

COMBINED MANOMETER AND AIR DIFFERENTIAL PRESSURE SWITCH



TVI supplies a unit suitable for all the applications where a visual indication of the air differential pressure together with an alarm at a pre-set value is required. Typical applications are monitoring of the filters in ventilation plants, correct fan functioning, low pressure in chimney flues and overpressure. The compact unit is complete of

- a differential manometer with an inclined liquid tube, complete of tank to allow temporary overpressure, a bottle containing indication liquid and 2 stickers (red/green);
- a differential pressure switch connected to the manometer through PVC tubes, complete of pressure adjustment knob, terminals for electrical connections and cable gland PG 9. Protection class according to EN 60529: IP54;
- PVC tube \varnothing 4 x 7 - 2,2 m length, pipes and fixing screws.

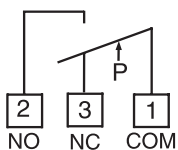
TECHNICAL FEATURES

Pressure switch:

- Microswitch with switching contacts
- Max. current: 3 (2) A 250 Vac
- Working temperature: -20/+60°C
- Max. pressure: 50 KPa
- Differential: fixed, see schedule
- Protection: IP54
- Electrical connection: PG 9
- Materials: ABS/PMMA/PC
- Sealings: NBR

Inclined tube manometer:

- Working temperature: -40/60°C
- Fluid: ISO-paraffin; range 600Pa, d = 0.786 kg/dm³ (15°C), red colour; range 1500 Pa, d = 1.870 kg/dm³ (15°C), blue colour
- Max. pressure: 200 KPa
- Accuracy: 5 Pa
- Materials: ABS/PMMA/PC
- Sealings: NBR



ELECTRICAL WIRINGS

When differential pressure increases:

- 1 - 3 open
- 1 - 2 close

SCHEDULE

Range manometer Pa	Range pressure switch Pa	Type	Differential Pa	Max pressure KPa
0-600	40-600	TVI- MP6	30	50
0-1500	100-1300	TVI- MP10	80	50

Installation instructions:

Locate the manometer on a convenient vertical surface.
Install gauge horizontally with self-drilling screws provided.

Filling:

Gauge fluid is red coloured paraffin oil (density 0.786 Kg/dm³ or blue coloured with density 1.870 Kg/dm³).

Back out the zero adjust knob until it stops: then turn in approximately two full turns so that there is room for adjustment in either direction.

Remove the fill plug and fill with gauge fluid until fluid is visible in vicinity of zero of scale.

Adjust for exact setting with zero knob and replace fill plug.

Fittings with air filter:

Run the tube from the fitting on the discharge side of the filter to the right gauge connection (-) and the tube from the other

side of the filter to the left gauge connection(+). Remove paper from back of green and red stickers and install adjacent to the indicating tube to show clean and dirty filter readings.

Maintenance:

Check oil level regularly and adjust zero knob as required. Be sure all pressure is removed by disconnecting tubing at top gauge before adjusting zero knob.

Add oil when necessary.

Warnings:

Each single operation done on the unit, either installation or maintenance, must be done without main supply on the unit and external loads. Such operations are permitted only by skilled workers. We are not responsible for possible damages caused by an inadequate installation and/or by removed or exchanged security devices.

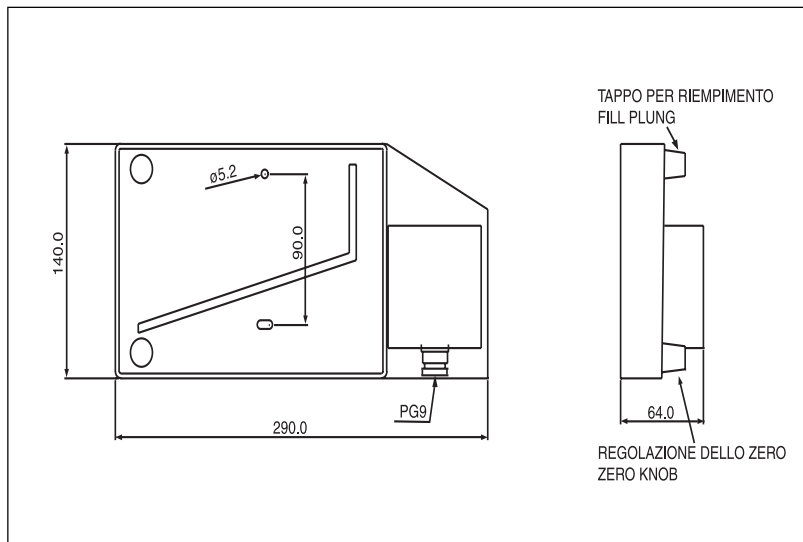


Figure 1

