Pressure measurement

Powerful instruments for process pressure, differential pressure, level and flow

Endress+Hauser

People for Process Automation

Endress+Hauser – from a supplier of instrumentation to a provider of complete systems

What is Endress+Hauser's complete product offering?
Our competence in products, solutions and services is always appreciated. We have developed from a supplier of instrumentation to a provider of complete systems with the goal of serving our customers throughout the entire life cycle of their plants and to increase their industrial productivity. Wherever level, pressure, flow, temperature, analytical and recording data are needed and systems, components and solutions are used, companies appreciate the experience of Endress+Hauser. This is one of the reasons why we are a leading global provider of measurement, control and automation solutions for process industry production and logistics.

Curious?
www.endress.com

Endress+Hauser is a family enterprise with a staff of round about 10,000 world-wide and sales of more than 1.5 billion Euro.
Our global presence with production facilities (Product Centers) in Europe, Asia, India and the US, as well as sales and service organizations worldwide in almost every country, ensures constant communication with our customers. This enables Endress+Hauser to consistently support the competitiveness of our customers with the highest degree of quality, safety and efficiency.
Continuous optimization of our processes and the use of innovative technology enable us to extend the frontiers of measurement, control and automation engineering and to find safe and efficient solutions for the benefit of our customers.
We ensure the compatibility of our processes with the environment to save energy and resources.

All this also makes our customers confident that they will be able to rely on us in the future as **'People for Process Automation'!**

Competence in pressure measurement

Constant product quality, plant safety and economic efficiency – these are important aspects for any pressure measuring point. Whether pressure, level or flow, today pressure measurement technology is often used for measuring liquids, pastes and gases.
Application examples come from all industry sectors – from the chemical, petrochemical and energy industries to the pharmaceutical, food and environmental industries or in power plants.

The broad range of products available means that finding the ideal solution is easy. No product is suited to all application areas. Therefore measuring systems must be selected that work reliably under the conditions of a particular application and, at the same time, meet the economic situations.

Being one of the leading suppliers in pressure measurement, Endress+Hauser supports you from planning and commissioning through to the maintenance of your measuring point. In addition, we assist you in automation, asset management and the visualization of process data.

Endress+Hauser's pressure instrumentation has a strong presence in all areas of process automation.

Endress+Hauser Operations App

The app offers fast access to up-to-date product information and device details e.g. order code, availability, spare parts, successor products for old devices and general product information - wherever you are, whenever you need it.
Simply enter the serial number or scan the data matrix code on the device to download the information.

Available on the App Store

Scan the QR-Code

Industry segmentation

Hygiene

- Food and Beverages
- Pharma and Biotechnology

The hygiene instruments of Endress+Hauser were especially designed to meet the strict requirements of the food, beverages and pharmaceutical industry and to offer customers safety and reliability. The design, material selection and surface quality of the instruments as well as the process connections correspond to the international hygiene standard according to EHEDG, FDA, 3-A and ASME-BPE.

Process

- Oil and Gas
- Chemicals/Petrochemicals
- Energy
- Pulp and Paper
- Primaries and Metal

Endress+Hauser is one of the internationally leading providers of robust and reliable field instrumentation of the process industry. The contacts and experience of many years provide the know-how for the process safety required. Abrasive and corrosive media place high demands on the functions and materials of the instruments. Endress+Hauser offers high-performance and safe solutions with relevant certificates like Ex or SIL.

Environment

- Water
- Waste Water

Instrumentation plays an important role in the provision of water. In order to guarantee a high degree of plant availability and constant process safety, the instruments of Endress+Hauser reliably measure levels and pressures in all areas of potable water production and treatment as well as waste water production and purification. Endress+Hauser has more than 60 years of experience and the required potable water approvals for the instruments.

Endress+Hauser sensor technology

Ceramic cell

Ceraphire®

Ceramic is one of the hardest materials in the world and ensures the best material properties for the medium. Endress+Hauser capacitive ceramic sensors have membranes up to 30 times thicker than conventional sensors.
Even the tiniest of deflections result in measuring signals with the highest accuracy. The property of the ultra-pure ceramic (99.9%) guarantees high resistance to corrosion, low temperature hysteresis and the best overload resistance.

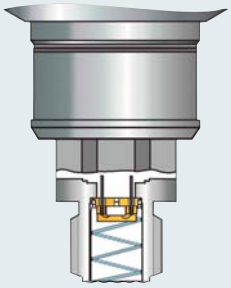
Ceramic cell for process pressure applications

Metal cell

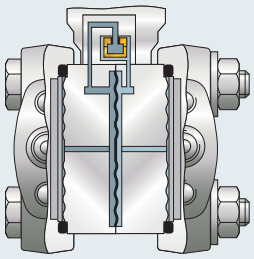
Silicon technology

Silicon sensors with metal membrane are available for gauge pressure, absolute pressure and differential pressure measurement. As a high-performance solution for high pressure applications up to 700bar, these sensors meet the highest requirements and work reliably across a large temperature range.

For process pressure applications



For differential pressure applications

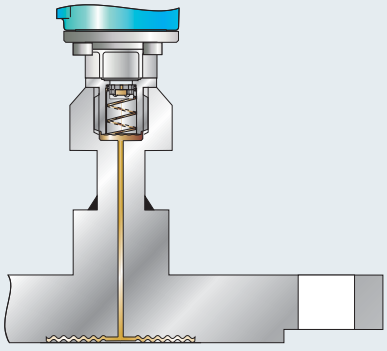


Contite (Silicon technology)

The Contite sensor has been specially developed for hydrostatic level measurement based on silicon technology.
With its protection for sensor and cell electronics, the Contite sensor is a convincing solution in the event of severe moisture and condensate formation. The measuring element itself is protected and hermetically sealed between the process membrane and measuring membrane. The process membrane is of Hastelloy C and, thanks to its clever design, is insensitive to any kind of build-up.

Diaphragm seals (Silicon technology)

If measurement is to take place under extreme conditions, a variety of diaphragm seals are available for the direct mounting or with capillary extension. They can be used for media temperatures from -70°C up to 400°C, are insensitive to aggressive, highly viscous, crystallizing or polymerizing media and are suitable for measuring points that are difficult to access. Endress+Hauser offers the highest quality in the manufacturing process and a wide range of special materials (coating and fill fluids) for all diaphragm seals. Our experts optimize the measuring systems to ensure the maximum degree of performance and reliability.



Hygienic industry

Advantages Ceraphire®

- Completely dry measuring system free of oil
- Self-monitoring measuring cell with membrane breakage detection
- FDA-listed and USP Class VI-tested material
- Surface roughnesses <0.38µm
- Up to 40-fold overload stability
- CIP and SIP cleaning

Advantages silicon technology

- Smallest process connections and membrane diameters with constant accuracy
- Surface roughnesses <0.38µm
- Numerous process connections
- FDA-listed fill oils
- CIP and SIP cleaning

Advantages Contite

- Absolute condensate resistance due to hermetically sealed measuring cell
- Highest measuring stability in extreme temperature changes
- High accuracy and repeatability, particularly in small measuring ranges
- FDA-listed fill oil
- Surface roughnesses <0.38µm
- CIP and SIP cleaning

Process industry

Advantages Ceraphire®

- Highest corrosion resistance
- Long operating time in abrasive media
- Highly vacuum-proof due to measuring cell free of oil
- Process temperatures up to 150°C in flush-mounted installation
- Up to 40-fold overload stability

Advantages silicon technology

- Process pressures up to 700bar
- Large selection of process connections and materials
- Coated membranes available

Advantages Contite

- Measuring membrane of Hastelloy for high corrosion resistance
- Different membrane coatings possible

Environmental industry

Advantages Ceraphire®

- Unaffected by build-up formation and abrasion
- Easily cleaned in case of sludge
- Unaffected by strong pressure surges in pipes
- Rope variants for measurement in wells and shafts
- Sensor with temperature compensation
- Potable water approval

Advantages silicon technology

- High variance in process connections and materials
- Membrane coatings to prevent hydrogen diffusion into the measuring cell (e.g. in case of hydrogen sulfide)

Advantages Contite

- Membrane coatings to prevent hydrogen diffusion into the measuring cell (e.g. in case of hydrogen sulfide)
- Separated rod and rope variants for level measurement from the top

Advantages diaphragm seals

- For flush-mounted pressure measurement in extreme process temperatures of up to 400°C
- Highest degree of variance and flexibility in membrane materials and process connections (e.g. tube)
- Process connections separated by capillary extensions for applications with high vibration

Products for the hygienic industry

The hygiene instruments of Endress+Hauser distinguish themselves by their sophisticated hygiene process connections developed according to international standards and facilitating easy and effective cleaning of the pressure instruments. The pressure instruments measure continually and reliably also in case of high cleaning temperatures and/or the use of aggressive cleaning agents frequently employed, for example, in CIP/SIP processes. They correspond to the relevant international hygiene standards according to EHEDG, FDA, 3-A and ASME-BPE. Endress+Hauser offers a very wide selection of different hygiene process connections as a standard.

