akribis

USER GUIDE

PEL 2500-SV

Produal

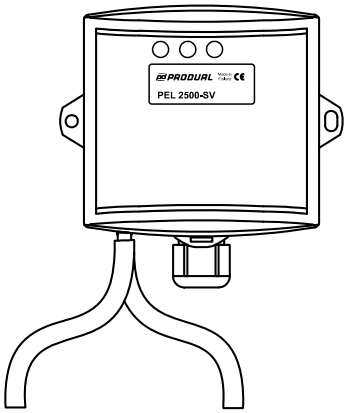
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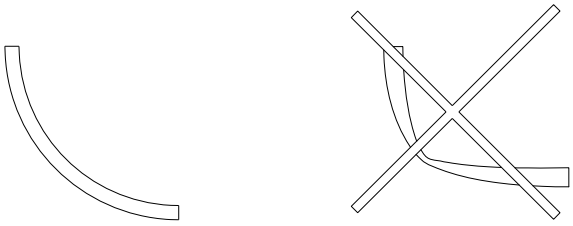
COMMISSIONING

Mounting

- The transmitter should be installed above the measuring point to avoid condensation problems.



- The duct overpressure is detected by connecting the measuring point to + connector and by leaving the - connection open (surrounding space pressure). Accordingly, the duct under-pressure is detected by connecting the measuring point to - connector and by leaving the + connection open.
- Install the measuring hoses carefully so that the hoses don't bend too tightly. Too tight curves may prevent the air flow to the sensor.

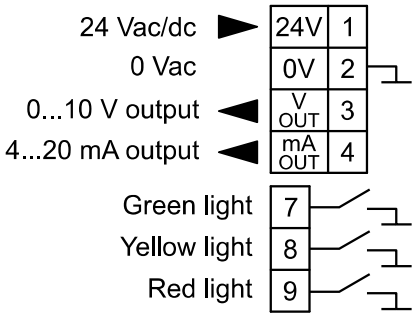


- The hose length doesn't effect on the measuring accuracy. However, long hoses generate delay on the measurement.

Wiring



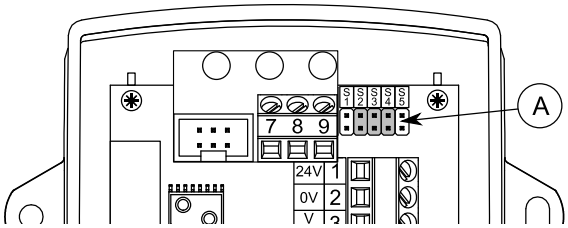
Device wiring and commissioning can only be carried out by qualified professionals. Always make the wirings while the power is switched off.



Information is subject to change without prior notice.

Selecting the measuring range

The measuring range can be selected with the jumpers S2, S3 and S4.



A. Pressure selection jumpers

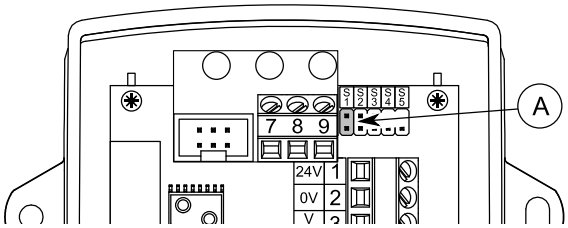
	±100	0…100	0…200	0…500	0…1000	0…1500	0…2000	0…2500 *)
S2	○ ○	■	○ ○	■	○ ○	■	○ ○	■
S3	○ ○	○ ○	■	■	○ ○	○ ○	■	■
S4	○ ○	○ ○	○ ○	○ ○	■	■	■	■

*) Factory setting. The 0…2500 Pa range is also used for the custom range setting.

The custom range is 0…2500 Pa as a default. The range can be changed by using ML-SER tool.

Selecting the time constant

The time constant can be selected with the jumper S1.



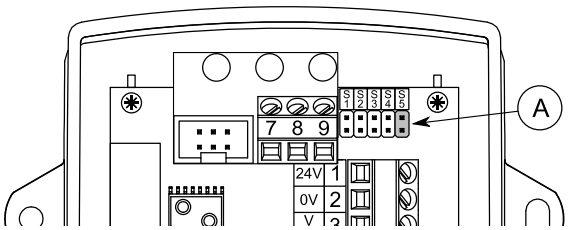
A. Time constant selection jumper

	2 s	8 s*)
S1	○ ○	■

*) Factory setting.

