



THE RAPID FLOW LIQUID TRANSMISSION CELLS

These Rapid Flow Liquid Transmission Cells are designed to monitor liquid streams in process environments using transmission spectroscopy. The design of the cells allows for the high unimpeded flow of sample thus ensuring that the sample analyzed in the cell is the timely representation of the sample in the process line or reaction vessel. The rapid flow design also ensures that the cell does not get clogged by particulates in the process stream.

The spectroscopic sensitivity of the cells can be easily tailored to a particular application by selecting the pathlength spacer that optimizes the spectroscopic measurement. The cells can be used with FTIR spectrometers or with UV-Vis-NIR spectrometers depending on the window materials. Ambient and temperature controlled models mount directly in the sample compartment. Optional SMA interface for fiber optic spectrometers.

APPLICATIONS

- ▶ Monitoring liquid streams in process environments.
- ▶ Transmission spectroscopy.

FEATURES

- ▶ Rapid unimpeded flow of sample
- ▶ Demountable windows and spacers.
- ▶ Wide choice of window materials and pathlength spacers
- ▶ Choice of window materials: CaF₂, SiO₂ and ZnSe; Al₂O₃, ZnS and ZrO₂ available on special order.
- ▶ Pathlength easily changed by changing the spacer.
- ▶ 0.25, 0.50, 1.0, 2.0, 3.0, 5.0 and 8.0 mm pathlength spacers available.
- ▶ 7 mm diameter clear aperture.
- ▶ Made from chemically resistant 316 stainless steel cell.
- ▶ 1/4" Swagelok fittings.
- ▶ Maximum operating pressure: 6.9 MPa (1000 psi).
- ▶ Temperature controlled models available for operation up to 200°C with FKM o-rings, 260°C with FFKM o-rings.
- ▶ Slide plate mounted; optional SMA interface.



INCLUDES

- ▶ Stainless steel cell body with Swagelok™ fittings.
- ▶ Spacer sets for 0.25 and 0.50 mm pathlengths.
- ▶ Temperature controlled models include a K-type thermocouple and 24V cartridge heaters.
- ▶ FKM o-rings.
- ▶ Slide plate mounted.
- ▶ Windows need to be ordered separately.

O-Rings (2 ea required per cell)	
FKM	FFKM
ORV-016	ORK-016
ORV-011-1	ORK-011-0

Windows	
CaF ₂	001-096-1
ZnSe	001-096-3
SiO ₂	001-096-2

Sets of two 316 stainless steel spacers	
Thickness	Part number
0.25 mm	048-909-1
0.50 mm	048-909-2

ORDERING INFORMATION

Temperature Controlled Rapid Flow Liquid Transmission Cell..... CATALOG NO. 048-900

OPTIONS & REPLACEMENT PARTS

Temperature Controller, 110V input, 24V output with USB adapter..... ATK-024-3
 Temperature Controller, 220/240V input, 24V output (CE marked) with USB adapter..... ATK-024-4
 Heater,..... HTRS-16
 Heater Assembly..... TFC-HTR

