

Pressure switch series PE - PED

Pressure switches and differential pressure switch of series PE and PED are suitable for application on domestic and industrial combustion plants for detection of pressure of gas belonging to the first, second and third family and air.

They are normally applied on the most common combustion plants like furnaces, boilers, dryers and compact burners.

PE pressure switches are certified **CE**, according to norms EN 1854. The switching point is adjustable via hand wheel.



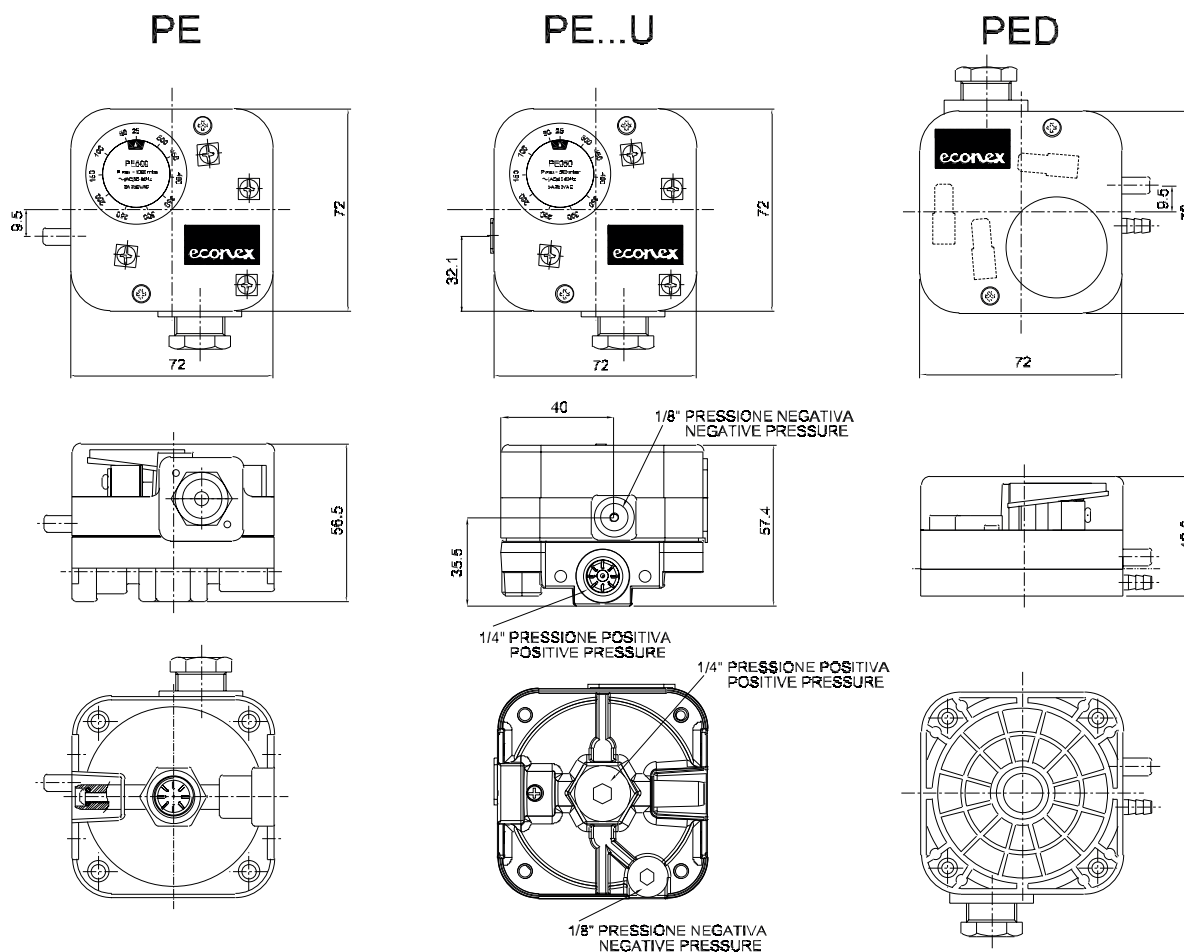
TECHNICAL FEATURES

Base support	Die-casted aluminium (PE and PE...-U models), polycarbonate (PED)	
Diaphragm	NBR (PE and PE...-U), silicon (PED)	
Housing	Brass	
Switch part	Polycarbonate	
Electrical rating	250V ac 5A	
Pressure connection	1/4" BSP	
Ambient temperature	-15 ÷ +60 °C	
Endurance	50.000 cycles gas, 100.000 air	
Enclosure	IP54 - IP44 (differential)	
Cable gland	M18 x1 on request with adapter M20 x 1,5	
Models	PE	Positive Pressure Switch
	PE...-U	Positive and Differential Pressure Switch
	PED	Differential Pressure Switch

FEATURES

- Installation in horizontal (preferred) or vertical position. In case of differential pressure switch PED mounted in horizontal, the switching points will change by 0.25 mbar
- Max. pressure PE pressure switch: 500 mbar and 1 bar (only PE 500)
- Differential pressure switch PED max pressure 100 mbar
- Adjustable tolerance $\pm 15\%$
- Electrical connection : male fast-on 6.3 x 0.8 mm
- Air connection : silicone or polyamide, polyurethane hose $\varnothing 4 \times \varnothing 7$ or $\varnothing 5 \times \varnothing 8$ mm

