

B - Use limits :

Usage pressure must be lower than 10 bar for all products.

In case of dangerous gas<sup>(1)</sup> valve diameter (line) must be below 100 mm.

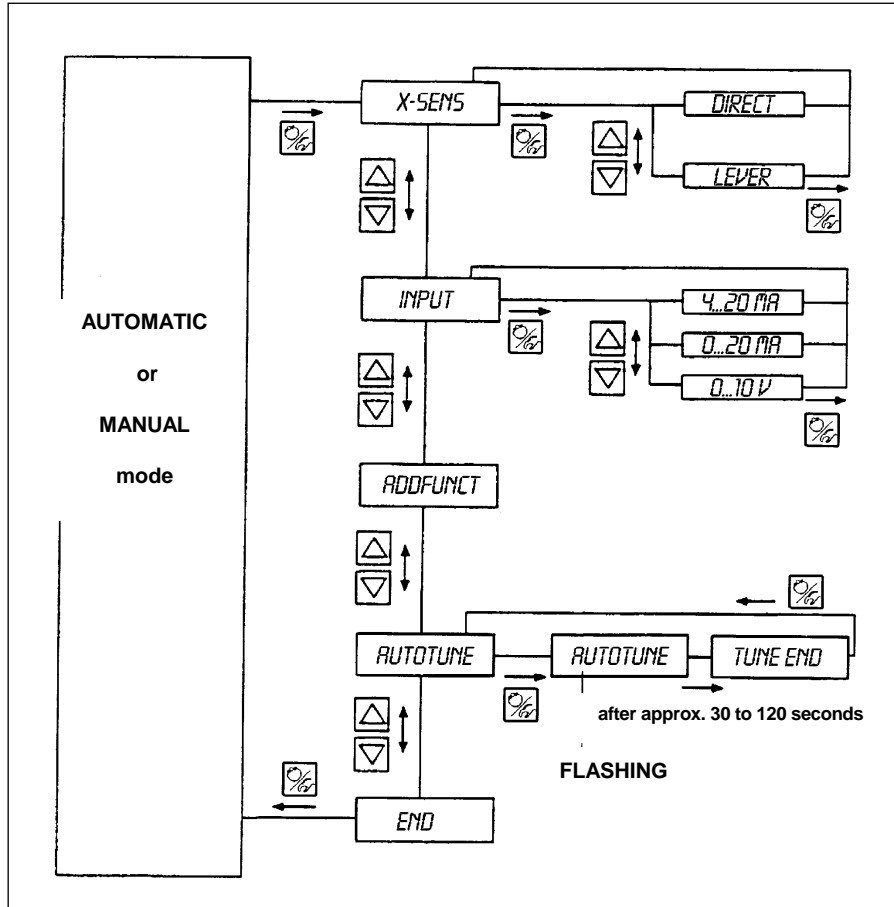
For use outside these limits, please contact our technical service.

<sup>(1)</sup>dangerous gas : group 1 gas, identified by a letter on the label and on the security card of the product :

E (for detonating gas), O (for fuel), F+, F and R10 (inflammable), T+ and T (toxic).

For additional information, please see regulation 67/548/EC "Labeling of dangerous products".

### Main menu at initial start-up



**NOTE :** For any additional information, please see the manual for positioner model 1067 supplied with the product or contact our Technical Department.



## INSTALLATION GUIDE

### CONTROL VALVE

[www.definox.com](http://www.definox.com)

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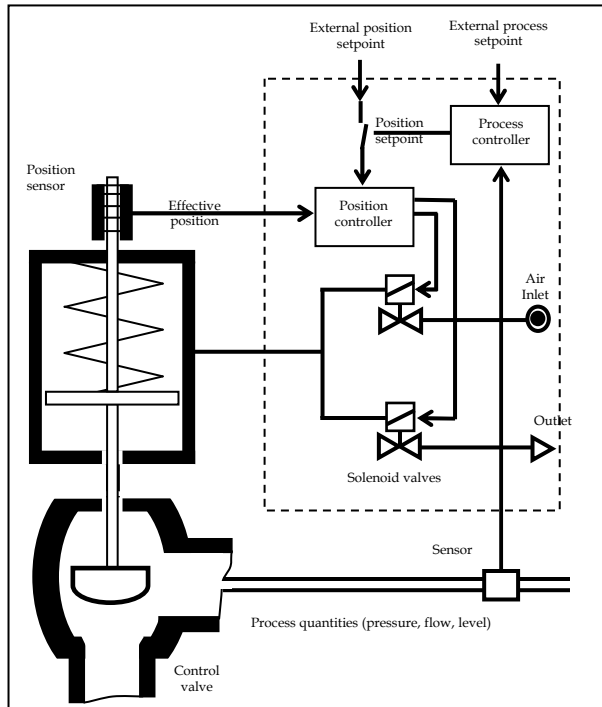
Follow the fitting and operating instructions carefully. Take account of the actual working conditions and observe the technical specifications for the valve.

