

## 663.501 Flow-Through Cell For Process Control

### Application

### Particular characteristics

### Material

Online-Measurements in the chemical process industry

- pressure resistance up to 100 bar, temperature resistance up to 300°C
- easy to dismantle for cleaning
- optical components: sapphire or quartz SUPRASIL<sup>®</sup>
- cell material: stainless steel or Hastelloy<sup>®</sup>



This Hellma flow-through cell was developed for on-line measurements where the diameter of the pipe is very small. The optical windows are made of quartz SUPRASIL<sup>®</sup> or sapphire, the barrel is made of stainless steel 1.4571 (316 Ti) or 1.4404 (316L) or alloy 2.4602 (Hastelloy<sup>®</sup> C-22).

Fibre-optic cables link the measuring cell with the spectrometer. As with cuvette measurements, the light beam passes through the sample compartment only once. This results in very low stray light and improves the quality of the measurement.

The seals consist of Kalrez<sup>®</sup> compound 4079, no epoxy is used for parts of the cell which come into contact with the sample.

In the case of cold liquid samples, condensation on the optics of the collimator and the insides of the windows could occur. To avoid this the measuring cell has optional flushing attachments for dry, oil-free air.