Selecting the output mode

The transmitter output can be either pressure linear or flow linear. The output mode can be selected with the jumper S5.



A. Output mode selection jumper

	pressure linear*)	flow linear
S5	■	○ ○

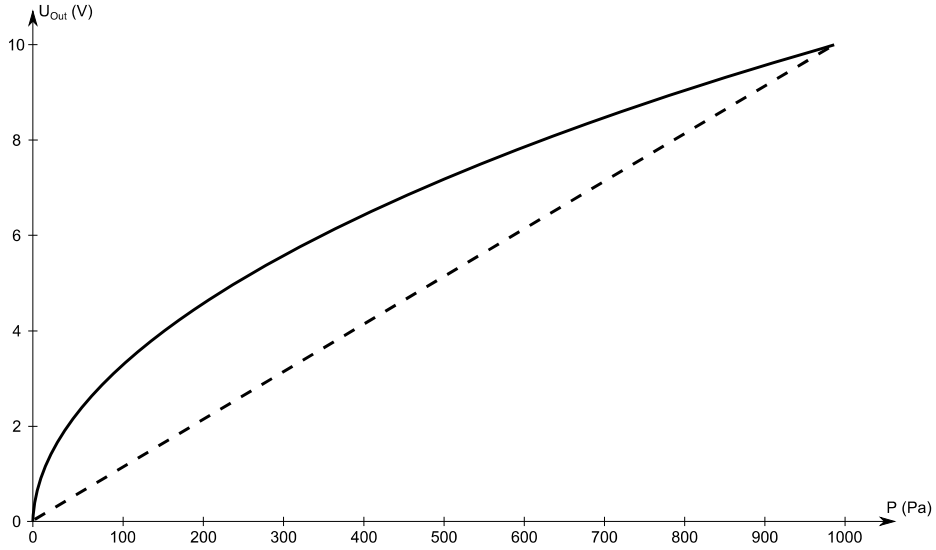
*) Factory setting.

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Flow linear output

When the flow linear output is selected, the transmitter outputs are converted to follow the flow across the measurement area. The conversion is made by using square root extraction method.

See the following figure for the output example in the 0…1000 Pa range:



_ _ _ _ _ = Pressure linear output

_____ = Flow linear output

ZERO POINT CALIBRATION

The purpose of the zero point calibration is to remove the possible long term drift. The zero point is calibrated automatically every five minutes.

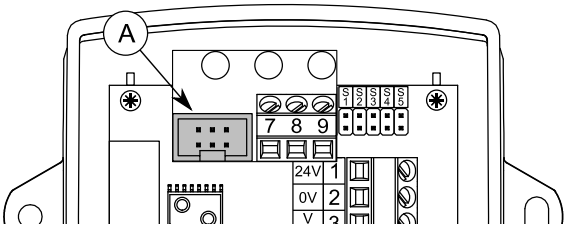
NOTE: The zero point calibration is also executed on the start-up and a minute after the start-up.

ML-SER TOOL

With the ML-SER tool you can change the device settings.

