

FOR FINE PRESSURE AND FLOW MEASUREMENT

PRODUCT OVERVIEW

PRESSURE TRANSMITTERS

PRESSURE LEVEL TRANSMITTERS

PRESSURE SWITCHES

FLOW SENSORS

DIGITAL INDICATING DEVICES

www.hubacontrol.com

PRODUCT OVERVIEW

TYPE	PRESSURE RANGE	PAGE	PRESSURE	MEDIUM
			Relative Absolute Differential	Air and neutral gases Flammable gases Liquides Refrigerants
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Huba Control AG develops, manufactures and markets components designed exclusively for the measurement of pressure and flow from 1 mbar ... 1000 bar and 0.5 ... 240 l/min. View the latest data sheets, operating instructions and certificates at **www.hubacontrol.com.**

PRODUCTION COMPETENCE

Huba Control production department is designed for the assembly, setting and adjustment of pressure switches and pressure transmitters. The individual stages of the process are carried out with varying degrees of rationalisation. A key strength is our expertise in complex automated production processes, including automatic adjustment.

OUALITY - SECURITY - ENVIRONMENT

We achieve the requirements for the conversion of our strategy, company policy and targets with our integrated process orientated management system complying to the legal obligations in force an further demands. With well managed processes and our skilled employees we master the quality, environment and security demands.

The philosophy of our employees is:

«I steadily improve and aspire to make no mistakes.»



QUALITY, SECURITY & ENVIRONMENT

CANTILEVERED CERAMIC BEAM TECHNOLOGY FROM HUBA CONTROL

The excellent synergy of our unique diaphragm in combination with our ceramic cantilever beam sensors allow us to produce transmitters with long term stability for very fine measurement in the Pascal range. This technology has been proven on millions of sensors in many different applications.



CERTIFICATIONS

ISO 9001 Certification ISO/TS 16949 Certification ISO/IEC 17025 Accredidation ISO 14001 Certification OHSAS 18001 Certification



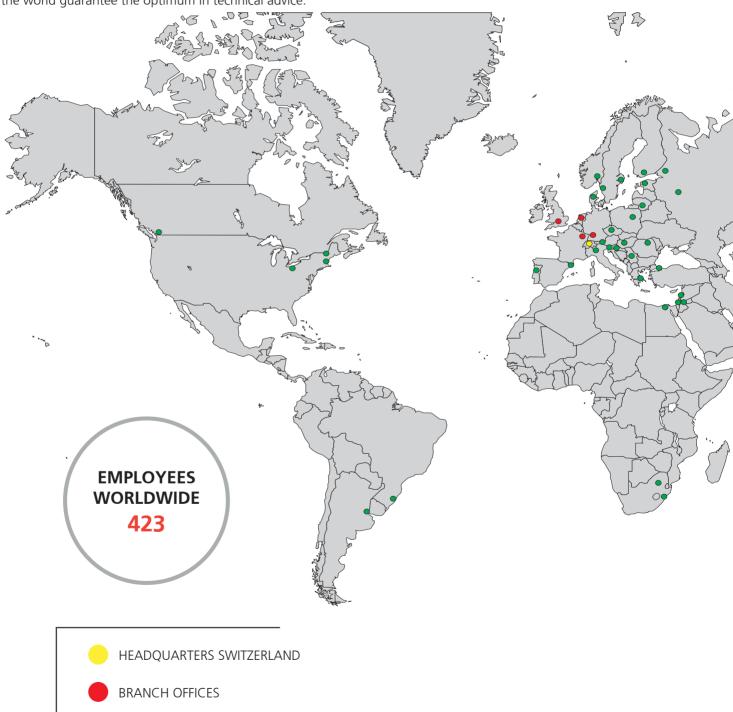
PRESSURE MEASURING CELL TECHNO LOGY FROM HUBA CONTROL

The in-house development and production of pressure measuring cells in combination with the excellent electronic design allows the production of innovative pressure transmitters. Huba Control draws on over 20 years experience in the use of ceramic technology.

The products are proven millionfold in various applications.

MARKET PERFORMANCE

With its clear focus on pressure measurement technology Huba Control is able to develop innovative products across a very broad spectrum, covering an extensive range of applications for the optimisation of machine, system and plant processes. Sales engineers at the headquarters in Switzerland, in our own branch offices in Germany, France, United Kingdom and Netherlands as well as representatives all over the world guarantee the optimum in technical advice.



DISTRIBUTORS





The target market for Huba pressure and flow measurement technology is divided into several sectors based upon application as special pressure sensors for Industrial automation (INDUSTRY) or components for gas boilers (GAS), heating, ventilation and air conditioning (HVAC) and automotive industry.

Huba Control is the market leader in the GAS BOILER and HVAC sectors. 97% of our products are exported. Over 50 specialist agents and own sales engineers in Germany, France, United Kingdom and Netherlands, allow us to expand our market presence continually.

Huba's production department is designed for the assembly, balancing and adjustment of pressure switches and pressure transmitters. The individual stages of the process are carried out with varying degrees of rationalisation (fully, semi and partially automated manufacture) depending on the quantities involved. A key strength is our mastery of complex automated routines, including automatic calibration, manufacture of one-off products and large-scale production runs, and the maintenance of short throughput times.



SINCE 1945 YOUR QUALIFIED PARTNER

1945	Huba Control AG founded by J. Huber & Cie. AG in Baden
1974	Company name in Huba Control AG
1990	Concentration on pressure measurement technology
1995	ISO 9001 Certification
2005	Automotive standard ISO/TS 16949 Accreditation Accredidation acc. ISO/IEC 17025
2006	Factory Extension Completed
2008	Automotive standard ISO/TS 16949 certification
2010	Certification acc. ISO 14001
2012	Certification acc. OHSAS 18001 (Managment of employment protection)
2016	Expansion of production area

Type 400 pressure transmitter, with its proven ceramic lever technology, has adjusted temperature compensated sensor signals and is available with a voltage output. The voltage output (VDC) is an amplified, linear signal suitable for direct processing in electronic control systems. The sensors are ideal for continuous level measurement in washing machines, dishwashers etc.

