

Pressure Regulator With Input and Output Pressure Sensor



Features

- With or Without Integrated Pressure Sensors (input and output separately)
- Adjustable Output Pressure
- High Flow
- Inline or Block mounting options
- Designed for rough environment
- Very light
- Aircraft grade aluminium

Technical specifications

Dimensions L x W x H	42 x 28 x 56 mm 42 x 48 x 68 mm (with sensors)
Weight	130 g (150 g with sensors)
Operating temperature	-20 ... 80°C
Operating pressure	Input 1 - 10 Bar Adjustable from 4 to 10 bar
Supply voltage (pressure sensor)	5V
Output voltage (pressure sensor)	0.5V – 4.5V 0.5V = 0 bar 4.5V = 10 bar

Electrical diagram (regulator with pressure sensor)

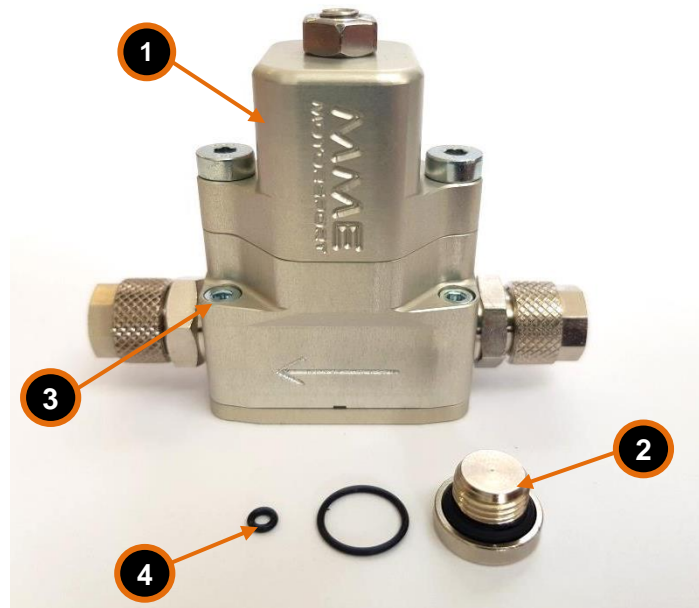
Brown	5V
Blue	Ground
White	Input pressure (0.5V - 4.5V)
Black	Output pressure (0.5V – 4.5V)
Green/Yellow	Not connected

Pressure sensor	
Voltage	Pressure (bar)
0.5	0
1	1.25
1.5	2.5
2	3.75
2.5	5
3	6.25
3.5	7.5
4	8.75
4.5	10

Anything below 0.45V and above 4.6V means sensor error (connection error or sensor damaged)

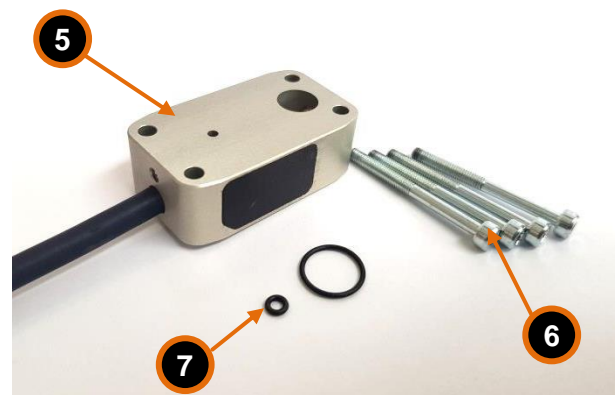
Included in the regulator kit (no pressure sensor) – PR-01

- ① Pressure regulator
- ② Plug for block mounting
- ③ Bolts for block mounting
- ④ Spare seals



Included in the sensor extension kit - PR-01-2SENS

- ⑤ Pressure sensor block
- ⑥ Bolts for mounting to pressure regulator
- ⑦ Spare seals



Connection Diagram

Flow direction is marked with an arrow.

Animation of different mountings available here: <https://www.youtube.com/watch?v=mIWVXKPi3Ws>

Inline connection (no sensor)



Inline connection (with pressure sensor)



Sensor cable must be turned in the direction of out port.

Block mount (no sensor)



Block mount (with pressure sensor)



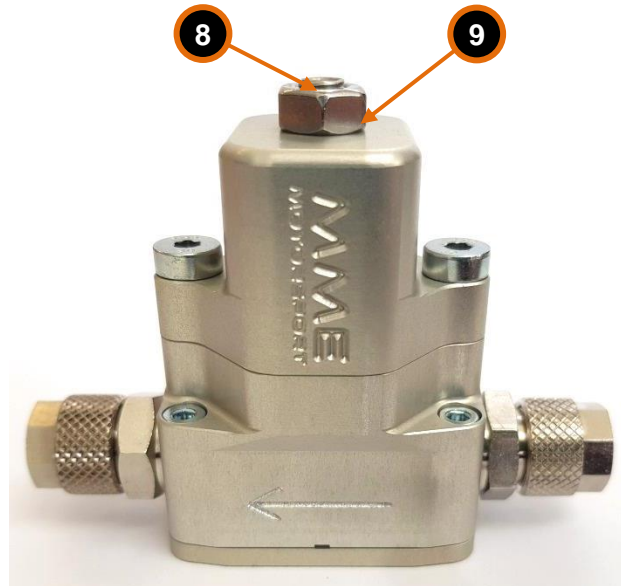
Adjusting pressure

First, unscrew the locking nut ⑨. Rotating hex screw ⑧ clockwise will increase the output pressure. Rotating it anticlockwise will reduce it. Please note that while adjusting pressure, regulator will not release excess pressure. After turning the screw, some air should flow through it for the regulator to stabilize.

