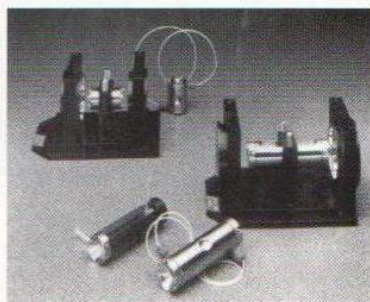


CIRCLE® Cell

Ideal Accessory for static and dynamic aqueous sample measurements

The CIRCLE uses an exclusive technology, Cylindrical Internal Reflectance (CIR), for fast and simple analyses of aqueous-based liquids. Samples may be introduced into the open-boat cell for simple cuvette-style sampling. The combination of input and output optics, coupled with the crystal rod provide a highly repeatable pathlength for obtaining quantitative results. The crystal rod provides the ideal pathlength for aqueous samples and strongly absorbing liquids. A wide variety of crystal materials is available. A series of flow-cell options permits the CIRCLE to be used for flow application, such as monitoring fermenters and HPLCs. Two CIRCLE kits are available; the Micro CIRCLE Kit and the Macro CIRCLE Kit.



CIRCLE Specifications

- Crystal Angle: 45° ZnSe
- Number of Reflections: 11

CIRCLE Cell Volumes

- Micro, S/Steel Flow Cell: 25 µl
- Macro, S/Steel Flow Cell: 400 µl
- Micro, Pyrex® Flow Cell: 660 µl
- Macro, Pyrex Flow Cell: 2.2 ml

Applications

- Aqueous liquids
- Highly absorbing liquids
- Biological studies
- Volatile solvents
- HPLC eluents
- Pharmaceuticals

CIRCLE Cell Volumes (con't)

- Micro Boat: 0.5 ml
- Macro Boat: 5.0 ml

Crystal Dimensions

- Micro: 1/8" x 1-1/2"
- Macro: 1/4" x 3-1/4"

Stainless Steel Flow Cell

- Max. Pressure: 1500 psi @ 20°C

Product Features

- ◆ More than 3,000 CIRCLEs sold
- ◆ Short, fixed pathlength, less than 13 µm
- ◆ Largest variety of options available for different sample volumes: flowing, heating, cooling and pressure
- ◆ Macro and micro open boat cell configuration
- ◆ O-Ring sealing of crystal rods

Product Advantages

- Industry standard; the first ATR accessory for liquids
- For reproducible sampling
- Widely used ATR accessory for all types of liquid samples
- As easy to use as a beaker; easy to fill
- For leakproof sampling

Ordering Information

| PRODUCT NAME | PART NUMBER | DESCRIPTION |
|------------------|-------------|--|
| Macro CIRCLE Kit | 0005-0XX | Includes: Macro Base Optical Unit, Macro ZnSe Crystal Rod, Macro Open-Boat Cell, Pyrex-Body Flow Cell, Manual and Alignment Tools |
| Micro CIRCLE Kit | 0005-1XX | Includes: Micro Base Optical Unit, Micro ZnSe Crystal Rod, Micro Open-Boat Cell, Micro Stainless Steel Flow Cell, Manual and Alignment Tools |

Options/Replacements for Macro CIRCLE Kit

| | | |
|---|----------|--------------------------|
| Stainless Steel Flow Cell, up to 1500 psi | 0005-202 | Does not include crystal |
| Replacement Pyrex Flow Cell | 3000-370 | Does not include crystal |
| O-Ring for Pyrex Flow Cell | 849-0036 | |
| O-Ring for SS Flow Cell and Open Boat | 849-0024 | |
| Macro Glass Cell | 0005-200 | Does not include crystal |
| Macro Boat Cell | 0005-201 | Does not include crystal |

Options/Replacements for Micro CIRCLE Kit

| | | |
|--|----------|--------------------------|
| Stainless Steel Flow Cell, up to 1500 psi | 0005-302 | Does not include crystal |
| Replacement Pyrex-Body Flow Cell | 3000-397 | Does not include crystal |
| O-Ring for Pyrex-Body Flow Cell | 849-0041 | |
| O-Ring for S/Steel Flow Cell and Open Boat | 849-0035 | |
| Micro Glass Cell | 0005-300 | Does not include crystal |
| Micro Boat Cell | 0005-301 | Does not include crystal |

Optional Crystal Rods

| | ZnSe | Ge | Si | Sapphire | ZnS | AMTIR |
|--------------|----------|----------|----------|----------|----------|----------|
| Macro CIRCLE | 7005-000 | 7005-010 | 7005-020 | 7005-050 | 7005-060 | 7005-070 |
| Micro CIRCLE | 7005-100 | 7005-110 | 7005-120 | 7005-150 | 7005-160 | 7005-170 |