# SonoTT™ Clamp-On Transducer





- For non-invasive flow measurement of liquids
- For use on flexible tubing
- Sensors for all common tube sizes
- Customer specific calibration (seven tables per sensor)
- Hanging installation

## **Technical Specification**

**Size (H x W x D)** 25 x 33 x 45 mm

Weight 137 g

**Housing material** Epoxy resin, aluminium, stainless steel

Safety class (IEC60601-1) BF
IP-Code IPX4
Cable length 2.9 m

**Compatible flow meters** SonoTT<sup>™</sup> FlowComputer, SonoTT<sup>™</sup> flow boards

**Connector plug** Depending on application and device (D-Sub and round plug)

**Recommended tube type** Flexible, non-reinforced tubing, e.g. silicone, PVC

**Medium type**Water, purified water, blood and most dialysis-, infusion and irrigation solutions

**Medium operating temperature** 4 to 50 °C (40 to 122 °F)

### Accuracy and Drift (in Combination with SonoTT™ FlowComputer)

#### Flow Range Accuracy

Flow value 0.0 to 1.0 lpm  $\pm$  0.07 lpm  $\pm$  Flow offset drift Flow value 1.01 to 10.0 lpm  $\pm$  7% of reading  $\pm$  Flow offset drift

Flow Offset Drift max. 0.03 lpm within 2 hours

### Transducer Sizes and Flow Measurement Range

Type (depending on flow meter)	Maximum Flow Range (depending on medium, bi-directional)	<b>Tube Size</b> ID (inner diameter), WT (wall thickness), OD (outer diameter)					
	[l/min]	ID [in]	WT[in]	OD [in]	ID [mm]	WT [mm]	OD [mm]
SCT/ CT 3/16 x 1/16"	up to $\pm$ 6	3/16	1/16	5/16	4.76	1.59	7.94
SCT/ CT 6.8 mm	up to $\pm$ 6	11/64	3/64	17/64	4.30	1.25	6.75
SCT/ CT 1/4 x 1/16"	up to $\pm 8$	1/4	1/16	3/8	6.35	1.59	9.52
SCT/ CT 1/4 x 3/32"	up to $\pm 8$	1/4	3/32	7/16	6.35	2.38	11.11
SCT/ CT 3/8 x 1/16"	up to $\pm$ 10	3/8	1/16	1/2	9.53	1.59	12.70
SCT/ CT 3/8 x 3/32"	up to $\pm 10$	3/8	3/32	9/16	9.53	2.38	14.29
SCT/ CT 1/2 x 3/32"	up to $\pm 20$	1/2	3/32	11/16	12.70	2.38	17.46

# SonoTT™ Clamp-On Transducer

#### Calibration

Factory calibrated to customer specific tubing, medium and operating temperature. The default calibration parameters are set to water at 37°C (98.6°F) and either PVC or silicone tubing, but each sensor can store up to seven calibration tables with different parameters depending on your applications and requirements.

#### Resolution

**Air pressure** 70 to 106 kPa

Operating temperature range10 to 40 °C (50 to 104 °F)Storage temperature range-20 to 45 °C (-4 to 113 °F)Transport temperature range-20 to 55 °C (-4 to 131 °F)Humidity operation30 to 75 % (non-condensing)

**Humidity storage and transport** 10 to 96 %

# em-tec

em-tec GmbH Lerchenberg 20 86923 Finning, Germany P: +49 8806 9236 0 F: +49 8806 9236 50 E: em-tec-info@psgdover.com em-tec.de