OEM PRESSURE TRANSMITTER TYPE 501

Type 501 pressure transmitters, with automated production processes, are suitable for larger quantity industrial OEM applications. Various pressure and electrical connections, together with several standardised output signals, provide suitability for a wide variety of applications.

OEM PRESSURE TRANSMITTER TYPE 503

Type 503 pressure transmitters, with their excellent price / performance ratio, are specially designed for industrial OEM applications. Partially automated production techniques allow us to produce high quantities, yet retaining the flexibility to offer different versions.







MEDIUM

Liquids and neutral gases

PRESSURE RANGE

0 ... 10 - 100 mbar

OUTPUT

ratiom. 10 ... 70%

ACCURACY

< 0.3% fs

ELECTRICAL CONNECTION

Connector RAST 2.5

PRESSURE CONNECTION

Hose connector Ø 6.2 mm

MEDIUM

Liquids and gases

PRESSURE RANGE

-1 ... 0 - 60 bar

OUTPUT

ratiom. 10% ... 90%, 0 ... 5 V, 1 ... 6 V, 0 ... 10 V, 4 ... 20 mA

ACCURACY

< 0.5% fs

ELECTRICAL CONNECTION

Cable 1.5 m, connector DIN EN 175301-803-A or C, M12x1

PRESSURE CONNECTION

Inside thread or outside thread

MEDIUM

Liquids and gases

PRESSURE RANGE

0 ... 2.5 – 25 bar

OUTPUT

ratiom. 10 ... 90%, 0 ... 5 V, 0 ... 10 V, 4 ... 20 mA

ACCURACY

< 1.0% fs

ELECTRICAL CONNECTION

Cable 1.5 m, connector DIN EN 175301-803-A, connector RAST 2.5

PRESSURE CONNECTION

Outside thread or plug connector

- + Robust construction, sensor element has no contact with media
- Special design developed for large scale manufacture at an attractive price
- + Fully automated manufacture, including in-line adjustment of zero point and full scale value
- + Compact construction
- Automated manufacture in large quantities for ideal price / performance ratio
- + Robust ceramic sensor technology
- + High resistance to extreme temperatures
- + Partial automatic production, giving ideal price / performance ratio
- + Ideal for use as a control element, as a result of a small hysteresis
- Incorporates all the benefits of ceramics technology for industrial applications

Type 505 pressure transmitters are particularly suitable for measuring water pressure rates in heating and industrial circular flow. Due to partially automated manfacturing we are able to handle customer orders in high quantities.

OEM PRESSURE TRANSMITTER TYPE 506

Type 506 pressure transmitters are suitable for different applications in the field of industrial refrigeration due to it's application specific pressure connections. Automated manufacturing allows the efficient production of large quantities, resulting in an excellent price / performance ratio.

OEM PRESSURE TRANSMITTER TYPE 511

Type 511 pressure transmitters meet the highest specifications for longevity, accuracy, temperature stability and EMC characteristics, making them suitable for an extremely wide range of demanding industrial applications.







MEDIUM

Liquids and gases

PRESSURE RANGE

0 ... 4 – 16 bar

OUTPUT

ratiom. 10 ... 70%, ratiom. 10 ... 50%, 0.5 ... 3.5 V

ACCURACY

< 1.0% fs

ELECTRICAL CONNECTION

Connector RAST 2.5

PRESSURE CONNECTION

Outside thread or plug connector

MEDIUM

Refrigerants

PRESSURE RANGE

-1 ... 7 – 60 bar

OUTPUT

ratiom. 10 ... 90%, 0 ... 5 V, 1 ...6 V 0 ... 10 V, 4 ... 20 mA

ACCURACY

< 0.5% fs

ELECTRICAL CONNECTION

Connector DIN EN 175301-803-A or C, Cable 1.5 m, M12x1

PRESSURE CONNECTION

Inside thread or outside thread

MEDIUM

Liquids and gases

PRESSURE RANGE

-1 ... 0 – 600 bar

OUTPUT

0 ... 5 V, 1 ... 6 V, 0 ... 10 V, 4 ... 20 mA

ACCURACY

< 0.5% fs

ELECTRICAL CONNECTION

Cable 1.5 m, swift connector, AMP JPT, M12x1, connector DIN EN 175301-803-C

PRESSURE CONNECTION

Inside thread or outside thread

- + Best price / performance ratio through: electronic integrated in measuring element, optimised mounting concept and automatic production
- + Ideal for use as a control element, as a result of a small hysteresis
- + Compact construction
- + Automated manufacture in large quantities for ideal price / performance ratio
- + Robust ceramic sensor technology
- + High resistance to extreme temperatures
- + Compact and rugged construction for highest operational reliability
- No media egress when exceeding rupture pressure
- + Negligible temperature influence on accuracy
- + Excellent EMC capacity
- + Saving the costumer time with the swift connector cable mounting system

The pressure transmitter type 512 with cable connection meets the highest demands of industrial and mobil hydraulic applications. This sensor is available with protection standard IP 69K. The standard pressure orifice prevents damage due to pressure peaks. The compact and rugged design meets the requirement of shock- and vibration stability according Kfz-norm ISO 16750. The pressure transmitter type 512 guarantees highest EMC stability according to various road vehicle regulations with test level up to 100V/m.

OEM PRESSURE TRANSMITTER TYPE 515

Type 515 pressure transmitter with cable connection meets the highest demands for industry and vehicle manufacturing applications. The compact and robust mechanical design incorporating IP69K protection allows for use in the most stringent of conditions.