Cerabar T
- Simple mount, no calibration required
- Large measuring range for gauge pressure and absolute pressure
- Sensors of ceramic or stainless steel
- Flush-mounted connections and materials with FDA conformity

Ceraphant T
- Quick and flexible process connections thanks to modular connections
- Function check and on-site information with LEDs and digital display
- Operation and visualization also possible via PC
- Stainless steel housing and lasered nameplate

	Pressure types	Areas of application	Span	Sensor	Output
Cerabar T	Gauge pressure/ absolute pressure	Process pressure	100mbar...400bar 1.5psi...6,000psi	Metal up to 400bar (6,000psi)	4...20mA analog
Ceraphant T	Gauge pressure/ absolute pressure	Process pressure Pressure switch	100mbar...40bar 1.5psi...600psi	Metal up to 40bar (600psi)	1 x PNP switch, 2 x PNP switch 1 x PNP switch with additional 4...20mA analog
Cerabar M	Gauge pressure/ absolute pressure	Process pressure Level	10mbar...40bar 0.15psi...600psi	Ceramic up to 40bar (600psi) Metal up to 40bar (600psi)	4...20mA analog, 4...20mA HART® PROFIBUS® PA, FOUNDATION™ fieldbus
Deltabar electronic dp	Hydrostatic pressure	Level	100mbar...40bar 1.5psi...600psi	Ceramic up to 40bar (600psi) Metal up to 40bar (600psi)	4...20mA HART®
Cerabar S	Gauge pressure/ absolute pressure	Process pressure Level	5mbar...400bar 0.075psi...6,000psi	Ceramic up to 40bar (600psi) Metal up to 400bar (6,000psi)	4...20mA HART®, PROFIBUS® PA FOUNDATION™ fieldbus
Deltabar S	Differential pressure	Differential pressure Level Flow	0.5mbar...40bar 0.07psi...600psi	Metal up to 40bar (600psi) Static pressure up to 420bar (6,000psi)	4...20mA HART®, PROFIBUS® PA FOUNDATION™ fieldbus
Deltapilot M	Hydrostatic pressure	Level	10mbar...10bar 0.15psi...150psi	Contite up to 10bar (150psi)	4...20mA HART®, PROFIBUS® PA FOUNDATION™ fieldbus
Deltapilot S	Hydrostatic pressure	Level	10mbar...10bar 0.15psi...150psi	Contite up to 10bar (150psi)	4...20mA HART®, PROFIBUS® PA FOUNDATION™ fieldbus

Cerabar M
- Instrument platform with extensive variants
- Very simple operation directly on the instrument or via the control system
- Aseptic connections and FDA-conforming materials
- Modular electronics and displays
- Option of separate assembly of electronics housing and sensor with process connection

Deltabar electronic dp
- Capillary free electronic differential pressure for level measurement
- Independent of ambient temperature changes
- Intuitive, menu-driven installation and commissioning

Cerabar S / Deltabar S
- Very simple operation directly on the instrument or via the control system
- Reliable data management with HistoROM/M-DAT
- Extensive diagnosis functionality
- Housing may be turned by 380° (!) for an optimum view of the display
- Option of separate assembly of electronics housing and sensor with process connection

Deltapilot M
- Contite measuring cell: Waterproof, climate-resistant and long-term stable
- High accuracy also after extreme temperature changes
- Compact design for installation on the bottom or outlet of a tank
- Very easy operation directly at the instrument or via the control system
- Option of separate assembly of electronics housing and sensor with process connection

Deltapilot S
- Contite measuring cell: Waterproof, climate-resistant and long-term stable
- Highest accuracy and reproducibility
- Reliable data management with HistoROM/M-DAT
- High accuracy also after extreme temperature changes
- Very easy operation directly at the instrument or via the control system
- Option of separate assembly of electronics housing and sensor with process connection

Process temperature	Accuracy	Long-term stability	Process connections	Certificates / approvals	Products
–25…+135°C / –13…+275°F	0.5%	≤ 0.15% / year	Clamp, Triclamp, SMS	■ ATEX, CSA, SIL2 ■ 3-A, EHEDG, FDA	PMP135
–40…+135°C / –40…+275°F	0.5%	≤ 0.15% / year	Clamp, SMS, Varivent, DIN 11851, APV	■ CULUS ■ 3-A, EHEDG, FDA	PTP35
–40…+150°C / –40…+302°F –70…+400°C with diaphragm seal –94…+752°F with diaphragm seal	0.15% 0.075% optional	≤ 0.1% / year ≤ 0.25% / 5 years	DIN 11851/11864, Varivent, Neumo BioControl, APV, DRD, universal adapter, Triclamp, SMS	■ ATEX, FM, CSA, IEC Ex, SIL2, NEPSI, TIIS ■ 3-A, EHEDG, FDA, CoC according to ASME-BPE	PMC51, PMP51, PMP55 (with hyg. connections)
–40…+125°C / –40…+257°F	Single sensor: 0.075% 0.05% optional System: 0.1% 0.07% optional	≤ 0.05% / year ≤ 0.075% / 5 years for single sensors	DIN 11851/11864, Neumo BioControl/SMS, DRD, Varivent, Triclamp, APV	■ ATEX, FM, CSA, IEC Ex	FMD71, FMD72
–25…+150°C / –13…+302°F –70…+400°C with diaphragm seal –94…+752°F with diaphragm seal	0.075%	≤ 0.05% / year ≤ 0.15% / 5 years ≤ 0.2% / 10 years	DIN 11851, Triclamp, Varivent, DRD, SMS, APV, universal adapter	■ ATEX, FM, CSA, NEPSI, TIIS, IEC Ex, SIL3 ■ 3-A, EHEDG, FDA	PMP75, PMC71 (with hyg. connections)
–40…+85°C / –40…+185°F –70…+400°C with diaphragm seal –94…+752°F with diaphragm seal	0.075%	≤ 0.05% / year ≤ 0.15% / 5 years	Varivent, DRD, DIN 11851, Sanitary tank spud	■ ATEX, FM, CSA, NEPSI, TIIS, IEC Ex, SIL3 ■ 3-A, EHEDG, FDA	FMD78 (with hyg. connections)
–10…+100°C / +14…+212°F 135°C / 275°F for 30 min.	0.2% 0.1% optional	≤ 0.1% / year ≤ 0.25% / 5 years	Universal adapter, DIN 11851/11864, Neumo BioControl, SMS, DRD, Varivent, Triclamp, Anderson	■ ATEX, FM, CSA, NEPSI, TIIS, IEC Ex, SIL2 ■ 3-A, EHEDG, FDA, CoC according to ASME-BPE	FMB50
–10…+100°C / +14…+212°F 135°C / 275°F for 30 min.	0.1% 0.075% optional	≤ 0.05% / year ≤ 0.125% / 5 years	Universal adapter, DIN 11851/11864, Neumo BioControl, SMS, DRD, Varivent, Triclamp, Anderson	■ ATEX, FM, CSA, NEPSI, TIIS, IEC Ex, SIL3 ■ 3-A, EHEDG, FDA, CoC according to ASME-BPE	FMB70

Products for the process industry

The instruments of Endress+Hauser are equipped with a robust housing variant of aluminum or stainless steel (316L) for the aggressive ambient conditions of the process industry.
Even for extremely rough process conditions, the instruments offer a wide selection of sensor materials. This contributes to a longer serviceable life of the instruments and increased process safety in a decisive manner.

