

# Digital pressure gauge



## Description

Digital pressure gauges are used to display and monitor pressure-dependent operating processes in machines and systems. The pressure to be measured is detected by a ceramic sensor and displayed via the electronics. The display is provided by a clearly visible 4-digit LCD display. The front cover with the display can be rotated.

Before unpacking and using the unit, please read these operating instructions. Please follow the instructions exactly as described here. Devices should only be used, maintained, and serviced by individuals familiar with these operating instructions and in accordance with local regulations regarding health and safety.

The measuring unit should only be used in machines that comply with EC-machine guidelines.

## Instrument inspection

The devices are checked before shipment and shipped in perfect condition. If any damage to the device is visible, we recommend a close inspection of the delivery packaging. In case of damage please inform immediately the parcel service/forwarding agent immediately, as the transport company is liable for transport damage.

## Operating principle

The pressure to be measured is detected by a ceramic sensor and displayed via the electronics. In parallel, an analog output signal for remote transmission of the measured values and a relay output are available.

## Mechanical connection

Before installation:

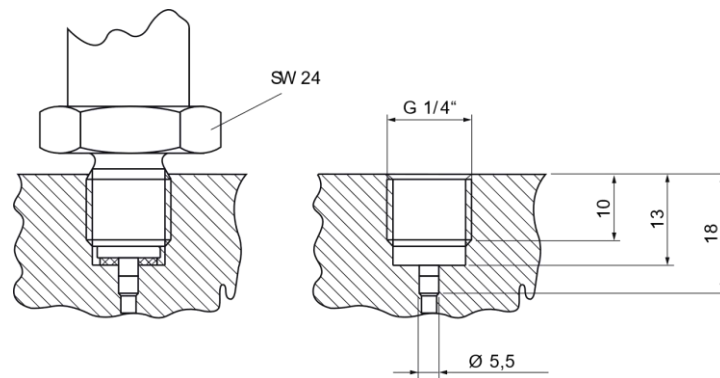
- Make sure that the max. pressure in your plant is within the measuring range of the digital manometer. The measuring range can be read on the type plate.
- Make sure that the permitted max. operating temperatures of the device are not exceeded.
- Make sure that there are no packing parts left in the device.

Installation:

- Make sure that the line is depressurized.
- The digital manometer is mounted in the same way as a mechanical manometer.

- The standard threaded connection is sealed with a suitable gasket (flat gasket or sealing ring according to DIN 16258).
- When screwing in the device, do not screw in at the housing, but at the hexagon (SW 24). Only use an open-end wrench for assembly!
- If possible, it should be checked after the mechanical installation whether the connection screwed connection/pipe is tight.

**Note:** The installation takes place in a metallic fitting or container, which must be connected to a potential equalization. This measure is necessary to comply with the EMC directive.



## Electrical connection

### Standard model

**Note:** Make sure that you use a 9 V alkaline manganese block battery.

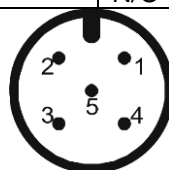
- Open the battery compartment on the back of the device and connect the 9 V block battery to the connector plug.
- Place the 9 V block battery in the compartment and close the lid.

### With external 24 V DC

**Note:** Incorrect assignment of the connections can lead to the destruction of the devices.

- Make sure that the electrical connection lines are de-energized.
- Connect the connection lines to the plug (cable) according to the connection diagrams below.
- Wire cross-section of the connection line: 0.34 mm<sup>2</sup>

Contact-No	With external 24 V DC	With external 24 V DC and control output
1	+Vs/24VDC	+Vs/24VDC
2		N/O contact
3	GND	GND
4		
5		N/O contact



## Function keys

The following key functions are available when selecting menu items:

### Standard model

- ↓ next menu option
- ↑ previous menu option
- P** 1 x press to switch-on
- P** 1 x press to switch-of
- ↓→**P** jump to the function

### With external 24 V DC

- ↓ next menu option
- ↑ previous menu option
- ↓→**P** jump to the function

### Adjustments and function

- ↓ Value-adjustment upwards
- ↑ Value-adjustment downwards
- P** Enter value and jump to next menu option
- ↑&↓ Reject input, return to menu option

## Adjustment

### Possible adjustments of the device:

1. zero point
2. password (factory pre-set: 5)
3. peak value memory
4. relay (option) with settable hysteresis
5. (factory pre-set: switching point on 50% of measuring range)