PRESSURE TRANSMITTER TYPE 519

The pressure transmitter type 519 has a compact and robust design and a very high measurement accuracy. The flush diaphragm offers the use in the process technique of pasty media. Beside various pressure- and electrical connectors there are pressure ranges from 400 mbar to 60 bar full scale available. This sensor utilises a ceramic technology, developed by Huba Control and for the last 20 years, in millions of applications.







MEDIUM

Liquids and gases

PRESSURE RANGE

0 ... 40 – 1000 bar

OUTPUT

ratiom. 10 ... 90%, 0 ... 5 V, 1 ... 6 V, 0 ... 10 V, 4 ... 20 mA

ACCURACY

< 0.5% fs

ELECTRICAL CONNECTION

Cable PUR 1.5 m

PRESSURE CONNECTION

Outside thread

MEDIUM

Liquids and gases

PRESSURE RANGE

-1 ... 0 – 600 bar

OUTPUT

ratiom. 10 ... 90%, 0 ... 5 V, 1 ... 6 V, 0 ... 10 V, 4 ... 20 mA

ACCURACY

< 0.5% fs

ELECTRICAL CONNECTION

Cable 1.5 m

PRESSURE CONNECTION

Inside thread or outside thread

MEDIUM

Liquids and gases

PRESSURE RANGE

0 ... 0.4 – 60 bar

OUTPUT

ratiom. 10 ... 90%, 0 ... 5 V, 1 ... 6 V, 0 ... 10 V, 4 ... 20 mA

ACCURACY

 \pm 0.3.% fs

ELECTRICAL CONNECTION

Connector DIN EN 175301-803-A or C, connector M12x1

PRESSURE CONNECTION

Outside thread

- + Compact and rugged construction for highest operational reliability
- + Welded construction no elastomer
- + Negligible temperature influence on accuracy
- + Excellent EMC capacity
- + Rugged PUR cable with IP 69K

- + Compact and rugged construction for highest operational reliability
- + Negligible temperature influence on accuracy
- + Excellent EMC capacity
- + IP 69K

- + Flush diaphragm
- + Very high measurement accuray
- + Excellent thermal characteristic
- + There are low pressure ranges from 400 mbar full scale available
- Compact and rugged construction
- Available with temperature measurement

The compact Type 520 pressure transmitter is based upon the Huba Control developed thick film technology where the pressure measuring cell is fully welded. This transmitter meets the high burst protection demands and is suitable for the use in all types of refrigerants including ammonia.

PRESSURE TRANSMITTER TYPE 522

The compact Type 522 pressure transmitter for shipbuilding is based upon the Huba Control developed thick film technology where the pressure measuring cell is fully welded. Applications requiring high burst pressure can be met with the Type 522 which is also certificated to meet the leading shipbuilding requirements.

PRESSURE TRANSMITTER TYPE 525

The pressure transmitter type 525 has a compact and robust design and a very high measurement accuracy.

The pressure transmitter with it's large variety of pressure- and electrical connection has also pressure ranges from 50 mbar full scale. The compact 525 pressure transmitter is based upon the well proven ceramic technology developed by Huba Control over 20 years ago.







MEDIUM

Liquids, gases and refrigerants

PRESSURE RANGE

-1 ... 9 bar / 0 ... 2.5 - 1000 bar

OUTPUT

0 ... 5 V, 1 ... 6 V, 0 ... 10 V, ratiom. 10 ... 90% , 4 ... 20 mA

ACCURACY

typ. < 0.3% fs

ELECTRICAL CONNECTION

Swift connector, metri pack serie 150, connector DIN 175301-803-A or C, M12x1, braids, connector RAST 2.5

PRESSURE CONNECTION

Inside thread or outside thread

MEDIUM

Liquids, gases and refrigerants

PRESSURE RANGE

0 ... 2.5 – 600 bar

OUTPUT

0 ... 10 V, 4 ... 20 mA 🖾

ACCURACY

typ. < 0.3% fs

ELECTRICAL CONNECTION

Connector DIN 175301-803-A, M12x1, swift connector

PRESSURE CONNECTION

Inside thread or outside thread

MEDIUM

Liquids and gases

PRESSURE RANGE

0 ... 0.05 – 0.6 bar

OUTPUT

0 ... 5 V, 0 ... 10 V, 4 ... 20 mA, ratiom. 10 ... 90%

ACCURACY

 $\pm 0.35\%$ fs

ELECTRICAL CONNECTION

Connector DIN 175301-803-A or C, M12x1, swift connector

PRESSURE CONNECTION

Inside thread or outside thread

- + Compact and rugged construction
- + Welded construction no elastomer
- + Saving time by quick cable mounting by the customer with swift connector
- + Wide choice of connections available
- Compact and rugged construction
- + Welded construction no elastomer seals
- + Certified for shipbuilding with: Germanischer Lloyd I American Bureau of Shipping I Bureau Veritas I Det Norske Veritas I Lloyd's Register
- + Very high measurement accuray
- + Excellent thermal characteristic
- + Compact and rugged construction
- + Large selection of electrical and pressure connections available
- + Pressure ranges from 50 mbar full scale available

The compact type 526 pressure transmitter is based upon the well proven ceramic technology developed by Huba Control over 20 years ago. The pressure transmitter with it's large variety of pressure- and electrical connection has also pressure ranges from 100 mbar full scale. These units are available in high quantities for OEM customers with an excellent price to performance ratio.

PRESSURE TRANSMITTER TYPE 527

The compact Type 527 pressure transmitter is based upon the well proven ceramic technology developed by Huba Control over 20 years ago. These transmitters are suitable for applications across a broad spectrum of industries and shipbuilding.

PRESSURE TRANSMITTER TYPE 528

The compact Type 528 pressure transmitter is based upon the well proven ceramic technology developed by Huba Control over 20 years ago. These transmitters are suitable for applications across a broad spectrum of industries.







