

PST

## Quick Start Guide

EN

FR

ES

IT

# Quick Start Guide



## Manostats

The PST is used to control pressure.

### Symbols used

For your safety and in order to avoid any damage of the device, please follow the procedure described in this document and read carefully the notes preceded by the following symbol:

The following symbol will also be used in this document, please read carefully the information notes indicated after this symbol:



### Tolerated overpressure

PST-11, PST-12: 21,000 Pa; PST-13: 69,000 Pa; PST-14: 1400 mbar; PST-15: 4100 mbar

### Conditions of use ( $^{\circ}\text{C}/\text{RH}/\text{m}$ )

From 0 to  $+50^{\circ}\text{C}$ . In non-condensing condition. From 0 to 2000 m.

### Storage temperature

From -10 to  $+70^{\circ}\text{C}$

### Protection

IP65

### Power supply

24 Vac/Vdc  $\pm 10\%$

### Consumption

3 VA

## Connections



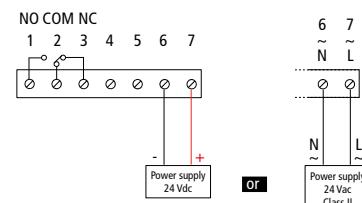
1. Solenoid valve (only PST-11)
2. Switchs
3. Switchs
4. Pressure connections
5. Autozero
6. LCC-S software connection
7. Alarm LED
8. Button for settings
9. Relay terminal block
10. Power supply terminal block
11. Cable gland

## Electrical connections as per NFC15-100 standard



This connection must be made by a qualified and trained technician. To make the connection, the transmitter must not be energized.

NO: normalement opened  
COM: common  
NC: normally closed



- On-off switch

## Settings and use of the transmitter

To perform an autozero, unplug the 2 pressure connections tubes and press the "Autozero" key.

On the PST-11 transmitter, it is not necessary to unplug the 2 pressure connection tubes.

When an autozero has been performed, "On" green light turns off then turns on, and "autoZ" is displayed.

### • Configuration



To configure the transmitter, it must not be energized. Then, you can make the settings required, with the DIP switches (as shown on the drawing below). When the transmitter is configured, you can power it up.

To configure the transmitter, unscrew the 4 screws from the housing then open it. DIP switches allowing the different settings are then accessible.

### • Units setting – right DIP switch

To set a unit of measurement, put the 1, 2, 3 and 4 on-off switches as indicated in the table below.

## PST-11, PST-12, PST-13

Configurations	Pa	mmH <sub>2</sub> O	mbar	inWG	mmHG	daPa	kPa	hPa
Combinations	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

## PST-14, PST-15

Configurations	mbar	inWG	kPa	PSI	mmHG	mmH <sub>2</sub> O	daPa	hPa
Combinations	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

### • Threshold configuration

The button allows to activate or not an alarm (threshold), to set the action of the alarm (edge), to set the threshold(s) value, to set the time-delay and to acknowledge the alarm.

### Working principle:

- By pressing on the button more than 3 seconds, you can validate the setting and go to the next setting.
- By pressing quickly on the button, you can increment a value and scroll down the different option or values.

### • Activate or deactivate an alarm

- Press the button for 3 seconds, "CONF" is displayed then "NEG", meaning that the relay is in negative security, it is excited during an alarm condition.

If needed, press quickly on the button to switch the relay in positive security, the relay is de-energized during an alarm condition or a current breaking, "POS" is displayed.

- Press 3 s the button, "Buzz" screen is displayed with "ON" or "OFF" blinking. Briefly press on the button to activate ("ON") or deactivate ("OFF") (according to the last saved configuration) the buzzer during an alarm condition.

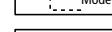
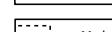
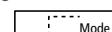
- Press 3 s the button, "Alarm" screen is displayed with "On" or "Off" blinking (according to the last saved configuration).

- Press quickly the button, the display changes from "On" (activated alarm) to "Off" (deactivated alarm).

- Press 3 seconds the button to confirm the setting. If the alarm is deactivated, the instrument displays the measurement; if the alarm is activated, the instrument displays the following setting.

### • Set the action of the alarm (rising edge or falling edge)

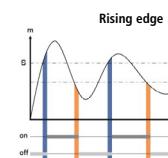
The edge determines the action of the alarm according to the trespassing direction of the threshold(s).