DIMENSIONS

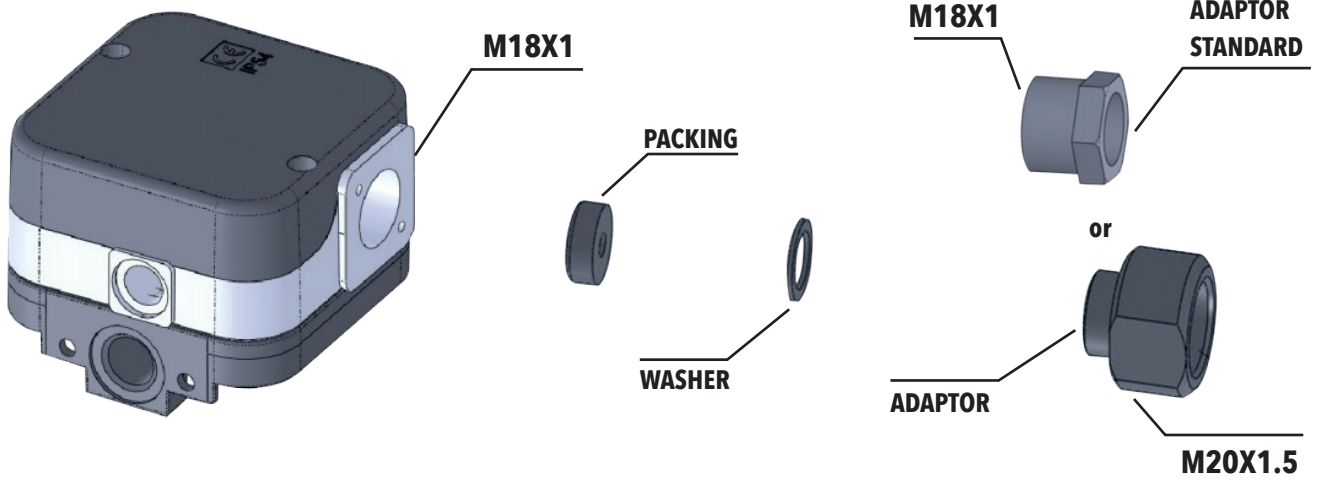
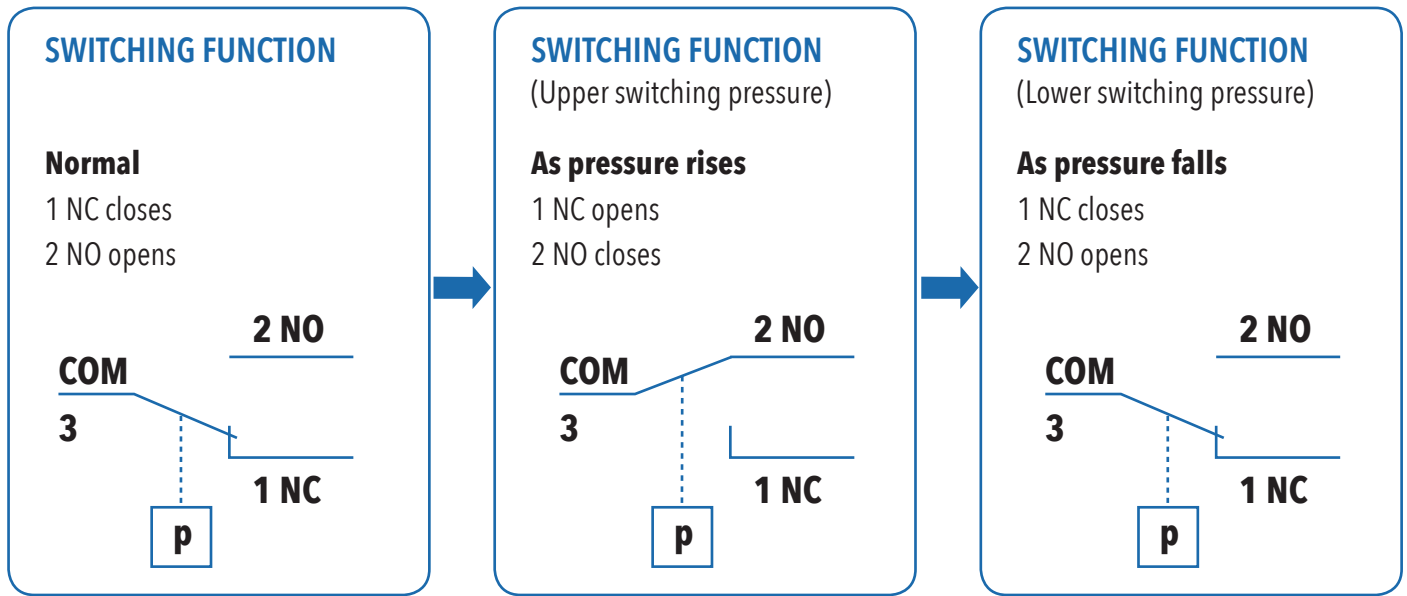


MODELS

Model	Type	Range	P.Max	Differential ΔP	Net weight in Kg
PE003	Positive Pressure Switch	0.4 - 3.0 mbar	500 mbar	≤ 0.3 mbar	0,15
PE003-U	Positive and Differential Pressure Switch	0.4 - 3.0 mbar	500 mbar	≤ 0.3 mbar	0,20
PED003	Differential Pressure Switch	0.4 - 3.0 mbar	100 mbar	≤ 0.3 mbar	0,15
PE005	Positive Pressure Switch	0.5 - 5.0 mbar	500 mbar	≤ 0.3 mbar	0,15
PE005-U	Positive and Differential Pressure Switch	0.5 - 5.0 mbar	500 mbar	≤ 0.3 mbar	0,20
PED005	Differential Pressure Switch	0.5 - 5.0 mbar	100 mbar	≤ 0.4 mbar	0,15
PE010	Positive Pressure Switch	2.0 - 10.0 mbar	500 mbar	≤ 0.4 mbar	0,15
PE010-U	Positive and Differential Pressure Switch	2.0 - 10.0 mbar	500 mbar	≤ 0.4 mbar	0,20
PED010	Differential Pressure Switch	2.0 - 10.0 mbar	100 mbar	≤ 0.5 mbar	0,15
PE050	Positive Pressure Switch	2.5 - 50.0 mbar	500 mbar	≤ 1.5 mbar	0,15
PE050-U	Positive and Differential Pressure Switch	2.5 - 50.0 mbar	500 mbar	≤ 1.5 mbar	0,20
PED050	Differential Pressure Switch	2.5 - 50.0 mbar	100 mbar	≤ 1.5 mbar	0,15
PE150	Positive Pressure Switch	30 - 150 mbar	500 mbar	≤ 5 mbar	0,15
PE150-U	Positive and Differential Pressure Switch	30 - 150 mbar	500 mbar	≤ 5 mbar	0,20
PE500	Positive Pressure Switch	100 - 500 mbar	1000 mbar	≤ 13 mbar	0,15
PE500-U	Positive and Differential Pressure Switch	100 - 500 mbar	1000 mbar	≤ 13 mbar	0,20

