

## Type MA 25

### Application

The hand-held instrument MA 25 with digital indication can be used for the measurement of pressure, under-pressure and differential pressure of gaseous and non-aggressive media.

Three different ranges are available:

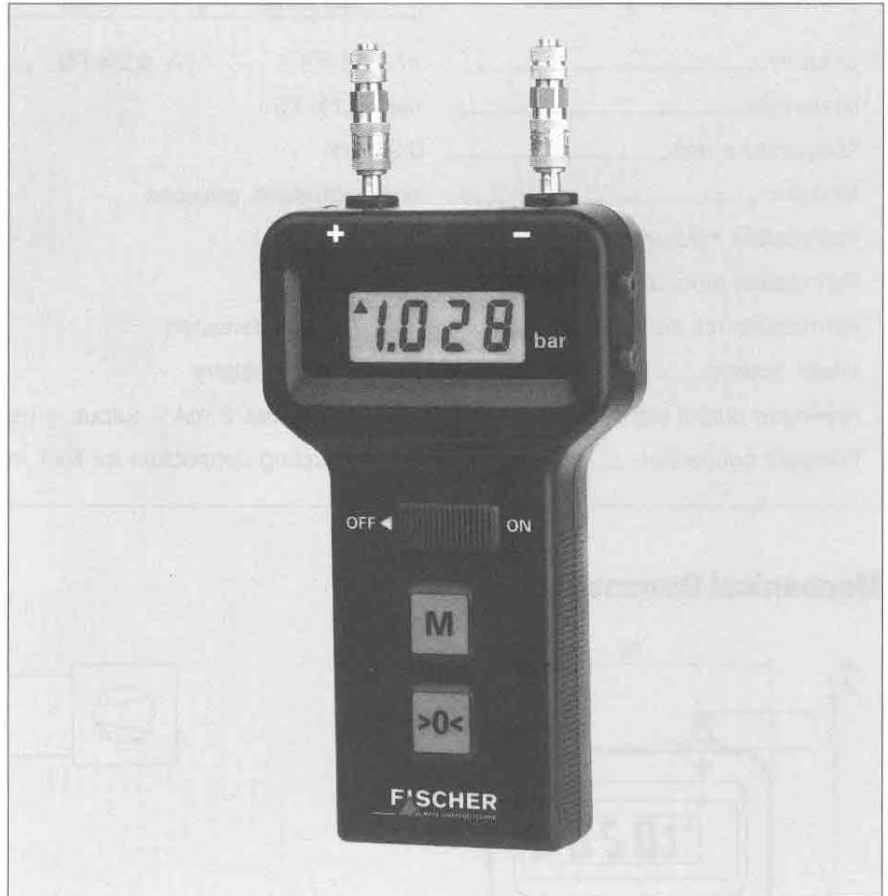
- 0 – 200 mbar
- 0 – 2 bar

Range of applications:

- filter-monitoring of air-conditioning systems
- maintenance of gas-burners in heating installations
- other service and maintenance work in industrial process.

### Essential Characteristics

- nonsystem-connected hand-held pressure gauge for portable application
- high overload protection
- rugged design
- high resolution
- quick-coupling connection



### Construction and Principle of Operation

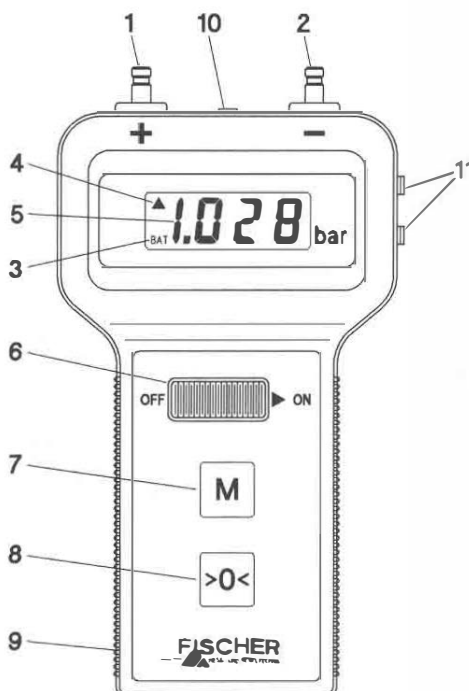
The basic element of the portable instrument MA 25 is a piezoresistive sensor, which consists of a measuring circuit on a silicium diaphragm.

