



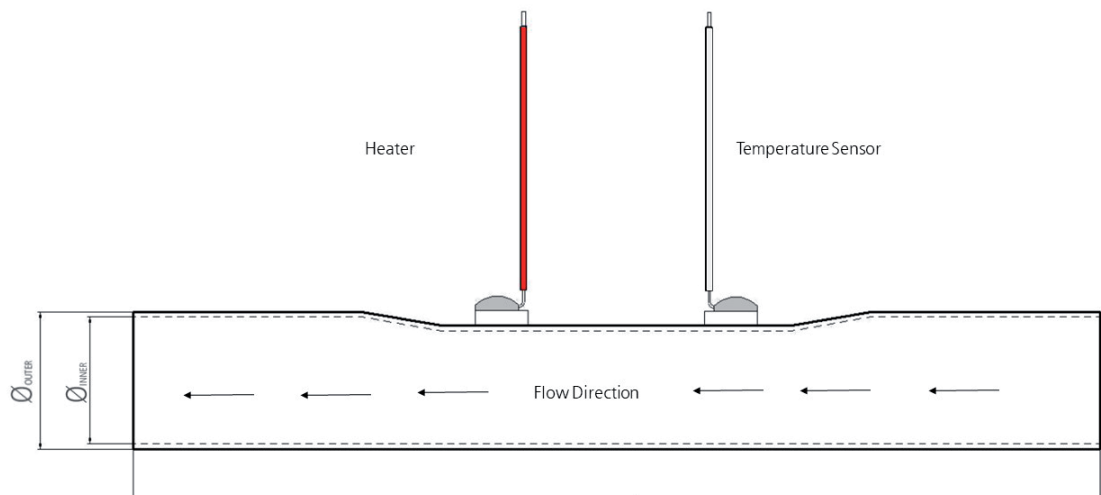
Out of Liquid Thermal Mass Flow Sensor

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

Illustration¹⁾



1) For actual size, see dimensions

Technical Sensor Data

Tube dimensions (L x Ø_OUTER (x Ø_INNER) in mm):*

Operating temperature range:

Heater resistance:*

Temperature sensor resistance:*

Operating measuring range:

Characteristics curve (TCR):

Accuracy:

Sensor wire:*

Sensor dimensions (L x W x H x LW in mm)

Tube Material:*

40.0 x 4.0 (x 3.8)

-50 °C to +150 °C

The temperature range has an impact on the accuracy, depending on variations in the thermal properties of flowing media

$R_H(0\text{ °C}) = 50\ \Omega$ (red wires)

$R_s(0\text{ °C}) = 1000\ \Omega$ (white wires)

0 ml/min to 3000 ml/min (4 m/s)

3850 ppm/K

IEC 60751 F0.6 (class C)

Cu/Ag, stranded wires PTFE isolated, AWG 30/19, 50 mm

2.3. x 2.0 x 1.3

Stainless steel 1.4301/304

*customer specific versions on request

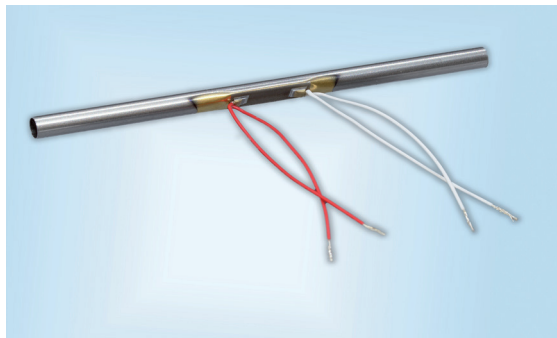


Flow Performance

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

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

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



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