

## INTEGRATED VALVE MANIFOLD FOR GAS GENERATOR



Air is a mixture of oxygen and nitrogen; an oxygen concentrator separates these two gases and increases the proportion of oxygen from about 21% to about 90%.

Atmospheric air is trapped by the concentrator and filtered. A compressor then raises the pressure of the air.

The compact manifolds for gas management feature an on/off or proportional fluid control function which can be used for fast switching and high flow rates while assuring high reliability and long life.

Typically used in electro-medical applications, these systems can be customised to meet detailed specifications or requirements, including for use in a clean room environment.

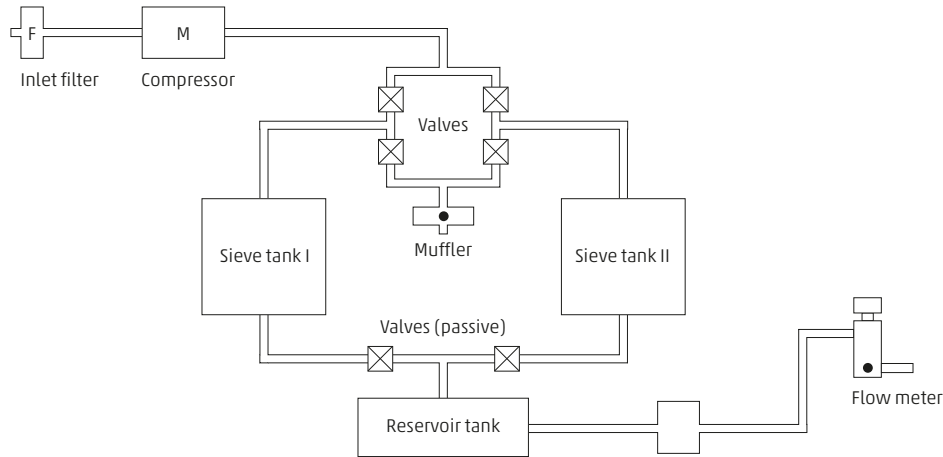
**The concentrator consists of two molecular sieves, a compressor and a control unit**

**In use the compressor pumps air into the two sieve columns where oxygen, nitrogen and water are separated out from one another**

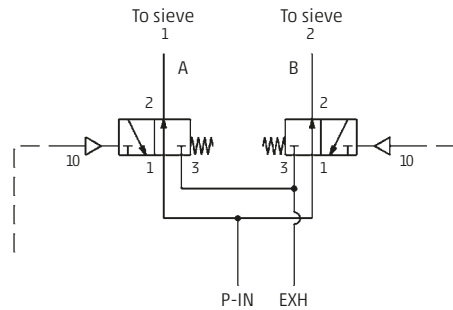
**The control unit can be set to provide, for example, a continuous oxygen supply for respiratory therapy**

**A regulator's function is to reduce and control pressure of the oxygen on the output port**

## Manifold integrated solution Flip block sieve control



## In-line poppet valve 2x3/2 solenoid valves

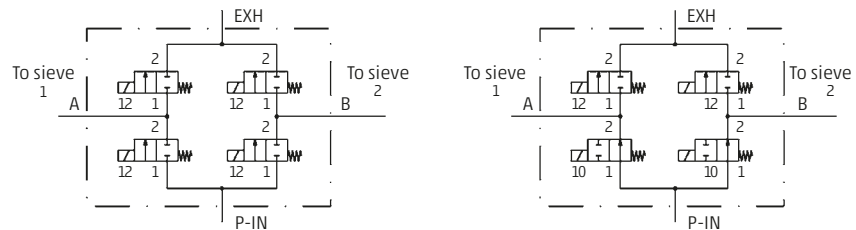


### General data

Pressure	1 ÷ 3 bar
Media	air / oxygen
Flow	kv = 13 l/min 600 NL/min air at 2.5 bar free flow 510 NL/min air at 2.0 bar free flow
Voltage	6-12-24 V DC
Power consumption	2x1 Watt
Cycles	on/off 7 seconds life 30,000 hrs (5 years), 20 Mcycles

Other manifold functions are available on request.

## In-line poppet valve 4x2/2 solenoid valves



### General data

Pressure	1 ÷ 6 bar
Media	air / oxygen
Flow	kv = 10 l/min 460 NL/min air at 2.5 bar free flow 400 NL/min air at 2.0 bar free flow
Voltage	6-12-24 V DC
Power consumption	4x1 Watt
Cycles	on/off 5 seconds life 30,000 hrs (5 years), 20 Mcycles

Other manifold functions are available on request.