MEDIUM

Liquids and gases

PRESSURE RANGE

0 ... 0.1 - 0.6 bar

OUTPUT

ratiom. 10 ... 90%

ACCURACY

 $\pm (1.8 \text{ mbar} + 0.2\% \text{ fs})$

ELECTRICAL CONNECTION

Connector DIN 175301-803-A or C, M12x1

PRESSURE CONNECTION

Inside thread or outside thread

MEDIUM

Liquids and gases

PRESSURE RANGE

0 ... 1 – 60 bar

OUTPUT

0 ... 10 V, 4 ... 20 mA 😉

ACCURACY

typ. < 0.3% fs

ELECTRICAL CONNECTION

Connector DIN 175301-803-A, M12x1, swift connector

PRESSURE CONNECTION

Inside thread or outside thread

MEDIUM

Liquids and gases

PRESSURE RANGE

-1 ... 0 – 60 bar

OUTPUT

0 ... 5 V, 1 ... 6 V, 0 ... 10 V, ratiom. 10 ... 90% 6 , 4 ... 20 mA 6

ACCURACY

typ. < 0.3% fs

ELECTRICAL CONNECTION

Swift connector, metri pack serie 150, connector DIN 175301-803-A or C, M12x1, braids, connector RAST 2.5

PRESSURE CONNECTION

Inside thread or Outside thread

- + Compact and rugged construction
- + Ideal price / performance ratio
- + Pressure ranges from 100 mbar full scale available
- + Large selection of electrical and pressure connections available
- Compact and rugged construction
- + Negligible temperature influence on accuracy
- Certified for shipbuilding with:
 Germanischer Lloyd | American Bureau of Shipping | Bureau Veritas
 Det Norske Veritas | Lloyd's Register
- + Compact and rugged construction
- + Negligible temperature influence on accuracy
- + Saving the customer time with the swift connector cable mounting system
- + Wide choice of connections available

The µP-regulated, programmable pressure transmitter Type 540 has a robust industry design. The parameters are easily adjustable with two function keys in the configuration menu which enable up to two switching points to be set. All systems are equipped with a diagnostic function. The large 4 digit LED display assures a good accuracy of reading. The pressure transmitter Type 540 is based upon the Huba Control developed thick film technology where the pressure measuring cell is fully welded.

PRESSURE TRANSMITTER TYPE 548

The µP-regulated, programmable pressure transmitter Type 548 has a robust industry design. The parameters are easily adjustable with two function keys in the configuration menu which enable up to two switching points to be set. All systems are equipped with a diagnostic function. The large 4 digit LED display assures a good accuracy of reading. The pressure transmitter Type 548 is based upon the well proven ceramic technology developed by Huba Control over 20 years ago.

PRESSURE TRANSMITTER TYPE 550

The pressure transmitter type 550 meets the highest requirements for mobile hydraulic applications. This sensor is available with protection standard IP 67 or IP 69K. The standard pressure orifice prevents damage due to pressure peaks. The compact and rugged design meets the requirement of shock- and vibration stability according road vehicle standards ISO 16750. The pressure transmitter type 550 guarantees highest EMC stability according to various road vehicle regulations with test level up to 100V/m.







MEDIUM

Liquids and gases

PRESSURE RANGE

0 ... 60 – 600 bar

OUTPUT

0 ... 10 V, 4 ... 20 mA

ACCURACY

< 1.0% fs

ELECTRICAL CONNECTION

M12x1

PRESSURE CONNECTION

Inside thread or outside thread

MEDIUM

Liquids and gases

PRESSURE RANGE

-1 ... 0 – 40 bar

OUTPUT

0 ... 10 V, 4 ... 20 mA

ACCURACY

< 1.0% fs

ELECTRICAL CONNECTION

M12x1

PRESSURE CONNECTION

Inside thread or outside thread

MEDIUM

Liquids and gases

PRESSURE RANGE

0 ... 40 – 600 bar

OUTPUT

0 ... 5 V, 0 ... 10 V, 4 ... 20 mA ratiom. 10 ... 90%

ACCURACY

< 0.5% fs

ELECTRICAL CONNECTION

Kostal SLK 2.8, AMP-JPT, AMP Superseal 1.5, Deutsch DT04-3P, metri pack serie 150, M12x1

PRESSURE CONNECTION

Outside thread

- + Compact and rugged construction
- + High over pressure
- + Clearly readable display
- + Diagnostic function
- + Up to 2 programmable switching outputs
- + Compact and rugged construction
- + High over pressure
- + Clearly readable display
- + Diagnostic function
- + Up to 2 programmable switching outputs
- + Compact and rugged construction for high operating reliability
- + Welded construction no elastomer seals
- + Negligible temperature influence on accuracy
- + Excellent EMC capacity
- + Wide choice of connections available

The pressure transmitter type 558 meets the highest requirements for the industry and vehicle manufacturing. This sensor is available with protection standard IP67 or IP69K. The optional pressure orifice prevents damage due to pressure peaks. The compact and rugged design meets the requirement of shock- and vibration stability according road vehicle standards ISO 16750. The pressure transmitter type 558 guarantees highest EMC stability according to various road vehicle regulations with test level up to 100V/m.

PRESSURE TRANSMITTER TYPE 680

The pressure transmitters of Type 680 with piezoresistive measuring elements have compensated, calibrated and amplified sensor signals which are available as standard voltage or current outputs. The transmitter housing is available with various pressure and electrical connections. Manufactured from stainless steel, its welded construction provides a watertight seal. With its sophisticated building block system, individual designs to meet specific applications are possible.

OEM DIFFERENTIAL PRESSURE TRANSMITTER TYPE 401

Type 401 pressure transmitters sense ultra fine changes in air pressure and are designed to provide optimum control. The dual component diaphragm with it's unique geometry, gives highly sensitive operation and excellent repeatability, even in the range below 20 Pascal.