Rising edge (1 threshold): the alarm goes off when the measurement exceeds the threshold and stops when it is below the threshold.

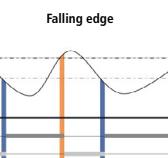
Falling edge (1 threshold): the alarm goes off when the measurement is below the threshold and stops when it exceeds the threshold.

Monitoring (2 thresholds): the alarm goes off when the measurement is outside the defined low and high thresholds.



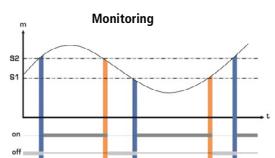
Measurement (m) > Threshold (S) during the time-delay T1: Alarm activation.

Measurement (m) < Threshold (S) + Hysteresis (H) during the time-delay T2: Alarm deactivation.



Measurement (m) < Threshold (S) during the time-delay T1: Alarm activation.

Measurement (m) > Threshold (S) + Hysteresis (H) during time-delay T2: Alarm deactivation.



The alarm goes off when the measurement is outside the low and high thresholds.

- Press briefly the button to select the trespassing direction then press the button more than 3 seconds to validate this direction and set the thresholds.

### • Set the threshold(s) value

The first digit blinks, it corresponds to the positive (+) or negative (-) setting of the threshold value. Press briefly on the button to select the sign for the threshold value. Press on the button more than 3 seconds to validate.

The second digit blinks, press briefly on the button to scroll the numbers. Press the button more than 3 seconds to validate.

Repeat the process until the last digit to configure the threshold value, validate the threshold and go to the following setting. If the monitoring edge has been selected, the transmitter displays the setting of the second threshold.

- Set the hysteresis

The hysteresis is only for the rising edge and the falling edge modes.

In rising edge mode, the hysteresis allows to the transmitter to stay in alarm when the measurement is between the threshold and the threshold minus the hysteresis.

Ex: for a 100 Pa threshold and a 10 Pa hysteresis, the instrument will stay in alarm when the measurement will be between 100 and 90 Pa.

In falling edge mode, the hysteresis allows to the transmitter to stay in alarm when the measurement is between the threshold and the threshold plus the hysteresis.

Ex: for a 100 Pa threshold and a 10 Pa hysteresis, the instrument will stay in alarm when the measurement will be between 100 and 110 Pa.

The first digit blinks, set it pressing the button briefly several times then press on the button more than 3 seconds to set the following digit.

Once the hysteresis is set, press the button more than 3 seconds to validate and set the time-delays.

- Set the time-delay 1 and the time-delay 2 (600 seconds maximum)

- In rising edge mode, the time-delay 1 corresponds to the time lag before the alarm goes off when the threshold has been reached. The time-delay 2, corresponds to the time lag before the alarm stops when the measurement is lower than the threshold minus the hysteresis.

**Setting procedure:** "Time 1" for the time-delay 1 is displayed then the time in second. The first digit blinks, press briefly on the button and scroll the figures. Press on the button more than 3 seconds to validate. Repeat the process until the last digit to set the time-delay 1 value (from 0 to 600 s) and validate. "Time 2" is displayed the time in second. Repeat the process to set the time-delay 2.

- In falling edge mode, the time-delay 1 corresponds to the time lag before the alarm goes off when the threshold has been reached. The time-delay 2, corresponds to the time lag before the alarm stops when the measurement is lower than the threshold plus the hysteresis.

The setting procedure is the same as the rising edge procedure.

- In monitoring mode, the alarm of the transmitter goes off when the measurement is below the lower threshold and higher the high threshold. The time-delay 1 corresponds to the time lag before the alarm goes off when the measurement is below the lower threshold and higher the high threshold. The time-delay 2 corresponds to the time lag before the alarm stops when the measurement is between the lower and higher thresholds.

The setting procedure is the same as the rising edge procedure.

### Configuration via LCC-S software (optional)

The software allows to set the alarms, the thresholds, and the time-delay of the manostats.

- To access the configuration via software:
  - Set the DIP switches as shown beside.
  - Connect the cable of the LCC-S to the connection of the transmitter.
- Please refer to the user manual of the LCC-S to make the configuration.

