Solutions in Medical Engineering

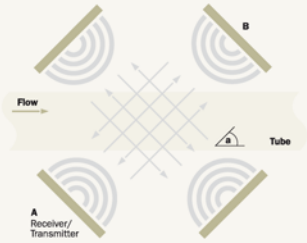

# Sono TT Ultrasonic Flowmeter

emtec

## Transit– Time Principle

Transit-time flowmeters measure the difference in travel-time between pulses transmitted in a single path along and against the flow.

One or two piezo-ceramic transducer-pairs are used. Each transducer-pair alternately transmits and receives bursts of ultrasonic energy.
The difference in the transit-times in the upstream vs. the downstream direction measured over the same path can be used to calculate the flow through the tube.




## Sono TT Ultrasonic Flowmeter

Transit-Time Flowmeter with easy to read dot-matrix LED display and dynamic bar-graph flow-display. Adjustable high and low flow alarms. RS 232 interface for data transfer to PC.

| | |
|---|---|
| Weight | 3,3 kg |
| Size (WxHxD) | 210 x 90 x 293 mm |
| AC Power Supply | 100 – 240 VAC, 50-50 Hz, max. 40 VA |
| Probes | Z or X type configuration |
| Measurement Range | ± 20 lpm, depending on probe type |
| Resolution | 0,01 lpm in the range of 0 – 9,99 lpm<br>0,1 lpm in the range of 10 – 20 lpm |
| Flow Display | |
| Averaging Time | adjustable from 0,5 to 5 sec. |
| Communication | RS 232 |

## Flow Probes

Robust Clamp-On Flow-Probes for silicon or pvc tubing. Probes are pre-calibrated for maximum accuracy. Up to 7 calibration tables can be stored in an EPROM. For custom-specific calibration please ask our technical support engineers. Probes are water-proof and easy to clean.

| | |
|---|---|
| Type of probe | X-type |
| Probe accuracy | typ. ± 7%,<br>(± 3% or better attainable with optimized measurement set-up) |
| Cable | 2 meters |
| Connector | High –Density D-Sub, 15 Pin |
| Calibration | Pre-Calibrated, data stored in an EPROM |

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More detailed product-information available for download at the em-tec web-site.