MEDIUM

Liquids and gases

PRESSURE RANGE

0 ... 6 – 60 bar

OUTPUT

0 ... 5 V, 0 ... 10 V, 4 ... 20 mA ratiom. 10 ... 90%

ACCURACY

< 0.5% fs

ELECTRICAL CONNECTION

Kostal SLK 2.8, AMP-JPT, AMP Superseal 1.5, Deutsch DT04-3P, metri pack serie 150, M12x1

PRESSURE CONNECTION

Outside thread

MEDIUM

Liquids and gases

PRESSURE RANGE

0 ... 0.1 - 1000 bar

OUTPUT

0... 5 V, 0 ... 10 V, 4 ... 20 mA 🖾

ACCURACY

< 0.25% fs (< 0.05% fs on request)

ELECTRICAL CONNECTION

Cable in several lengths, Lumberg RSF4 or RSF50, connector DIN EN 175301-803-A, Binder 723

PRESSURE CONNECTION

Inside thread or outside thread

MEDIUM

Air and neutral gases

PRESSURE RANGE

0 ... 3 – 8 mbar

OUTPUT

0.5 ... 4.5 V

ACCURACY

< 0.3% fs

ELECTRICAL CONNECTION

Connector RAST 2.5

PRESSURE CONNECTION

Hose connector Ø 6.2 mm

- + Compact and rugged construction for high operating reliability
- + Negligible temperature influence on accuracy
- + Excellent EMC capacity
- + Wide choice of connections available
- + Effective overload protection due to chemically eteched chip diaphragm and specially designed glass gland
- + Compact construction with SMD technology enhances operational reliability in the presence of shock and vibration
- Welded construction provides 100% sealing against media
- + Special development for optimize of combustion mixture in gas boilers
- + With the special diaphragm geometry inherently stable due to homogeneous manufacture
- + Ideal dimensioning for high sensitivity and with long term stability
- Excellent repeatability even in the lower pressure range (< 20 Pascal)

DIFFERENTIAL PRESSURE TRANSMITTER TYPE 402

Type 402 pressure transmitters are ideally suited to measuring fine air flow in air conditioning systems, and fine pressures in the environmental / medical technology sectors. Individually ranged sensors ensure optimum accuracy and long term stability of measurement. Location is quick and easy, either via a mounting plate or directly onto a PCB.

OEM DIFFERENTIAL PRESSURE TRANSMITTER TYPE 403

Type 403 pressure transmitters sense ultra-fine changes in gas pressure for use in air / gas ratio control systems. All materials used are compatible with flammable gas. When used in combination with our Type 401 pressure transmitter, the optimum air / gas ratio can be achieved.

DIFFERENTIAL PRESSURE TRANSMITTER TYPE 652

Type 652 pressure transmitters are ideally suited to the continuous monitoring of liquid and gas flow (or level) in heating, ventilation and process technology. Their especially rugged construction allows a single port over-pressure of up to 20 bar, depending upon pressure range.







MEDIUM

Air and neutral gases

PRESSURE RANGE

0 ... 3 – 50 mbar

OUTPUT

0.5 ... 4.5 V

ACCURACY

< 0.6% fs

ELECTRICAL CONNECTION

Connector RAST 2.5, pins for PCB mounting

PRESSURE CONNECTION

Hose connector Ø 6.2 mm

MEDIUM

Flammable gas

PRESSURE RANGE

0 ... 3 – 8 mbar

OUTPUT

0.5 ... 4.5 V

ACCURACY

< 0.5% fs

ELECTRICAL CONNECTION

Connector RAST 2.5

PRESSURE CONNECTION

Hose connector Ø 6.2 mm

MEDIUM

Liquids and gases

PRESSURE RANGE

0 ... 50 – 1000 mbar

OUTPUT

0 ... 10 V, 0 ... 20 mA, 4 ... 20 mA

ACCURACY

< 1.5% fs

ELECTRICAL CONNECTION

Screw terminals

PRESSURE CONNECTION

Inside thread

- + Attractive price / performance ratio
- + Excellent synergy of diaphragm technology and ceramic elements
- Special adapter for top-hat rail mounting
- + Direct pcb mounting with simple snap-on system
- + Special development for optimize of combustion mixture in gas boilers
- + With the special diaphragm geometry inherently stable due to homogeneous manufacture
- + Ideal dimensioning for high sensitivity and with long term stability
- + Excellent repeatability even in the lower pressure range (< 20 Pascal)
- + High overpressure safety margin 10/20 bar on P1
- 3 standardised output signals for direct Processing in control / monitoring systems
- + Functionally simple, rugged mechanics with high operating reliability
- + Attractive price / performance ratio

VOLUME FLOW TRANSMITTER TYPE 679

The volume flow transmitter type 679 have Bi-direction pressure ranges. Variable measurement of pressure, flow or velocity of flow is available. Special sensors developed for each pressure range guarantee a physically precise and long term stable measurement.

The diversity of versions ensure the use in many various applications in HVAC or for fine measurement in the industry or medical sector.

DIFFERENTIAL PRESSURE TRANSMITTER TYPE 692

Type 692 pressure transmitters have a unique, well proven ceramic technolgy. There are variety of pressure and electrical connections available, together with several standardised output signals. The wide variety of options makes these transmitters ideal for applications across a broad spectrum of industries.

DIFFERENTIAL PRESSURE TRANSMITTER TYPE 698

The pressure modules Type 698 are suitable for monitoring pressure and flow in air conditioning systems and in the laboratory sector. The module is optionally available with a 3 digit LED display, two limit value switches (potential free) as well as a square root extraction.







