

# Pressure Meters

## PCE-Pxx

Differential pressure meter for air and gas measurement with optional cable and software

Highly accurate professional pressure meter. With this unit, besides measuring, you will be able to transmit data to a PC. This instrument is ideal for industrial applications, technical service or for a laboratory (especially for measuring non-corrosive gases). It has overload protection (double measurement range) to avoid damaging the sensor. We have four models available with a measurement range up to 7 bar.

- 9 measuring units to choose from
- Positive, negative and differential pressures
- 2 pins of Ø 4 mm
- Memory LCD
- It is used in heating and air conditioning, in pneumatic systems, in medical units, etc.
- ISO Certificate (optional)



### Technical specifications

Model	PCE-P05	PCE-P15	PCE-P30	PCE-P50	
PSI	Range	0 to ±5	0 to ±15	0 to ±30	0 to ±100
	Resolution	0.003	0.01	0.02	0.1
mbar	Range	0 to ±350	0 to ±1000	0 to ±2000	0 to ±6900
	Resolution	0.2	1	2	4
InH <sub>2</sub> O	Range	0 to ±140	0 to ±415	0 to ±830	0 to ±2750
	Resolution	0,1	0,3	0,5	2
InHg	Range	0 to ±9.999	0 to ±30.5	0 to ±61	0 to ±200
	Resolution	0.001	0.05	0.01	0,1
mmHg	Range	0 to ±260	0 to ±750	0 to ±1500	0 to ±5200
	Resolution	0.2	0.5	1	3
kPa	Range	0 to ±35	0 to ±100	0 to ±200	0 to ±690
	Resolution	0.02	0.1	0.2	0.4
cmH <sub>2</sub> O	Range	-	0 to ±1050	0 to ±2100	0 to ±7000
	Resolution	-	1	2	4
Kg/cm <sup>2</sup>	Range	-	0 to ±1.05	0 to ±2,1	0 to ±7,0
	Resolution	-	0.001	0.002	0.004
Accuracy	±0.3 % (full range at +25 °C)				
Reproducibility	±0.2 % (maximum ±0.5 % of final value)				
Measurement interval	0.3 ms				
Min, Max, Peak, Hold	yes				
Interface	yes, RS-232				
Software	yes, as optional, for data transfer and check (in English)				
PC requirements	CD player, Windows 95 or better				
Power	9 V battery (PP3)				
Enclosure	ABS plastic				
Dimensions	182 x 72 x 30 mm				
Weight	150 g				

### Contents

Differential pressure meter (one of our models), carrying case and user's manual

### Model No. Description

PCE-P05	Gas pressure meter up to 0.35 bar
PCE-P15	Gas pressure meter up to 1.00 bar
PCE-P30	Gas pressure meter up to 2.00 bar
PCE-P50	Gas pressure meter up to 6.90 bar

### Optional accessories

SOFTP-AZ	Software and data cable
CAL-PCE-P	ISO Certificate
SS-AZ	Silicon probe (2 m)



## PCE-910 & PCE-917

Differential pressure meter for air and liquid measurements (you can't use it with acids or bleaches)

The digital differential pressure meter is ideal for industrial or laboratory uses. With this unit you can measure hydraulic or pneumatic systems. The most important feature of this differential pressure meter is its accuracy. The RS-232 interface allows the user to transmit the data to a computer for analysis and evaluation. We have optional software and an RS-232 data cable available. If your PC only has a USB, we recommend the purchase of an RS-232 to USB adaptor.

- Selection of measurement units
- High, negative and differential pressures
- Min, Max, and Data-Hold
- RS-232 interface
- For measuring air, gas and non-corrosive liquids
- ISO Certificate (optional)



### Technical specifications

Model	PCE-910	PCE-917	
PSI	Range	±29.00	±101.00
	Resolution	0.01	0.05
mbar	Range	±2000	±7000
	Resolution	1	5
inH <sub>2</sub> O	Range	±802.0	±2800
	Resolution	0.5	2
mH <sub>2</sub> O	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
Kg/cm <sup>2</sup>	Range	±2.040	±7.000
	Resolution	0.001	0.005
atmospheres	Range	±1.974	±6.905
	Resolution	0.001	0.005
Accuracy	±2 % (full range)		
Reproducibility	±1 %		
Measurement interval	0.8 s		
Min, Max, Peak, Hold	yes		
Interface	RS-232		
Power	9 V battery (PP3)		
Enclosure	plastic		
Enclosure dimensions	180 x 72 x 32 mm		
Weight	345 g		

### Contents

PCE-910 or PCE-917 differential pressure meter, carrying case, battery and user's manual

### Model No. Description

PCE-910	Differential pressure meter for gas and liquids up to 2000 mbar
PCE-917	Differential pressure meter for gas and liquids up to 7000 mbar

### Optional accessories

SOFT-LUT-D	Software with RS-232 cable
RS232-USB	RS-232 to USB Adaptor
CAL-AZ	ISO Certificate



## PCE-932

Pressure meter with external sensors for ranges up to 400 bar, optional RS-232 cable and software

This handheld pressure meter is used to measure high ranges of pressure in the industrial sector and in research and development. You can connect a pressure sensor, up to a maximum of 400 bar, to the unit (with a 1.2m long connecting cable). The integrated RS-232 interface can be used to transfer data to a computer, using the optional software and data cable. This pressure meter comes calibrated, but if you want, we can offer you an optional laboratory calibration ISO (with certificate).

