



## ▶ High accuracy flow measurement for single use applications

**KROHNE**

▶ measure the facts

### **FLEXMAG 4050 C – Unique electromagnetic flowmeter for single use processes**

The FLEXMAG 4050 C is the first electromagnetic flowmeter that features a disposable flow tube designed specifically for single use biopharmaceutical applications such as filtration processes, chromatography, or buffer and media preparation.

The biocompatible and gamma sterilisable flow tube is produced in a clean room facility and features a single barb fitting that meets biopharmaceutical requirements for adaptation to single use systems.

As an electromagnetic meter, the FLEXMAG 4050 C will not drift over time. It provides a completely stable, direct and accurate volumetric flow measure unaffected by fluid properties such as colour or density.



FLEXMAG 4050 C

### Highest accuracy without recalibration

Thanks to the electromagnetic principle and the manufacturing precision of the flow tube, the FLEXMAG 4050 C flowmeter provides highly accurate measurement with outstanding repeatability. Transmitter and flow tube are factory calibrated and do not require in-situ calibration.

### Aseptic design

The FLEXMAG 4050 C has been developed for single use biopharmaceutical applications. The wetted part of the FLEXMAG 4050 C is manufactured in a ISO 13485 certified site – production takes place in an ISO 7 clean room environment. The full-bore construction of the flow tube is designed for minimal hold-up volume without obstruction, and the single barb fitting is suitable for braided as well as non-braided hoses.

### Highlights

- Disposable single use flow tube (packed in double sealed individual pouches)
- One transmitter fits 2 flow tubes diameters
- Accuracy: 1 % of measured value
- Full bore flow path/low pressure drop
- Pulse and current output
- Factory calibrated
- No recalibration needed
- No maintenance required
- Flow path minimizes hold up volume
- Wetted parts materials made from biocompatible material (FDA, USP VI, BSE/TSE)
- Flow tube is gamma sterilisable up to 50 kGy
- 24 VDC power supply

### Contact

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### One transmitter – two flow tube sizes

The transmitter can accommodate two different flow tubes sizes, which provides the flexibility of being able to handle two different flow ranges by simply exchanging the tube without having to re-calibrate. Flow tube sizes available are:

transmitter ¼"

- ¼" ID: 0.015 l/min to 3 l/min\*

transmitter ⅜"-½"

- ⅜" ID: 0.07 l/min to 14 l/min\*
- ½" ID: 0.1 l/min to 20 l/min\*

transmitter ¾"-1"

- ¾" ID: 0.3 l/min to 62 l/min\*
- 1" ID: 0.5 l/min to 75 l/min\*

\* extended measuring ranges available on request.



### Single use flow tubes

The single use flow path tubes are gamma sterilisable at 25...40 kGy irradiation, and have been tested up to 50 kGy. All wetted materials meet the USP class VI / ISO 10993 requirements and are made from animal free compounds. Each tube is individually packed in a double layered PA/PE pouch.



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