Cerabar T
- Simple mount, no calibration required
- Large measuring range for gauge pressure and absolute pressure
- Sensors of ceramic or metal

Ceraphant T
- Quick and flexible process connections thanks to modular connections
- Function check and on-site information with LEDs and digital display
- Operation and visualization also possible via PC
- Stainless steel housing and lasered nameplate

Cerabar M
- Instrument platform with extensive variants
- Very simple operation directly at the instrument or via the control system
- Modular electronics and displays
- User-friendly software with application-specific parameter selection

	Pressure types	Areas of application	Span	Sensor	Output
Cerabar T	Gauge pressure/ absolute pressure	Process pressure	100mbar...400bar 1.5psi...6,000psi	Ceramic up to 40bar (600psi) Metal up to 400bar (6,000psi)	4...20mA analog
Ceraphant T	Gauge pressure/ absolute pressure	Process pressure Pressure switch	100mbar...400bar 1.5psi...6,000psi	Ceramic up to 40bar (600psi) Metal up to 400bar (6,000psi)	1 x PNP switch, 2 x PNP switch 1 x PNP switch with additional 4...20mA analog
Cerabar M	Gauge pressure/ absolute pressure	Process pressure Level	10mbar...400bar 0.15psi...6,000psi	Ceramic up to 40bar (600psi) Metal up to 400bar (6,000psi)	4...20mA analog, 4...20mA HART® PROFIBUS® PA, FOUNDATION™ fieldbus
Cerabar S	Gauge pressure/ absolute pressure	Process pressure Level	5mbar...700bar 0.075psi...10,000psi	Ceramic up to 40bar (600psi) Metal up to 700bar (10,000psi)	4...20mA HART®, PROFIBUS® PA FOUNDATION™ fieldbus
Deltabar M	Differential pressure	Differential pressure Level Flow	1mbar...40bar 0.015psi...600psi	Metal up to 40bar (600psi) Static pressure up to 160bar (2,320psi)	4...20mA HART®, PROFIBUS® PA FOUNDATION™ fieldbus
Deltabar electronic dp	Hydrostatic pressure	Level	100mbar...40bar 1.5psi...600psi	Ceramic up to 40bar (600psi) Metal up to 40bar (600psi)	4...20mA HART®
Deltabar S	Differential pressure	Differential pressure Level Flow	0.5mbar...40bar 0.07psi...600psi	Ceramic up to 3bar (45psi) Metal up to 40bar (600psi) Static pressure up to 420bar (6,000psi)	4...20mA HART®, PROFIBUS® PA FOUNDATION™ fieldbus
Waterpilot	Hydrostatic pressure	Level	100mbar...20bar 1.5psi...3,000psi	Ceramic up to 20bar (300psi)	4...20mA Analog, 4...20 mA HART® optionally with temperature sensor Pt100
Deltapilot M	Hydrostatic pressure	Level	10mbar...10bar 0.15psi...150psi	Contite up to 10bar (150psi)	4...20mA HART®, PROFIBUS® PA FOUNDATION™ fieldbus

Deltabar M
- Compact design
- Flexible adaptation and installation
- Modular electronics and displays
- User-friendly software with application-specific parameter selection

Deltabar electronic dp
- Impulse line and capillary free electronic differential pressure for level measurement
- Independent of ambient temperature changes
- Intuitive, menu-driven installation and commissioning

Cerabar S / Deltabar S
- Very simple operation directly on the instrument or via the control system
- Reliable data management with HistoROM/M-DAT
- Extensive diagnosis functionality
- Housing may be turned by 380° (!)
- Functional safety up to SIL3

Waterpilot
- Ceramic measuring cell protects against abrasion
- Robust housing with the smallest of probe diameters
- Highest accuracy
- Integrated temperature sensor
- Materials conforming to potable water directives

Deltapilot M
- Contite measuring cell: Waterproof, climate-resistant and long-term stable
- Very easy operation directly at the instrument or via the control system
- Rod/rope versions for installation from the top
- User-friendly software with application-specific parameter selection

	Process temperature	Accuracy	Long-term stability	Process connections	Certificates / approvals	Products
	−25...+100°C / −13...+212°F	0.5%	≤ 0.15% / year	Threads: ISO, ANSI, M	■ ATEX, CSA, SIL2 ■ GL/RINA	PMC131, PMP131
	−40...+100°C / −40...+212°F	0.5%	≤ 0.15% / year	Threads: ISO, DIN, ANSI	■ CULUS	PTC31, PTP31
	−40...+150°C / −40...+302°F −70...+400°C with diaphragm seal −94...+752°F with diaphragm seal	0.15% 0.075% optional	≤ 0.1% / year ≤ 0.25% / 5 years	Flanges: ANSI, EN, JIS Threads: ISO, JIS, ANSI	■ ATEX, FM, CSA, IEC Ex, SIL2, NEPSI, TIIS ■ NACE, WHG	PMP51, PMC51, PMP55
	−40...+150°C / −40...+302°F −70...+400°C with diaphragm seal −94...+752°F with diaphragm seal	0.075% 0.05% optional	≤ 0.05% / year ≤ 0.15% / 5 years ≤ 0.2% / 10 years	Flanges: ANSI, EN, DIN, flush-mounted process membrane	■ ATEX, FM, CSA, NEPSI, TIIS, IEC Ex, SIL3 ■ NACE, WHG, GL, ABS	PMC71, PMP71, PMP75
	−40...+85°C / −40...+185°F	0.1% 0.075% optional	≤ 0.1% / year ≤ 0.25% / 5 years	¼" - 18 NPT	■ ATEX, FM, CSA, IEC Ex, SIL2, NEPSI, TIIS ■ NACE, WHG	PMD55
	−40...+125°C / −40...+257°F −40...+400°C with diaphragm seal −40...+752°F with diaphragm seal	Single sensor: 0.075% 0.05% optional System: 0.1% 0.07% optional	≤ 0.05% / year ≤ 0.075% / 5 years for single sensors	Flanges: ANSI, EN Threads: ANSI, ISO	■ ATEX, FM, CSA, IEC Ex	FMD71, FMD72
	−40...+85°C / −40...+185°F −70...+400°C with diaphragm seal −94...+752°F with diaphragm seal	0.075% 0.05% optional	≤ 0.05% / year ≤ 0.15% / 5 years	¼" - 18 NPT, RC ¼, Flanges: ANSI, EN, DIN, JIS	■ ATEX, FM, CSA, NEPSI, TIIS, IEC Ex, SIL3 ■ NACE, WHG, GL, ABS	PMD70, PMD75, FMD76, FMD77, FMD78
	−10...+70°C / +14...+158°F	0.2% 0.1% optional	≤ 0.1% / year ≤ 0.25% / 5 years	Mounting clamp, cable assembly screw	■ ATEX, FM, CSA ■ Potable water approvals: NSF, KTW, ACS ■ GL, ABS, LR, DNV	FMX21, FMX167
	−10...+85°C / +14...+185°F	0.2% 0.1% optional	≤ 0.1% / year ≤ 0.25% / 5 years	Flanges: ANSI, EN, JIS Threads: ANSI, ISO, Suspension clamp	■ ATEX, FM, CSA, NEPSI, TIIS, SIL2 ■ NACE, WHG, GL, ABS, LR, DNV	FMB51, FMB52, FMB53

Products for the environmental industry

Hydrostatic instruments of Endress+Hauser are designed for the specific requirements of the environmental industry. Materials conforming to potable water directives, robust designs for applications in sludges or systems without any metal for use in salt water offer the right instrument for any application. Easy instrument operation facilitates commissioning and verification of the pressure devices.

