Hengesbach
Prozessmesstechnik

The fine art of measuring.

Process instrumentation
in best hands.

www.hengesbach.com

On the measurability of advantages

Success with a sense of proportion would be an apt description of the development of the Hengesbach family enterprise.

It was founded in 1953, when the young Federal Republic of Germany was still enveloped in a sense of optimism, and soon started to focus on the development and production of high-quality measuring devices for industrial applications. Nearly 60 years later, Hengesbach, which has its registered offices in the Rhine-Ruhr industrial region, has become one of the most distinguished producers in its sector and offers a broad range of measuring devices for a multitude of applications: in the food and beverages industry, in the pharmaceutical sector, in the chemical and paper industry and in all places with high expectations concerning the performance of modern measuring devices.

Hengesbach sets standards in measuring technology: its entire product range for the parameters temperature, flow, filling level, analysis, process pressure and evaluation is based on quality standards that make Hengesbach products stand out in the market and clearly differentiate them from those of its competitors.

Development, construction, design and material form the core of durable, highly accurate products that are used all over the world with documented success in plants and processes of sensitive sectors such as the food and beverages industry. Hygienic design in particular guarantees a maximum of predictable safety within complex production processes.

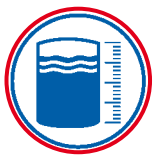
The company is currently led by the second family generation, represented by business graduate Gabriele Hengesbach. Technological thinking and entrepreneurial action are continued, with commitment to the family and to traditional performance goals. In addition to development and production, customer-oriented consulting has become a focal point. It bundles all services related to planning, installation, initial operation and production.

Hengesbach is a highly specialised company and therefore offers clear advantages with measurable results: best quality, absolute precision, convincing innovative power and consistent customer orientation.

You can rate us according to that!

Kind regards
Gabriele Hengesbach

We set standards:

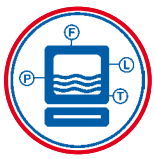

Level

Temperature


Flow


Process pressure


Analysis



PC evaluation


Service

Pressure/Level Transmitters
Flush Mounted Diaphragm

Programmable pressure- and level transmitter PZM 100/101 with flush mounted stainless steel diaphragm and o-ring sealing, modular connection system

The modular connection system MODULAR by Hengesbach

- Measurement range from 0/0.1 bar to -1/+100 bar for relative resp. absolute pressure
- Turn-down 10:1, output signal 4-20 mA
- Parameterization at transmitter or via the external control module OPUSM
- Calibration without pressure presence, sterilizable up to 140°C/200 °C
- Protection class IP 67and IP 69K
- 1 basic device for various connection adapters, easy to position
- Options

Applications

- For all established process pressure and level measurement in pressurized and unpressurized tanks

Programmable pressure- and level transmitter PZT 100/101 with flush mounted stainless steel diaphragm, modular connection system, no elastomers

- Measurement range from 0/0.1 bar to -1/+100 bar for relative resp. absolute pressure
- Turn-down 10:1, output signal 4-20 mA
- Parameterization at transmitter or via the external control module OPUSM
- Calibration without pressure presence, sterilizable up to 140°C/200 °C
- Protection class IP 67 and IP 69K
- 1 basic device for various connection adapters, easy to position
- Options

Applications

- For all established process pressure and level measurement in pressurized and unpressurized tanks

EHEDG FDA 3A 28-03

Programmable pressure- and level transmitter KS 100/101 with ceramic measuring cell, flush mounted

- Measurement range from 0/10 mbar to -1/+70 bar for relative resp. absolute pressure
- Oil free, capacitive measuring cell, high mechanical load capacity
- Turn-down 10:1, output signal 4-20 mA
- Parameterization at transmitter or via the external control module OPUSM
- Calibration without pressure presence
- Options

Applications

- For all established process pressure and level measurement in unpressurized and pressurized tanks, viscous and aggressive media

Programmable pressure- and level transmitter TPF 100/101 with flush mounted stainless steel diaphragm and various process connectors