MEDIUM

Air and neutral gases

PRESSURE RANGE

-1 ... 1 mbar / 0 ... 0.3 – 50 mbar

OUTPUT

0 ... 10 V, 0 ... 20 mA, 4 ... 20 mA

ACCURACY

< 0.5% fs

ELECTRICAL CONNECTION

Screw terminals

PRESSURE CONNECTION

Hose connector Ø 6.2 mm

MEDIUM

Liquids and gases

PRESSURE RANGE

0 ... 0.1 – 25 bar

OUTPUT

0 ... 5 V, 0 ... 10 V, 4 ... 20 mA

ACCURACY

< 0.5% fs

ELECTRICAL CONNECTION

Cable 1.5 m, Connector DIN EN 175301-803-A, Connector DIN EN 60130-9

PRESSURE CONNECTION

Hose connection or screw fitting, outside thread, adapter inside- and outside thread

MEDIUM

Air and neutral gases

PRESSURE RANGE

-5 ... 5 mbar / 0 ... 10000 mbar

OUTPUT

0 ... 10 V, 0 ... 20 mA, 4 ... 20 mA

ACCURACY

< 1.0% fs

ELECTRICAL CONNECTION

Screw terminals

PRESSURE CONNECTION

Hose connector conical 4 ... 7 mm or quick fitting

- + Switchable output signals
- Switchable response curve (linear or root-extracted)
- + Resettable Zero Point (Reset button)
- + Full scale adjustable
- + Applications with Bi-directional pressure ranges possible
- + Very low temperature sensitivity
- + High resistance to extreme temperatures
- + No mechanical creepage
- + Modular system and choice of mate rials to suit individual applications
- + Rugged measured value detector, owing to outstanding synergy obtained by combining diaphragm technology with a cermaic element
- + High overpressure safety margin, even in the lowest pressure range
- + Easy to install and commission
- + No maintenance required

DIFFERENTIAL PRESSURE TRANSMITTER TYPE 699

The Type 699 transmitters are available in switchable pressure ranges and with or without digital device. The full-version includes customer specific adjustment possibilities. Especially developed sensors for each pressure range ensure accurate long term stable measurement and the large variety of options provide the perfect platform for use in air conditioning technology as well as for fine measurement in the industrial and medical environment

PRESSURE LEVEL TRANSMITTER TYPE 711

The level sensing pressure transmitters of type 711 with a relative pressure measuring cell have an adjusted and amplified sensor signal. Cable length from 3 to 300 meters as well as ex-versions and versions with drinking water approval are available.

PRESSURE LEVEL TRANSMITTER TYPE 712

The level sensing pressure transmitter Type 712 is manufactured using a relative or absolute pressure measuring cell with an adjusted and amplified sensor signal and is available with various cable lengths from 2 to 30 meters. The Type 712 offers Ex protection as well as versions with integrated temperature measurement. In addition to voltage and current outputs the Type 712 is available with ratiometric outputs.







MEDIUM

Air and neutral gases

PRESSURE RANGE

-1 ... 1 mbar / 0 ... 0.3 – 50 mbar

OUTPUT

0 ... 10 V, 0 ... 20 mA, 4 ... 20 mA

ACCURACY

< 0.5% fs

ELECTRICAL CONNECTION

Screw terminals

PRESSURE CONNECTION

Hose connector Ø 6.2 mm

MEDIUM

Fluides

PRESSURE RANGE

0 ... 0.1 - 16 bar

OUTPUT

4 ... 20 mA 🖾

ACCURACY

< 0.3% fs

ELECTRICAL CONNECTION

Cable in several lengths

MEDIUM

Fluides

PRESSURE RANGE

0 ... 0.3 – 3 bar

OUTPUT

0 ... 10 V, 4 ... 20 mA ^⑤, ratiom. 10 ... 90%

ACCURACY

< 0.5% fs

ELECTRICAL CONNECTION

Cable in several lengths

- + Available with or without LCD display or modbus
- + Switchable output signals
- Switchable response curve (linear or root-extracted)
- Resettable Zero Point (Reset button)
- + Full scale adjustable

- + Suitable for drinking water
- + Ex-version availabe
- + Sea water resistant
- + High accuracy
- + Large variety of cable length
- + Suitable for drinking water
- + lintrinsically safe execution with Voltage- and current output
- + With integrated temperature measurement
- + Suitable for fitting within a 1 inch diameter pipe

PRESSURE LEVEL TRANSMITTER TYPE 713

The pressure level transmitter type 713 is used for continuous fluid level measurement of ground and drinking water. The compact design allows the transmitter to be used in applications with restricted access as small as 3/4 inch i.d. pipe. As well as a current output the pressure level transmitter type 713 has been enhanced with energy efficient ratiometric and digital outputs making it ideal for battery powered applications. The pressure level sensor 713 is based upon the well proven ceramic technology developed by Huba Control over 20 years ago.

ELECTRONIC PRESSURE SWITCH TYPE 521

The compact Type 521 pressure switch is based upon the Huba Control developed thick film technology where the pressure measuring cell is fully welded. Switching points set in the factory and are available both N/C and N/O function. Various electrical and pressure connections are available to suit given applications.

ELECTRONIC PRESSURE SWITCH TYPE 529

The compact Type 529 pressure switch is based upon the Huba Control developed unique ceramic technology used for the last 20 years in millions of applications. Switching points set in the factory and are available both N/C and N/O function. Various electrical and pressure connections are available to suit given applications.







