SumoFlo CPFM-8103

Ultra-Low Flow Single-Use Coriolis Flow Meter

With extremely low flow rate achievable to 0.002 kg/min. and accuracy of ±1.5% of reading, the SumoFlo® CPFM-8103 Low Flow Single-Use Coriolis Mass Flow Meter is an advanced patented flow meter based on the Coriolis principle. Featuring flow ranges from 0.002 to 0.05 kg/min, the SumoFlo Low Flow Coriolis Flow Meter is specifically designed for measuring liquids with extremely low flow rates in high-purity biopharmaceutical applications that require all gammasterilizable wetted surfaces.

Due to the patented Coriolis technology, SumoFlo Low Flow Meters offer ±1.5% accuracy of mass flow rate readings, which are unaffected by flow regime or variations to the velocity profile, allowing for accurate measurements of bubbly or frothy fluids. The SumoFlo Low Flow Coriolis Flow Meter is the world's only gamma-sterilizable Coriolis mass flow meter, and is available in a disposable, drop-in form factor for singleuse applications. The fluid contacting surfaces are made of unreinforced PEEK (Polyether ether ketone) that meet USP Class VI, USP 661 and USP 788 standards.

FEATURES

- Accuracy: +/- 1.5% of mass flow rate reading or +/- 0.3 g/min, whichever is higher
- Fluid measurement performance is independent of fluid properties, eliminating the need to calibrate on different fluids
- 1/8" barb connections
- Supports fluids flow ranges from 2 to 50 g/min
- Disposable drop-in sensor option for singleuse applications
- Custom sensor mounting cradle available
- CE Marking certified version available

The SumoFlo CPFM-8103-series is designed and assembled from American and imported materials in California, USA. This product is protected by U.S. and international patents.

MEASUREMENT SPECIFICATIONS

MODEL	8103-U08
Accuracy	±1.5% of reading or ±0.3 g/min, whichever is higher
Temperature	Ambient: 0°– 50°C, Fluid: 2°– 40°C
Operating Pressure	30 psig (max.) (80 psig max upon request)
Flow Range	02 – 50 g/min

Note: Pressure drop at max. flow range = 10 psi in water (1 cP)

MATERIAL SPECIFICATIONS

Process Connections	1/8" barb connection[1]
Wetted Materials	Unreinforced PEEK (Polyether ether ketone), Adhesive compliant with ISO 10993, 316L stainless steel. All polymeric wetted materials are USP Class VI compliant.
Interconnecting Cable Length	Standard 3 m; Maximum up to 30 m
Ingress Rating For Connectors	IP65

ELECTRICAL SPECIFICATIONS

Supply Voltage	24 V DC ±10%
Power Consumption	Max 6 W
Programming	Operator Parameter configuration through configuration port with a PC
Analog Output Module	1x 4–20 mA, 2x 4–20 mA, 3x 4–20 mA,or 4x 4–20 mA; configurable as Mass Flow Rate, Temperature. Volumetric flow rate under development.
Digital Input/Output Module	0x D/O, 1x D/O, or 2x D/O; Configurable as Frequency or Digital I/O
Frequency Output	0 to 10 kHz proportional to flow rate
Digital Output over MODBUS[2]	Mass Flow Rate, Temperature. Volumetric flow rate under development.

[1] **Consult the factory for other types of process connection options.**
[2] **Requires CELE-8103 model configured for MODBUS communications.**

WARNING: The customer is solely responsible for determining the necessary or most suitable product or service for any particular use case or application. All such risks are assumed by the customer. Specifications subject to change without notice.
WARRANTY: For product warranty information, please contact: info@cpc-bio.com or +1 800-519-7633.
For trademark information, please visit: www.cpc-bio.com/trademarks-and-patents
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