

Manual

Differential pressure meter PCE-910 / PCE-917



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1 Introduction

Thank you for purchasing a PCE-910 / PCE-917 from PCE Instruments.

This differential pressure meter is especially suitable for measuring pressure and thus carrying out preventive maintenance in hydraulic or pneumatic systems, but it can also be used in the areas of HVAC, medical technology, pneumatics, computer applications and laboratory measurements. It is suitable for air, non-corrosive liquids and gases. It can even be used under adverse conditions as its case is resistant to dust and water. A silicon component prevents liquids to enter the device as well as the sensor. High-precision measurement results are ensured as the device is controlled by a micro processor.

The differential pressure meter is calibrated at the factory and a calibration certificate from a calibration laboratory can be ordered separately for an extra charge. The certificate has a check protocol and contains the name of the company, which means that it can be incorporated into the company's pool of internal test tools according to ISO standards.

2 Safety notes

Please read this manual carefully and completely before you use the device for the first time. The device may only be used by qualified personnel and repaired by PCE Instruments personnel. There is no warranty of damages or injuries caused by non-observance of the manual.

- The device may only be used in the approved temperature range.
- The case should only be opened by qualified personnel of PCE Instruments.
- The instrument should never be placed with the user interface facing an object (e.g. keyboard side on a table).
- You must not make any technical changes to the device.
- The appliance should only be cleaned with a damp cloth / use only pH-neutral cleaner.

This manual is published by PCE Instruments without any guarantee.

We expressly point to our general guarantee terms which can be found in our general terms of business.

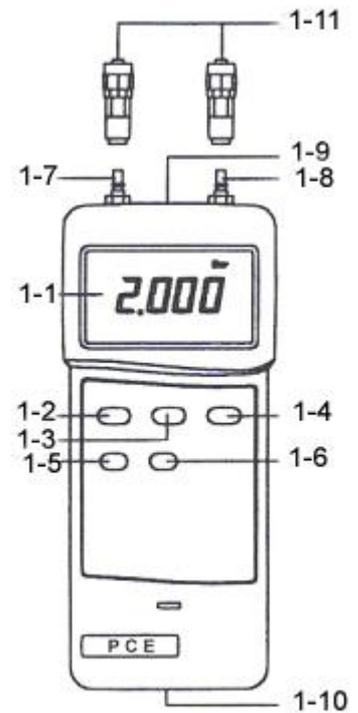
If you have any questions please contact PCE Instruments.

3 Specifications

Model		PCE-910	PCE-917
PSI	Range	±29.00	101.50
	Resolution	0.01	0.05 / 0.1
Mbar	Range	±2000	±7000
	Resolution	1	5
inH2O	Range	±802.0	±2800
	Resolution	0.5	2
mH2O	Range	±20.40	±70.00
	Resolution	0.01	0.05
inHg	Range	±59.00	±206.0
	Resolution	0.02	0.1
mmHg	Range	±1500	±5250
	Resolution	1	5
Torr	Range	-	-
	Resolution	-	-
Pa / kPa	Range	-	-
	Resolution	-	-
atm	Range	±1.974	±6.905
	Resolution	0.001	0.005
kg/cm ²	Range	±2.040	7.000
	Resolution	0.001	0.005
Accuracy		±2 % (full range)	
Reproducibility		±1 %	
Measurement sequence		0.8 s	
Min- Max- Peak- Hold		Yes	
Interface		RS-232	
Power supply		1 x 9 V battery PP3	
Material of case		plastic	
Dimensions of case		180 x 72 x 32 mm	
Weight		210 g	

4 System description

- 1-1 Display
- 1-2 On / Off key
- 1-3 HOLD key
- 1-4 ZERO key
- 1-5 MAX / MIN key
- 1-6 UNIT selection key
- 1-7 Connection for hose adaptor 1
- 1-8 Connection for hose adaptor 2
- 1-9 RS-232 interface
- 1-10 Battery compartment
- 1-11 Fast-action plug for hose adaptor



5 Instructions

5.1 Measurement

Switch on the device by means of the On / Off key (1-2).
Select the desired pressure unit (mbar, mmHg, ...) by pressing the UNIT key (1-6).
Carry out a zero setting by pressing the ZERO key (1-4).
Place the two fast-action plugs (1-11) on the adaptor connections (1-7 and 1-8).
The display will now show a number.

Attention: When the pressure on connection 1 (1-7) is lower than the pressure on connection 2 (1-8), a negative measurement result will be indicated. If it is the other way round, a positive pressure will be displayed.

When you press HOLD (1-3) during a measurement, the current measurement value will be held in the display and the HOLD icon will be displayed. When you press the HOLD key (1-3) again, the value will disappear and the current measurement results will be shown again.

When you press MAX / MIN (1-5), the REC icon will appear in the display and the lowest, as well as the highest value of a series of measurement will be recorded. When you wish to read out the maximum value, press the MAX / MIN key (1-5) again. The maximum value along with the MAX icon will be displayed. By pressing the MAX / MIN key (1-5) again, you will be able to see the minimum value along with the MIN symbol in the display. You can deactivate this function by pressing and holding the MAX / MIN key (1-5) for 2 to 3 seconds.

5.2 Auto Power Off

To save energy, the device has an Auto Power Off function. The meter will switch off automatically after 10 minutes of inactivity. This function will be disabled as soon as the display shows the REC icon for continuous measurement.

5.3 RS-232 data interface

By means of the integrated interface jack (1-9) and the optionally available software kit (cable + software), you can transfer your measurement results directly to a PC or laptop.

5.4 Battery replacement

Replace the 9 V battery when the low battery indicator LBT appears on the left-hand side of the display. Remove the battery compartment cover from the back of the device with slight pressure, using your fingernails. Then remove the used battery and replace it by a new one. Push the cover back on.

6 Disposal

For the disposal of batteries, the 2006/66/EC directive of the European Parliament applies. Due to the contained pollutants, batteries must not be disposed of as household waste. They must be given to collection points designed for that purpose.

In order to comply with the EU directive 2012/19/EU we take our devices back. We either re-use them or give them to a recycling company which disposes of the devices in line with law.

If you have any questions, please contact PCE Instruments.

7 Contact

If you have any questions about our range of products or measuring instruments please contact PCE Instruments.

7.1 PCE Instruments UK

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