

# PRESSURE & AIR FLOW METERS

ETI's range of pressure meters is designed for measuring non-corrosive gauge or differential air or gas pressure in a wide range of industries.

## APPLICATIONS

- Flue draught measurement
- Gas pressure in heating appliances
- Air conditioning ducts
- Monitoring of filter differential pressure
- Velocity measurement with a pitot tube

## ABSOLUTE, GAUGE OR DIFFERENTIAL

To get a correct and accurate pressure measurement, first identify whether you need to measure the absolute, gauge or differential pressure.

### ABSOLUTE PRESSURE

In a perfect vacuum, zero is the complete absence of pressure. This is referred to as absolute zero pressure. Absolute pressure is the pressure being measured from absolute zero pressure. It is most commonly used for meteorological applications like weather stations.

### GAUGE PRESSURE

Atmospheric pressure is the pressure caused by the earth's atmosphere - it's commonly affected by altitude, wind velocity, and temperature. Most pressure gauges read zero at atmospheric pressure. Gauge pressure is the pressure being measured from atmospheric pressure. It is often used to measure car tyres, water levels, chamber pressure and hydraulic applications.

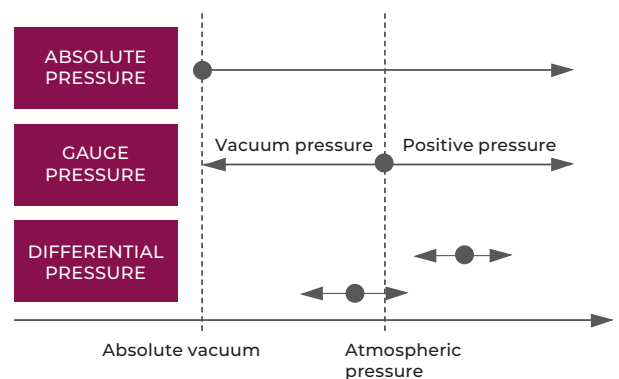
## DIFFERENTIAL PRESSURE

Differential pressure is the difference between two different pressure measurements. It is commonly used for HVAC applications and filter monitoring.

## MANOMETERS AND PRESSURE METERS

Pressure is usually measured using manometers and pressure meters. Manometers are used to measure gas pressure or low atmospheric pressure, while pressure meters measure high-pressure, non-corrosive air or gas.

Our range of u-gauge manometers and pressure meters display the differential pressure and feature 11 selectable units of measurement, including psi and mbar.



## 9202 MANOMETER

- Robust water-resistant case offering IP65 protection
- Zeroing functionality
- 11 selectable units of measurement
- Automatic temperature compensation

The 9202 digital manometer allows the user to measure positive and negative differential pressure over the range of -137.9 to 137.9 mbar with a resolution of 0.1 mbar and features over pressure protection to at least twice the measuring capacity.

These easy-to-use manometers are ideal for plumbers and gas engineers to measure domestic gas pressures and low pressure, non-corrosive air or gases in HVAC applications. The units can be used to measure air pressure in ductwork or pressure drops across filters to determine performance.

The 9202 manometer features a custom LCD display with P1, P2, diff, hold, open circuit, low battery indication and a user selectable backlight. The unit incorporates an auto-power-off facility that automatically turns the instrument off after approximately 25 minutes, maximising battery life. The instrument automatically compensates for changes in temperature.

Each unit is housed in a durable, ABS case that has an integrated rubber seal to ensure complete water tightness and help reduce the possibility of damage in harsh environments. Supplied complete with batteries, operation manual and two 500 mm long x 6 mm ID connection hoses.

### OPTIONAL ACCESSORIES:

- Protective silicone boot - black c/w foot stand and magnet for mounting on pipes, metallic surfaces etc. (830-258)
- Stainless steel wall bracket (832-015) screws not supplied - see page 41 for details



Specification	9202 manometer	
	Range	Resolution
psi	±2	0.01
inH <sub>2</sub> O	±55.36	0.01
mbar	±137.9	0.1
kPa	±13.79	0.01
inHg	±4.07	0.001
mmHg	±103.4	0.1
ozin <sub>2</sub>	±32.00	0.01
ftH <sub>2</sub> O	±4.613	0.001
cmH <sub>2</sub> O	±140.6	0.1
kgcm <sub>2</sub>	±0.1406	0.001
bar	±0.1379	0.001
Accuracy	±0.5 %FS or better (25 °C)	
Repeatability	±0.2 % (Max. 0.5 %FS)	
Battery	3 x 1.5 volt AAA	
Battery life	100 hours	
Display	Custom LCD	
Dimensions	32 x 71 x 141 mm	
Weight	185 grams	

Order code	Description	£ each
825-902	9202 manometer	74.00
825-998	500 mm connection hoses (2)	5.00
830-258	Protective silicone boot - black	14.00
832-015	S/steel wall bracket	15.00
890-280	3-point traceable calibration certificate*	49.00
*unit of measure mbar		

# 9200 SERIES PRESSURE METERS

- Robust, water-resistant case offering IP65 protection
- 11 selectable units of measurement
- 4 models available  $\pm 5$  to  $\pm 75$  psi
- Automatic temperature compensation

This range of four industrial differential pressure meters offer high accuracy, performance and repeatability. The pressure meters allow the user to indicate the positive and negative differential pressure over the range of  $\pm 5$ ,  $\pm 15$ ,  $\pm 30$  or  $\pm 75$  psi.