Connecting ML-SER tool to the device

1. Remove the cover.
2. Connect the ML-SER tool cable to the connector.



A. ML-SER connector

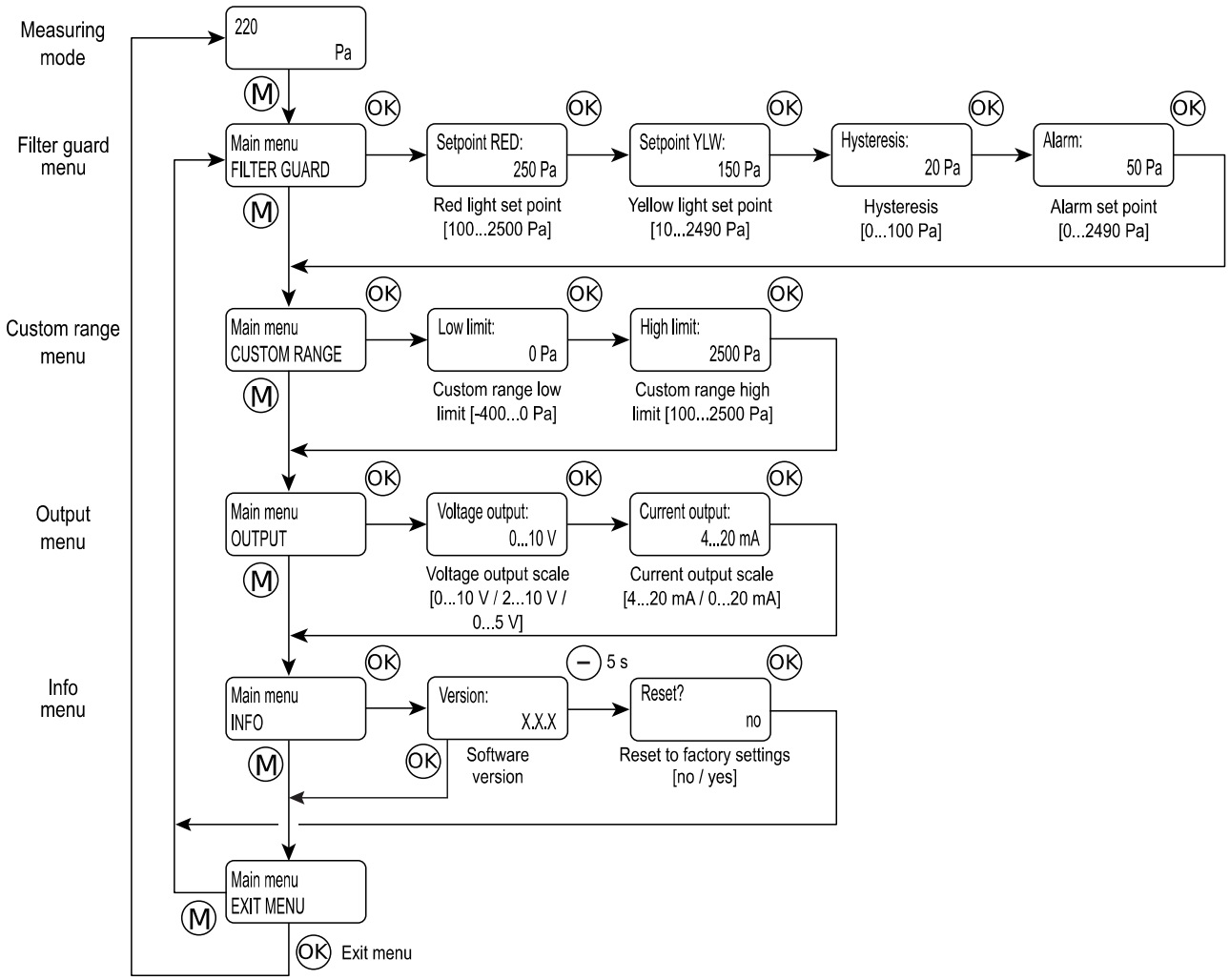
When the ML-SER is successfully connected, the pressure measurement value is displayed on the ML-SER tool display. The connecting can take few seconds.

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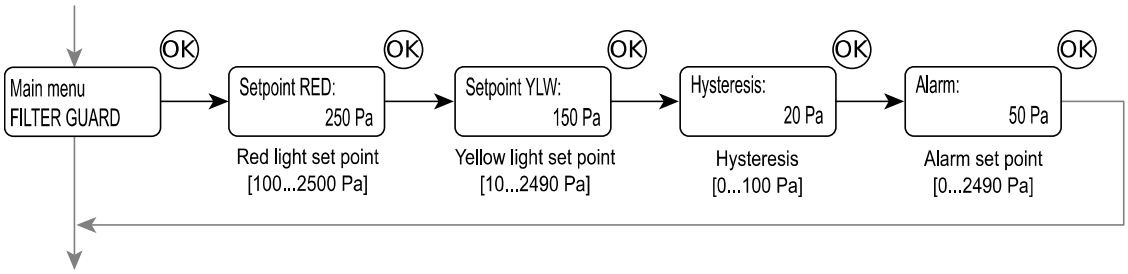
ML-SER menu

The device settings can be changed by using ML-SER tool. You can proceed in the menu by pressing the M and OK buttons. The values can be changed with the ”+” and ”-” buttons. The value is accepted with the OK button. The settings are saved when exiting the menu. The following menu structure contains the factory settings.