MEDIUM

Fluides

PRESSURE RANGE

0 ... 0.6 - 16 bar

OUTPUT

4 ... 20 mA , ratiom. 10 ... 90%, 3000 ... 11000 Digits

ACCURACY

< 0.4% fs

ELECTRICAL CONNECTION

Cable in several lengths

MEDIUM

Liquids and gases

PRESSURE RANGE

0 ... 2.5 – 600 bar

UPPER SWITCHING POINT

8 ... 100% fs

LOWER SWITCHING POINT

5 ... 97% fs

ACCURACY

typ. < 0.3% fs

ELECTRICAL CONNECTION

Swift connector, M12x1

PRESSURE CONNECTION

Inside thread or outside thread

MEDIUM

Liquids and gases

PRESSURE RANGE

-1 ... 0 – 60 bar

UPPER SWITCHING POINT

8 ... 100% fs

LOWER SWITCHING POINT

5 ... 97% fs

ACCURACY

typ. < 0.3% fs

ELECTRICAL CONNECTION

Swift connector, M12x1

PRESSURE CONNECTION

Inside thread or outside thread

- + Ceramic sensor Al2O3 99.6%
- + Suitable for drinking water
- Excellent linearity and long term stability
- + Applicable in 3/4 inch pipes
- + Available with temperature measurement

- + Compact and rugged construction
- Welded construction no elastomer seals
- Saving the customer time with the swift connector cable mounting system
- + Wide choice of connections available
- + Compact and rugged construction
- + Negligible temperature influence on accuracy
- + Saving the customer time with the swift connector cable mounting system
- + Wide choice of connections available

MECHANICAL PRESSURE SWITCH TYPE 604

The Type 604 pressure switch is used as a p flow switch in ventilation ducts for the control of filters and fans, and in primary and secondary control systems for the control of air dampers. The 604 pressure monitoring switches are also ideally suited to protect heating coils from overheating and for monitoring industrial air cooling circuits.

OEM MECHANICAL PRESSURE SWITCH TYPE 605

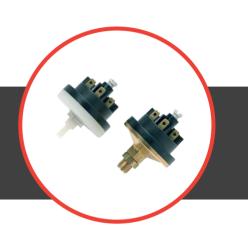
Type 605 pressure switches are specially developed for use in gas fired heating systems. There are more than 40 million switches in use worldwide. Produced on a fully automated production line. High setting accuracy and repeatability, combined with excellent reliability characterise a quality of switch above the industry norm.

MECHANICAL PRESSURE SWITCH TYPE 620/625

Type 620 and 625 pressure switches, with 13 pressure ranges, are suitable for liquids and gases. Body materials are available in plastic, brass and aluminium, with a choice of NBR, FPM, EPDM and silicone diaphragms. Very high precision through finely tuned measurement stages and high long term stability. Rugged design and especially suitable for use in general industrial equipment construction, process technology and food automation.







MEDIUM

Air and neutral gases

PRESSURE RANGE

0.2 ... 50 mbar

ELECTRICAL CONNECTION

Screw terminals, flat connector 6.3 or 4.8 mm

PRESSURE CONNECTION

Hose connector \emptyset 6.2 mm or inside thread

MEDIUM

Air and neutral gases

PRESSURE RANGE

20 ... 400 Pa

ELECTRICAL CONNECTION

Flat connector 6.3 or 4.8 mm

PRESSURE CONNECTION

Hose connector \emptyset 6.2 mm

MEDIUM

Liquids and neutral gases

PRESSURE RANGE

-900 ... 6000 mbar

ELECTRICAL CONNECTION

Screw terminals, Flat connector 6.3 mm

PRESSURE CONNECTION

Inside thread M5, hose connector \emptyset 6 mm, outside thread

- + Easy to install
- + Multi-layer gold plated contact
- + Combi-bracket for vertical or horizontal installatione
- + Cable strain relief integrated in PG11
- + Long-term stability of switching points through trapezoidal bead diaphragm
- + Fitting of the switch
 - Fast mounting with snap bracket system
- High contact strength (typically 10 cN) and self cleaning roll operation contact
 - Not susceptible to contact pollution
- + High accuracy by 13 ideally designed pressure range increments
- + Switching differences adjustable
- + Customer specific switching points adjustable in factory
- + Rugged industrial switch with excellent Price / performance ratio

MECHANICAL PRESSURE SWITCH TYPE 630

Differential pressure, vacuum and overpressure switches of Type 630 are suitable for monitoring neutral and slightly aggressive liquids and gases. Switching element isolated from medium. Ideal for use as flow monitor in sanitary piping / heating installations or for level monitoring in general process technology applications. Extremely rugged construction with high functionality due to 10/20 bar safety margin in both pressure chambers.

OEM FLOW SENSOR TYPE 200

The flow sensor Type 200 is based on the Karman Vortex principle. You can choose between various versions. The Type 200 is available with or without temperature measurement. With no moving parts the flow sensor is not sensitive to debris, has marginal pressure loss and high accuracy.

FLOW SENSOR TYPE 210

The flow sensor Type 210 is based on the Karman Vortex principle. In comparison to the OEM flow sensor (Type 200), the Type 210 is available with an increased range of power supply and output signals all with and without temperature measurement. With no moving parts the flow sensor is not sensitive to debris, has marginal pressure loss and high accuracy.







MEDIUM

Liquids and neutral gases

PRESSURE RANGE

6 ... 5500 mbar

ELECTRICAL CONNECTION

Screw terminals, Flat connector 6.3 mm

PRESSURE CONNECTION

Inside thread

MEDIUM

Fluides

FLOW RANGE

0.5 ... 150 l/min

NOMINAL DIAMETERS

DN 6/8/10/15/20/25

OUTPUT

Frequency output 12 ... 483 Hz

TEMP. MEASURMENT

NTC / PT1000

ELECTRICAL CONNECTION

Connector RAST 2.5, M12x1

TUBE CONNECTION

Plastic - connection copper tube Plastic - outside thread

- Repeatability up to < ± 0.4 mbar
 Functionally simple, rugged mechanics with high operating reliability
- + High overpressure safety margin at both connections (P1 + P2) up to 10/20 bar
- + Low cost product with high levels of accuracy
- + Drinking water approval WRAS, KTW, W270, ACS
- + Wide application temperature range
- + Measuring element not sensitive to debris

