Innovative Sensor Technology
physical. chemical. biological.

Out of Liquid

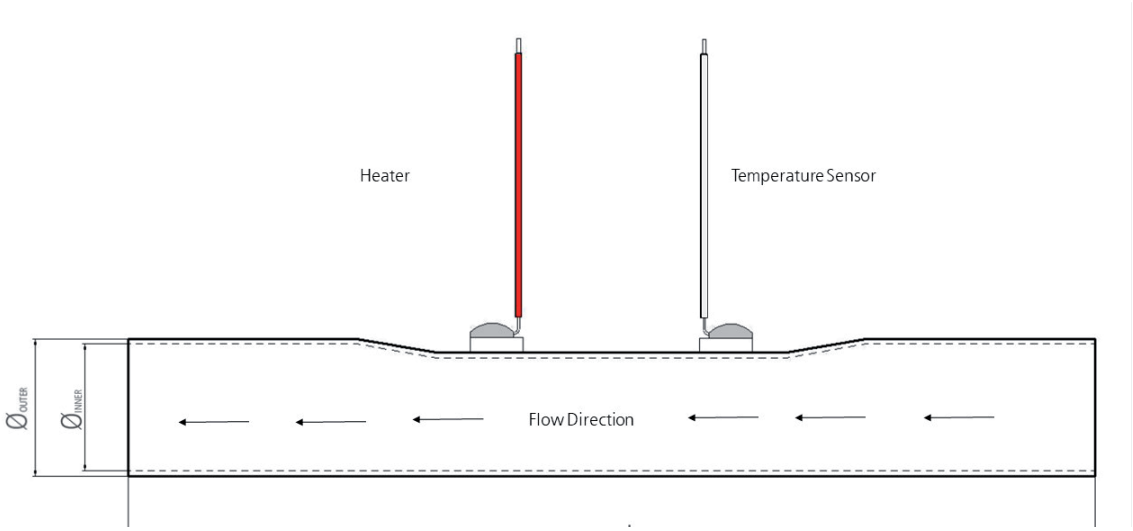
Thermal Mass Flow Sensor

Optimal for flow applications in aggressive liquids

Benefits & Characteristics

- Suitable for aggressive liquids
- No contact between sensor and liquid
- High chemical resistance
- Simple flow switches possible

Illustration[1)]



1) For actual size, see dimensions

Technical Sensor Data

Tube dimensions (L x $Ø_{OUTER}$ (x $Ø_{INNER}$) in mm):*	40.0 x 4.0 (x 3.8)
Operating temperature range:	-50 °C to +150 °C The temperature range has an impact on the accuracy, depending on variations in the thermal properties of flowing media
Heater resistance:*	R_H (0 °C) = 50 Ω (red wires)
Temperature sensor resistance:*	R_S (0 °C) = 1000 Ω (white wires)
Operating measuring range:	0 ml/min to 3000 ml/min (4 m/s)
Characteristics curve (TCR):	3850 ppm/K
Accuracy:	IEC 60751 F0.6 (class C)
Sensor wire:*	Cu/Ag, stranded wires PTFE isolated, AWG 30/19, 50 mm
Sensor dimensions (L x W x H x LW in mm)	2.3. x 2.0 x 1.3
Tube Material:*	Stainless steel 1.4301/304

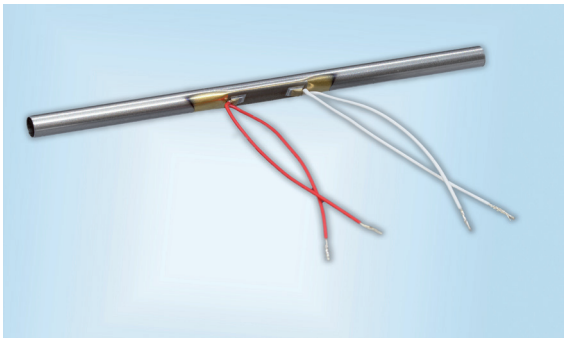
*customer specific versions on request

Flow Performance

The following values are viewed as typical and achieved in laboratory conditions. The medium was deionized water.

Measurement range:	0 - 20 kg/h (laminar flow profile) 20 - 200 kg/h (turbulent flow profile)
Sensitivity:	< 0.1 m/s
Response time t_{63}:	< 500 ms, dependent on electronics (used average determination)
Accuracy:	Typically 3% of measured value (depending on electronics and calibration)
Temperature sensitivity (uncomp.):	< 0.3% /K (depending on electronics and calibration)
Maximum Heating range:	0.75 W
Overtemperature (CTA-mode):	10 - 15 K (recommended) max. 30 K

Product Photo



Order Information

	P1K0/050.232.2K.C.050.M.U.S
Order code	104171

Additional Electronics

	Document name:
Module:	DFOOL_Demo_Module_E
Order code	104021
Former order code	*160.00026*

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