

ATEQ DP

Simplified model
of ATEQ D

Programmable gas flowmeter for production line



ATEQ DP in standard case

The **ATEQ DP** is an equipment of flow measurement conceived for control on production line. Its use is very simple and its able to do 32 distinct measures.

Its applications are numerous, especially in the gas industries, domestic appliances, packaging and medical industries.

MAIN FEATURES

- 3U, 19" rack mounting.
- 32 channels.
- Checking and compensation of the variations of pressure.
- Numerical display of flow and pressure.
- Measure of flow in continuous mode.
- Programmable reject levels.
- Standard of measure units : l.atm/min, l.atm/h, m³.atm/h, g/min.
- Interfacing through input - output and RS 232 serial port.

APPLICATIONS

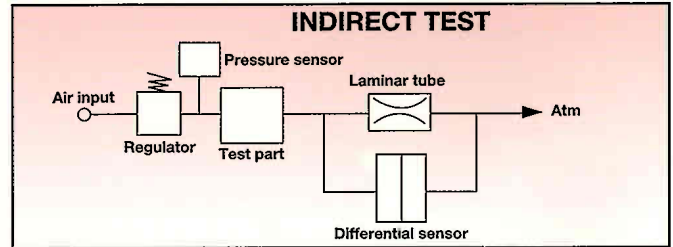
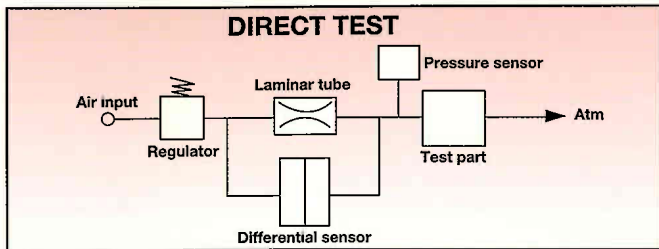
- **Flow control** : cookers, ovens, valves, gas taps, gas burners lighters...
- **Leak detection** : valve seats, gear boxes, hydraulic components, motors...
- **Control of aerosols, injectors...**

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PRINCIPLE OF MEASURE

ATEQ DP converts a loss of the load at the input and output connections of air leak tube calibrated in a flow measure : the apparatus compensates automatically the variations of viscosity and pressure.

The flow measurement can be carried out directly or indirectly :



TECHNICAL CHARACTERISTICS

■ MEASURE :

Sensor or transducer of pressure differential (ATEQ's patent) equipped with an automatic correction of derivation from zero and a system of protection against the excessive pressures.

Full scale :

200.0 Pa (2 mbar ~ 0.3 PSI).

Resolution : 0.025% of the full scale.

Linearity : < 1% of the full scale.

Transducer of pressure relative to a silicium gauge equipped with an automatic correction in case of derivation from zero and a system of protection against the excessive pressures.

Full scale :

- -90 kPa (-900 mbar / -13.04 PSI)
(vacuum pump not provided)
- 15 kPa (150 mbar/2.17 PSI)
- 200 kPa (2000 mbar/29 PSI)
- 400 kPa (4 bar/60 PSI).

Resolution : 0.25% of full scale.

Linearity : < 0.5% of full scale.

■ RANGE OF MEASURE :

10 l.atm/h ; 30 l.atm/h ; 80 l.atm/h ; 500 l.atm/h
1 500 l.atm/h ; 4 000 l.atm/h ; 10 000 l.atm/h

■ PNEUMATICS :

Pneumatic system :

Gate stop valves and ring seal or joint pressurized with a pneumatic control and return through a spring. Life span of 5.000.000 cycles minimum.

Pneumatic connections :

4 x 6 mm ~ air input.
6 x 8 mm and 8 x 10 mm ~ air output test.

Air input :

The input measure must be between 400 and 800 kPa (4 ~ 8 bar / 60 ~ 116 PSI).
A standardized filter of 5 μ is set up in the apparatus.
Quality of air required 1.2.1. (norm ISO 8573-1).

Concentration and granulometry (class 1) : 0.1 μ m and 0.1 mg/m³.

Dew point under pressure (class 2) : - 40° C.

Maximum concentration of oil (class 1) : 0.01 mg/m³.

■ PRESENTATION :

Rack 19", 3U.

Standard dimension :

H x W x D = 153,4 mm x 528,5 mm x 292 mm.

Weight of the standard case : about 10 kg.

■ ELECTRONIC :

Microprocessor : INTEL 80C32 ~ 12 MHz.

■ ELECTRONIC POWER SUPPLY :

Power voltage : 110 V / 220 V

Monophased 50/60 Hz - 40 VA

The equipment must be connected to a ground of good quality.

■ INTERFACES :

Output RS 232 on a 9 pin connector.

Remote control via interface, relay or automation available in option.

Input of main board :

- Dry contact
- Connection tension open 24V
- Connection close 10 mA.

Output 24 V of the remote control CPU :

- 24 V continuous open collector
- 500 mA maxi on the load.

Input of the relay board :

- Dry contact
- Connection tension open 24 V
- Connection close 10 mA.

Output relay board :

- Dry contact - maximum current of 500 mA under a load.

■ ACCESSORIES :

- Waterproof case IP55

Consult our accessories brochure.

Characteristics subject to modification without notice.

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