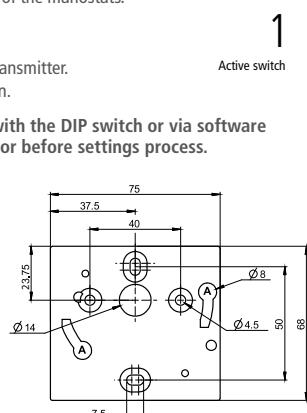
 The configuration of the parameters can be done either with the DIP switch or via software (you can not combine both solutions). Switch off the sensor before settings process.

### Mounting

To mount the transmitter, mount the ABS plate on the wall (drilling: Ø 6 mm, screws and pins are supplied).

Insert the transmitter on the fixing plate (see A on the drawing beside). Rotate the housing in clockwise direction until you hear a "click" which confirms that the transmitter is correctly installed.

 Once the transmitter is installed and powered up, please make an autozero to guarantee the correct working of the transmitter in any position.



**Maintenance:** please avoid any aggressive solvent. Please protect the transmitter and its probes from any cleaning product containing formalin, that may be used for cleaning rooms or ducts.

**Precautions for use:** please always use the device in accordance with its intended use and within parameters described in the technical features in order not to compromise the protection ensured by the device.

### Accessories

Please refer to the data sheet to get more information about available accessories.

Français

# Guide rapide



## Manostats

Le PST est utilisé pour contrôler la pression.

### Symboles utilisés

Pour votre sécurité et afin d'éviter tout endommagement de l'appareil, veuillez suivre la procédure décrite dans ce document et lire attentivement les notes précédées du symbole suivant :



Le symbole suivant sera également utilisé dans ce document. Veuillez lire attentivement les notes d'informations indiquées après ce symbole.



### Surpression admissible

PST-11, PST-12 : 21 000 Pa ; PST-13 : 69 000 Pa ; PST-14 : 1400 mbar ; PST-15 : 4100 mbar

### Conditions d'utilisation (°C/%HR/m)

De 0 à +50 °C. En conditions de non-condensation. De 0 à 2000 m.

### Température de stockage

De -10 à +70 °C

### Indice de protection

IP65

### Alimentation

24 Vac/Vdc ±10%

### Consommation

3 VA

## Connectiques

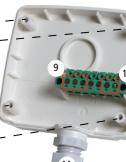
### Intérieur de la coque avant



### Face avant mobile



### Boîtier arrière fixe

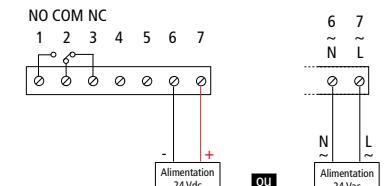


1. Electrovanne (uniquement PST-11)
2. Switchs
3. Switchs
4. Prises de pression
5. Autozéro
6. Connexion Logiciel LCC-S
7. LED Alarme
8. Bouton pour réglages
9. Bornier relais
10. Bornier d'alimentation
11. Presse-étoupe

## Raccordements électriques suivant normes NFC15-100

 Seul un technicien formé et qualifié peut réaliser cette opération. Pour réaliser le raccordement, l'appareil doit être HORS-TENSION.

NO : normalement ouvert  
COM : commun  
NC : normalement fermé



## Réglages et utilisation du capteur

Pour réaliser un autozéro, il faut débrancher les tubes des 2 prises de pression et appuyer sur le bouton « Autozéro ». Sur le capteur PST-11, il n'est pas nécessaire de débrancher les tubes des 2 prises de pression.

Lorsqu'un autozéro est effectué, le voyant « On », allumé en vert, s'éteint puis se rallume et « autoZ » s'affiche.

- Configuration

 Pour configurer le capteur, le mettre hors tension puis procéder aux réglages souhaités en disposant les interrupteurs comme décrit ci-dessous. Remettre le capteur sous tension une fois les réglages effectués.

Pour configurer le capteur, dévisser les 4 vis du boîtier puis l'ouvrir. Les switchs permettant les différents réglages sont alors accessibles.

- Réglage des unités – switch de droite

Pour régler une unité de mesure, positionner les interrupteurs 1, 2, 3 et 4 des unités comme indiqué dans le tableau ci-après.

