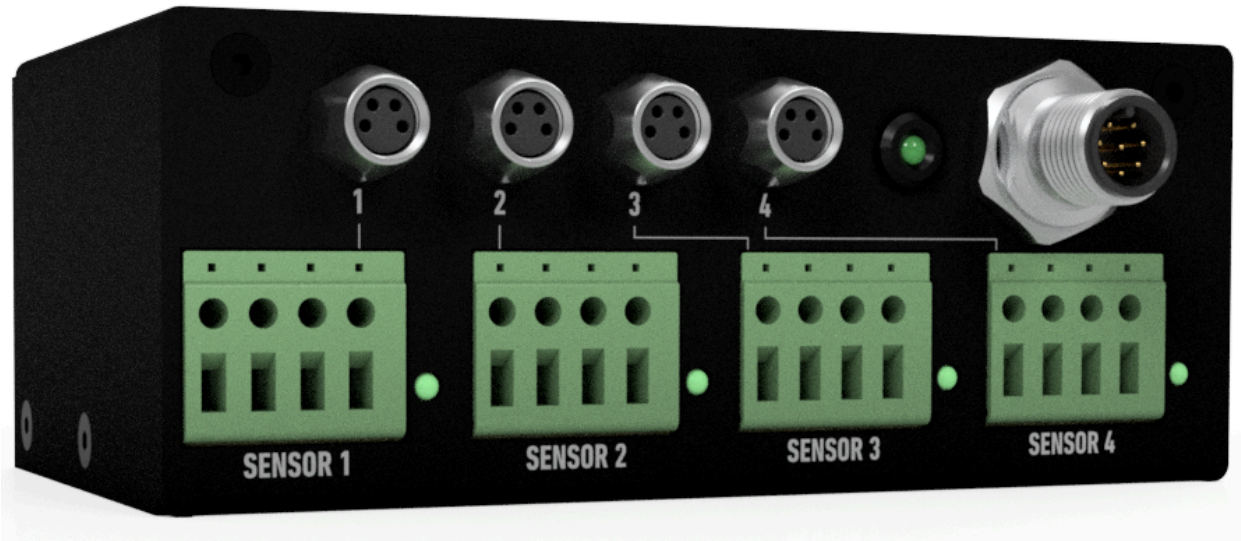


# OEM SENSOR HUB DATASHEET



Elveflow OEM Sensor Hub connects up to 4 sensors to read and monitor sensor values.

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## General specifications

Dimensions (mm)	<b>124 x 49 x 70 mm</b>
Weight (g)	<b>250 g</b>
OEM Control Center connection	<b>M12 8 pins (shielded cable 25 cm recommended)</b>
Sensor communication	<b>I2C, Analog</b>
Sensor connection	<b>M8 4 pins (shielded cable 1 m recommended), or Terminal block (4 wires)</b>
Sensor compatibility	<b>Elveflow sensors (MFS, MPS, bubble detector and MFP) Analog sensors with 0/10V input signal and with up to 24V supply</b>
Number of sensor connections	<b>4</b>
Casing material	<b>Aluminium</b>
Mounting orientation	<b>Any</b>

## Electrical specifications

Acquisition frequency	<b>200Hz</b>
Acquisition resolution (analog)	<b>16 bits</b>
Input range (analog)	<b>0 - 10V</b>
Resolution	<b>5 mV</b>
Sensor supply voltage (analog)	<b>5 to 24V</b>
Maximum power consumption (W)	<b>4W</b>
Maximum power / channel (W)	<b>0.9W</b>

## Communication specifications

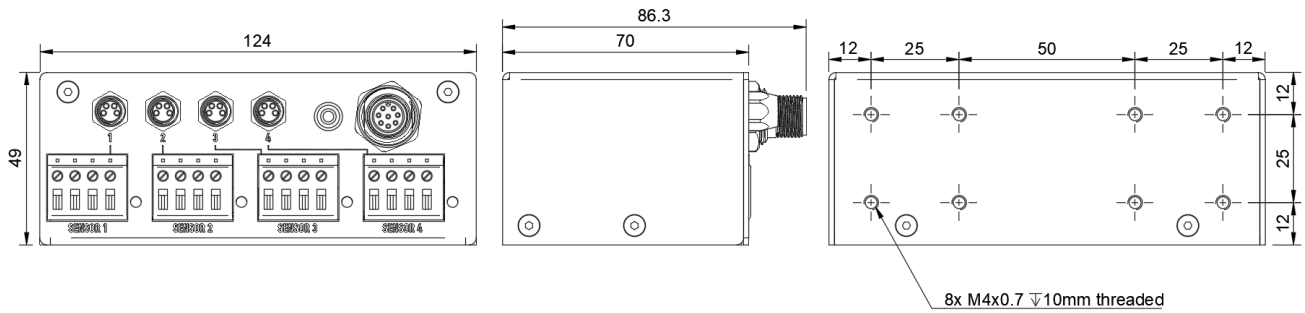
Interface	<b>M12 8 pins</b>
Communication type	<b>Universal Asynchronous Receiver-Transmitter (UART)</b>
Serial communication speed	<b>230400 bauds</b>