- Measurement range from 0/0.1 bar to -1/+100 bar for relative resp. absolute pressure
- various process connections, like
  - Metal sealing mounting system, clamp with o-ring
  - Flange versions EN and ANSI
- Turn-down 10:1, output signal 4-20 mA
- Parameterization at transmitter or via the external control module OPUSM
- Calibration without pressure presence
- Options

Applications

- For all established process pressure and level measurement in unpressurized and pressurized tanks

Pressure/Level/Differential Pressure Transmitters Flush Mounted Diaphragm

Pressure transmitter PZM 050/ TPF 050 with flush mounted stainless steel diaphragm modular and fixed connection system

- Measurement range from 0/0.1 bar to -1/+100 bar for relative resp. absolute pressure
- Easy-to-clean model with o-ring sealing
- Sterilizable up to 140°C/200 °C, IP 67 and IP 69K
- Vacuum tight, fixed measuring ranges
- 1 basic device for various connection adapters, like VARIVENT®, Clamp, DRD, DIN flanges

The modular connection system MODULAR by Hengesbach

- Applications
- For all established process pressure and level measurement, for liquid up to pasty media

- Options
- Series 080: high precision 0.05% FS

EHEDG FDA

Overload resistant pressure transmitter KS 050 with dry ceramic measuring cell, internal or flush mounted

- Measurement range from 0/10 mbar to -1/+70 bar, preadjusted
- Up to hundredfold overload proof
- Analog-output 4-20 mA
- Temperature stability, high precision
- Options

- Applications
- For process pressure measurement of gases, vapors and liquids

Level probe TPS-T for hydrostatic level measurement

- capacitive and piezoresistive
- Measurement range from 0/20 mbar to 0/+20 bar
- Output signal 0/4-20 mA, 0-10 V
- High overload resistance with capacitive ceramic cell
- Options

- Applications
- Hydrostatic level measurement in deep wells, waste water reservoirs

Overload resistant pressure transmitter TCS / TCF… , flush mounted, G 1/2 and M22 x1,5

- Measurement range from 0/1 bar to -1/+200 bar for relative resp. absolute pressure
- Very high overload resistance with low nominal pressures
- Small connection dimensions
- 4-20 mA, cost-efficient solution
- Options

- Applications
- For all established process pressure and level measurement, especially in pipes with small diameters,filling lines…

Differential pressure transmitter KERADIFF 100
High overload resistance and self-monitored

- Measurement range from 2 mbar to 40 bar, PN 420
- Self-monitoring from the measuring cell to the signal output
- Highest resistance of the ceramic/silicon cell against vibrations and alternating pressure
- Options

Applications

- Measurement of level or differential pressure in liquid media
- Differential pressure measurement on dynamic pressure tubes, orifices …

Differential pressure transmitter KERADIFF 140
Overload resistant and self-monitored with capillary and flush mounted diaphragms

- User- and service-friendly from 100 mbar up to 30 bar
- Parameterization at transmitter
- Unpressurized parameterization at device
- Options

Applications

- Level- or volume measuring of liquids with process connections via capillary tubes and front flush mounted diaphragm seals, e.g. VARIVENT®, milk sanitary connection, clamp..
- For aggressive, pasty and hot media

Differential pressure transmitter KERADIFF 150
overload resistant and self-monitored for level measurement with flush mounted diaphragm on one inlet

- User- and service-friendly from 100 mbar up to 40 bar
- Parameterization at transmitter or via hand held terminal
- Unpressurized parameterization at device possible
- Options

Applications

- Applications
- Level- or volume measuring of liquids with process connection via diaphragm seal on one side, version e.g hygienic applications (tanks…)
- For aggressive, pasty and hot media

pressure/Diaphragm Seals manometer/PressureSwitch/Transmitter

Bourdon tube manometer RC .. EN 837-1 in chemistry design

- Measuring range from -1/0.6 bar to 0/1000 bar acc. EN 837-1
- Various housings Ø 63, Ø 100, Ø 160 mm
- Graded pressure ranges according to EN 837-1
- Available in chemistry or standard design
- Options

