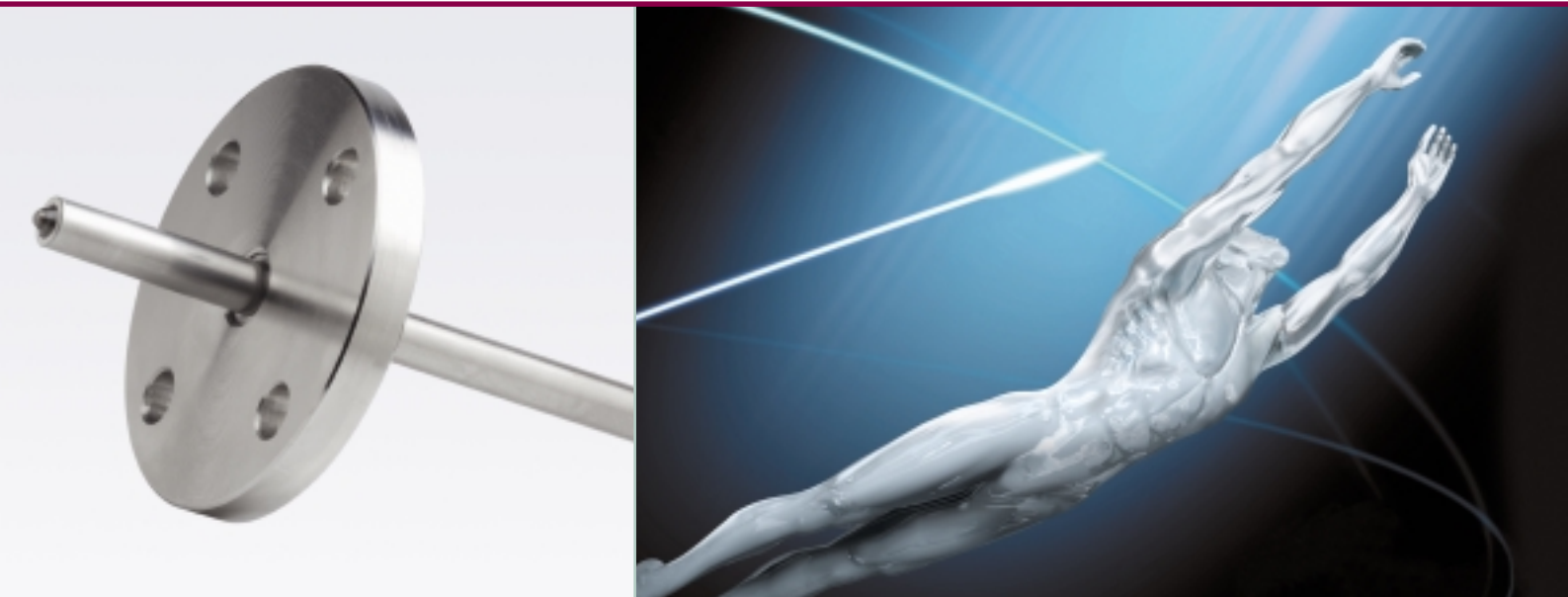


ATTENUTO

Fiberoptic ATR-Immersion Probes with the Superior Optic Material – Sapphire



ATTENUTO ATR-immersion probes are remarkable for their robust design and unmatched selection of materials for all submersible components. With the optic material Sapphire, ATTENUTO ATR-immersion probes are practically abrasion- and corrosion free, and thus stable in concentrated, strong acids and bases. Moreover, the probes will not be damaged by spikes in temperature or pressure.

With our ATTENUTO probes, the effective optical path length is reported in the sub-micrometer range, allowing for the online analysis in highly-concentrated solutions and eliminating the cumbersome dilution steps. ATTENUTO probes are designed for direct immersion into reactors and pipes. The probes are manufactured in accordance with your selection from a wide range of materials, process connections, pressure limits, diameters and temperature ranges or can be further customized to meet your individual needs.

ATTENUTO – the Clear Advantages at a Glance

- Abrasion- and corrosion free Sapphire optic
- Chemical resistance
- Verifiable process capability
- Range of application from UV to NIR
- Wide variety of models and customized designs
- Compatible with all types of spectrometers
- Complete range of accessories



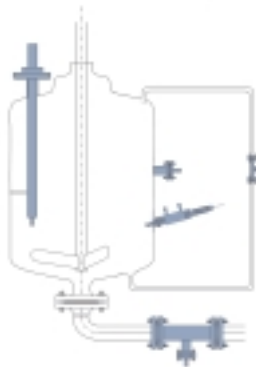
ATTENUTO Meets the Highest Demands in Process Analysis Technology

Applications

In organic-chemical synthesis and in the downstream processing of biotechnologically manufactured products.

Standard Procedures

- Reaction monitoring in heterogeneous catalyzed processes
- Online determination of concentrations in active ingredient- or color concentrates
- Control of membrane separation or process chromatography



Specifications

Optic

Optical path length (OPL) ~0.2 μm at 250 nm and with 3 reflections

Probe Design

Dimensions Diameter 18 mm
Immersion depth from 100 mm

Standard materials Stainless steel DIN 1.4435/316L,
Sapphire

Process connectors DIN- or ANSI flanges
Screw fittings (Swagelok)
Additional connectors upon request

Process Conditions

Temperature Maximum 180°C (continuous use)

Pressure 0–100 bar

Options

Alternative materials Stainless steel DIN 1.4571/SS316Ti,
titanium and hastelloy

Other Additional designs, dimensions
and specifications upon request

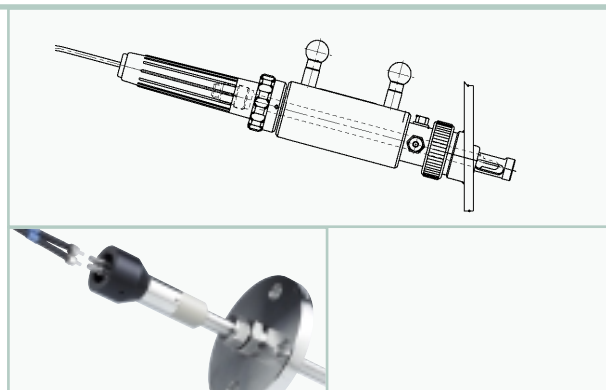
Declaration of Conformity

Certified in accordance with Pressure Equipment Directive 97/23/EC

Total Service – from Probes to a Complete Range of Accessories

We offer much more than just fiberoptic probes. Our comprehensive accessory program includes everything you need for implementing our probes as well as reliable coupling solutions for almost any type of spectrometer.

Ask us about the optimal solution for you.



Solvias AG
P.O. Box
4002 Basel
Switzerland

Tel. +41 61 686 62 17
Fax +41 61 686 60 96
pat@solvias.com
www.pat.solvias.com