



TM50/TM80 Process Line



Example applications

- Process control with NIR, UV/VIS and fluorescence spectroscopy
- Measurement of UV-VIS-absorbing gases such as F₂, Cl₂, Br₂, I₂, SO₂, O₂
- Reaction tracking in chemical processes from UV to NIR
- Solvent blending



Benefits

- Easy process connection via standard flanges
- Optical layer thickness freely selectable and adjustable by the customer
- Fibre optics can be changed during the ongoing process
- Little reduction in cross section thanks to slim probes
- Very high energy throughput for a good signal-to-noise ratio
- Suitable for all common fibre optic coupled spectrometers and photometers
- Wavelength ranges: UV/VIS/NIR



Technical Specifications Standard Flowcell

Measuring Principle	Transmittance
Material Process Window	Sapphire
Material Flowcell	1.4571
Process Connection	DIN or ANSI Flange
Sealing Material	Kalrez® 6375
Temperature Range	5°C to 150°C (pertinent to Sealing Material)
Pressure Range	up to 40 bar / 600lb/sq.in. (pertinent to Flange)
Optical Path Length	freely selectable up to 20 mm / 0,78 Zoll
Collimation Optics	Stainless Steel 1.4571 with Lens Suprasil® 300
Optical Fiber	0,5 m / 19,7 Zoll Stainless Steel Coat 600/660 µm Quarzfiber with SMA Connection and Stainless Steel Sleeve 130mm / 5,12 Zoll
Compliance	Pressure Equipment Directive 2014/68/EU

Other materials, such as other stainless steels or Hastelloy, etc., are manufactured on customer manufactured. Other sealing materials are also used according to customer requirements. For UV applications or on request, the cell is supplied with quartz optics.