Cerabar T

Ceraphant T

Cerabar T
- Simple mount, no calibration required
- Large measuring range for gauge pressure and absolute pressure
- Sensors of ceramic or metal

Ceraphant T
- Quick and flexible process connections thanks to modular connections
- Function check and on-site information with LEDs and digital display
- Operation and visualization also possible via PC
- Stainless steel housing and lasered nameplate

	Pressure types	Areas of application	Span	Sensor	Output
Cerabar T	Gauge pressure/ absolute pressure	Process pressure	100mbar...400bar 1.5psi...6,000psi	Ceramic up to 40bar (600psi) Metal up to 400bar (6,000psi)	4...20mA analog
Ceraphant T	Gauge pressure/ absolute pressure	Process pressure Pressure switch	100mbar...400bar 1.5psi...6,000psi	Ceramic up to 40bar (600psi) Metal up to 400bar (6,000psi)	1 x PNP switch, 2 x PNP switch 1 x PNP switch with additional 4...20mA analog
Cerabar M	Gauge pressure/ absolute pressure	Process pressure Level	10mbar...400bar 0.15psi...6,000psi	Ceramic up to 40bar (600psi) Metal up to 400bar (6,000psi)	4...20mA analog, 4...20mA HART® PROFIBUS® PA, FOUNDATION™ fieldbus
Deltabar M	Differential pressure	Differential pressure Level Flow	1mbar...40bar 0.015psi...600psi	Metal up to 40bar (600psi) Static pressure up to 160bar (2,320psi)	4...20mA HART®, PROFIBUS® PA FOUNDATION™ fieldbus
Waterpilot	Hydrostatic pressure	Level	100mbar...20bar 1.5 psi...3,000psi	Ceramic up to 20bar (300psi)	4...20mA analog, 4...20mA HART® optionally with temperature sensor Pt100
Deltapilot M	Hydrostatic pressure	Level	10mbar...10bar 0.15psi...150psi	Contite up to 10bar (150psi)	4...20mA HART®, PROFIBUS® PA FOUNDATION™ fieldbus

Cerabar M

Deltabar M

Cerabar M
- Instrument platform with extensive variants
- Very simple operation directly at the instrument or via the control system
- Modular electronics and displays
- User-friendly software with application-specific parameter selection

Deltabar M
- Compact design
- Flexible adaptation and installation
- Very simple operation directly on the instrument or via the control system
- Modular electronics and displays
- User-friendly software with application-specific parameter selection

Waterpilot

Deltapilot M

Waterpilot
- Ceramic measuring cell protects against abrasion
- Robust housing with the smallest of probe diameter
- Highest accuracy
- Integrated temperature sensor
- Materials conforming to potable water directives
- Extensive measuring point accessories

Deltapilot M
- Contite measuring cell: Waterproof, climate-resistant, long-term stable
- Very small temperature influences
- Very simple operation directly at the instrument or via the control system
- Rod/rope versions for installation from the top
- User-friendly software with application-specific parameter selection

	Process temperature	Accuracy	Long-term stability	Process connection	Certificates/ approvals	Products
	−25...+100°C / −13...+212°F	0.5%	≤ 0.15% / year	Threads: ISO, ANSI	■ ATEX, CSA, SIL2	PMC131, PMP131
	−40...+100°C / −40...+212°F	0.5%	≤ 0.15% / year	Threads: ISO, DIN, ANSI	■ CULUS	PTC31, PTP31
	−40...+150°C / −40...+302°F −70...+400°C with diaphragm seal −94...+752°F with diaphragm seal	0.15% 0.075% optional	≤ 0.1% / year ≤ 0.25% / 5 years	Flanges: ANSI, EN, JIS Threads: ISO, ANSI, JIS	■ ATEX, FM, CSA, IEC Ex, SIL2, NEPSI, TIIS ■ WHG	PMP51, PMC51, PMP55
	−40...+85°C / −40...+185°F	0.1% 0.075% optional	≤ 0.1% / year ≤ 0.25% / 5 years	¼" - 18 NPT	■ ATEX, FM, CSA, IEC Ex, SIL2, NEPSI, TIIS ■ WHG	PMD55
	−10...+70°C / +14...+158°F	0.2% 0.1% optional	≤ 0.1% / year ≤ 0.25% / 5 years	Mounting clamp, cable assembly screw	■ ATEX, FM, CSA ■ WHG ■ Potable water approvals: NSF, KTW, ACS	FMX21, FMX167
	−10...+85°C / +14...+185°F	0.2% 0.1% optional	≤ 0.1% / year ≤ 0.25% / 5 years	Flanges: ANSI, EN, JIS Threads: ANSI, ISO	■ ATEX, FM, CSA, IEC Ex, NEPSI, TIIS, SIL2 ■ WHG ■ Potable water approvals: NSF, KTW	FMB51, FMB52, FMB53

Cerabar T

PMP135

PMC131

Advantages at a glance

- Simple mount, no calibration required
- Large measuring range for gauge pressure and absolute pressure
- Sensors of ceramic or stainless steel
- Flush-mounted connections and materials with FDA conformity

ATEX

Simple, practical, reliable – Cerabar T

Cerabar T is the ideal solution for measurement tasks requiring a compact pressure transducer with a set measuring range. The instrument is quickly integrated in the process using either threaded or flush-mounted process connections. For gauge and absolute pressure measurement, the T programme offers the robust ceramic sensor with a measuring range of up to 40bar (580psi) or the metal sensor up to 400bar (5,800psi). Both versions guarantee safe functioning in gas, steam and liquid.

PMP131
Metal sensors – reliable and robust
PMP131 with a metal sensor is the perfect choice for high-pressure applications, e.g. in hydraulic systems. The compact design supports installation in the smallest of spaces in the shortest of timeframes.

- Up to 4-fold overload resistance
- For Ex areas

PMC131
Ceramic sensors – safe and sound
The PMC131 with a ceramic sensor offers stability and reliability. The sensor does not use a filling fluid, so is the ideal choice for vacuum applications.

- Corrosion-proof and abrasion-proof
- Up to 40-fold overload resistance
- Excellent linearity down to the smallest measuring range

PMP135
Hygiene matters!
Applications in hygienic processes make major demands on the material and the design. The PMP135 hygienic line combines the typical compact design with flush-mounted process connection and materials in conformity with FDA. This means you can use this device in aseptic processes without hesitation.

Ceraphant T

PTP35

PTP31

Advantages at a glance

- Quick and flexible process connection thanks to modular connections
- Function check and on-site information with LEDs and digital display
- Operation and visualization possible via PC
- Stainless steel housing and lasered nameplate

Comfortable pressure switch

Our 25 years of knowledge and experience in pressure measurement have naturally left a mark in the development of Ceraphant T, with the right amount of innovation at the right point, as in the hallmark of Endress+Hauser products.
Ceraphant T provides safe measurement and monitoring of absolute and gauge pressure in gas, steam, liquid and dust.

Thanks to its modular adapter system, the pressure switch can be integrated quickly and easily in the process. The stainless steel housing is extremely resistant. Cleaning is simple, as the device information is lasered into the housing.

As it should be for any modern pressure switch, the Ceraphant T is equipped with an illuminated display as standard.
The measured values are visualized with the corresponding unit. The rotatable housing can be positioned in accordance with your requirements, regardless of how the Ceraphant T is installed.

Sure and simple guidance through the setup
You are guided directly to the essential menu items either via operating the keys or via the PC.

The following versions are available for the various requirements:

Electronic versions

- One PNP switch output
- Two PNP switch outputs
- PNP switch output with additional 4...20mA analog output

Process connection versions

- Threaded connections
- Hygienic connections

Waterpilot

Advantages at a glance

- Robust housing with the smallest of probe diameters
- High resistance in case of overload as well as against aggressive media
- Robust and abrasions-resistant ceramic cell
- Highest accuracy
- Integrated temperature sensor
- Materials in conformity with drinking water directives
- Extensive measuring point accessories
- Option: Automatic density correction

ATEX FM APPROVED IECEx SA GL ABS KTW ACS WHG NSF

Hydrostatic cable probe for the complete measuring solution

Level measurement in deep wells is a typical application for Endress+Hauser's Waterpilot. Waterpilot – that means level measurement certified for drinking water with a robust ceramic sensor and integrated temperature measurement, all combined on a diameter of just 22mm (0.9"). As a result, the smallest of wells can be used for the application.

