• As FC-VFT-xx50, for 200 µm broadband fibers

FC-VFT-UVIR400

• As FC-VFT-xx50, for 400 µm broadband fibers

FC-VFT-UVIR600 FC-VFT-xx800 • As FC-VFT-xx50, for 600 µm broadband fibers

FC-VFT-xx1000

• As FC-VFT-xx50, for 800 µm fibers

MF-FI-SM-MM

• As FC-VFT-xx50, for 1000 µm fibers

• SMA fiber interconnect, 2 pieces needed for each vacuum feedthrough

Specify xx = UV for UV/VIS fiber cables, IR for VIS/NIR

Options



-HT • High Temperature version (up to 200°C)