Applications

- For measurement in gases, vapors and liquids

Transmitter manometer RC... with DMU

- Measuring ranges from 0/0,6 bar to -1/1000 bar
- For connection to manometer RC.. or PC.. 100/160
- Supply voltage 24 VDC
- Output signal 4-20 mA, 2wire or 0-20 mA, 3wire
- Options

Applications

- Local display and remote transmission of measuring data

Diaphragm seals for all kind of industries

- Use of diaphragm seals to separate the instruments like manometers, transmitters, differential pressure transmitters, pressure switches from media, CIP- and SIP compatible, with capillary tube on demand:
- Membrane diaphragm seals for food- and pharma industry
- Membrane diaphragm seals with flange and thread connections
- Diaphragm seals with pipe
- Special materials, various filling fluids, FDA
- For use in EEx-areas
- Material certifcates EN 10204

Diaphragm Pressure Manometer PC...EN 837-3 in chemistry design

- Measuring range from 0/25 mbar to
- Various housings Ø 63, Ø 100, Ø 160 mm
- Graded pressure ranges according to EN 837-3
- Options

Applications

- For measurement in gases, vapors and liquids

Contact manometer RCK/PCK… with various process connections

- For relative and absolute pressure measurement
- Available with 1-3 limit switches
- Customized switching function
- Mounting to bourdon-tube and diaphragm manometers with diameters 63 to 160 mm
- Various process connection fittings
- Options

Applications

- For measurement in gases, vapors and liquids

Accessories for pressure and differential pressure instruments

Water pockets, manometer connection fittings, connection nipples, union nuts, sealing washers, pipe hooks, capillary inductance coils, settling throttles, manometer isolating valves, double valves, stop-cocks, overpressure safety devices, valve blocks, dynamic pressure probes

Level

Capacitive level probe LEVELTEC for limit level detection

- In almost all conducting and non-conducting liquids
- Insensitive for foaming
- Slit free mounting due to metal sealing system
- Transistor output PNP 24 VDC
- sensitivity adjustment
- Options

Applications

- Preferably for pipes and tanks as protection against drainage

Conductive level probe NKS for limit level

- Detection of electricly conductive media
- NKS 11 and NKS 13 "Tuchenhagen" probe
- All stainless-steel, sealed
- Slit free mounting due to metal sealing system
- Options

Applications

- Installation in pipes or tanks, e.g. as protection for pumps against drainage or overfill protection
- Foam detection with module NC1

Vibration level switch LIQUITEC for limit level detection

- For liquids, e.g. water, acids, emulsions...
- Almost insensitive to turbulences, foaming, vibrations
- Economical solution for easy application, 24VDC
- Process connection G1B for welded hygienic Adapter and other available
- Options

Applications

- Limit monitoring in pipes or tanks, e.g. as dry running protection for pumps or overfill protection

Conductivity/Turbidity/Evaluation Process Visualization

Turbidity Transmitter TURBIMESS inline monitoring for product identification and phase separation

- for media with a turbidity ≥ 150 NTU and for water
- Measuring principle by infrared scattered light
- Output signal 4-20 mA
- Compact version, protection class IP 67
- Stainless steel design
- Various hygienic process connections, e.g. Clamp 2", VARIVENT®, DIN 11864…, FDA, 3A
- Options

Applications

- Separation of different media, also in CIP-circuits …
- Detection of different kinds of milk, e.g. whole milk, skim milk .., juices… in process lines

Indication module DIS and FAM

- Modular for all transmitters with field- or standard housings
- Easy retrofit, programmable
- Protection class IP 67
- LCD, 41/2 digit display, turnable 360°
- Options

Applications

- Local display or switching function for first equipment or upgrading of transmitters