**VALVE IDENTIFICATION**

DEFINOX control valves have an identification number. You will need this number in order to identify the spare parts you may request.

**DESCRIPTION OF THE CONTROL VALVE:**

DEFINOX control valves with position memory are ideal for the control and regulation of flow rates, temperatures, levels, pressure and for use in biotechnology. DEFINOX control valves are currently available in sizes DN 40 to DN 76 in standard food grade and aseptic (with diaphragm) versions. These valves have a simple loop function.



**1 – Measurement**

Different types of measurement are possible:

- Pressure sensor
- Temperature sensor
- Level sensor
- Positioning arrow (operation of the actuator as positioner)
- Flowmeter

**2 – The PID controller** (Proportional - Integral - Derived)

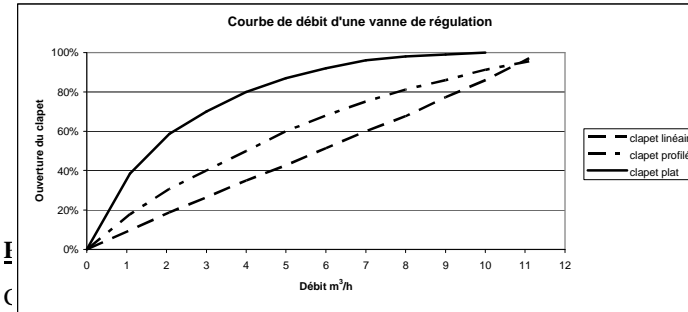
The controller processes the control discrepancy. This calculator compares the setpoint value with the actual value and supplies an output signal depending on this difference (processes the 4-20 mA output).

Two types of control are possible:

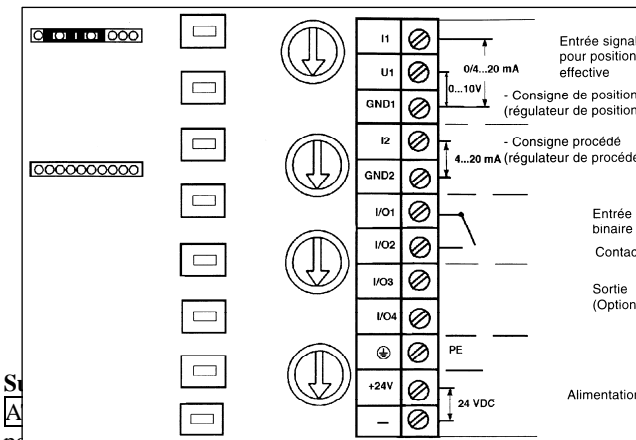
- Manual control according to system evaluation (valve and service conditions)
- In auto-adaptive mode, the P.I.D. controller calculator automatically performs some of the control functions

**3 – The valve**

The valve can operate in NO or NC with an optional metal/metal seal. The profiled disc facilitates linearization of valve operation (see example below). The valve used for control DCX1 or DCX3 valve or a US valve.



Assigning the connections.



the M4 tapping on the base of the positioner must be connected to the valve and the valve must be earthed by the shortest connection possible.

**Observation**

For an external PID with use of the valve as a simple positioner, the signal input must be connected to I1 – GND1.

Enter P Control in the main menu, configure the external setpoint, then delete P Control from the main menu.

**Installation**

The compressed air supply must be dry and filtered, with or without oil. Prior to assembly and installation, clean any impurities from the pipes and connections. Ensure that the supply pipe is configured correctly, particularly if the pipe is long, then the pipe diameter should be increased. In the event of a malfunction, please contact us.

**EEC CONFORMITY**

A - Our valves comply with European regulations (EEC) within the limits of use described in paragraph B. The CE mark on the valve indicates conformity to the following regulations :

- 89/336 "Electromagnetic compatibility"
- 97/23 "Pressurized equipment"
- 73/23 "Low pressure"