- Pressure measurement for several conditions and systems
- Maximum pressure up to 400 bar (depending on sensor)
- It's not necessary to recalibrate if you change the sensor
- RS-232 interface
- Optional software to transfer data to a computer
- Several units adjustable (bar, psi, mWs, etc.)
- MIN, MAX, Data Hold functions
- Auto shut-off to save battery life (can be disabled)
- ISO Certificate (optional)



### Technical specifications

Measurement range	0 to 400 bar (depending on sensor / pressure connection)
Selectable measuring units	bar, psi, Kg/cm <sup>2</sup> , mm/Hg, inch/Hg, mH <sub>2</sub> O, inch/H <sub>2</sub> O, atmospheres
Pressure connection	optional, voltage DC 5V (maximum sensor output DC 100 mV (see ranges))
Zero function for offset correction	via keypad
Functions	pressure, Min and Max, Hold, transfer to a PC through integrated RS-232 interface
Auto shut-off	to save battery life (can be disabled)
Measurement interval	every 0.8 sec. approximately
Indicator	large LCD (61 x 34 mm)
Operating temperature	0 to +50 °C
Operating humidity	0 to 80 % r.h.
Enclosure	ABS plastic
Battery life	indicated on the display
Power	9 V battery pack
Dimensions	180 x 72 x 32 mm
weight	345 g

### Technical specifications (sensors)

Model	PS-100-20	PS-100-50	PS-100-100	PS-100-400
Range	0 to 20 bar	0 to 50 bar	0 to 100 bar	0 to 400 bar
Accuracy	±0.5 % of measurement range			
Resolution	0.02 bar	0.05 bar	0.1 bar	0.5 bar
Screw thread	1/4 "			
Operating temperature	maximum +80 °C			
Dimensions	Ø 30 mm x length 85 mm			
Cable length	1.2 m			
Weight	160 g			

### Contents

Pressure meter PCE-932, user's manual (pressure probes are not included in the delivery)

Model No.	Description
PCE-932	Pressure meter PC-932

### Optional accessories

PS-100-20	Pressure probe for 20 bar
PS-100-50	Pressure probe for 50 bar
PS-100-100	Pressure probe for 100 bar
PS-100-400	Pressure probe for 400 bar
SOFT-LUT-D	Software with RS-232 cable
RS232-USB	RS-232 to USB Adaptor
CAL-PS	ISO Certificate



## PCE-THB 38

Thermometer, hygrometer and barometer all-in-one, with dew point calculation

The PCE-THB38 thermo-hygrometer and barometer can measure and display digitally the relative humidity, temperature and barometric pressure. Temperature is measured using an RTD sensor and relative humidity is measured using a capacitive sensor with a high repeatability. The barometer also calculates dew point. All this is contained with one complete climatological meter.

- Measures temperature, humidity and barometric pressure
- Calculates dew point
- Selection of units of pressure: hPa (mbar), mmHg and inHG
- Minimum, maximum and Hold functions
- Internal sensor is protected
- Compact design
- ISO Certificate (optional)



### Technical specifications

Measurement ranges	
- Barometric pressure	10 to 1100 hPa (mbar)
- Temperature	0 to +50 °C
- Relative humidity	10 to 95 % r.h.
- Dew point (calculation)	-25 to +49 °C
Resolution	
- Barometric pressure	0.1 hPa <1000 hPa, 1 hPa >1000 hPa
- Temperature	0.1 °C
- Relative humidity	0.1 % r.h.
- Dew point	0.01 °C
Accuracy	
- Barometric pressure	±1.5 hPa <1000 hPa, ±2 hPa >1000 hPa
- Temperature	±0.8 °C
- Relative humidity	±3 % of reading ±1 % r.h. < 70 % r.h. ±3 % r.h. >70 % r.h.
Operating temperature	
Power	0 to +50 °C
Dimensions	4 x 1,5 V battery AAA
Weight (incl. batteries)	210 x 40 mm
	160 g



### Contents

PCE-THB38 Thermo-hygrometer-barometer, batteries and user's manual

Model No.	Description
PCE-THB 38	Thermo-hygrometer and barometer

### Optional accessories

CAL-THB	ISO Certificate (for barometric pressure)
CAL-RF	ISO Certificate (for thermometer and hygrometer)