

Kuhner shaker

FlowCon 2/3/4

Stand-alone gas mixing device

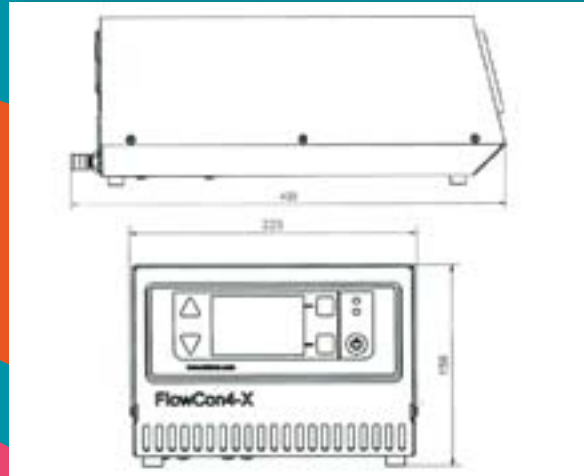


FlowCon 4

mixing up to 4 gases

Modular system

designed for disposable vessels



FlowCon 2/3/4

The Kuhner FlowCon has been developed for the R&D environment and initial production steps in bioreactors with disposable bags. Whether stabilizing pH in cell cultivations with CO₂ or reducing oxygen concentration for microaerophilic organisms, the FlowCon gas mixer meets all user needs. The FlowCon can be used as a stand-alone device or can be integrated with the Kuhner equipment family (incubator shakers, disposable bioreactors).

Reproducibility

Up to four mass flow controllers ensure high accuracy and reproducibility of the gas mixture. The number of mass flow controllers can be adapted to individual requirements (FlowCon 2/3/4). An integrated pressure sensor prevents over pressure in the connected bioreactor by reducing the gas flow in the first step and shutting off the gas flow in the second step. Step limits can be freely programmed by the user. Integrated air filters and back pressure valves ensure interference free and long operating times for the FlowCon.

The Kuhner ISIS-Software provides data logging, programming and controlling. Technical controls for "21 CFR Part 11" compliance are built in to ISIS-X software.

- + Mixing up to four gases (gas mixtures can be connected as well)
- + Flow rate from 0 to 20 [sL/min] (customised flow rates available)
- + ISIS-Software control
- + Integration in Kuhner shakers
- + Integrated pressure sensor

FlowCon 2/3/4

can be integrated in the Kuhner equipment family
SBM/SS-X, LT-X, ISF1-X, ISF4-X

Kuhner ISIS-Software

provides data logging, programming
& controlling



Technical data

- Number of mass flow controllers**
 2, 3 or 4
- Dimensions**
 225x158x430 (WxDxH) [mm]
- Ambient conditions**
 5-40 [°C], max. 85 [% rH]
- Input**
 up to 4 gases, push connector 6 [mm]
 + air
 + oxygen
 + nitrogen
 + carbon dioxide
 (also gas mixtures can be connected)
- Input pressure**
 1-2 bar
- Output**
 1, (tube fitting for tube ID 13 [mm])
- Flow rate**
 0-20 [sL/min]
 (customised flow rate available)
- Accuracy**
 ±1.5% from the end value
- Stand-alone operation**
 yes
- Software**
 ISIS (optional)
 data logging, programming,
 controlling
- Interface, standard**
 CAN-Bus
- Interface, optional**
 USB, Ethernet, digital, analogue
- Pressure sensor**
 integrated,
 0-400 [mbar],
 programmable, prevents over pressure
 in the connected vessel
- Air filter**
 integrated, prevents blocking
 of the mass flow controllers
- Back pressure valve**
 integrated,
 prevents reflux into the mass flow controllers



Mixing up to 4 gases

www.kuhner.com

Kuhner

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