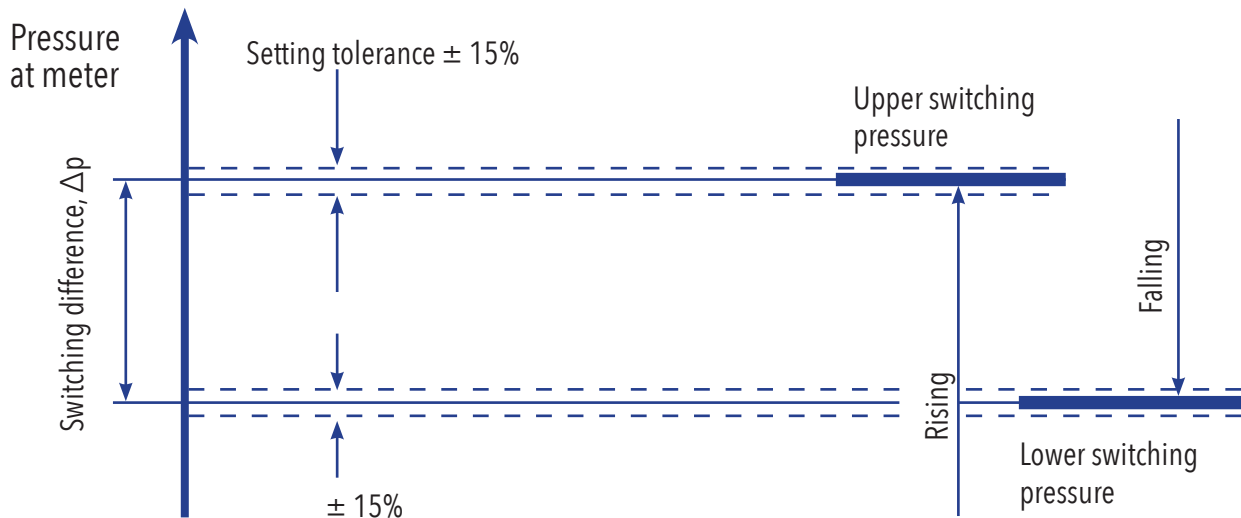
WIRING

The following scheme show how to wire the PE pressure switch:

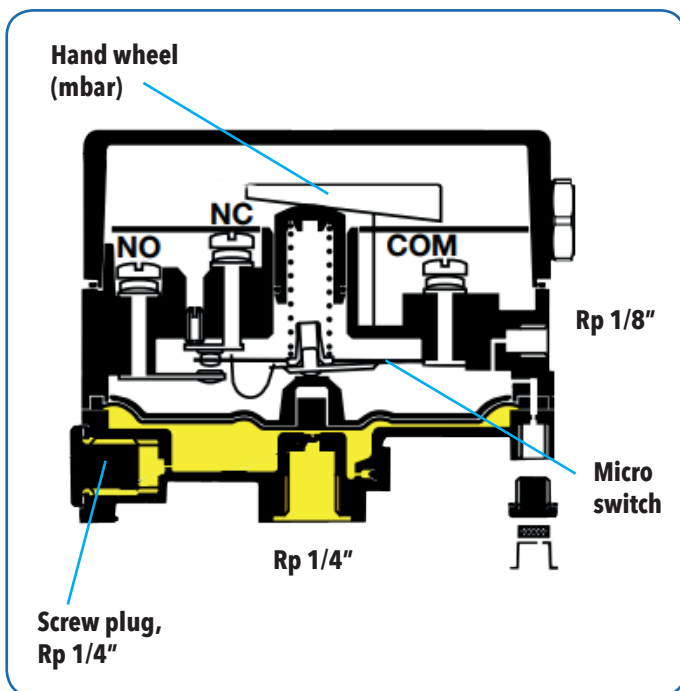


DEFINITION OF SWITCHING DIFFERENCE Δp

The switching difference Δp is the pressure difference between the upper and lower switching pressures.



FUNCTION



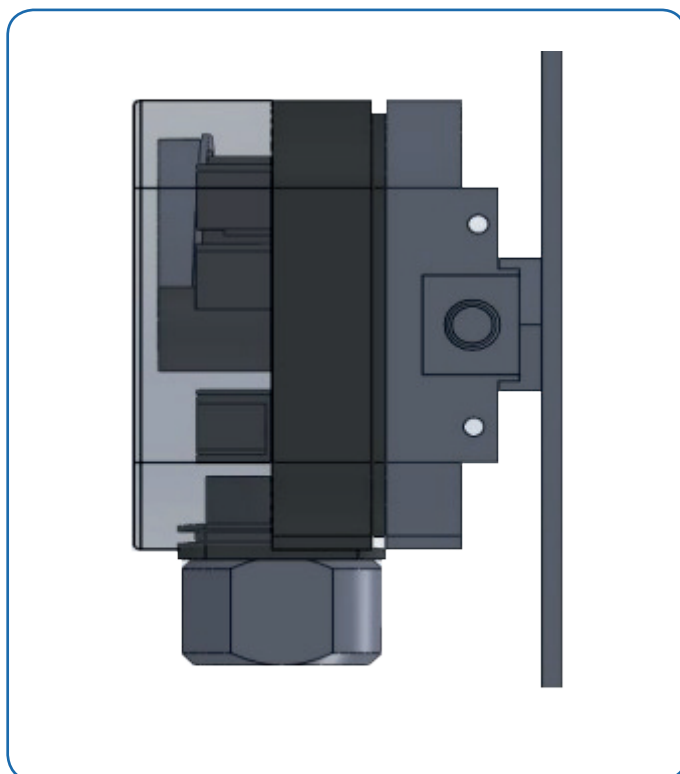
POSITIVE PRESSURE

Positive pressure of PE is measured from the bottom 1/4" port, while on model PE..-U can be measured from both the bottom and the side port.

DIFFERENTIAL PRESSURE

Differential pressure of PE..-U is measured by connecting both positive port (bottom 1/4" port and side port) and negative port (bottom 1/8" port and side port).

INSTALLATION AND OPERATING INSTRUCTIONS



WARNING

Installation, adjustment and maintenance of the device must be carried out exclusively by skilled and authorized service technicians.

Non-proper installation, adjustment, changes, use and maintenance may cause damages to the personnel or to the equipment. Consequently, it is necessary to respect strictly the following instructions and local prescriptions for both the installation of electric devices.

INSTALLATION

Standard installation is vertical, like in the picture, however is possible to install also in other position, the set point for the pressure will change slightly.

All the reported data are subject to be changed without notice.

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econex

Econex s.r.l. - Via Francesco De Sanctis, 53 - I-20141 Milano
Tel. +39 0289502912 - Fax +39 028463084 - www.econex.it - info@econex.it