After adjustment, screw the locking nut back ⑨.

Minimum pressure that can be set is 4 bar. At 4 bar the adjusting screw is 10mm out (from enclosure to top of the screw).

Maximum pressure is 10 bar (locking nut and adjusting screw are parallel)

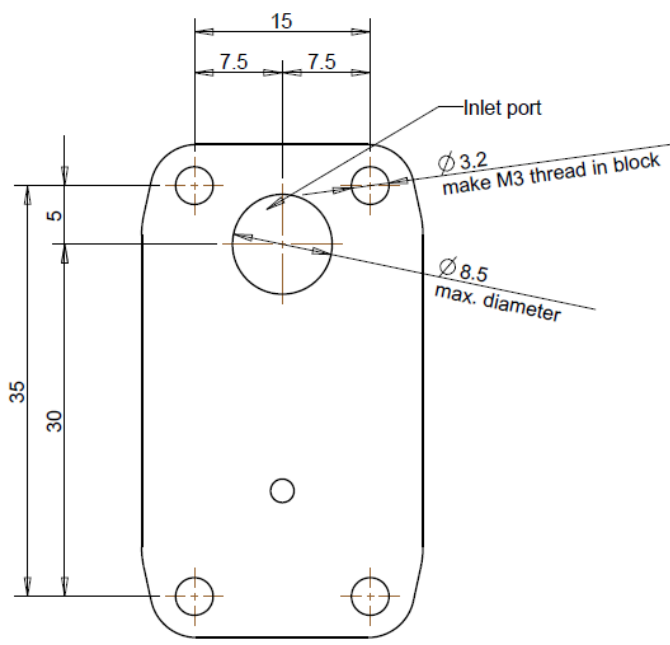
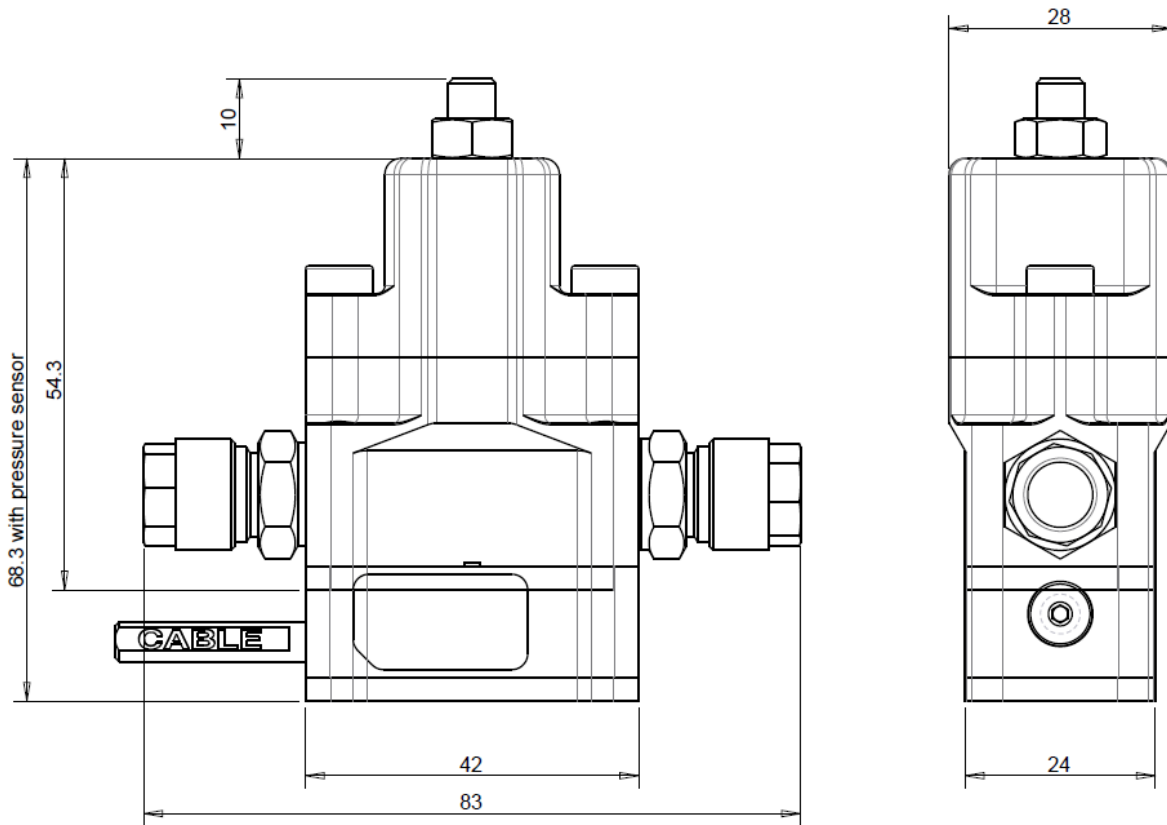


Mounting pressure sensor to regulator

Pressure regulator is mounted to the sensor as shown in the picture.
Take care for seals, they must be in place as seen on the picture.



Technical drawing



Ordering

PR-01 – Adjustable Pressure Regulator with Inline and Block connection kit. Without pressure sensor.

PR-01-2SENS – Dual Pressure Sensor extension kit for Pressure Regulator PR-01

Servicing

No servicing required.