



## Temperature Controlled Demountable Liquid Cells

Temperature Controlled Demountable Liquid Cells are intended for examining liquids and mulls at temperatures ranging from -80°C to 260°C. Their leak-free design makes them suitable for static and flow operation. In addition, these 316 stainless steel cells feature high chemical resistance and readily exchanged pathlength spacers.

### APPLICATIONS

- ▶ Infrared measurements of liquids, mulls and smears at elevated and reduced temperatures.
- ▶ Process control and laboratory applications.

### FEATURES

- ▶ Variable pathlength, from 6µm to 1mm.
- ▶ Heatable to 200°C with Viton o-rings or 260°C with optional Kalrez o-rings.
- ▶ Coolable to 0°C with suitable coolant, purge and o-rings.
- ▶ Flow-through cooling conduit stabilizes the cell temperature.
- ▶ Thermally isolated cell body prevents heat transfer to the spectrometer.
- ▶ Leak-free design utilizes standard, non-drilled windows.
- ▶ Easily disassembled for cleaning and window replacement.
- ▶ Two ports permit static or flow applications.
- ▶ Chemically inert 316 stainless steel cell with Luer Lok or 1/8" Swagelok™ fittings.
- ▶ Sample slide plate mounted for user convenience.
- ▶ Available with an 8mm or 20mm diameter open aperture.
- ▶ Maximum operating pressure with ZnSe windows
  - ▶ 4.5 MPa (660 psi) for the DLC-S13 (8 mm aperture).
  - ▶ 690 kPa (100 psi) for the DLC-S25 (20 mm aperture).
- ▶ Temperature controlled cells for operation at lower or higher temperatures available on special order.



### INCLUDES

- ▶ Stainless steel cell body with Luer Lok or Swagelok™ fittings.
- ▶ Embedded K-type thermocouple, low-voltage cartridge heaters and cooling conduit.
- ▶ Viton o-rings.
- ▶ Slide plate mounting.
- ▶ A dozen PTFE spacers. One each for 6, 12, 25, 56, 100, 150, 250, 390, 500, 630, 750, and 950 µm pathlengths.
- ▶ Order windows separately.

Windows	13x2 mm	25x2 mm
Al <sub>2</sub> O <sub>3</sub>	WBD-U22	--
CaF <sub>2</sub>	WFD-U22	WFD-U25
ZnS	WID-U22	WID-U25
NaCl	WLD-U22	WLD-U25
ZnSe	WMD-U22	WMD-U25
KBr	WPD-U22	WPD-U25

	8 mm apt. (13x 2 mm)	20 mm apt. (25 x 2 mm)
<b>Spacers Sets (12 per package)</b>		
6µ	MSP-006-M13	MSP-006-M25
12µm	MSP-012-M13	MSP-012-M25
25µm	MSP-025-M13	MSP-025-M25
56µm	MSP-056-M13	MSP-056-M25
100µm	MSP-100-M13	MSP-100-M25
150µm	MSP-150-M13	MSP-150-M25
250µm	MSP-250-M13	MSP-250-M25
390µm	MSP-390-M13	MSP-390-M25
500µm	MSP-500-M13	MSP-500-M25
630µm	MSP-630-M13	MSP-630-M25
750µm	MSP-750-M13	MSP-750-M25
950µm	MSP-950-M13	MSP-950-M25
<b>Assorted Spacers</b> one each: 6, 12, 25, 56, 100, 150, 250, 390, 500, 630, 750 and 950 µm		
assorted	PSA-M13	PSA-M25

### ORDERING INFORMATION

### CATALOG No.

8 mm aperture (13x2 mm windows)      20 mm aperture (25x2 mm windows)

Temperature Controlled Demountable Cells, 24V

Liquid Cell (Luer Lok fittings)..... TFC-M13-3 ..... TFC-M25-3

Flow Cell (Swagelok™ fittings) ..... TFC-S13-3 ..... TFC-S25-3

### OPTIONS AND REPLACEMENT PARTS

Viton O-Ring ..... ORV-012 ..... ORV-020

Kalrez O-Ring ..... ORK-012 ..... ORK-020

Temperature Controller, 110V input, 24V output. Includes USB adapter..... ATK-024-3

Temperature Controller, 220/240V input, 24V output (CE marked). Includes USB adapter..... ATK-024-4