

Products and delivery program

PRESSURE MEASUREMENT TECHNOLOGY



- ⊕ **Mechanical pressure gauges**
- ⊕ **Pressure sensors an transmitters**
- ⊕ **Digital pressure gauges**
- ⊕ **Electrical pressure gauges**
- ⊕ **Accessories for pressure measurement**

Our product range is divided into the following product lines for the most diverse application areas in industry.

Electronic Pressure measurement technology

We offer a complete range of electronic pressure gauges:

Pressure sensors, pressure switches, pressure transducers, and pressure transmitters for measuring gauge, absolute, and differential pressure. Our pressure measuring devices are available in measuring ranges from 0...0.6 mbar to 0...2,000 bar. We supply these devices with standardized current or voltage output signals, as well as interfaces and protocols for various fieldbuses.

Mechanical Pressure measurement technology

Indicating pressure gauges for gauge, absolute and differential pressure with tube, plate or capsule spring measuring systems, as well as pressure media for many industrial processes, have proven their worth in many cases.

The devices have display ranges from 0...25mbar to 0...4000bar with display accuracies up to 0.25%.

Control engineering

Manometer valves, manometer valves according to DIN 16270 and water trap pipes for the installation of various manometers and electrical pressure measuring devices have proven their worth in industry. Furthermore, our sales department offers district heating ball valves from the company Högfors and various versions of manually operated ball valves and automatic ball valves with electric drive for automation.



Electric Temperature measurement technology

Our product range includes thermocouples, resistance thermometers (also with on-site display), temperature switches, and analog and digital temperature transmitters for all industrial sectors. Measuring ranges from -200 to +1300 °C are covered.

All thermometers can be supplied with protective tubes according to DIN 43772 or customer-specific standards.

Mechanical temperature measurement technology

Mechanical temperature measuring devices operate on the bimetallic, tension, or gas pressure principle with display ranges of -200 °C to +500 °C.

All mechanical thermometers are designed for operation in a separate protective tube, allowing for quick replacement during the operating phase.

Calibration laboratory / Calibration technology

For testing measuring instruments, we offer a wide range of calibration devices for the physical quantities pressure, temperature and for electrical quantities.

Furthermore, as a service, we calibrate all types of electronic and mechanical pressure and temperature measuring instruments in our DKD/DAkkS calibration laboratory or on-site.



CALIBRATION LABORATORY for mechanical measurements

CALIBRATION EQUIPMENT

Calibration technology

For testing measuring instruments, we offer a wide range of calibration devices for the physical quantities pressure, temperature and for electrical quantities. Furthermore, as a service, we calibrate all types of electronic and mechanical pressure and temperature measuring instruments in our DKD/DAkkS calibration laboratory or on-site.

Your competent partner in testing and calibration technology

Product quality, operational reliability, and cost-effectiveness are directly linked to the accurate and reliable measurement of process variables. Therefore, entrust the calibration and maintenance of your measuring instruments to a competent partner.

Our calibration laboratory is accredited according to DIN EN ISO/IEC 17025 by the German Accreditation Body Berlin (DAkkS) and is a member of the PRINTING expert committee in the German Calibration Service (DKD).

Performing a calibration

Before calibration, the calibratability of the devices is assessed, and adjustments are made if necessary. The calibration results are documented in a calibration certificate according to applicable guidelines, and the item being calibrated receives a calibration mark. We calibrate measuring instruments of our own manufacture as well as those from other manufacturers.



Our calibration service offers you an independent calibration service with a comprehensive range of services.



- **Calibration according to EN17025 for the measured quantity pressure**

In our calibration laboratory, DAkkS calibrations and factory calibrations are performed for the measured quantity pressure, covering a range from absolute pressure to positive and negative gauge pressure from one Pascal up to 6,000 bar.

- **Factory calibration ISO9001: Measured quantities pressure, temperature, torque, force, mass, length and electrical quantities**

Accurate and reliable measurements are a prerequisite for any high-quality industrial production.

Measuring and testing equipment is used, among other things, for the quantitative determination of properties as well as for control, regulation and automation in manufacturing.



PRODUCT RANGE PRESSURE MEASURING TECHNOLOGY

Mechanical pressure measurement technology

Indicating mechanical pressure gauges have proven their worth in many industrial sectors:

Product range

- Bourdon tube pressure gauge, standard version or chemical version
- Precision manometer
- Capsule spring manometer
- Diaphragm manometer
- Differential pressure gauge
- Manometer with electrical contact device

The devices have display ranges from 0...25mbar to 0...2500bar with display accuracies up to 0.25%.

Pressure transmitter

Pressure transmitters with integrated pressure gauges and pressure transducers have proven their worth in industry for the most difficult measurement tasks.

Electronic pressure measurement technology

We offer a complete range of electronic pressure gauges:

- Digital pressure gauges
- Pressure sensors
- Pressure transmitter
- Low-pressure sensors
- Level probes and fill level indicators
- Hand pumps with reference pressure measuring devices

Our pressure gauges are available in measuring ranges from 0...0.6 mbar to 0...2,000 bar. We supply these devices with standardized current or voltage output signals, as well as interfaces and protocols for various fieldbuses.

Digital manometers and handheld pressure gauges are available for a wide variety of applications.

ACCESSORIES for pressure measurement technology

- Water trap pipes according to DIN
- Manometer weld-on fitting
- Connectors / Transition pieces
- Pressure shock reducer
- Seals
- Measuring instrument holder

Mechanical pressure measurement technology

Bourdon tube pressure gauge - standard version

The pressure gauges from the standard range meet general requirements and are suitable for normal stresses in terms of accuracy and design.

