

Disposable Measurement Cells

FEATURES

- Zero dead volume
- Quick Insert/Release Mechanism
- Line sizes from 1/16" to 1"
- Optical path-lengths from 10 mm (4.5 OD) to 0.5 mm (90 OD)
- USP Class VI and FDA certification
- Sterilizable by autoclaving or irradiation



Kemtrak disposable measurement cells eliminate cross-contamination between products and batches, offering the utmost in safety, convenience and flexibility in bio-pharmaceutical processing. The Kemtrak UV measurement platform system is ideally suited to chromatographic separation and filtration applications where a wide selection of line sizes and choice of measurement path lengths accommodate small scale discovery to full scale production.

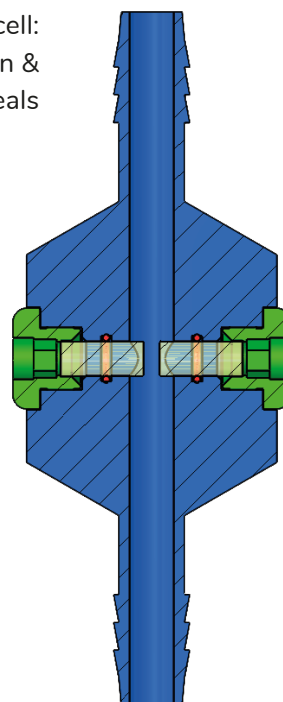
Manufactured from high purity medical grade poly-phenylsulfone (PPSU), measurement cells are color coded for optical path length and sterilizable through autoclaving or irradiation.

Zero dead volume across the entire cell range ensures sharp peak detection for fractionation control and filtration applications.

Kemtrak single use measurement cells are available from 1/16" to 1" and have ready-to-attach hose barb connections. A robust, space saving cell dock with quick insertion/release mechanism swiftly and precisely positions the cell in the optical light path for reliable measurement performance. Measurement cells can be delivered with an optical path length (OPL) from 10 mm to 0.5 mm, giving overall measurement range capability of 4.5 to 90 OD when used with a Kemtrak DCP007 UV absorbance analyzer.

Disposable measurement cell:
Zero dead volume design &
FDA certified o-ring seals

Verification accessory with NIST traceable verification filters



Disposable Measurement Cells

DISTRIBUTOR

| tubing size | inside diameter ¹ (mm) | internal volume ² (mL) | Optical Pathlength (mm) & Color Code | | | | | |
|------------------------------------|-----------------------------------|-----------------------------------|--------------------------------------|--------------------|---------------------|----------------------|------------------------|---------------------|
| | | | 0.5 red - blue | 1.0 blue - blue | 1.5 blue - green | 2.0 green - green | 5.0 yellow - yellow | 10 black - black |
| 1/16" ³ | 1.60 | 0.10 | ✓ | ✓ | ✓ | | | |
| 1/8" ³ | 2.44 | 0.23 | ✓ | ✓ | ✓ | ✓ | | |
| 3/16" | 3.18 | 0.79 | ✓ | ✓ | ✓ | ✓ | | |
| 1/4" | 3.94 | 1.2 | ✓ | ✓ | ✓ | ✓ | | |
| 3/8" | 6.35 | 3.2 | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 1/2" | 10.5 | 8.7 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3/4" | 14.7 | 17 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 1" | 20.8 | 34 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Absorbance range ⁴ (OD) | | | 90 | 45 | 30 | 22.5 | 9 | 4.5 |

¹ The 1" disposable measurement cell has a 10 mm wide slit in the middle (reduced diameter)

² Approximate volume based on a 2 mm OPL

³ 1/4-28 UNF fitting

⁴ OD range stated relates to the maximum absorbance on a Kemtrak DCP007-UV analyzer at 280 nm (4.5 AU)

DISPOSABLE MEASUREMENT CELL

PROCESS CONNECTION

Hose barb 1/16" to 1"

OPTICAL PATHLENGTH (OPL)

0.5, 1.0, 1.5, 2.0, 5.0 & 10 mm

OPL accuracy better than ±0.01 mm

Color coded

WETTED MATERIALS

Body: Polyphenylsulfone (PPSU blue)

Windows: UV grade fused silica (190 - 2000 nm)

Seals: O-Rings (EPDM or FFKM).

FDA, USP class VI, Animal free

SURFACE FINISH

N6: Ra < 0.8 µm (32 µinch)

PRESSURE

0 - 6 bar (0 - 87 psi)

STERILIZATION

Autoclave: +135 °C (+275 °F)

Radiation: 25 - 50 kGy

OPERATING CONDITIONS

Ambient & process temperatures from -20 to +150°C (-4 °F to +302 °F)

SHELF LIFE

36 months after manufacturing date

DOCK FOR MEASUREMENT CELL

MATERIAL

Stainless Steel 316 L (polished)

FIBER OPTIC CONNECTION

SMA 905 type connector

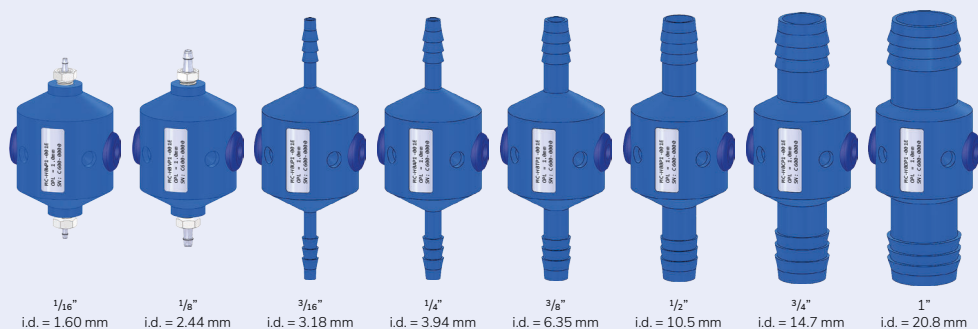
OPERATING CONDITIONS

Ambient temperatures from -20 to +130°C (-4 °F to +266 °F)

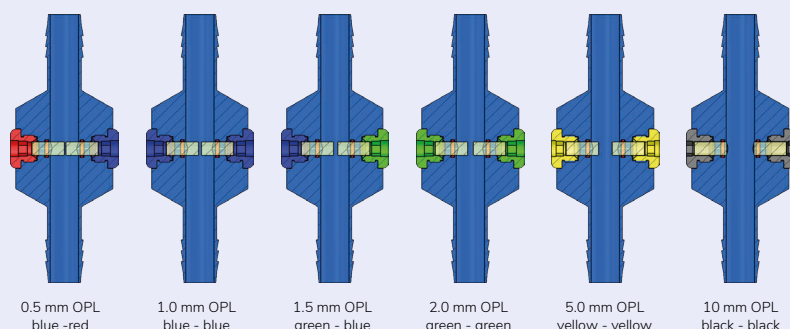
PROTECTION

IP66 / EN 60529

HOSE BARB CONNECTION 1/16" TO 1"



COLOR CODED OPTICAL PATHLENGTH (OPL) FROM 0.5 TO 10 MM



Kemtrak is the leading manufacturer of high performance LED based industrial photometers and automation products for the process engineering industry. Kemtrak provides tailor made solutions to meet the needs of a wide range of industries including chemical, petrochemical & offshore, biotech, pharmaceutical, food & beverage, pulp & paper and water & environment.

Kemtrak has trained representatives and support personnel globally and is certified according to ISO 9001:2015.