

# FLOW CALIBRATION UNIT

GAS STANDARD PUMP

- **Calibrate flow**
- **Reduce power use**
- **Shorten R&D process**
- **Save money & time**

## > CONCEPT

Xavitech® can supply calibrated pumps according to customer needs. Just as important, the customers can also adjust the pump performance themselves. This is really valuable during the design phase of a system since the user will be able to compensate for condition changes simply by reprogramming the pumps. Once the system layout is fixed the customer can inform Xavitech® on which pump setting was the best. Hereafter, Xavitech® can easily supply calibrated pumps according to the new requirements. Such a procedure implies a quick production transfer which saves time and costs for the user.

## > FLOW CALIBRATION UNIT

The flow calibration unit will enable the user to adjust the flow through altering the pump frequency and store setting permanently into the pump memory. This datasheet describes the Flow calibration unit.



### KEY BENEFITS

Simple to use  
Reduce power consumption  
Minimize pump noise  
Flexibility  
Settings stored in pump  
Speed up system tuning

### APPLICATIONS

R&D for new product development  
LAB

## > GENERAL DATA

Calibration unit supply:  
Pump supply:

12 V DC (centerpin +)  
See mode description



## > USING CALIBRATION UNIT

On the picture above you can see a blue circle around the mode selector.

### Mode 1

Move the jumper to connect pin1 and pin2. The pump will then run on the same supply as the calibration unit.

### Mode 2

Move the jumper to connect pin2 and pin3. The pump will then run on the supply attached to VCC connector. Input can be between any voltage that is specified for the connected pump. See pump datasheet for more details.

Connect the pump as shown on the picture. Select pump supply mode according to mode 1 or 2. Connect power supply to the calibration unit, green LED will go on. Main menu on the calibration unit will appear, see picture above. If power is connected to the calibration unit before the pump is connected or powered. The LCD will show "Waiting for pump" until the pump is connected or supply for pump is turned on.

### Frequency

At startup, the last stored frequency setting will appear. This value can be adjusted between 10 to 255. 10 corresponds to the highest frequency and 255 to the lowest. This value is controlled by the UP and DOWN buttons. Make sure that the arrow is in front of frequency. Press ENTER to store the frequency into the pump. The value that is programmed into the pump is stored in the eeprom of the pump, so you can disconnect the pump and the setting will remain in the pump.

### Stop

Move the control arrow with the SELECT button to Stop command and press ENTER, the pump now stops.

### Reset:

Move the control arrow with the SELECT but to Reset command and press ENTER, the pump now Resets and starts pumping.

## TROUBLE SHOOTING

If the LCD shows "communication failure":

-Control if pump is connected properly.

If the LCD shows "Waiting for pump" even though the pump is connected:

-Restart the calibration unit with the pump connected to the unit.

If the pump don't start when using mode 2 for the power supply:

-Check that VCC for pump and that the 12 VDC for calibration unit has common Ground.

-Control that the jumper is in the right position.