Display areas
0...0.6 bar to 0...400 bar

Areas of application
Heating and air conditioning technology, pneumatics
Workshop equipment



Bourdon tube pressure gauge - robust design

High-quality pressure gauges for applications in plant engineering and industry. They are suitable for liquid and gaseous media.

Versions with and without glycerin filling

Display areas
0...0.6 bar to 0...1600 bar

Areas of application
Mechanical engineering, plant engineering and chemical industry
Hydraulics, pneumatics



Bourdon tube pressure gauge - Tmax version

Pressure gauges for applications in district heating under high metrological stress and media temperatures up to 140°C.

Display areas
0...4 bar to 0...40 bar

Areas of application
District heating technology plant construction



Bourdon tube pressure gauge - chemical version

Pressure gauge with media-contacting parts and measuring mechanism made of stainless steel, specifically designed for the chemical and petrochemical industries under particularly high metrological stresses and aggressive environmental conditions.

Display areas
0...0.6 bar to 0...4000 bar

Areas of application
Chemical industry, petrochemical industry, food industry
Drinking water technology



Bourdon tube manometer - precision measuring version

Precision pressure measuring instruments with an accuracy class of 0.6% are manufactured with high precision and are used for exact pressure measurement in the laboratory and in development.

Display areas
0...0.6 bar to 0...1000 bar

Areas of application
Quality assurance
test benches



Diaphragm manometer

Diaphragm pressure gauges are used with aggressive media and are easily protected against high pressures.

Display areas
Flange diameter 160 mm: 0...16 mbar to 0...400 mbar
Flange diameter 100 mm: 0...0.6 bar to 0...25 bar

Areas of application
Chemical industry
Paper industry



Pressure gauges with contact device

Diaphragm pressure gauges are used with aggressive media and are easily protected against high pressures.

Display areas
Flange diameter 160 mm: 0...16 mbar to 0...400 mbar
Flange diameter 100 mm: 0...0.6 bar to 0...25 bar

Areas of application
Chemical industry
Paper industry



Further details available upon request.

Pressure transmitter

Pressure transmitters are used where, due to high temperature, high viscosity or crystallizing substances (food industry), separation from the mounted pressure measuring device is necessary, usually by means of a stainless steel membrane.

Versions for the process, food and pulp industries

- Membrane pressure transmitter with threaded connection
- Pressure transmitter with internal diaphragm
- Pressure transmitter with flanged connection
- Pressure transmitters for the food industry



Electrical pressure measurement technology

Pressure sensors and pressure transmitters

Pressure sensors with various output signals are universally applicable for almost all industrial applications. Measuring range, accuracy, output signal, and connection conditions can be selected according to the diverse requirements of customers.

Measuring ranges
0...0.1 bar to 0...2500 bar

Areas of application
Mechanical and plant engineering
Vacuum technology
Pneumatics, hydraulics



Digital pressure gauges

Digital pressure gauges offer the ideal solution for local, network-independent and accurate pressure display.

Measuring range
depending on the version, up to 1000 bar

Areas of application
Testing laboratories
Mechanical and plant engineering
Quality assurance



Handheld pressure gauges

These versatile pressure gauges are ideal for mobile pressure measurement in service and assembly. The use of internal or external sensors allows them to meet the requirements of various applications.

Versions for relative pressure, absolute pressure or differential pressure

Measuring ranges
-1 ... 0 bar to 0... 1000 bar

Areas of application
Heating technology, service and installation



hand pumps

- Pneumatic hand pump up to 4 bar
- Pneumatic hand pumps up to 40 bar
- Hydraulic hand pumps up to 700 bar
- Accessories adapter set



Spindle pumps

- Single-stage hydraulic spindle pumps up to 250 bar
- Two-stage hydraulic spindle pumps up to 1000 bar
- Accessories for spindle pumps: connection fittings, oil reservoirs



Accessories for pressure measurement technology

- Water trap pipes, connectors
- Digital display for connecting pressure sensors
- Plug-in displays for transmitters
- Intrinsically safe food separators
- Pressure gauge protective caps
- Cooling elements for pressure gauges
- Measuring instrument holder
- Manometer connection adapter DIN 837
- Seals



Tradition for over 100 years

HENSEL Mess-, Regel- und Prüftechnik GmbH is a small, innovative company with a production facility in Germany.

Our product and sales program includes high-quality mechanical pressure gauges, digital manometers, mechanical temperature gauges, resistance thermometers, and electronic handheld measuring devices, as well as calibration devices for pressure and temperature measurement technology.

Solutions for pressure, temperature, and calibration technology are an integral part of our customers' business processes. Therefore, we see ourselves not merely as a supplier of measurement technology components, but rather as a competent partner who, in close cooperation with our customers, offers comprehensive solutions. These solutions are individually tailored and precisely aligned with the specific requirements.

Your partner for the following industries

- **Mechanical engineering and automation technology**
- **food industry**
- **Energy generation**
- **Pipeline construction**
- **Pharmaceutical and petrochemical industries**
- **Heating system installation**
- **Water and wastewater technology**



Wilhelm-von-Polenz-Str. 7
D - 02733 Cunewalde

Tel. +49 35877 / 231 - 0
Fax +49 35877 / 231 23

www.hensel-cunewalde.de info@hensel-cunewalde.de