



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⁾



Technical Sensor Data

Tube dimensions (L x \emptyset_{OUTER} (x \emptyset_{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

 $R_{_{H}}(0 \ ^{\circ}C) = 50 \ \Omega \text{ (red wires)}$

 $R_{_{s}}(0\ ^{\circ}\text{C})$ = 1000 Ω (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



physical. chemical. biological.

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)

Sensitivity: Response time t₆₃:

Accuracy:

Temperature sensitivity (uncomp.): Maximum Heating range: Overtemperature (CTA-mode):

Product Photo

0 - 20 kg/h (laminar flow profile) 20 - 200 kg/h (turbulent flow profile)

< 0.1 m/s

< 500 ms, dependent on electronics (used average determination)

Typically 3% of measured value (depending on electronics and calibration)

< 0.3% /K (depending on electronics and calibration) 0.75 W

10 - 15 K (recommended) max. 30 K



Order Information

Order code

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

Additional Electronics

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



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