MEDIUM

Fluides

FLOW RANGE

0.5 ... 150 l/min

NOMINAL DIAMETERS

DN 6/8/10/15/20/25

OUTPUT

Frequency output 12 ... 483 Hz Analogue signal 0 ... 10 V, 4 ... 20 mA

TEMP. MEASURMENT

PT1000

ELECTRICAL CONNECTION

Connector M12x

TUBE CONNECTION

Plastic - connection copper tube Plastic - outside thread

- + Flow measuring with voltage, current, pulse or frequency output
- + Drinking water approval WRAS, KTW, W270, ACS
- + Measuring element not sensitive to debris
- + Temperature non-sensitive measuring principle

FLOW SENSOR TYPE 212

The flow sensor type 212 is based on the Kármán vortex trail. Vortex trail principle. This flow sensor convinces due to the additional digital indicating device which shows the flow rate and the media temperature. The type 212 is available with and without temperature measurement. With no moving parts the flow sensor is not sensitive to debris, has marginal pressure loss and high accuracy.

FLOW SENSOR TYPE 230

The flow sensor Type 230 is based on the Karman Vortex principle. You can choose between various versions as integrated temperature measurement. The Type 230 has a rugged construction of red brass. With no moving parts the flow sensor is not sensitive to debris, has marginal pressure loss and high accuracy.

OEM FLOW SENSOR TYPE 235

The flow sensor Type 235 is based on the Type 200 but incorporates a brass housing. The flow sensor Type 235 is based on the Karman Vortex principle. You can choose between various versions as integrated temperature measurement

With no moving parts the flow sensor is not sensitive to debris, has marginal pressure loss and high accuracy.







MEDIUM

Fluides

FLOW RANGE

0.5 ... 150 l/min

NOMINAL DIAMETERS

DN 6/8/10/15/20/25

OUTPUT

4 ... 14.5 mA, 4 ... 20 mA

ELECTRICAL CONNECTION

Connector M12x1

TUBE CONNECTION

Plastic - connection copper tube Plastic - outside thread

MEDIUM

Fluides

FLOW RANGE

1.8 ... 150 l/min

NOMINAL DIAMETERS

DN 10 / 15 / 20 / 25

OUTPUT

Frequency output 13 ... 480 Hz Analogue signal 0 ... 10 V, 4 ... 20 mA

TEMP. MEASURMENT

PT1000

ELECTRICAL CONNECTION

Connector M12x1

TUBE CONNECTION

Red brass - outside thread

MEDIUM

Fluides

FLOW RANGE

0.9 ... 240 l/min

NOMINAL DIAMETERS

DN 8 / 10 / 15 / 20 / 25 / 32

OUTPUT

Frequency output 9 ... 479 Hz

TEMP. MEASURMENT

NTC / PT1000

ELECTRICAL CONNECTION

Connector RAST 2.5, M12x1

TUBE CONNECTION

Brass - outside thread

- + Flow measuring with immediate display of flow measuring range and medium temperatur
- + Excellent media resistance
- Drinking water approval
- + Measuring element not sensitive to debris
- + Flow measuring with voltage, current, pulse or frequency output
- + Drinking water approval WRAS, KTW, W270, ACS
- + Marginal loss of pressure
- + Temperature non-sensitive measuring principle
- + Low cost product with high levels of accuracy
- Drinking water approval WRAS, ACS
- + Wide application temperature range
- Measuring element not sensitive to debris
- + Temperature non-sensitive measuring principle

FLOW SENSOR TYPE 236

The flow sensor Type 236 is based on the Type 210 but incorporates a brass housing. The Vortex Sensor Type 236 has a rugged construction of brass connection. This flow sensor is available with a larger variety concerning power supply and outputs. You can choose between various versions as integrated temperature measurement. With no moving parts the flow sensor is not sensitive to debris, has marginal pressure loss and high accuracy.

DIGITAL INDICATING DEVICE TYPE 800

Type 800 digital indicators are equipped with a 4 digit display, as well as optional switch and analogue outputs. The sensor signal is evaluated and indicated as pressure by the digital display. The programming of the limit value output can be executed with the buttons on the front or via a data cable from a computer.

DIGITAL INDICATING DEVICE TYPE 801

Type 801 digital indicators are compatible with all sensors with DIN plug EN 175301-803-A. Independent of the mounting position of the sensor, the display can be rotated to give the ideal reading position. The 801 has a 3 digit liquid-crystal display which is adjustable by the customer, or available factory set.







MEDIUM

Fluides

FLOW RANGE

0.9 ... 240 l/min

NOMINAL DIAMETERS

DN 8 / 10 / 15 / 20 / 25 / 32

OUTPUT

Frequency output 9 ... 479 Hz Analogue signal 0 ... 10 V, 4 ... 20 mA

TEMP. MEASURMENT

PT1000

ELECTRICAL CONNECTION

Connector M12x1

TUBE CONNECTION

Brass - outside thread

INPUT SIGNALS

0 ... 5 V, 0 ... 10 V, 0 ... 20 mA, 4 ... 20 mA

OUTPUT SIGNALS

0 ... 10 V,

0 ... 20 mA, 4 ... 20 mA
Potential-free limit value switch

INPUT SIGNALS

0 ... 5 V

0 ... 10 V

0 ... 20 mA

4 ... 20 mA

- + Flow measuring with voltage, current, pulse or frequency output
- + Drinking water approval WRAS,
- + Measuring element not sensitive to debris
- + Temperature non-sensitive measuring principle
- + Ease of use
- + All adjustments are possible from the front of unit
- Limit value switching points preadjustable without application of pressure
- + Transmitter power supply from indicating device saves cabling
- + Portable plug-in indicator
- + Irrespective of the installation arrangement of your transducer the display module can be rotated and turned to give the ideal reading-position
- + Protection class IP 65 with screw fastened DIN EN 175301-803 connectors



FOR FINE PRESSURE AND FLOW MEASUREMENT