## Control and monitoring

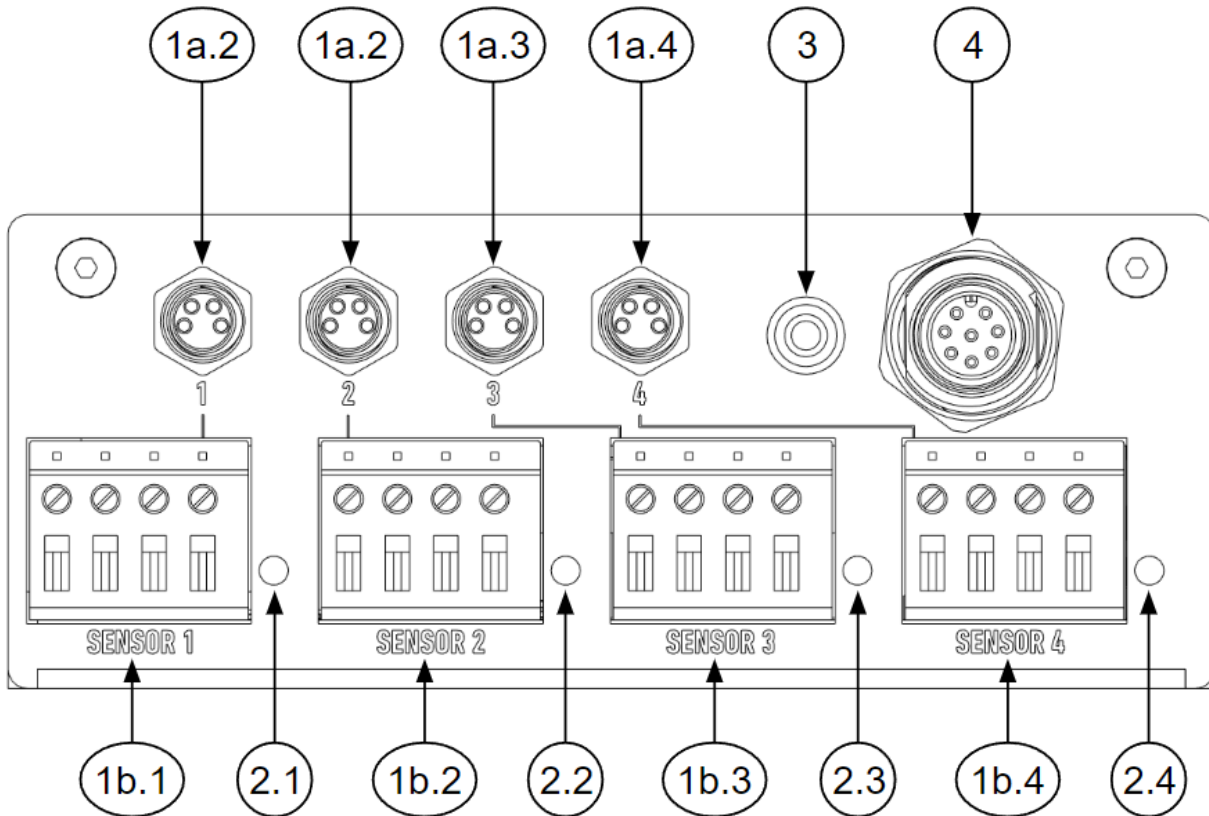
UART commands	<b>Sensor configuration &amp; monitoring</b>
Software control	<b>ESI via a OEM Control Center only</b>
Distributed PI regulation between a regulators module and a sensor on another module	<b>Yes</b>

# Dimensional drawing

(Dimensions in mm)