A robust design for applications in waste waters and sludges or a design free of metal with long-term stability for usage in salt water is also available.

Intelligent application also means using the right accessories. The know-how behind many applications is invested in the extensive range of accessories to provide a solution for your measuring tasks.

Electronic versions

- 4...20mA (FMX167)
- 4...20mA HART® (FMX21)

Optional with Pt100 for temperature measurement.

Accessories

Additional weight 300g	Suspension clamp	Cable gland	Temperature transmitter	Terminal box
				

Cerabar M

PMC51

PMP51

Advantages at a glance

- Instrument platform with extensive variants
- Very simple operation directly on the instrument or via the control system
- Aseptic connections and FDA-conforming materials
- Option of separate assembly from housing and electronic insert
- Modular electronics and displays
- User-friendly software with application-specific parameter selection

ATEX NEPSI TIIS FM APPROVED IECEx SIL 3 EHEDG FDA NACE INTERNATIONAL THE CORROSION SOCIETY WHG

Compact process pressure measurement

The Cerabar M pressure transmitter of Endress+Hauser constitutes a product suitable for many applications in the most varied industries due to the combination of different properties. Whether you intend to measure gauge or absolute pressure in liquids, steams or gases – Cerabar M will meet all of these challenges. The modular design permits maximum flexibility. The range of features offered is particularly convincing.

The stainless steel housing of Cerabar M distinguishes itself especially by its hygiene design. For aggressive ambient conditions, an even more robust housing variant of aluminum is available.
The compact and light instrument provides ingress protection up to IP 69K. Cerabar M can be supplied with all common and especially small, flush-mounted process connections for food and pharmaceutical applications. The function monitoring system and the unique Ceraphire® ceramic sensor make Cerabar M a pressure transmitter for any industry.

Electronics variants

- 4...20mA analog
- 4...20mA HART®
- PROFIBUS® PA
- FOUNDATION™ fieldbus

Cerabar M

Overview

Process instrumentation

PMC51

PMP51

PMP55

Hygienic instrumentation

PMC51

PMP51

PMP55

Applications

Welcome in any industry
It is not only the wide field of possible applications which makes the Cerabar M pressure transmitter unique. Its modular design permits maximum flexibility.
Electronics and display may be easily and quickly exchanged.
This reduces purchase and operation costs of a measuring point significantly and this for many years. For if a new plant concept entails a change to another type of communication, you merely exchange the electronic insert.

A revolutionary repertoire
The versatility of the Cerabar M pressure transmitter is unique: Whether you intend to measure gauge or absolute pressure in liquids, steams or gases – Cerabar M will meet all of these challenges. An extensive, application-oriented selection of process connections, electronics and certificates as well as housings permits an operation in hazardous areas through to hygiene applications. Cerabar M is thus the all-round instrument in a compact design.

Deltabar M

PMD55

Advantages at a glance

- Compact design
- Flexible adaptation and installation
- Very simple operation directly on the instrument or via the control system
- Modular electronics and displays
- User-friendly software with application-specific parameter selection

ATEX NEPSI TIIS FM APPROVED IECEx SIL NACE INTERNATIONAL THE CORROSION SOCIETY WHG

The compact class of differential pressure measurement

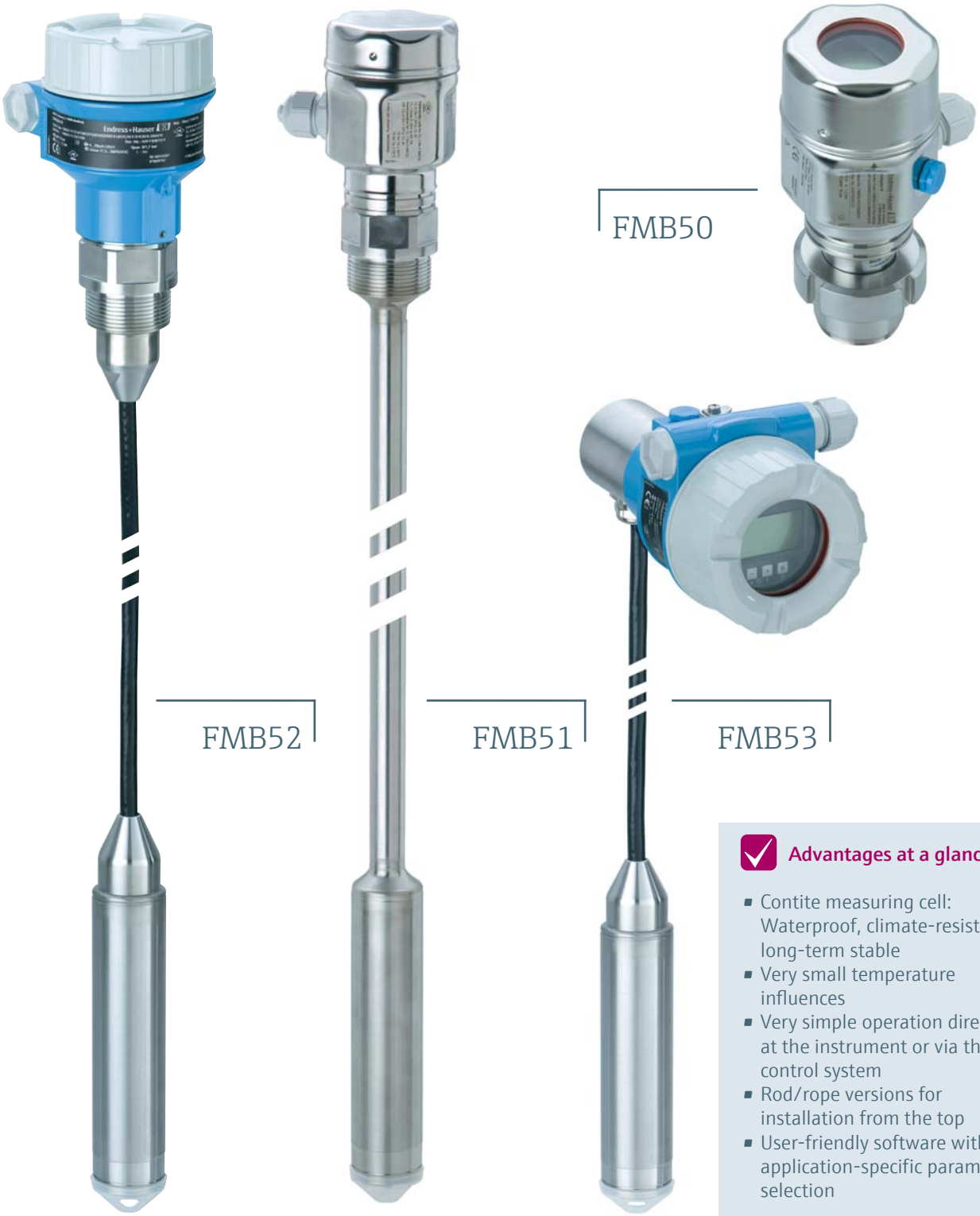
A new design, based on years of experience, was implemented in Deltabar M. It combines flexibility, modularity and compactness. The decisive advantage is this: Deltabar M is easily integrated in any installation conditions. Deltabar M users change from the high-pressure to the low-pressure side by merely moving a small switch on the main electronics. However, the compact design does not mean that accuracy, stability or the intelligence of a measurement have been compromised.

On the contrary: Deltabar M works digitally and is thus robust in relation to external influences and demonstrates high reproducibility. Electronics are modularly exchangeable, i.e. the differential pressure transmitter may be flexibly integrated into any plant or adapted in case of changes. Deltabar M can be set on site without any additional device or PC. This saves costs, be it in procurement, commissioning or operation. The modularity also saves future project costs.

