



**Manometers**  
**MP 100 - 101 - 105 - 112**  
**MP 120**

**New**



**Functions**

- Pressure
- Selection of units
- Manual automatic calibration
- HOLD function
- Minimum and maximum values
- Adjustable automatic shut-off
- Adjustable backlight
- Adjustable climatic parameters (MP120)
- Built-in calculation for velocity (MP120)

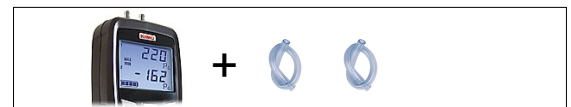
**Technical features**

- Measuring element**.....piezoresistif sensor
- Overpressure allowed**.....MP 100 : 250mbar, MP101: 700mbar,  
MP105 : 1.4bar, MP112 : 3 bar  
MP 120 : 250 mbar
- Pressure connectors**.....MP 100/101/120 : Ø 6.2 mm barbed connectors  
made of nickelled brass  
MP 105 et 112 : Ø 4.6 mm threaded connectors  
made of nickelled brass
- Display**.....2 lines, LCD technology. Sizes 50 x 34.9 mm.  
1 line of 5 digits with 7 segments (value)  
1 line of 5 digits with 16 segments (unit)
- Housing**.....Shock-proof made of ABS, IP54 protection
- Keypad**.....Metal-coated with 5 keys
- Conformity**.....electromagnetical compatibility (NF EN 61326-1 guideline)
- Power supply**.....1 alcaline battery 9V 6LR61
- Operating temperature**.....from 0 to 50°C
- Storage temperature**.....from -20 to +80°C
- Auto shut-off**.....adjustable from 0 to 120 min
- Weight**.....190g
- Languages**.....French, english

**MP 100 - 101 - 120**

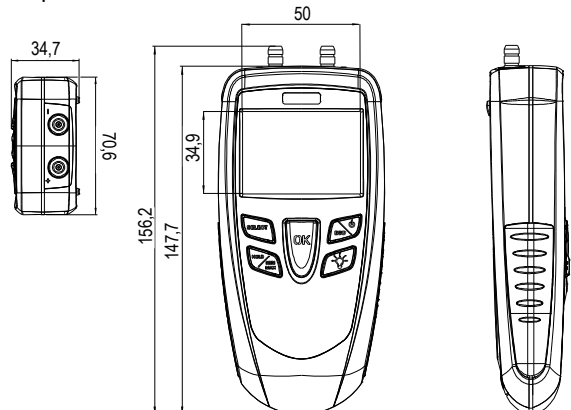


**MP 105 - 112**



**Dimensions (mm)**

- Top view
- Front view
- Side view



\*except class 100S

## Specifications

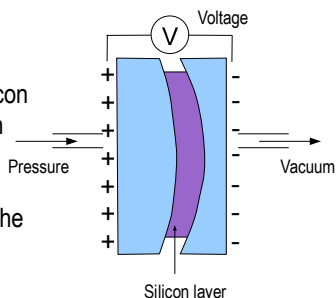
	Measuring units	Measuring range	Accuracy*	Resolutions
<b>PRESSURE</b>				
MP 100	Pa, mmH <sub>2</sub> O, inWg, daPa	from 0 to ±1000 Pa	±0.5% of reading ±2 Pa	1 Pa
MP 101	kPa, mmH <sub>2</sub> O, inWg, mbar, mmHg, daPa	from 0 to ±1000 mmH <sub>2</sub> O	±0.5% of reading ±2 mmH <sub>2</sub> O	0 to ±200mmH <sub>2</sub> O : 0,1 mmH <sub>2</sub> O beyond : 1 mmH <sub>2</sub> O
MP 105	kPa, inWg, mbar, mmHg, PSI	from 0 to ±500 mbar	±0.5% of reading ±0,5mbar	0,1 mbar
MP 112	kPa, inWg, mbar, mmHg, PSI, bar	from 0 to ±2000 mbar	±0.5% of reading ±2mbar	1 mbar
MP 120	Pa, mmH <sub>2</sub> O, inWg, m/s, fpm, daPa	from 0 to ±1000 Pa	±0.5% of reading ±2 Pa	1 Pa
<b>AIR VELOCITY Pitot tube</b>				
MP 120	m/s, fpm, Km/h	from 2 to 5 m/s from 5 to 40 m/s	±0.7 m/s ±0.5% of reading ±0.3 m/s	0.1 m/s

\*All accuracies indicated in this document were stated in laboratory conditions and can be guaranteed for measurements carried out in the same conditions, or carried out with required compensation.

## Working principle

### Piezoresistif sensor

Piezoresistif sensor is a diaphragm formed on a silicon substrate, which bends with applied pressure and generates millivoltage or millicurrent proportional to the pressure applied.



### Pitot tube

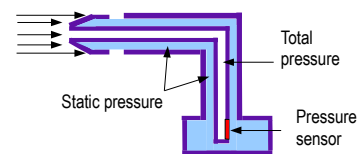
Dynamic pressure is measured by Pitot tube :

$P_d$  = Total pressure – Static pressure

Velocity is calculated according to Bernoulli simplified formula.

Formula with temperature correction :

$$V_{m/s} = K \times \sqrt{\frac{574,2 \theta + 156842,77}{P_0}} \times \sqrt{\Delta P_{en Pa}}$$



$P_0$  = Barometric pressure in Pa  
 $\theta$  = Temperature in °C  
K = Pitot tube coefficient

## Supplied with ...

DESCRIPTION	MP 100	MP 101	MP 105	MP 112	MP 120
Pressure sensor from 0 to ±1000 Pa	●				●
Pressure sensor from 0 to ±1000 mmH <sub>2</sub> O		●			
Pressure sensor from 0 to ±500 mbar			●		
Pressure sensor from 0 to ±2000 mbar				●	
Pitot tube Ø 6mm, length 300 mm	○	○	○	○	○
2x1 m clear tube Ø 4 x 6 mm	○	○	●	●	○
2x1 m silicone tube Ø 4 x 7 mm	●	●	○	○	●
Stainless steel tip Ø 6 x 100 mm*	●	●			●
Calibration certificate*	●	●	●	●	●
Transport case	●	●	●	●	●

\*except class 100S



- Included
- Optional

## Accessories (See related datasheet)

CE 100	J.T.C or J.Y.C	See related datasheet
Protective cover with magnet and holding system	Straight connections, in T or Y for tube Ø 5x8mm	Pitot Tube available in many lengths Ø 3/6 or 8mm, with or without temperature compensation

## Warranty period

Instruments have 1-year guarantee for any manufacturing defect (return to our After-Sales Service required for appraisal).

[www.kimo.fr](http://www.kimo.fr)

EXPORT DEPARTMENT

Tel : + 33. 1. 60. 06. 69. 25 - Fax : + 33. 1. 60. 06. 69. 29

e-mail : [export@kimo.fr](mailto:export@kimo.fr)



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[info@prctechth.com](mailto:info@prctechth.com) [www.prctechth.com](http://www.prctechth.com)