PM SERIES MANOMETER



OPERATING INSTRUCTIONS

12721 rev.2

RANGE		
Model	Operating Range	Overrange
PM 20	0.00 - 19.99 mbar + 0.0 - 130.0 mbar	1bar/402″H_2O
PM 21	0.00 - 13.00 kPa	1bar/402″H_2O
PM 22	0.00 - 52.28″ in H_2O	1bar/402″H_2O
PM 23	0.00 - 199.9 mm H_2O + 0.0 - 1320 mm H_2O	1bar/402″H_2O
PM 24	0.00 - 3.83″ in Hg	1bar/402″H_2O
PM 25	0.00 - 19.99 mm Hg + 0.0 - 97.5mm Hg	1bar/402″H_2O
PM 26	0.00 - 1.88 psi	1bar/402″H_2O

The above models features backlight, out of range, zeroing and hold.

Particular care should be taken not to over pressure the device as this may rupture the sensor membrane. This is not covered by the manufacturers warranty.
NOTE: The differential/gauge instruments will only measure positive pressures i.e. positive pressure applied to the positive port, or negative pressure applied to the negative port.

INSTRUMENT APPLICATION

The range of PM instruments are suitable for gauge and differential measurements over a wide range of pressures. They are not suitable for use with corrosive substances or cyclic hydrocarbons, e.g. motor oil, transmission fluid and freon.
To use the PM with these components, isolation must be provided in the form of a buffer, such as a mineral oil or dry air.

INSTRUMENT OPERATION

BATTERIES

Two AA or equivalent cells (not supplied). Follow instructions on reverse of instrument for fitting/replacement.
When  symbol appears on display, replace batteries.

IP65/IP67 RATING

The waterproof rating for this product will not be maintained unless the screws holding the battery compartment are firmly tightened when inserting or replacing batteries.

ON - OFF

Press **ON** key for on and **OFF** key for off. Automatic switch-off after 12 minutes, unless any key is activated. If ◇ key is held when unit is switched on, automatic switch-off function will be disabled until the unit is switched off.

BACKLIGHT
Press and hold **ON** key.

OUT OF RANGE
If pressure exceeds the scale range **Out** will appear on the display.

ZEROING
In order to achieve maximum accuracy it is recommended to zero the instrument in the orientation it will be used before taking any measurements.

DISPLAY HOLD
Pressing ◇ key freezes the display. The ◇ symbol will appear on the display. Press ◇ key again to return to normal display.

HAND PUMP OPERATION (if applicable)
Use the **T** piece to connect the hand pump to the instrument's **+** port and to the equipment being tested. Exhaust the system by turning the release valve on the hand pump anti-clockwise and set the fine adjustment threaded piston to mid range.
Close the release valve and apply pump action to the hand pump piston to generate the required approximate pressure. Fine adjustment of the desired pressure can then be made by rotating the threaded piston. The release valve may be used to vent the system.
Note: The hand pump is capable of generating 7bar max. It is, therefore, essential that extra care is taken not to over-pressure the instrument.

INSTRUMENT ACCURACIES

Over temperature range -10°C to +50°C is 0.2% of reading +0.2% of full scale + 1 digit.

The overall performance of the instrument is obtained by combining the stated accuracy and any uncertainty due to the measurement process.

WARRANTY
This instrument has been carefully assembled and tested, and is warranted against faulty workmanship and materials for two years from the date of purchase.
During the warranty period any defective instrument will be repaired or replaced at the discretion of the manufacturer. This warranty does not cover damage or failure resulting from misuse or accident.
Modification, adjustment or any alteration with the internal arrangement of the instrument shall absolve the manufacturer from any liability in respect of the instrument.
Any instrument to be repaired should be forwarded to the supplier, carriage paid and at the owner's risk. A brief description of the fault should be included.
For further information about your local distributor contact:

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www.digitron.co.uk.

TEST RESULTS

This instrument has been tested using a calibrated dead weight system:

Model: ..... Serial No: .....

This instrument has been tested in: .....

Tested by: .....

INPUT	READING