Electronics variants

- 4...20mA HART®
- PROFIBUS® PA
- FOUNDATION™ fieldbus

Deltapilot M



Advantages at a glance

- Contite measuring cell: Waterproof, climate-resistant, long-term stable
- Very small temperature influences
- Very simple operation directly at the instrument or via the control system
- Rod/rope versions for installation from the top
- User-friendly software with application-specific parameter selection

ATEX NEPSI TIIS FM APPROVED IECEx SIL 3 EHEDG FDA NACE INTERNATIONAL THE CORROSION SOCIETY WHG

Compact level measurement with the highest reproducibility

Hydrostatic is not by chance the most frequently used method for level measurement. The measuring principle is simple, reliable and versatile. It can be employed in liquids, pastes as well sludges and has thus secured a firm place in many industries and applications.
The compact design of Deltapilot M offers the solution for hydrostatic level measurements in tanks and vessels since it can be installed on the bottom or outlet.
The rod and rope design facilitate the installation from the top. Even under the most difficult process conditions, the different variants of Deltapilot M may be adapted in an optimum fashion. Deltapilot M can also be mounted at a distance to the tank. In this way, the housing including the electronics and display are mounted at a location which is easier accessible.
The electronics are installed in the transmitter in a modular system and guarantee very easy commissioning, reliable and flexible operation with many supporting functions and a high degree of safety.
The Contite measuring cell of Deltapilot M is hermetically protected against condensate or aggressive gases. Levels are measured with the highest reproducibility.
Deltapilot M may be adapted in many ways including flush-mounted and hygiene process connections. Apart from level measurement, also other information from the measuring point can be displayed, e.g. the content of a tank in liters.

Electronics variants

- 4...20mA HART®
- PROFIBUS® PA
- FOUNDATION™ fieldbus

Deltabar electronic dp

FMD71/FMD72

Advantages at a glance

- The electronic differential pressure system eliminates traditional mechanical issues resulting in greater process availability and reliability.
- Safety risks are minimized with the electronic differential pressure system architecture and design.
- Lowest total cost of ownership due to reduced installation time, maintenance, downtime and spare requirements.

ATEX FM APPROVED IECEx CSA

Electronic differential pressure for level measurement

Differential pressure measurement is often used to measure the level in pressurized and vacuum tanks. Traditional differential pressure measurement using impulse lines and capillaries have issues that can lead to less accuracy, process safety risks and greater total cost of ownership. This can be especially true in tall distillation towers or other vessels with varying ambient temperatures.

Eliminate typical mechanical issues of impulse lines like icing up, clogging, leaky tabs and dry/wet leg inconsistencies as well as temperature effects in capillary systems with the new electronic differential pressure system.
The Deltabar FMD71/FMD72 system uses proven pressure sensor technology in a new and innovative way. The system consists of just one transmitter and two sensor modules. One sensor module measures the hydrostatic level (high pressure) and the other one the head/blanket pressure (low pressure). The level is calculated out of these two values in the transmitter.

Reliable.
- Eliminate measurement drift due to ambient temperature changes - up to 95%
- Right sensor technology for the application: Metal or ceramic cells
- Self-monitoring Ceraphire® ceramic measuring cell
- Differential pressure, head pressure and sensor temperature from one system - available via HART®
- Continuous health indication of the entire system via HART® diagnostics
- Faster response time than traditional capillary systems - up to 10 times faster!
- Standard cabling connections provide flexibility

Safe.
- Eliminate tubing and connection leaks often seen with traditional systems
- Eliminate line condensation or evaporation events (dry/wet leg inconsistencies) and plugging events
- Reduce field personnel safety exposure risks
- Fully vacuum resistant Ceraphire® ceramic cells with highest overload protection

Cost effective.
- No system recalibration or reconfiguration required with any component change
- Water tight, quick disconnect between sensors
- Fewer spare parts – replace individual components of the system as needed
- Just one technician to install entire system
- No need for freeze protection/heat tracing

Cerabar S / Deltabar S

PMD75

PMP71

Advantages at a glance

- Easy commissioning
- Reliable data management with HistoROM/M-DAT
- Extensive diagnosis functionality
- Housing may be turned by 380° (!) for an optimum view of the display
- Functional safety up to SIL3

ATEX NEPSI TIIS FM APPROVED IECEx SIL 3 EHEDG FDA NACE INTERNATIONAL WHG ABS GL

Safety first

With its comprehensive safety package and the intelligent operating and device concept, Cerabar S / Deltabar S from Endress+Hauser offers unique technological innovation in high-end pressure measurement. The multitude of improvements guarantees the user the highest degree of functionality, information and process safety.

For example, the integrated HistoROM/M-DAT data module makes it possible to record, save and readout important process and device parameters. Analysis, simulation and service parameter querying can be carried out at any time using the diagnostic functions of Cerabar S / Deltabar S, ensuring optimization to the process.

Operation with concept
The 3-key operation allows for simple and reliable commissioning. All settings and interrogations can be easily carried out externally.
With the Quick Setup menu, the time and effort required to configure the device is reduced to a minimum so that the user commissions the transmitter goal quickly and reliably.
Thanks to the HistoROM/M-DAT memory, the device configuration can be reliably duplicated onto other measuring devices by simply unplugging and plugging the module. Rapid and reliable.
Since the housing can be rotated 380° regardless of the process connection, the pressure transmitter can be adjusted to any viewing position.

Electronics variants

- 4...20mA HART®
- PROFIBUS® PA
- FOUNDATION™ fieldbus

Cerabar S / Deltabar S

Overview

PMC71

PMP71

PMP75

PMD75

FMD77

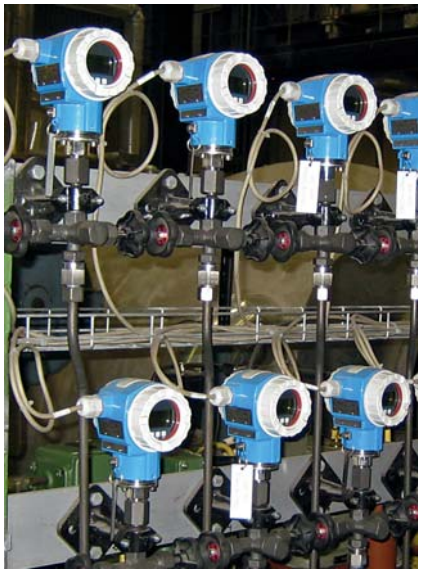
FMD78

Applications

Over the last 25 years, our top quality, optimum user safety and innovative power have made us to one of the most popular suppliers of pressure measurement technology worldwide.

This means our staff is at your side in your daily work process, willing partners who are always ready to listen to your needs.

This experience has resulted in the enhanced development and production of Cerabar S and Deltabar S with innovative technology suitable for all industries. All regulations are strictly observed and the appropriate certificates supplied.



Deltapilot S

FMB70

Advantages at a glance

- Contite measuring cell: Waterproof, climate-resistant and long-term stable
- Highest accuracy and reproducibility
- High accuracy also after extreme temperature changes
- Very easy operation directly at the instrument or via the control system
- Option of separate assembly of electronics housing and sensor with process connection

ATEX NEPSI TIIS

Hydrostatic pressure sensor water-proof and climate-proof

The Deltapilot S is used for measuring the level of water, paste and sludge. The various versions of Deltapilot S can be optimized – even under difficult process conditions. Digital electronic inserts installed directly in the probe housing or in a remote housing away from the measuring point guarantee reliable operation even if the sensor is flooded or being cleaned at the installation point. The Contite sensor is specially developed for hydrostatic level measurement and is hermetically sealed against condensation and gases.
Information on level, volume and product weight is provided with the highest degree of accuracy and reproducibility.

The stainless steel housing and for example clamp connection facilitate applications in the food industry and in life sciences. Deltapilot S supports qualification processes with required certificates, approvals, calibration protocols and test certificates.