The analogue outputs are disabled when entering the menu for the measuring mode. In addition the analogue outputs maintain the same voltage, as they were before entering the menu.

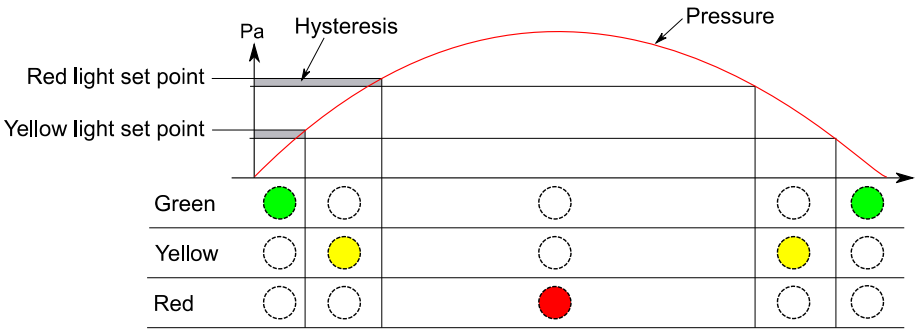


Filter guard menu



The filter guard function settings can be changed through the FILTER GUARD menu.

Indicator light and digital output functions

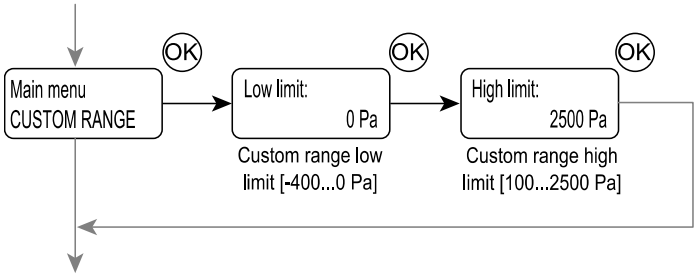


The digital outputs are controlled according to the indicator lights. When the indicator light is on, the corresponding output is in closed position. Accordingly, when the indicator light is off, the corresponding output is open position.

Alarm

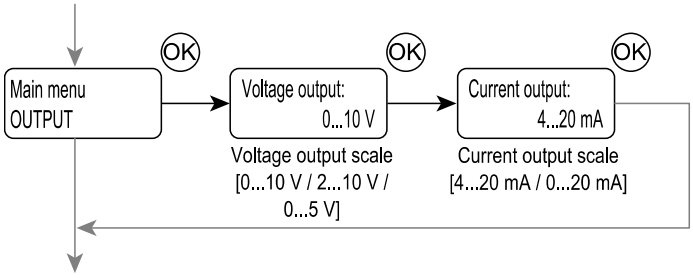
When the measured pressure is below the alarm set point, all indicator lights flash (frequency is 0,3 Hz) . Accordingly, all outputs change their state simultaneously with the indicator lights.

Custom range menu



The CUSTOM RANGE menu is for setting the custom pressure range limits. The custom range is in use when all the pressure range selection jumpers are placed.

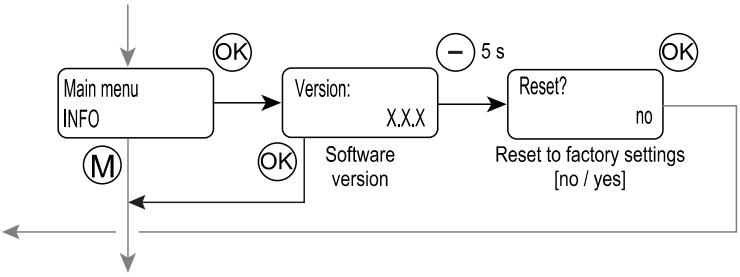
Output menu



You can change the measurement output scales through the OUTPUT menu.

Information is subject to change without prior notice.

Info menu



The INFO menu can be used for checking the software version and resetting to the factory settings.

Resetting to the factory settings

1. Press the "-" button for five seconds in the software version display.
2. Change the resetting dialog answer to "yes".
3. Press OK button.

   The factory settings are now reset.

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