### Factory pre-sets:

#### Standard model

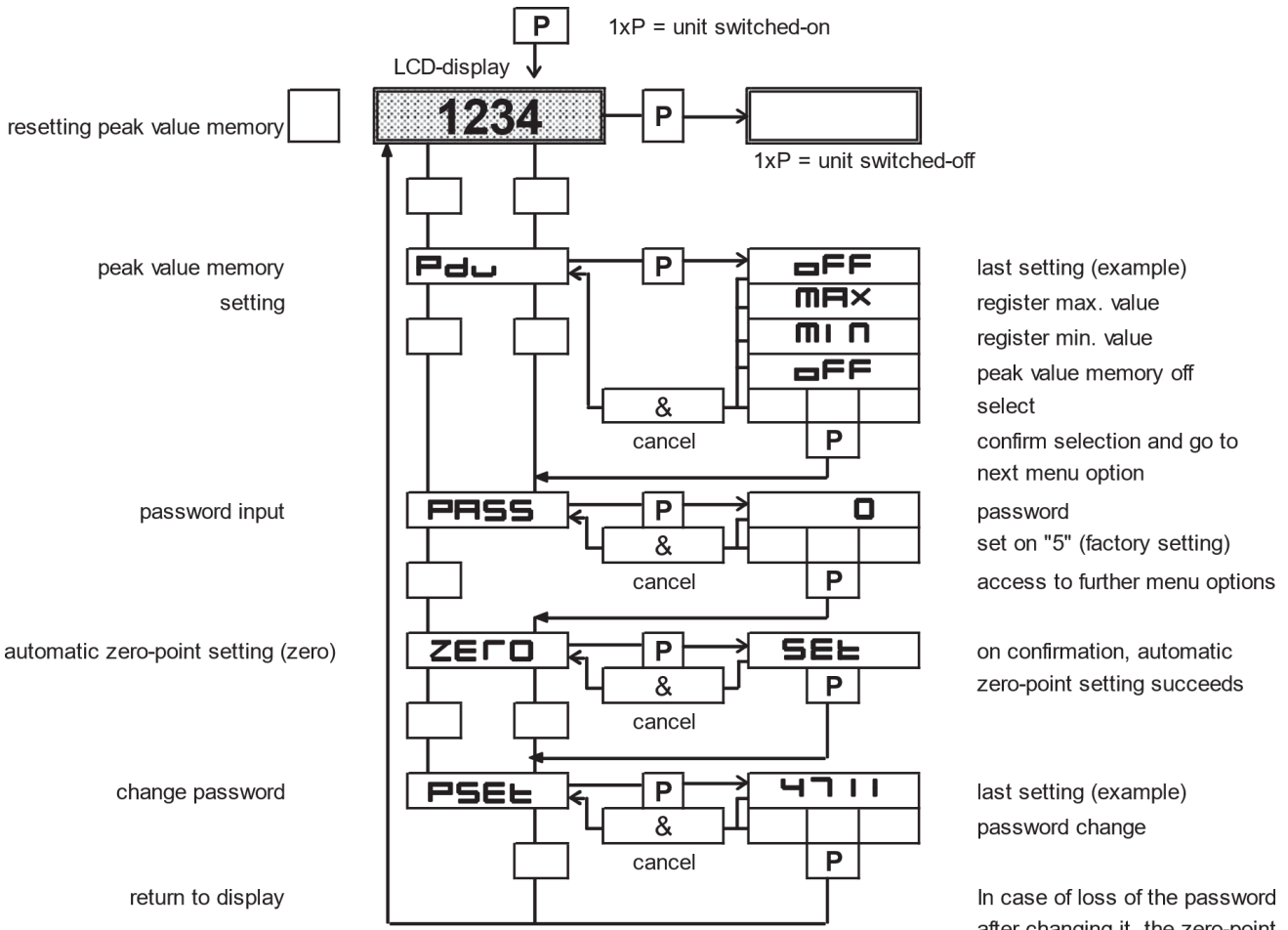
1. battery symbol on: voltage under 6,5 V
2. switch-off delay (default: 0 = inactive)
3. sampling rate (default: 5 measurements per second)
4. analogue output (linear) within measuring range 0...2 VDC (option)

**With external 24 V DC**

1. sampling rate (default: 5 measurements per second)
2. analogue output linear zum Messbereich 4...20 mA (option)