Electronics variants

- 4...20mA HART®
- PROFIBUS® PA
- FOUNDATION™ fieldbus

Deltapilot S

Overview

Separated version

Compact version

Version with flanges

FMB70

Applications

Apart from high accuracy you need processes without any contamination for your sensitive media. This requirement – combined with process safety – is a challenging task for process engineering.
The instrumentation employed must be easily cleaned from outside and may not permit any product residue in the process. The sensors have to work smoothly without any drift and measuring error even after SIP and CIP procedures and ensure process safety.
For decades, Endress+Hauser has been offering you a wide range of hygiene instrumentation for the requirements of the food and pharmaceutical industry.
Deltapilot S for hydrostatic level measurement with the unique Contite measuring cell has been the first choice in sophisticated applications with condensate formation or extreme temperature changes/temperature shocks for years.

Process connections

Triclamp	Universal connection	DRD	Thread	Flange
				

Deltatop

DO6x

DP6x

Advantages at a glance

- Customized pre-mounting and configuration
- Complete solution for every measuring point
- Orifice plate versions from DN 10 to DN 1000
- Pitot tubes from DN 50 to DN 12000
- Easy commissioning
- Extensive diagnosis functionality

ATEX FM APPROVED SIL

The tailored solution for your flow measurement

Deltatop
compact instrumentation
In the Deltatop concept, the primary device, manifold block and differential pressure transmitter Deltabar S are already assembled and optimized on the basis of customer data. Deltatop offers minimum static pressure loss and the best accuracy of the differential pressure and sensor.

Deltatop
separate instrumentation
The Deltatop concept follows customer needs based on separate instrumentation. If the application conditions do not allow compact instrumentation or if existing impulse piping will continue to be used, this is the optimum solution for modular flow measurement.

Accessories

Undivided orifice plate with corner taps	Manifold blocks	Shut-off valves	Pitot tubes	Condensate trap	Annular chamber orifice with corner taps
					

Thanks to our comprehensive portfolio of accessories and assemblies in various materials and versions, your measuring point can be completely equipped. We are pleased to help you in designing your measuring point.

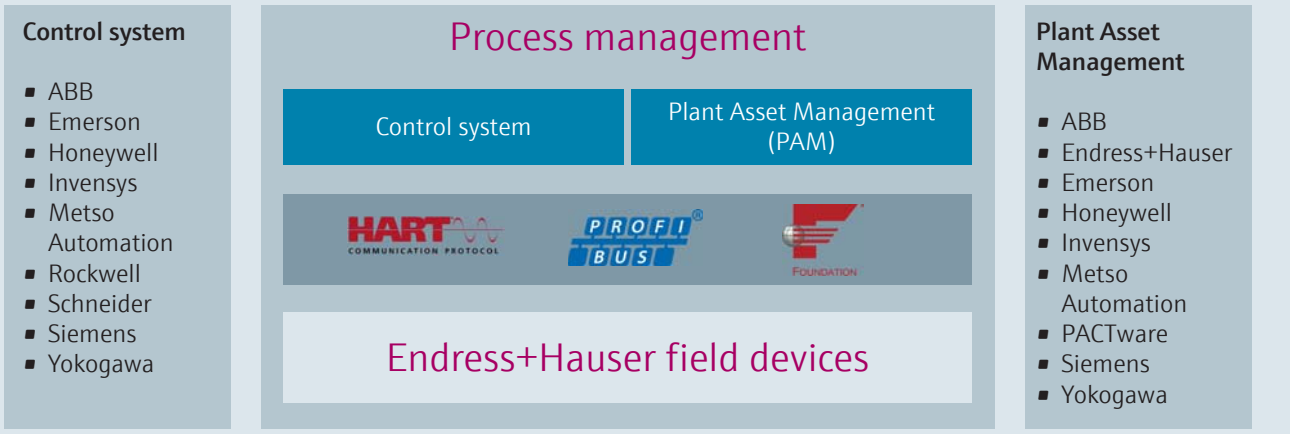
Smooth integration into your control system – thanks to digital communication

Endress+Hauser offers you all common electronics variants. Apart from the classic analog electronics (output 4...20mA), as the most basic variant, digital electronics variants are also available:

- FOUNDATION™ fieldbus offers easy testing of instruments, important additional information and diagnostic functionalities according to NAMUR NE107 as well as smooth system integration which increases the availability and safety of your plant.
- HART® electronics (output 4...20mA with superimposed HART® protocol) for additional functionalities and diagnostic functions.
- PROFIBUS® PA electronics for the complete integration into digital industrial bus systems. Simplified instrument identification, brief uploading and downloading times during commissioning, diagnostic functionalities according to NAMUR NE107 and the smooth integration help to reduce costs and downtimes to a minimum.

All digital electronics may be smoothly integrated into your control systems and can be configured via a PC and the universal FieldCare operating program as well as via all common PAM systems.

Integration of Endress+Hauser field devices into automation architectures



The integration capability of the instruments is tested at the Endress+Hauser system laboratory thus ensuring their system independence. Endress+Hauser also offers training opportunities directed especially to the integration of instruments into respective control systems.

Operating cost savings due to instrument diagnosis

Plant asset management is one of the most important trends in process industry. Thanks to digital communication protocols, all current Endress+Hauser instruments support the diagnostic categories according to NAMUR NE107. The pertaining classification of failures into four categories ensures that the right information is transmitted to the right persons at the right time. This avoids operating failures, improves the maintenance cycle and finally reduces costs.

Diagnostic categories

Symbol	Status Text	Explanation
	Failure	The output signal is invalid due to a functional failure in the field instrument or its periphery.
	Function control	Work is performed on the field instrument, the output signal is thus temporarily invalid (e.g. frozen).
	Maintenance requirement	The output signal is still valid but the wear and tear reserve will be depleted soon or a function will be limited shortly due to the conditions of use, e.g. ageing of the pH electrode.
	Non-conformance to specification	Deviations from the permitted ambient or process conditions determined by the instrument through self-monitoring or failures in the instrument itself show that the uncertainty of measurement in sensors or set point deviation in actuators probably exceeds what is expected under operational conditions.

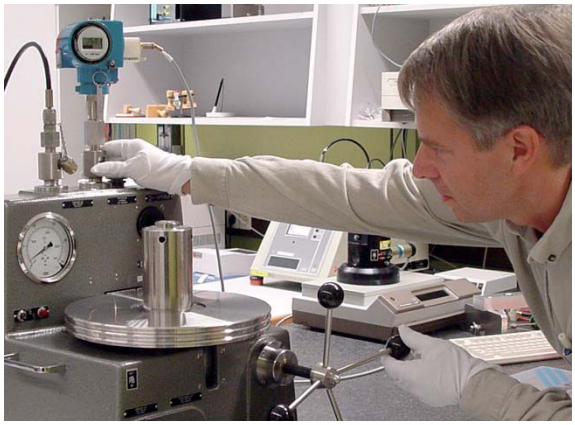
The correct use of diagnostic information can save operating costs in specific applications. Endress+Hauser pressure instrumentation has been equipped with numerous items of such information which may be very easily managed via a plant asset management system.

- The analysis of a number of incorrect pressure surges in a process permits conclusions of a shortened useful life of the instrument or a problem in the process.
- A user-specific pressure and temperature range (operating window) can be determined. If the same is underrun or surpassed, a diagnostic message can be issued.

Numerous further possibilities are available in the pressure instrumentation operating instructions.

We deliver excellence

Constant high-quality performance can only be achieved where enthusiastic and committed people pool their ideas.
For our clients and users, Endress+Hauser instruments should not just be distinguished due to technological innovation but also through the presence of people who stand behind this progress and quality, be it in service, sales, development or in production.