Conductivity Transmitter CONDUTEC Compact or separate version

- Measuring ranges programmable from 0…5.00 µS/cm to 0…500.0 mS/cm
- Output for temperature and conductivity
- 2 alarm outputs, function programmable
- Compact or separated version with LC-display, housing turnable
- Double-spaced display for conductivity and temperature
- Options

Applications

- For media separation, in CIP-circuits …
- Ultrapure water measurement

Digital indicators and converters as hardware-products for different kinds of transmitters

- Programmable transducer for standard signals mA/V or Pt100 input
- Operation via membrane keypad, freely configurable
- Max. 4 relay contacts (potential-free)
- Options

Applications

- Switch function and indication of pressure, temperature, differential pressure measurements or other parameters
- For level indication in pressurized tanks, with linearization function on demand

Further evaluating system components as addition to all products

Flow switch STREAMTEC
Safe monitoring of liquid media with special design for minimized temperature influences

- * switch output and signal output 4-20 mA,
  * output signal to read out the flow rate
- Range for liquid media : 0,03 – 3 m/s
- Range for gaseous media : 0,5 – 30 m/s
- Protection class IP 67 and IP 69K
- CIP- and SIP compliant up to 140 °C
- hygienic design
- Options

Applications

- Monitoring cooling water circulation systems of pumps, heat exchangers..
- Filter monitoring in the beverage industry
- Leak monitoring in process lines

Volume flow meter VOLUMTEC, magnetic inductive, available as compact and split version

For volume flow measurements in conductive fluids

- for application with high hygienic requirements
- diameter range from DN10 up to DN150
- measuring ranges from 30…3.000 L/h up to 6.400…640.000 L/h
- menu prompt operation on site without opening the housing
- vacuum stable and piggable measuring unit
- multitude of inputs and outputs for signal processing

Applications

- Volume flow measurements of vapor, gases, liquid and past-like media
- Other measuring principles available

Configuration- and visualization software for transmitters with serial-interface

- Configuration via pc
- Electronic management of measuring points
- Export pre-analysed values into other programmes
- Different visualisations of the signal
- Network-compatible database and data management

Visualization system for complex measurement and control tasks in many sectors - partner projects

Visualization software, adapted to various tasks and compete automation as "partnership-projects"

- Easy operation
- Programmable on basis of S7-PLC's
- Analysis function
- Control, indication, and storage of pumps, valves, and measuring device-data
- Linearization of various tank geometries
- „Module system" enables economical solutions, any tank quantity extendable
- On-site commissioning and training
- Complete automation solutions

Thermometer/
Temperature Transmitters

PT 100 (RTD) - thermometer TP…

- Various process connections for various branches
- RTD in 2-, 3- or 4-wire connection, class A
- Interchangeable measuring device > no protective sleeve necessary
- Various process connections, G ½ B metallic conus, VARIVENT®, Clamp, DIN 11851, DIN 11864, flanges
- Hygienic process connection, EHEDG certificate, FDA
- High accuracy

Options

- Head transmitter TE 42 , 4-20 mA, programmable
- Communication HART® or Profibus PA
- Application-oriented sensor lengths, tapered tipps down to 2 mm
- Very short response time for sensor 6 mm

PT 100 (RTD) - Surface thermometer TP 30/TP 11

- temperature detection without contacting the medium
- Mounting on the tank wall or flush mounting in the tank wall (TP 30)
- Designed as part of the pipe or for clamp fixation