All instruments feature over pressure protection to at least twice the measuring capacity. These easy-to-use pressure meters are ideal for measuring non-corrosive gauge or differential air/gas pressure in a wide variety of industries.

Each pressure meter features a custom LCD display with P1, P2, diff, hold, open circuit, low battery indication and a user selectable backlight. The unit incorporates an auto-power-off facility that automatically turns the instrument off after approximately 25 minutes, maximising battery life. The instrument automatically compensates for changes in temperature

Each unit is housed in a durable, ABS case that has an integrated rubber seal to ensure complete water tightness and help reduce the possibility of damage in harsh environments. Supplied complete with batteries, operation manual and two 300 mm long x 4 mm ID connection hoses.\*



Specification	9205 meter		9215 meter		9230 meter		9275 meter	
	Range	Resolution	Range	Resolution	Range	Resolution	Range	Resolution
psi	±5	0.01	±15	0.01	±30	0.01	±75	0.1
inH2O	±138.4	0.01	±415.2	0.1	±830.4	0.1	±2076	1
mbar	±344.7	0.1	±1034.2	1	±2068.4	1	±5171	1
kPa	±34.47	0.01	±103.4	0.1	±206.8	0.1	±517.1	0.1
inHg	±10.18	0.001	±30.54	0.01	±61.08	0.01	±152.7	0.1
mmHg	±258.5	0.1	±775.7	0.1	±1551.4	1	±3879	1
ozin2	±80.0	0.01	±240.0	0.1	±480.0	0.1	±1200	1
ftH2O	±11.53	0.001	±34.60	0.01	±69.20	0.01	±173.0	0.1
cmH2O	±351.5	0.1	±1055	1	±2109	1	±5273	1
kgcm2	±0.351	0.001	±1.055	0.001	±2.109	0.001	±5.273	0.001
bar	±0.344	0.001	±1.034	0.001	±2.068	0.001	±5.171	0.001
Accuracy	±0.5 %FS or better (25 °C)				±1 %FS or better at 25 °C			
Repeatability	±0.2 % (Max. 0.5 %FS)							
Battery & life	3 x 1.5 volt AAA - 100 hours							
Display	Custom LCD							
Dimensions	32 x 71 x 141 mm							
Weight	185 grams							

Order code	Description	£ each
825-905	9205 $\pm 5$ psi	74.00
825-915	9215 $\pm 15$ psi	100.00
825-930	9230 $\pm 30$ psi	100.00
825-975	9275 $\pm 75$ psi	100.00
825-990	Connection hoses 300 mm (2)	2.80
830-258	Protective silicone boot - black	14.00
832-015	S/steel wall bracket	15.00
890-280	3-point traceable calibration certificate**	49.00
**unit of measure mbar		

\* Excluding 825-905 which is supplied with two 500 mm long x 6 mm ID connection hoses (see page 128).

- **Connection hoses included**  
All units are supplied with high pressure, barbed connectors





# 9035 ANEMOMETER

- Displays the air velocity and temperature simultaneously
- Five scales m/s, km/h, ft/min, knots and mph
- Max/Min and average reading functions
- Simple and easy to operate

The 9035 hand held combined anemometer and thermometer is a general purpose vane air speed meter that simultaneously displays air flow/velocity measurement and temperature over the range 0.4 to 30 metres per second or 0.9 mph to 67 mph and -10 to 50 °C.

The instrument displays the air flow/velocity in five different modes/scales, metres per second (m/s), kilometres per hour (km/h), feet per minute (ft/min), knots and miles per hour (mph). The temperature can be displayed over the range -10 to 50 °C in either °C or °F with a resolution of 0.1 °C/°F.

The unit incorporates an auto-power-off facility, backlit display, average reading (last 10) and max/min functions. The 9035 Anemometer is housed in a robust ABS case and features an easy-to-read custom LCD.



Offering an effective way of measuring air velocity, volume and temperature in many industries. Anemometers are most commonly used for testing the efficiency of ventilation, heating and air-conditioning systems, but are regularly used in controlled laboratory testing applications such as wind tunnels. Further uses include measuring outdoor wind conditions as part of health and safety checks as well as in many manufacturing processes.

Order code	Description	£ each
825-835	9035 Anemometer	80.00
890-290	3-point traceable calibration certificate*	49.00
*unit of measure m/s		

Specification	9035 Anemometer
Range flow/ velocity	0.4 to 30 metres per second
Range temperature	-10 to 50 °C
Resolution	0.1 °C/°F
Scales	m/s, km/h, ft/min, knots & mph
Accuracy flow/velocity	±3 % of Full scale ±0.5
Accuracy temperature	±1.5 °C
Battery	3 x 1.5 volt AAA
Battery life	100 hours with backlight 1000 hours without backlight
Display	Custom LCD
Dimensions	Unit only: 32 x 71 x 141 mm Vane unit: 35 x 76 x 155 mm
Weight	270 grams unit & vane