Calibration

Calibration laboratory

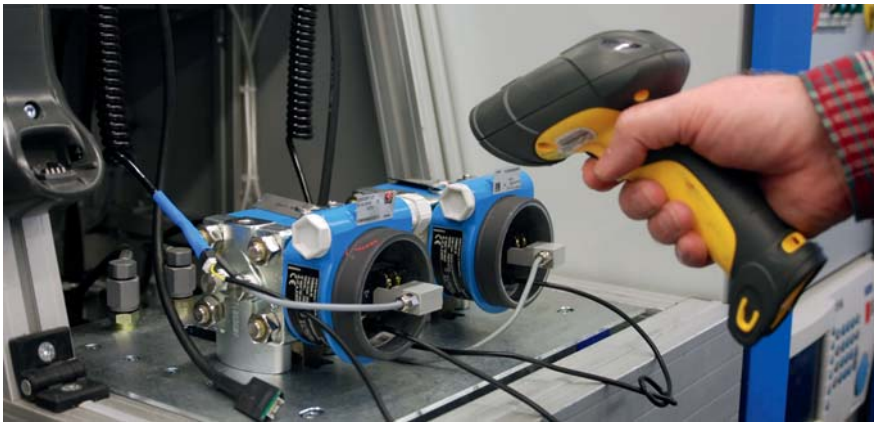
Measuring correctly is the 'metrological basis' for any manufacturer of measuring instrumentation. Those wanting to produce to ISO 9000 standards must be able to rely on dependable calibration equipment for all measuring devices. Endress+Hauser's own calibration since 1994.
It is responsible for managing the company's test equipment and looks after some thousand measuring units in use in production, development and service. Devices are calibrated for Endress+Hauser's own use, for clients and for third-party customers.
This guarantees that measurements on products can be safely traced back to 'national calibration standards'.

The Endress+Hauser calibration laboratory is accredited as a DAkkS (national accreditation body for the Federal Republic of Germany) lab (D-K-15172-01-00) for the measured variables vacuum and pressure. Pressure ranges from 1µbar (1.45 x 10-5psi) absolute pressure to 500bar (7,252psi) and from -1bar (-14.5psi) gauge pressure to 500bar (7,252psi). The smallest uncertainty of measurement which may be passed on is 0.003%.

Fully automated DKD/DAkkS calibration in the production process

Since November 2004 we have also successfully integrated automated calibration in the running production process.
Our modern production line for the entire S- and M-class pressure instruments is a global innovation in the production of complex measurement technology. For the first time we offer fully automated DKD/DAkkS calibration of pressure instruments in the running production process.

Customers have the possibility of selecting DKD/DAkkS calibration directly via the order code when ordering their pressure device. The requirement is recognized automatically during production. This means fully automatic control of the entire test procedure – right up to printing of test certificates and labels in the packaging unit.



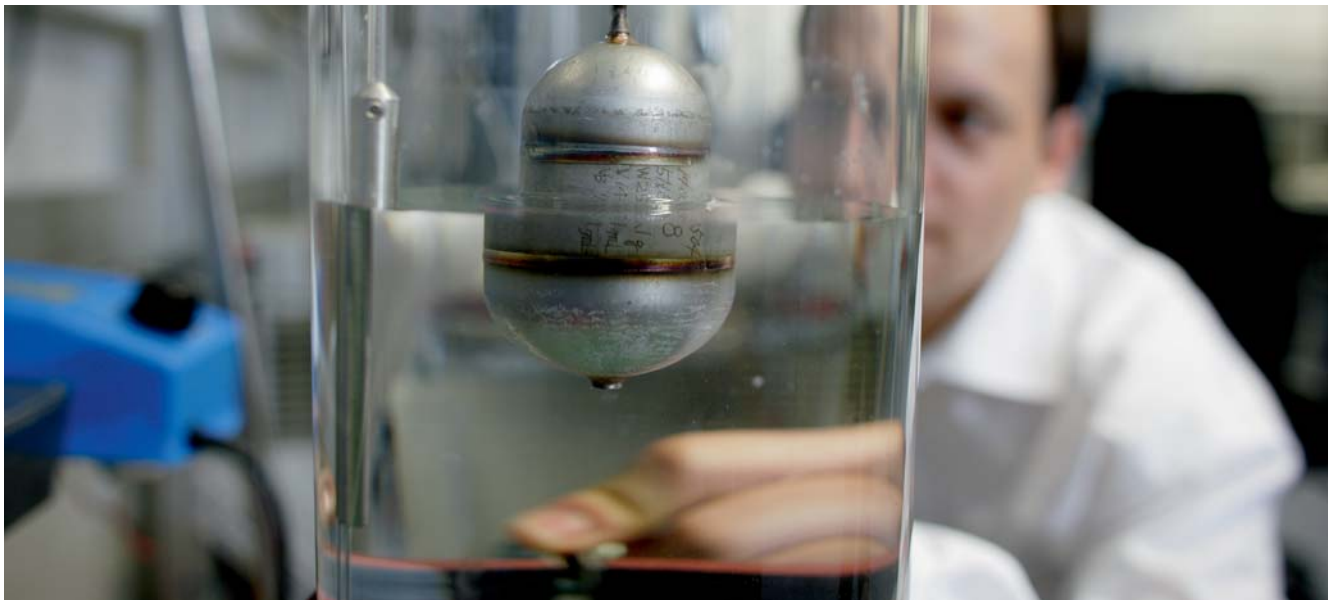
There are some things you can never get enough of – for example, safety

Test Center

The Endress+Hauser Test Center (inter-nationally accredited test centre: DATECH, FM, CSA) has three laboratories for device safety, application technology and electromagnetic compatibility. The various test units make it possible to ensure and improve the reliability and quality of Endress+Hauser devices under realistic test conditions. In addition, the devices for new applications can be tested in advance in parallel with development.

In the various 'durability tests', they are exposed to extreme conditions as can be expected in real applications. These include dust tests (explosion protection), abrasion and friction tests, climate tests (heat and cold), mechanical load tests and spray water leak tests. In addition to a fully automated tank test plant with a capacity of 6,000 liter, used to simulate the most difficult applications, the Endress+Hauser Test Center also has an accredited EMC laboratory.

Apart from carrying out tests on Endress+Hauser devices in parallel with development, the Test Center also trains service staff and even customers. Customer specific application problems are analyzed, tests to simulate new applications are run and device approvals are carried out.



Applicator

Selection and Sizing Tool for your Planning Processes

Time is money
The challenges in instrumentation engineering of a plant are numerous: Planners must obtain an overview of the whole project right from the start, they have to combine application and instrumentation to arrive at safe decisions. This is equally true for product selection, calculation and the administration of different projects. Calculations are complex and the variety of products cannot be mastered. Safe calculations and sizing of measuring points become time-consuming cost generators.

Applicator provides planning reliability, fast and flexibly
The Applicator software of Endress+Hauser is a convenient selection and sizing tool for planning processes. Using the entered application parameters, e.g. from measuring point specifications, Applicator determines a selection of suitable products and solutions. Supplemented by sizing functions and a module for project administration Applicator will alleviate your daily engineering work.
Applicator has been steadily developed for many years and proves its worth every day a thousand times in the most varied applications of customers.

Take the easy way
Just work with this clear Applicator desktop and straightforward module structure. Selection, calculation or administration, regardless of where you intend to enter a project, Applicator provides an open door for you to start anywhere.
And if you want to proceed from one module to another one, this is accomplished by a mere click and there is nothing to prevent a smooth exchange of data.

Advantages at a glance

- Planning reliability
- Timesaving
- Safe project data
- Flexibility in work processes

The fast way to your Applicator
Applicator of Endress+Hauser may be used free of charge both via the Internet and in form of a CD. You can order the CD version quite conveniently online

www.products.endress.com/applicator

Worldwide service close to you

Wherever you are situated, your local Endress+Hauser organization or regional customer support office will provide the exact performance you need, be it commissioning, repairs, on-site support, training or maintenance and calibration services.

As one of the largest networks of service experts in process automation, it is our desire to help you discover new opportunities and potentials for maximum benefit and minimum operating risk. We see ourselves as your fair partner in this task, providing the right advice and recommendations to ensure constant reduction of costs and risks.

Endress+Hauser Service:
Global, competent, reliable

At a glance

- Commissioning and installation
- Project management
- Preventive maintenance
- Maintenance contracts
- Spare part service
- Repair service
- Training
- Helpdesk
- Online documentation
- Calibration services

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Endress+Hauser

People for Process Automation