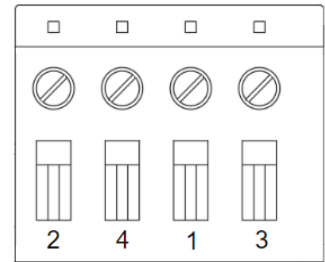
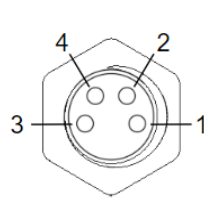
# Connections



1.x	Sensor connection, channel #x	<b>1a : M8 female 4 pins</b>
		<b>1b : Terminal block 4 pins</b>
2.x	Sensor LED, channel #x	<b>Green LED - ON when sensor is communicating</b>
3	Communication LED	<b>Green LED - ON when communicating</b>
4	Connection to OEM Control Center (or OEM Hub)	<b>M12 male - 8 pins</b>

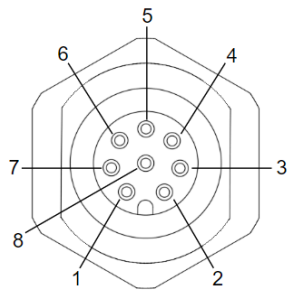
### Sensor wiring

1	<b>Vcc 5-24V (power supply)</b>
2	<b>SLC (clock line for I2C)</b>
3	<b>Ground</b>
4	<b>Data line (Analog signal / SDA for I2C)</b>

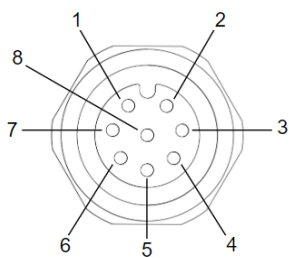


### M12 Pin out

1	<b>RX</b>
2	<b>TX</b>
3	<b>Ground</b>
4	<b>/</b>
5	<b>5V DC</b>
6	<b>/</b>
7	<b>Ground</b>
8	<b>24V DC</b>



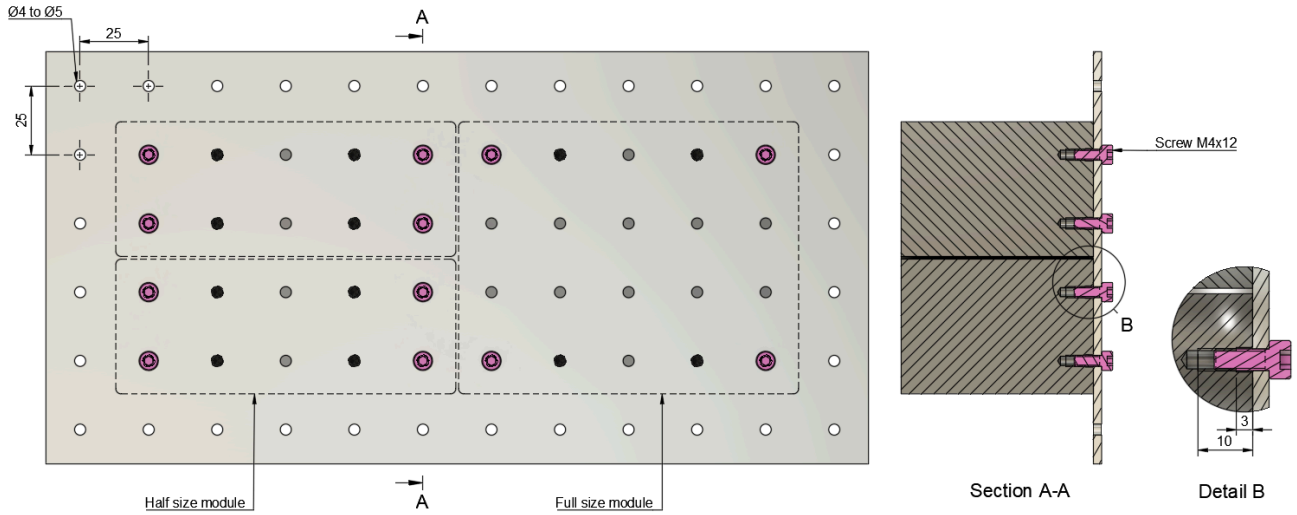
Male



## Assembly recommendations

The module can be used in any orientation.

### Assembly on standard perforated sheet metal



### Assembly with brackets

Brackets are Elveflow custom parts that can be purchased with an OEM system to assemble the modules together (see OEM Assembly kit).

