



Handling instructions

Pressure probe

0638.1445 (± 10 hPa), 0638.1545 (± 100 hPa)

0638.1645 (2 bar abs)



Please read before using instrument!

Observe measuring range (max. excessive pressure), too high pressure values can destroy the sensor!

Please read the appropriate instruction manual before using the instrument!

In order to obtain reproducible measurements with differential pressure probes and to maintain the accuracy ± 3 Pa with the 10 hPa probe, the following should be observed:

- The probe must be adjusted to the ambient temperature before the start of the measurement!
- Zero calibration must be carried out before beginning a measurement, the position of the pressure probe should not be changed during the measurements that follow!
- The pressure probe can be positioned as required.
- Avoid changes in temperature during the measurement!
- Observe + and - inputs!



Description

The pressure probe works with a differential pressure according to the principle of a strain gauge.

Connecting the probes

The pressure inlets in the differential pressure probe are marked with + and -. The higher pressure should be applied to the + inlet to achieve the best possible accuracy level. Higher pressure at the + inlet produces a positive pressure indication, while higher pressure at the - inlet produces a negative pressure indication.

Application

Set the connected probe to its position of use before beginning a measurement. We recommend the use of a magnetic holding fixture (see ordering data). Zero calibration should be carried out before the measurement in order to guarantee reproducible measurements. The position of the probe should not be altered during the measurement that follows! Zero calibration is not necessary for measurements with the absolute pressure probe (0638.1645). The pressure probes are calibrated in the factory, calibration is carried out when the pressure probe is lying flat (normal position). We therefore recommend that the probe remains in this position during measurements.

Make sure that the pressure probe is not subject to vibrations during the measurement (vibrations effect the results of the measurement).

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Technical data

Probe	Meas.range	Zero t.c. value during long-term meas. *	Accuracy	Max. overload
0638.1345	± 100 Pa		± (0.3 Pa + 0.5% of m.v.)	100 hPa
0638.1445	±10 hPa	type 0.3% of f.v./°C in range >10°C to 50°C type 1% of f.v./°C in range 0°C to 10°C	± 3 Pa	50 hPa
0638.1545	± 100 hPa	type 0.1% of f.v./°C	± 10 Pa (0 to 20 hPa) ± 0.5% of m.v. (20 to 100 hPa)	200 hPa
0638.1645	2 bar	type 0,05% of f.v./°C in range 0°C to 20°C	± 5 hPa	3200 hPa

* unimportant if constant temperature and reset before each measurement.

Operating temperature.....0 to +50 °C
Storage and transport temp.-20 to +70 °C



Care and maintenance

The pressure probe is maintenance-free and is not subject to a particular maintenance interval.

Clean the housing with a damp cloth.



Strong detergents or solvents should never be used for cleaning the measuring probe! Make sure that no liquid gets into the connection nipple!

Ordering data

Pressure sensor ±100 Pa0638.1345
Pressure sensor ±10 hPa0638.1445
Pressure sensor ±100 hPa0638.1545
Pressure probe 2bar abs0638.1645
Magnetic holding fixture.....0554.0225
Silicone hose0554.0440

Warranty

Pressure probe24 months

If the instrument is opened, improperly handled or if force is applied, no warranty will be granted!

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