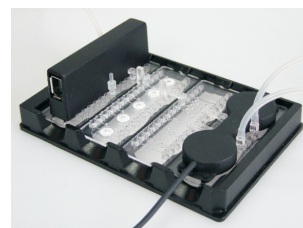
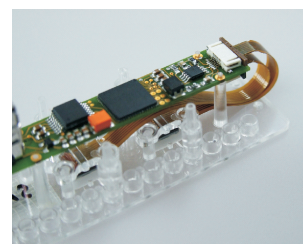


# FSS\_0809

## Silicon element flow sensor

### Main features

- small dimensions
- extremely light
- wide flow range
- compatible with microfluidic construction kit platform



The thinXXS flow sensor module, developed through collaborating partners of the microBuilder Consortium, consists of two silicon flow sensor chips, read-out electronics with analogue and digital output and polymer packaging containing standardized fluidic

connectors. The module fits into the thinXXS Microfluidic Construction Kit - a modular platform enabling the easy setup of microfluidic systems by combining available modules, each designed to perform microfluidic operations like pumping, mixing and splitting.

### Technical specifications

Number of sensors	2
Maximum flow	30 ml/min
Calibrated minimum flow	0.3 ml/min
Resolution	15 (µl/min)/digit
Pressure drop (at max. flow)	~70 kPa
Reproducibility	0.5+ % (rel. to full scale) 2.0% (rel. to measured scale)
Overpressure resistance	100 kPa (depends on packaging)
Flow detection response time	< 50 ms
Digital sampling time	min. 0.25 ms (depends on settings)
Operating temperature	5° - 50 °C
Temperature coefficient	50 % of max. flow
Wetted parts	COC (Topas), TPE (Uniprene), Silicon/Glass
Dimensions	75.5 x 25.5 x 28.1 mm

### Application areas

Besides the use in the microfluidic construction kit, the flow sensor module can be used for proof of principle investigations for all kinds of application fields where liquid (and gaseous) flows have to be precisely measured and controlled, such as:

- **Laboratory equipment**
- **Medical technology**
- **Ecology and Biotechnology**

Flow and pressure range, electric and electronic interfaces, as well as the packaging can be adapted to specific applications or integrated to suit typical OEM requirements.

# FSS\_0809

## Silicon element flow sensor



### Connections

#### Electronics

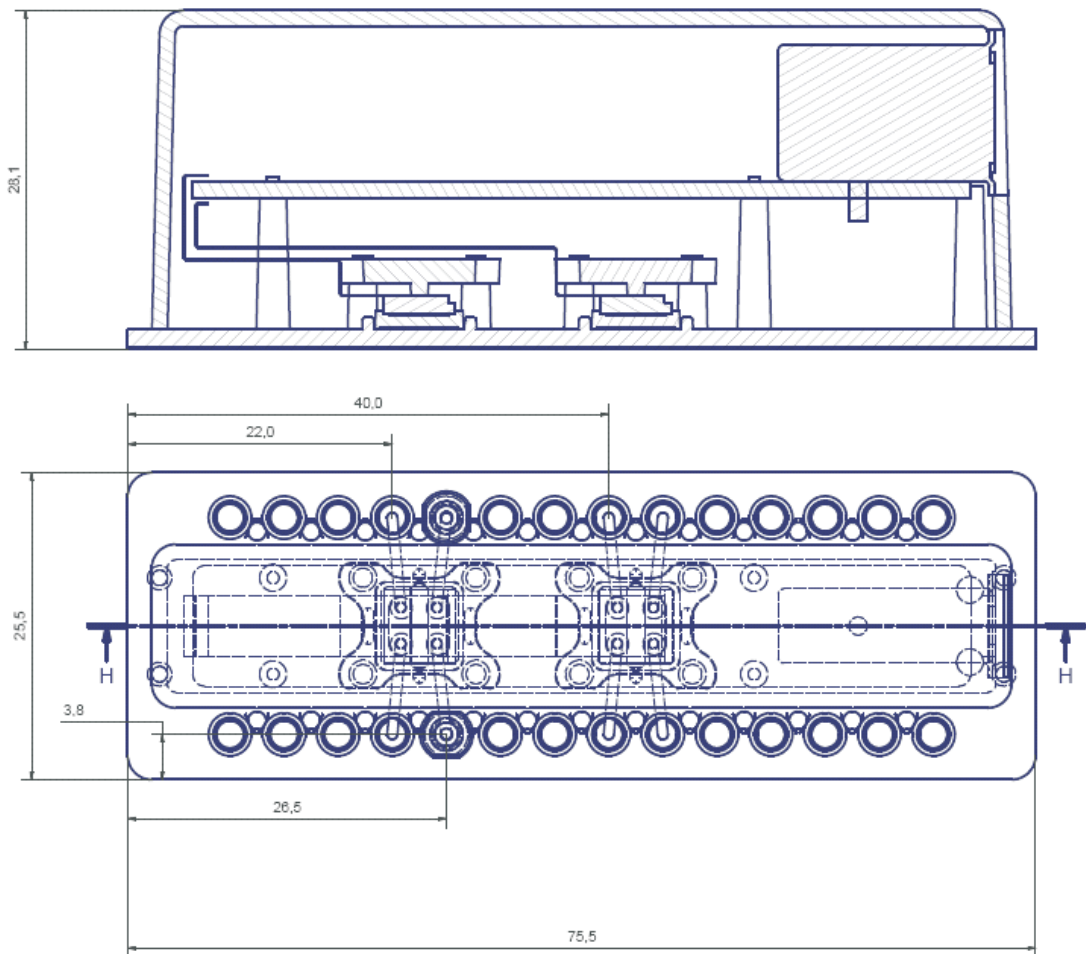
Power supply	5 – 18 V DC
Analogue output	0 – 2.5 V
Digital interface	RS232
Cable	custom – provided

#### Fluidics

Standard thinXXS fluid connector ports

#### Recommended tubing

Siltube TR60



### Order information:

Please contact thinXXS's sales representatives for more information.

microBuilder contributing partners:



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Specifications may be subject to change without further notice.