



# DATA SHEET

MP 110 - MP 111 MP 115 - MP 112





# Manometer



Easy to use



**Selection of units** 



**Hold-min-max functions** 



Manual autozero

#### **Features**

- Pressure measurement
- Selection of units
- Manual autozero
- Hold function

- Display of minimum and maximum values
- Configurable Auto shut-off
- Backlight

# **Technical specifications**

Parameter	Models	Measuring units	Accuracy**	Measuring range	Resolution
Pressure	MP 110	Pa, mmH <sub>2</sub> O, inWg, daPa	±0.5% of reading ±2 Pa	From -1000 to +1000 Pa	1 Pa
	MP 111	kPa, mmH <sub>2</sub> O, inWg, mbar, mmHg, daPa	$\pm 0.5\%$ of reading $\pm 2 \text{ mmH}_2\text{O}$	From -1000 to +1000 mmH <sub>2</sub> O	From 0 to $\pm 200 \text{ mmH}_2\text{O}$ : 0.1 mmH $_2\text{O}$ Beyond: 1 mmH $_2\text{O}$
	MP 115	kPa, inWg, mbar, mmHg, PSI	$\pm 0.5\%$ of reading $\pm 0.5$ mbar	From -500 to +500 mbar	0.1 mbar
	MP 112	kPa, inWg, mbar, mmHg, PSI, bar	±0.5% of reading ±2 mbar	From -2000 to +2000 mbar	1 mbar

#### **General features**

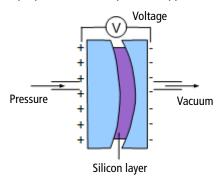
Measuring element	Piezoresistive sensor			
Tolerated	MP 110: 250 mbar / MP 111: 700 mbar			
overpressure	MP 115: 1.4 bar / MP 112: 3 bar			
Connector	MP 110 / 111: Ø 6.2 mm barbed connectors made of nickelled brass MP 115 / 112: Ø 4.6 mm barbed connectors made of nickelled brass			
Display	4 lines, LCD technology. Dimensions 50 x 36 mm. 2 lines of 5 digits with 7 segments (value) 2 lines of 5 digits with 16 segments (unit)			
Housing	ABS, protection IP54			
Keypad	5 keys			
European directives	2014/30/EU EMC; 2014/35/EU Low Voltage; 2011/65/EU RoHS II; 2012/19/EU WEEE			
Power supply	4 batteries AAA LR03 1.5 V			
Battery life	180 hours			
Ambience	Neutral gas			
Conditions of use (°C, %RH, m)	From 0 to $+50$ °C. In non condensing conditions. From 0 to 2000 m.			
Storage temperature	From -20 to +80 °C			
Auto shut-off	Adjustable from 0 to 120 min			
Weight	220 g			

## **Operating principle**

#### Piezoresistive sensor

The pressure deforms the silicon layer. This layer deformation generates a voltage at its terminates.

This voltage is proportional to the pressure applied.



#### Maintenance

We carry out calibration, adjustment and maintenance of your instruments to guarantee a constant level of quality of your measurements.

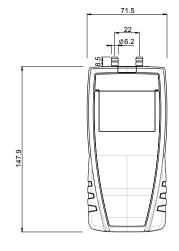
As part of Quality Assurance Standards, we recommend you to carry out a yearly checking.

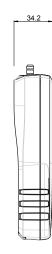
#### Accessories

Designation	Sales reference	Description	
CQ 15	24633	Magnetic protective housing	
J.T.C	11922	Straight junctions in T for $\emptyset$ 5 x 8 mm tube	
J.T.Y	11923	Straight junctions in Y for $\emptyset$ 5 x 8 mm tube	
Pitot Tubes	-	Different lengths, Ø 3/6 or 8 mm, bent or straight. See related data sheet.	
MT 51	24636	ABS transport case	
ST 110	24635	Soft transport case	



### Dimensions (in mm)





#### Kit content

Designation	Sales reference	Description
MP 110	24615	Manometer with 2 x 1 m of silicon tube Ø 4 x 7 mm, stainless steel tip Ø 6 x 100 mm, calibration certificate and soft transport case
MP 110 S	24712	Manometer with 2 x 1 m of silicon tube $\emptyset$ 4 x 7 mm, stainless steel tip $\emptyset$ 6 x 100 mm, adjustment certificate and soft transport case
MP 111	24616	Manometer with 2 x 1 m of silicon tube $\emptyset$ 4 x 7 mm, stainless steel tip $\emptyset$ 6 x 100 mm, calibration certificate and soft transport case
MP 111 S	24713	Manometer with 2 x 1 m of silicon tube $\emptyset$ 4 x 7 mm, stainless steel tip $\emptyset$ 6 x 100 mm, adjustment certificate and soft transport case
MP 112	24618	Manometer with 2 x 1 m of crystal tube Ø 4 x 6 mm, calibration certificate and soft transport case
MP 112 S	24721	Manometer with 2 x 1 m of crystal tube Ø 4 x 6 mm, adjustment certificate and soft transport case
MP 115	24617	Manometer with 2 x 1 m of crystal tube Ø 4 x 6 mm, calibration certificate and soft transport case
MP 115 S	24720	Manometer with 2 x 1 m of crystal tube Ø 4 x 6 mm, adjustment certificate and soft transport case

#### **Certificates**

Calibration certificate: A calibration is a comparison of the values of the instrument with those of a standard to determine a measurement error with an associated calibration uncertainty. A calibration certificate guarantees the traceability of measurements to national standards.

**Adjustment certificate:** An adjustment certificate is a document that ensures the conformity of the device with the tolerances of the data sheet. It ensures that the device has followed the manufacturing process.