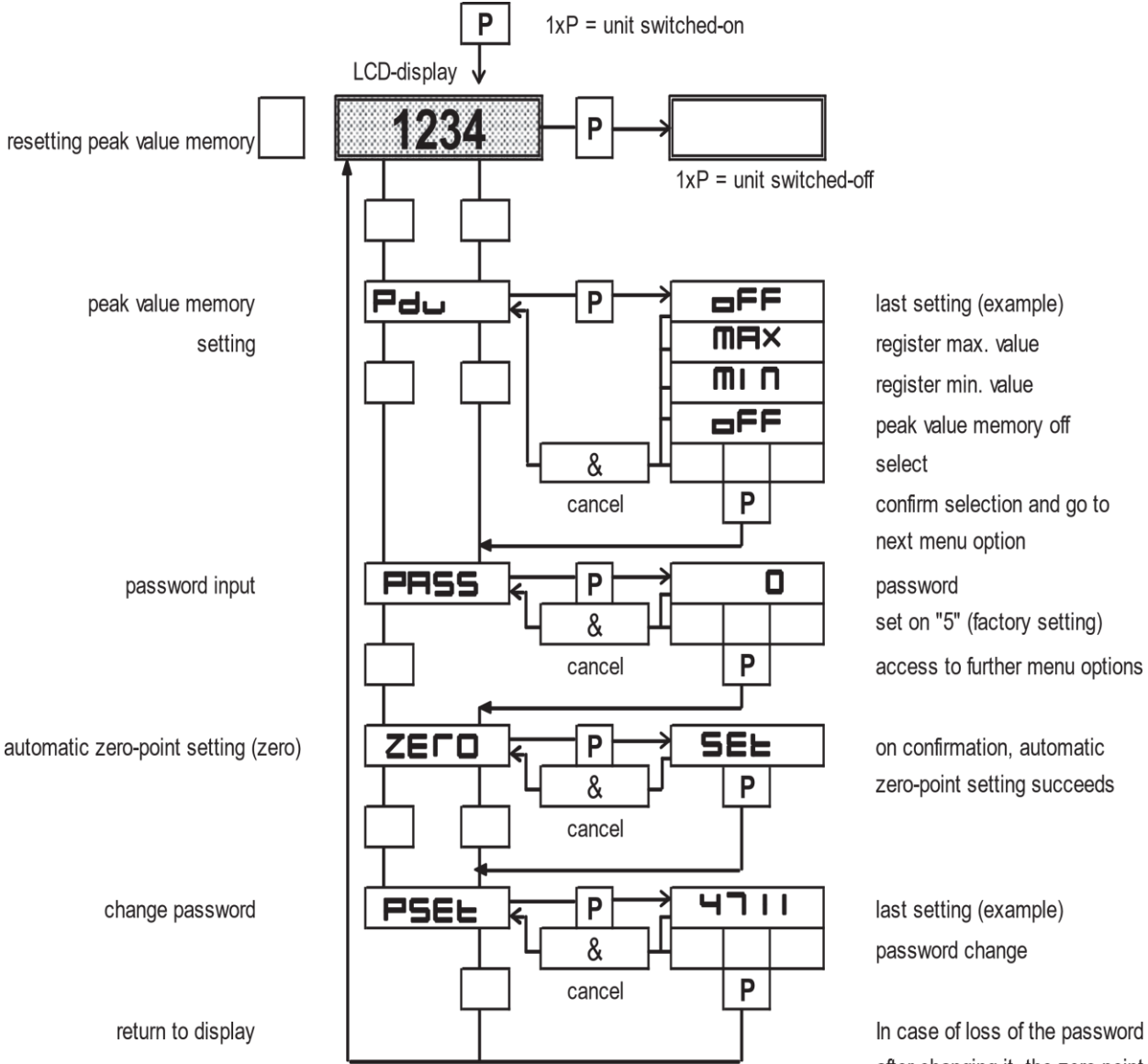
**Control functions**

**Standard model**



If the peak value memory is activated, the peak value can be reset by pressing the left arrow key.

**With external 24 V DC**



In case of loss of the password after changing it, the zero-point setting is no longer possible. Then the readout can only be done by the factory.

When in OFF mode, the MIN/MAX memory will display the current pressure. When in MIN mode, the minimum value is displayed with the arrow at the bottom left. When one is in MAX mode, the maximum value is displayed with the arrow on the top left. If the peak value memory is activated, the peak value can be reset by pressing the left arrow key to reset the peak value.

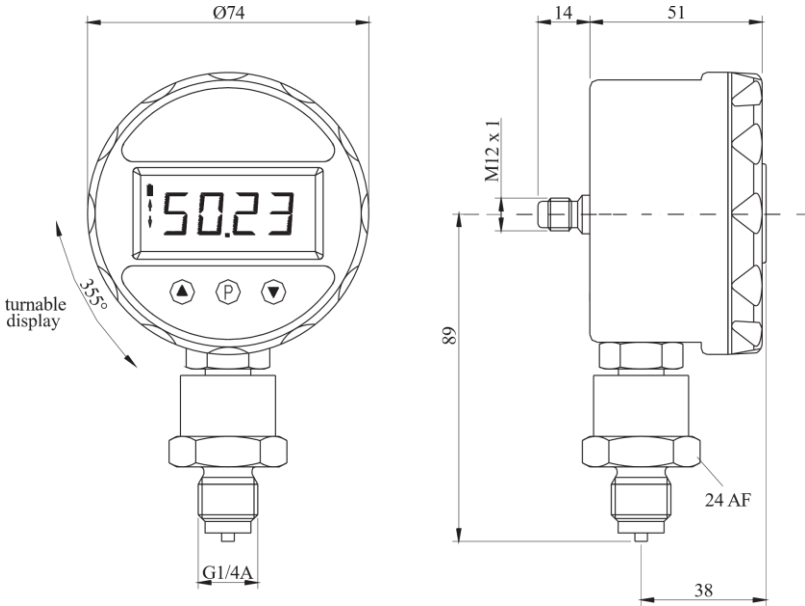


**Maintenance**

In case the medium to be measured is not contaminated, the device is maintenance-free.

**Dimensions**

**Standard model**



**With external 24 V DC**