Options

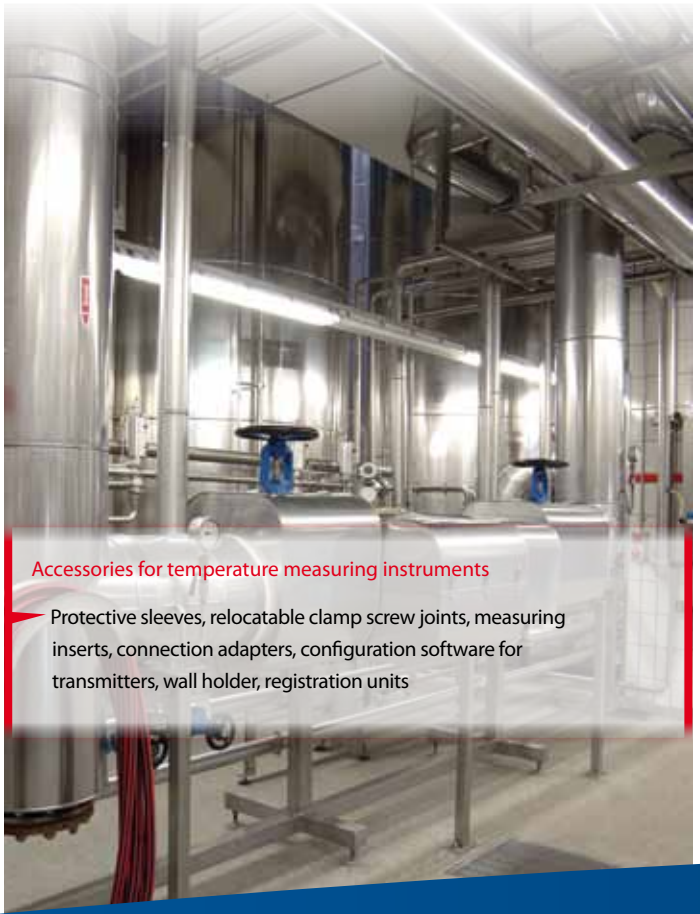
- Field housing IP 67 and IP 69K , alternative TP 11 with fixed connected cable
- Programmable head transmitter TE 42, 4-20 mA or resistance output
- Communication HART® or Profibus PA
- With special weld-in sockets for tank mounting

PT 100 (RTD) - thermometer TP 50 compact design

- Completely sealed
- Compact design for tight installations
- M12 connection plug for easy mounting
- 4-wire RTD sensor, class A

Options

- Programmable transmitter TE 62, 4-20 mA, 2-wire
- Tapered tipps, various lengths
- Various process connections with or without protection sleeves



Accessories for temperature measuring instruments

Protective sleeves, relocatable clamp screw joints, measuring inserts, connection adapters, configuration software for transmitters, wall holder, registration units

PT 100 (RTD) - thermometer type QUICKTEMP easy connect – application oriented solutions

Modular design for optimal application to the process with weld-in sleeves or screw-in for simple QS-checks e.g. of HACCP

- Equipment changes without process interruption
- Equipment changes without disconnecting electric wiring
- Makes calibration procedures very easy
- Varity of process connections, e.g.:
  · for weld-in in pipes from diam. 15
  · for screw-in with G 1/2B metallic conus

The modular connection system MODULAR by Hengesbach

Options

- Head transmitter 4-20 mA, programmable
- Communication HART® or Profibus PA
- Application-oriented sensor lengths, tapered tips, very short response time
- Flexibility by various process connection adapters
- Various transmitters

HART COMMUNICATION FOUNDATION

Temperature transmitter TE 42 for mounting in housing head and inserts for upgrading

Open programmability of the measuring range, sensor type etc. with the setup plug on device, even during measuring mode

- Transmitter: 4-20 mA, easy to retrofit
- High accuracy class
- Inserts: 2-, 3- or 4-wire with or without transmitter

Options

- Type TE 41 with galvanic isolation
- Transmitter with output HART® or Profibus PA
- Transmitter TE 32, externally programmable
- Inserts in various designs and accuracy classes…

In order to support our customers during the whole life cycle of our products, we offer a multitude of service a chievements which exceed the classic technical support.

The cooperation with Hengesbach improves your confidence, your flexibility and your competitiveness. Challenge us!

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Qualitity
with global scope

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China
Denmark
Great Britain
Italy
Austria
Poland
Romania
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Switzerland
South Africa
Czech Republic
Turkey
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Israel

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