Due to the piezoelectric effect, the application of pressure to the system causes a change of the resistance values of this bridge circuit.

This change of resistance (imbalance of the bridge circuit) is evaluated in an electronic circuitry and is indicated on a 3 1/2-digit indication (LCD).

The hand-held pressure gauge MA 25 is provided with a digital temperature compensation which is controlled by microcontroller program.

The mechanical pressure connections are realized by quick-couplings.



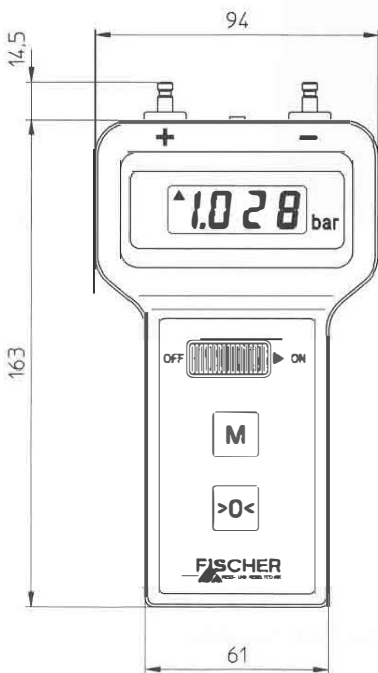
### Service Symbols

1. Pressure connection (- minus)
2. Pressure connection (+ plus)
3. Low-battery indication
4. Measuring value recorded
5. 3 1/2 digit display
6. Switch ON / OFF
7. Storage key „Memory“
8. AUTO - ZERO key
9. Battery case (on the backside of instrument)
10. Connection for power supply
11. Analogue output signal

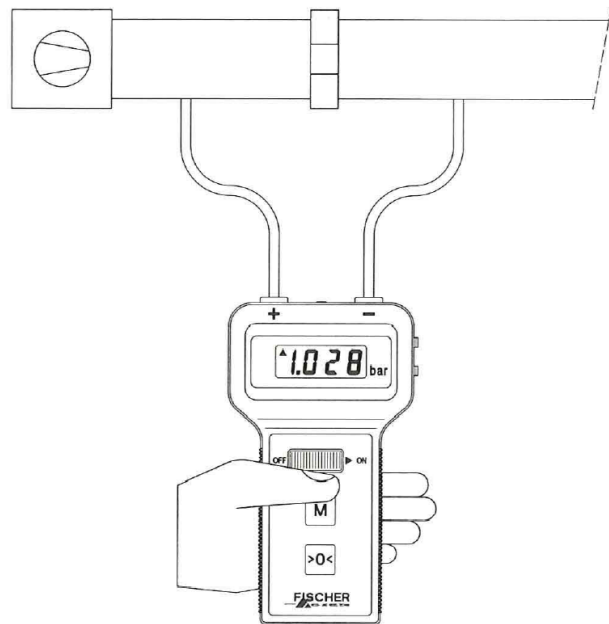
### Technical Data

Pressure Ranges	0 – 200 mbar	0 – 2 bar
Max. static Operating Pressure	2 bar	4 bar
Linearity	+/- 0,5% FS	+/- 0,5% FS
Hysteresis	max. 0,1% FS	
Temperature drift	0,08%/K	
Medium	non-aggressive, gaseous	
Permissible medium temperature	70 °C	
Permissible amb. temperature	0 – 50 °C	
Permissible rel. humidity	80%, non-condensated	
Power source	9 V transistor battery	
Analogue output signal	0 – 2 V DC, max. 2 mA - output: + (red); - (black)	
Pressure connection	quick-coupling connection for 6 x 1 mm	

### Mechanical Dimensions



### Application Example



### Ordering Instructions

#### Type MA 25

#### Pressure ranges

0 – 200 mbar	▶	4	4
0 – 2 bar	▶	4	5

