



Interested in knowing pH or DO levels within your perfusion lines?

The ID-Flow Through Cell is designed to connect directly into your flow loop, enabling you to measure pH and DO while your experimental run is active. Single-use, disposable, and preloaded with SBI's ID-Sensors, the ID-Flow Through Cell is the perfect way to collect reliable, real-time data of your culture conditions anywhere in a perfusion flow loop.

Connect the ID-Flow Through Cell into your flow loop with Luer fittings and insert a fiber optic cable into the housing. Select a single unit if you're interested in measuring only pH or DO or a dual unit to measure both pH and DO simultaneously.

Use with



Overview

The ID-Flow Through Cell is designed to connect into a perfusion loop and is available as a single or dual unit. The single unit comes preloaded with either an ID-Sensor pH or an ID-Sensor DO while the dual unit comes preloaded with ID-Sensors for both pH and DO. Both the single and dual units are single use and disposable.

Applications

Use the ID-External Star Adaptor in the following systems:

- Tissue culture perfusion bioreactors
- Microfluidics devices
- Bioprocessing bioreactors
- Organ perfusion chambers

You can use the ID-Flow Through Cell upstream and/or downstream of a bioreactor chamber or organ-on-a-chip device and between a bioreactor and fresh or spent media reservoir bottles to assess pH and dissolved oxygen levels and oxygen consumption.

Features

- Connects into a flow loop
- Single-use
- Disposable
- Sold in a 5 pack:
 - Single units equipped with either ID-Sensors pH or DO
 - Dual units equipped with both ID-Sensors pH and DO
- Buy in conjunction with the ID-Fiber Optic Kit!

FAQs

What size tubing does the ID-Flow Through Cell fit?

- The Luer fittings on the ID-Flow Through Cell have a 3 mm flow ID. 3 mm diameter tubing is recommended for optimal readings.

Where are the sensors? Do I need to place them myself?

- The ID-Flow Through Cells have the ID-Sensors already attached within the pipe portion of the units. The sensors are aligned to the channel that will secure the fiber optic cable in place.

Can I reuse the ID-Flow Through Cells?

- The ID-Flow Through Cells and ID-Sensors are designed to be single use.

Sensor Specifications

| | pH | DO |
|--------------------------|--|-----------------------------|
| MEASUREMENT RANGE | 6-8 | 0-100% |
| ACCURACY | 1.5% at pH 7 | 0.2% at full scale |
| RESOLUTION | ±0.01 at pH 7 | ±0.1% at 21% O ₂ |
| RESPONSE TIME | <15 sec | |
| TEMPERATURE RANGE | +5 to +60°C | |
| DRIFT | < or = 0.005 pH per day at 1 minute scan interval | |
| CALIBRATION | Pre-calibrated; recalibration is possible | |
| STERILIZATION | Autoclave, gamma irradiation; inquire about other methods | |
| SENSOR LIFE | 45 days (continuous monitoring), several months (intermittent monitoring) | |
| SHELF LIFE | 12 months | |
| SENSOR DIMENSIONS | ID-Sensors pH: 3mm or 7mm diameter x 0.3mm height sensors ID-Sensors DO: 3mm or 5mm diameter x 0.3mm height sensors (sensor size varies with accessory type) | |
| SCAN INTERVAL | 10 seconds or greater | |
| OPERATING SYSTEM | Windows 7/8/10 | |
| WARRANTY | 24 months | |