

Advanced in vitro exposure systems

VITROCELL® Flow Calibration Valves



VITROCELL® Flow Control

Introduction

Constant and defined flow of the test atmosphere over the cells is an important factor for the experiment. The VITROCELL® modules are designed to operate at low flow rates, in most cases the flow rate is 5 ml/min. In some applications higher flow rates are used. The recommended and most economical way to adjust the flow rate is to use the unique and efficient VITROCELL® flow calibration valves. The desired flow rate level is adjusted to a mass flow meter read out.

Alternatively VITROCELL® offers electronic mass flow controllers. In this case one mass flow controller per cell culture insert compartment is permanently required.

VITROCELL® Flow Calibration Valves

VITROCELL® flow calibration valves regulate the flow of the aerosol through the modules in the ml range.

The valves are located between the vacuum pump and the aerosol exposure top. Mass flow meters enable accurate valve read-outs. The consistent and adjustable flow rate ranges from 0...20 ml/min.

Alternative flow rate ranges are available upon request. The valves enable fast control of the flow rates prior to the experiment. They are manufactured from Teflon/stainless steel and can be easily cleaned. If the aerosol contains particles, we recommend installing disposable microfiber filters in front of the valves.



Features

- Easy and quick flow adjustment
- Economical solution
- Can be easily cleaned

About VITROCELL®

VITROCELL® exclusively concentrates on the developing, producing, installing, training and servicing of advanced *in vitro* exposure systems.

The VITROCELL® Systems' team is driven by their vision for new in-vitro standards through state-of-the-art technology, highly qualified workmanship and absolute client dedication. VITROCELL® has successfully collaborated with clients from leading research institutes, contract research organizations, regulatory authorities or industrial laboratories across the world. Working with our team experts, all modules have been tailored to create durable and complete turnkey-systems for *in vitro* inhalation toxicology. Gases, environmental atmospheres, nano particles and complex mixtures are analyzed on lung cells at the air/liquid interface using these systems. VITROCELL® technologies are also applicable to solutions for skin research.

Over a decade of devotion to research in this specific field has given our team of design & precision manufacturing specialists the opportunity to mentor highly diversified and complex projects **from conception to completion**. We strive to become a constructive member of each research team, providing support when it is needed, advice when it is required and modules of the highest quality, which are even polished by hand before leaving here to be integrated into your workspace. Every piece of our German engineered equipment is manufactured to the highest of standards – yours.

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