

# Instruction Manual MSI P3 (MSI P3 - 1.5 bar)



Dräger MSI GmbH Rohrstraße 32 D - 58093 Hagen

Tel.: 049-2331 / 9584 - 0 Fax: 049-2331 / 9584 - 29 e-mail: info@draeger-msi.de

5695025; 2012-10-16

## Content

- 1. Warning
- 2. The Instrument
- 3. Measuring step by step
- 4. Technical Data
- 5. Service and maintenance

## 1. Warning

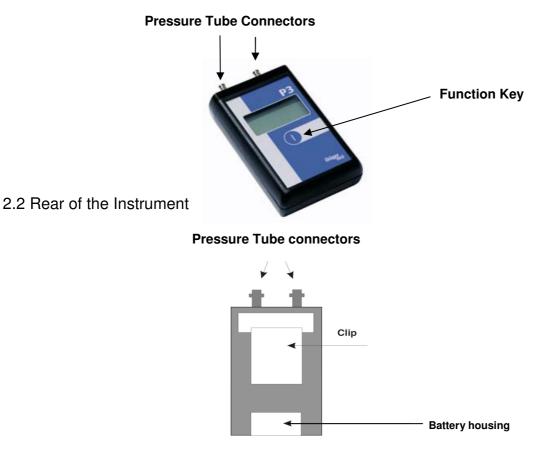
Using the MSI P3 (P3-1.5 bar) needs the knowledge and the acceptation of this manual and of the national and international regulations and standards. The instrument must not be used for applications others than described in this manual.

As from 2005 EC specifications for disposal of electric and electronic equipment are valid. These are regulated in the 2002/96/EC directive and respective national law. Essential content is the establishment of special collection and recycling facilities for private users. Since this device is not registered for private users, it is not allowed to dispose it in this way. For disposal you can send it back to your local Dräger Safety organisation and if requested, get further information concerning this matter from Dräger MSI GmbH.

### 2. The Instrument

The MSI P3 (P3-1.5 bar) is an electronic, handheld device for measuring differential pressures of non-acid gases. The maximal overpressure allowed is 750 mbar (4 bar).

## 2.1 front of the Instrument



### 2.3 Power supply

The MSI P3 (P3-1.5 bar) needs a 9V Alkaline Battery or a 9V Ni-Cd Cell for operation. The instrument is delivered without a battery. If the battery is low, "Lb" is shown in the display. For replacing the battery, press the cover of the battery housing and slip it into the direction of the arrow. Change the battery and close the housing vice versa.

### 3. Measuring step by step

Pressing the function key will switch the instrument on. It starts with a display check, all elements of the instrument will be in operation. Then the display reads the range (199.9 or 1500) and the unit (hPa). Note 1 hPa is equal 1 mbar.

Wait some seconds until the instrument shows a stable value. A short pressing of the function key will set the value to zero. Connect now one ore both connectors by the pressure tubes with the object to be measured, wait a few seconds and read the measured value.

The reading "uuuu" means the pressure is lower than -25.0 mbar, the reading "oooo" means the pressure is higher than 199.9 mbar (1500 mbar). Use never pressures higher than 750 mbar (4 bar).

Pressing the function key for more than 3 seconds will change the display reading to "off" and will switch the instrument off.

## 4. Technical data MSI P3 (MSI P3 - 1.5 bar)

Type of measurement	differential pressure
Range	-25.0 mbar 199.9 mbar (- 250 mbar 1500 mbar)
Resolution	0.01 mbar between $-19.99$ and $+ 19.99$ mbar 0.1 mbar all others (0.1 mbar between $-199.9$ and $+ 199.9$ mbar) (1 mbar all others)
Principle Accuracy	piezo resistant semiconductor, compensated temperature < 100 mbar: < $\pm$ 0.5 mbar or < $\pm$ 1 % of mv > 100 mbar: < $\pm$ 2 % of mv (< $\pm$ 5 mbar or < $\pm$ 2 % of mv)
Maximum overload Display Ambient temperature Storing temperature Power supply Dimensions (L*W*H) Weight	750 mbar (4 bar) Liquid crystal 3.5 characters + 10 °C + 60 °C - 20 °C + 60 °C 9V Alkaline or 9V NiCd 113mm * 65mm * 23 mm 142 g incl. Battery

### 5. Maintenance and Service

Dräger MSI GmbH recommends service once a year by authorised service people.