

# P1500 GAS

3.2 - 26V DC

- **Long Life-Time**
- **Calibrated flow**
- **Customized functions**
- **System savings**

## > **CONCEPT**

**Principle of operation** The micro-pumps from Xavitech are based on the principle of the oscillating displacement pump. The motor causes an internal axle to move back and forth. This action is transferred to the elastic diaphragm which, in cooperation with the non-return valve, produces the pumping effect.

## > **X-LIFE™ MOTOR**

The patented pump technology from Xavitech is unique in several aspects. Thanks to the X-life™ motor design, problems associated with other electro-magnetic pumps are simply eliminated. The axle motion is friction-less and it avoids striking into the magnet. As a consequence, the lifetime is long, the operation is safe, free of sparks, and reliable. In addition, the pump is oil-less and free of maintenance.

## > **INTELLIGENT**

The Xavitech pumps are also characterized by the built-in intelligence, offered by the internal microprocessor and the patented positioning system that displays the location and motion of the axle. This opens up vast new possibilities. For example, the axle motion reveals informa-

tion of the working conditions (e.g. stroke frequency, flow, and pressure). By processing this information, the pump can automatically take necessary measures – in real-time – to adjust its performance according to any condition changes.



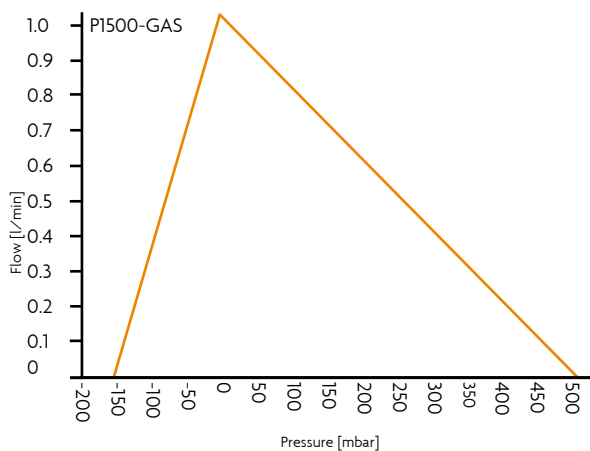
### KEY BENEFITS

Serial control  
Pressure measuring capabilities  
Flow and pressure regulating capabilities  
Constant flow regardless of battery voltage  
LCD control capabilities  
Programmable frequency  
Control capabilities of external components

### APPLICATIONS

Gas analysis  
Pressure / vacuum holding  
Medical diagnostics  
Blood pressure  
NPWT pump  
Aneastetic delivery  
Automotive  
Industrial

## > FLOW VS. PRESSURE



## > GENERAL DATA

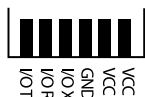
Motor type:	X-life motor
Supply voltage:	3.2 to 26.0 V DC
Average current:	130-180 mA*
Permissible amb. temp.:	0°C to 55°C**
Medium temp.:	0°C to 55°C**
Wetted parts:	PPS and EPDM (viton on request)
Weight:	105 grams
V200 max. performance:	
Flow:	1,1 L/min
Vacuum:	160 mbar
Pressure:	500 mbar

\* Depends on application type, load, and flow. Contact us for details.

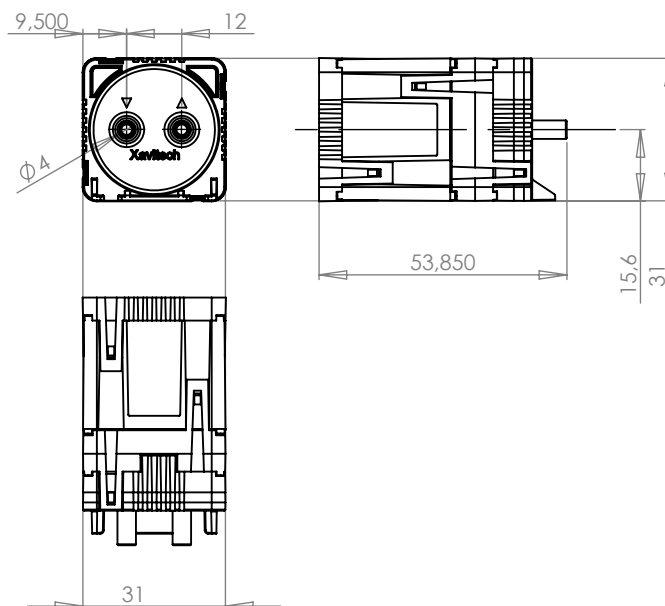
\*\* An extended range can be treated on request.

## > INSTALLATION / OPERATION

- The pump needs min. 3.2 V at start-up.
- The standard pump is not designed to start against max. vacuum or pressure, but this can be dealt with – please contact us for details.
- Incorrect lead connection can damage the internal electronics.
- To insure lifetime, air filters should be used in order to prevent contaminations like dust to enter the pump.
- The connector is 7 +/- 0.1 mm wide and 0.3 +/- 0.05 mm thick.
- Recommended connector: Molex 0526100672 FFC/FPC.
- The pump runs when I/O X (Digital Switch) is not connected or connected to ground, and the pump stops when I/O X is connected to 3.3 V.
- Connection scheme:



## > DIMENSIONS



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