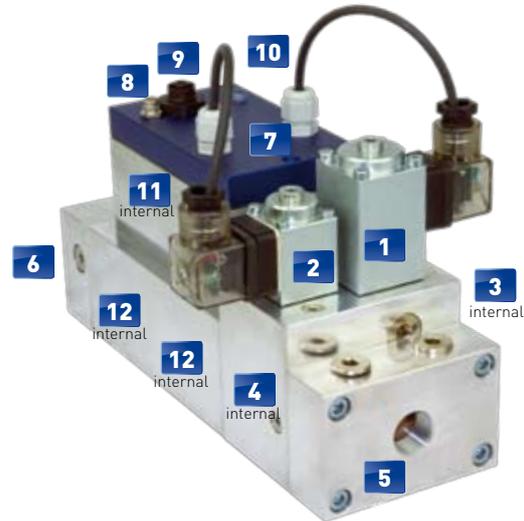
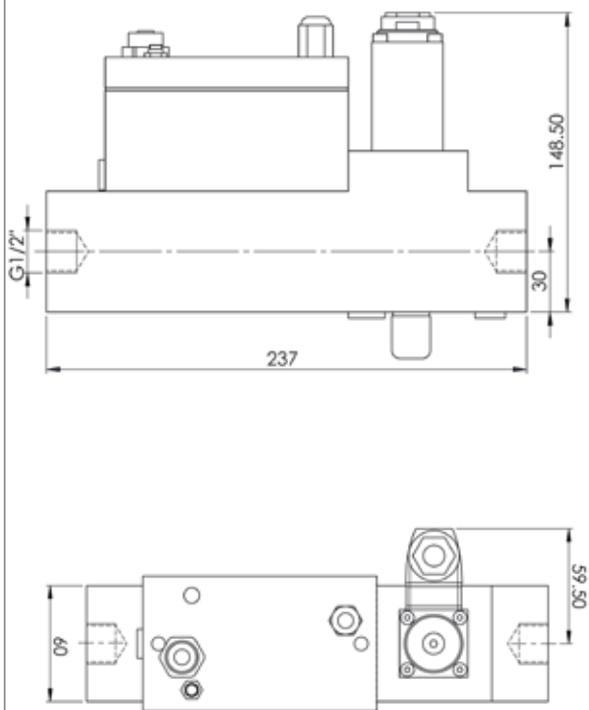


- 1** 1<sup>st</sup> Solenoid for large flow
- 2** 2<sup>nd</sup> Solenoid for small flow
- 3** 1<sup>st</sup> Proportional valve
- 4** 2<sup>nd</sup> Proportional valve
- 5** Outlet flange with thread connection
- 6** Inlet flange with thread connection
- 7** Micro-processor board
- 8** M8 Power supply
- 9** M12 Analog connector
- 10** LED operating mode
- 11** Measuring cell
- 12** Filter



## DIMENSIONS



## DATA

### OPERATION

Maximum flow	Nlmin <sup>-1</sup>	1650
Minimum flow	Nlmin <sup>-1</sup>	2
Maximum operating pressure	bar	16
Regulation ratio		1 : 500
Accuracy		± 3%
Step response (10% - 90%)	s	1 to 5
Operating temperature	°C	from -10 to +60

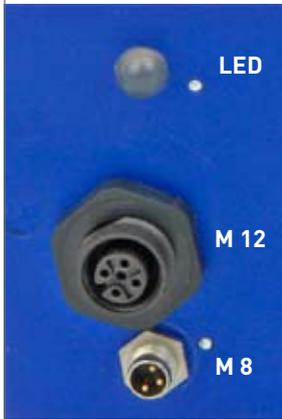
### MATERIALS

Housing	Aluminium
Flange connector	Aluminium
Valve	Brass
Sinter filter	Brass, 50 µ
Sealing gaskets	NBR

### ELECTRICAL EQUIPMENT

Connection voltage	V DC	24 ± 15 %
Capacity max.	W	30
Connection analog		Thread ½" BSP
Signal Set/Real	mA	4 - 20
Bypass Signal	V DC	24

## CONNECTION ASSIGNMENT



### LED DISPLAY

	Ready
	In operation
	Fully open
	Fault

### M8 POWER SUPPLY

Pin 1	24 VDC
Pin 3	0 V
Pin 4	PE, Ground

### M12 ANALOG CONNECTOR

Pin 1	Set Value	4-20 mA → AOP
Pin 2	Set Value	0 V
Pin 3	Real Value	4-20 mA → AIP
Pin 4	Real Value	0 V
Pin 5	Dig. Input	24 VDC, 10 mA

## IMPORTANT NOTICES

To ensure trouble-free operation, the **flox[on] S500** should be installed in a horizontal position. If installed vertically, the device could produce faulty measurements under certain conditions.

The **flox[on] S500** is maintenance-free even under harsh conditions. In case of a fault or failure of the measuring cell, please contact the service center.

When delivered, the **flox[on] S500** comes in secure transport packaging. It can be stored under dry conditions for up to two years before installation.

The **flox[on] S500** is intended solely for use with gases.

Liquids will ruin the measuring cell. This includes gas condensation, for example, if temperatures during operation drop below the condensation point.

Particulate matter in the form of gas impurities may clog the filter discs and decrease the performance of the **flox[on] S500**.

Incorrect wiring can destroy the electronics.

## CALIBRATION

Before delivery, the measuring cell in every **flox[on] S500** is calibrated with atmospheric air. There are correction factors for applications using other gases. In individual cases, if desired by the client, the calibration can be made directly with the specific gas intended for use.

The measuring cell does not require a recalibration for the rest of its operating life.

If a mixed gas such as air or natural gas is used, it should be noted that a change in the composition of the gas can occur during operation.

In such cases, and for all other questions about calibration, please contact our service center (see back page of this manual).

## CORRECTION FACTORS

GAS		CORRECTION FACTOR
Hydrogen*	H <sub>2</sub>	0,7
Argon	Ar	0,95
Nitrogen	N <sub>2</sub>	1,0
Oxygen	O <sub>2</sub>	1,0
Methane	CH <sub>4</sub>	1,1
Carbon dioxide	CO <sub>2</sub>	1,35

\* For applications using hydrogen gas, we recommend that the **flox[on] S500** be calibrated directly with hydrogen by FC Technik

## GUARANTEE

The **flox[on] S500** is guaranteed for 2 years.

## CONTACT

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