



SONOFLOW® CO.55 Non-Contact Clamp-On Flow Meters

SONOFLOW clamp-on flow meters are designed for upstream and downstream monitoring in the bioprocess industry. The innovative sensors have integrated electronics which allow them to function without an external board or transmitter, resulting in a compact flow meter in the size of a small transducer. The ultrasonic devices ensure scale-up from process development to commercial applications in GMP environments.



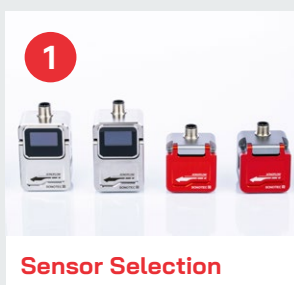
- Highly accurate measurements to improve process performance
- Reduced risk of contamination
- Compact flow meter for minimal equipment footprint
- Sustainable and reusable to cut down waste and costs
- No moving parts to reduce shear stress on cells
- Onsite sensor configuration via optional SONOTEC Software

Key Features

- Reliable flow measurement from 10 ml to 200 L / min
- Accuracy of up to 1 % when adjusted for customer specific tubing / fluid
- Ideally suited for silicone, TPE, and most standard bioprocess tubing
- Real-time flow measurement
- Volume totalizing and dosing output switch
- Integrated electronics, no external transmitter required



Intuitive and Easy to Handle



Sensor Selection



Parameter Setting



System Integration



Flow Measurement

Technical Data

Measuring Method	Transit-time ultrasound
Response time	10ms or faster on request
Channel Width	3.5 ... 34 mm
Outer Diameter – Tubing	4 ... 35 mm
Mounting	Fixed installation
Interfaces	4 ... 20 mA, 0 ... 20 kHz, PNP/NPN, RS-485 Modbus, digital input

Operating Voltage	12 ... 30 VDC
Current Consumption	50 mA max
Electrical Connection	8-pin M12 connector
Ambient / Media Temperature	0 ... +60 °C
Storage Temperature	-20 ... +70 °C
Protection Class	IP65

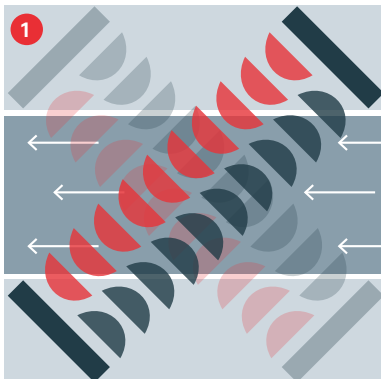
SONOTEC Software | Configure, Control, Collect

The use of the optional SONOTEC Software allows for customer specific configuration and testing.

- Configure sensors for different applications
- Control sensor performance and set outputs/inputs
- Collect measurement and sensor data
- Real-time flow monitoring & volume totalizing
- Connection of up to 12 sensors simultaneously



Measurement Principle



SONOFLOW flow meters use the ultrasound transit-time technology to accurately determine the flow rate. The sensor measures the time of flight of the ultrasonic wave with and against the flow direction of the liquid.

The time difference between both signals is a measure of the velocity of the streaming liquid. Measurements are taken in picoseconds and averaged to readings of 10 ms cycle. The specific flow volume is calculated from the fluid velocity and the known area of the measurement channel.

- 1 Ultrasonic waves with and against flow direction

Sales & Support

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🛡 SONOTEC GmbH certified acc.
to ISO 9001 and EN ISO 13485

SONOTEC® is a registered trademark
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