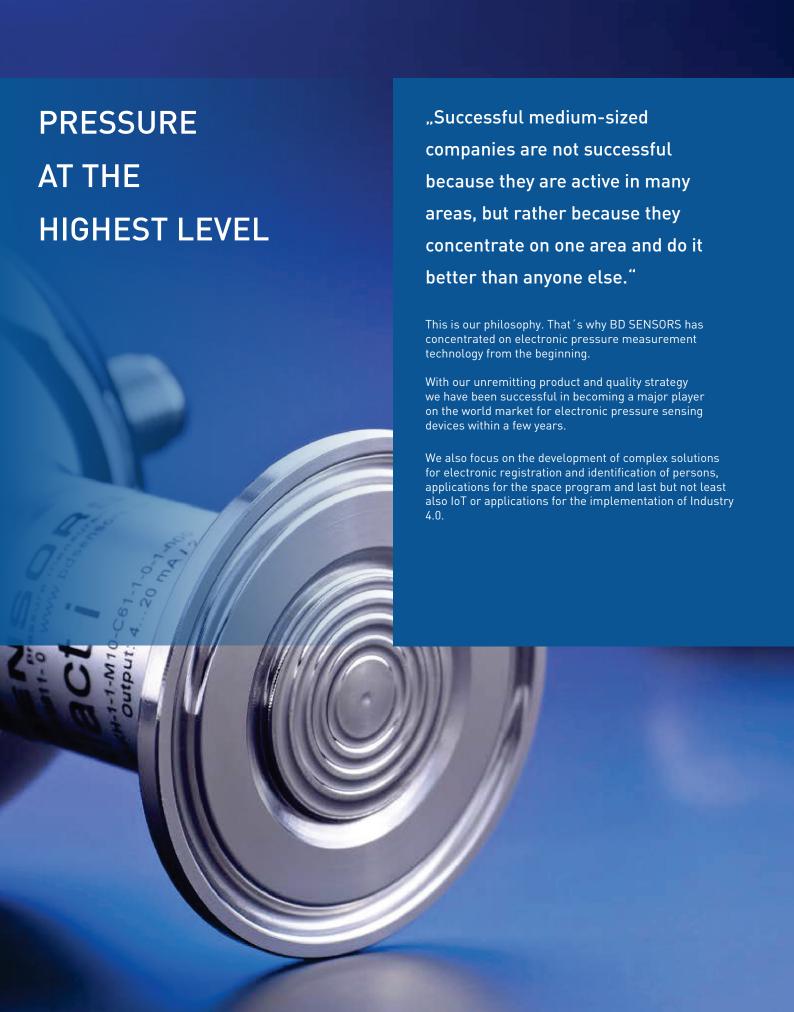
COSMIC QUALITY AT EARTHLY PRICES!









With 260 employees at 3 locations in Germany, the Czech Republic and China BD SENSORS has solutions from 0.1 mbar to 6000 bar:

- > pressure sensors, pressure transducers presure transmitters
- > electronic pressure switches
- > pressure measuring devices with display and switching outputs
- > hydrostatic level probes

Two pressure transmitters and a submersible probe, based on a stainless steel silicon sensor were the beginning.

Today the range extends to more than 70 standard products, from economical OEM devices to high-end products with HART® communication or field bus interface.

In addition we have developed hundreds of customer specific applications, underlining the competence and flexibility of BD SENSORS. The excellent price/performance ratio of our products is proof of the fact that we are able to meet the toughest demand: Being a problem-solver for our customers.

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For large production batches as well as for small production numbers, no matter for what medium or external factors, with almost any mechanical or electrical connection - we solve your problem

Flexibly, quickly and cost-efficiently.

The requirements on pressure and level measuring devices are various and, in addition to intelligent design solutions, require most of all appropriate sensor technology.





type DSP 210 without media isolation $(\emptyset = 18 \text{ mm})$

pressure ranges: 0 ... 20 mbar up to 0 ... 7 bar

application: gases, compressed air,

liquids and non-aggressive media

type DSP 410 / DSP 411 (\emptyset = 18 mm)

with stainless steel diaphragm

pressure ranges: 0 ... 100 mbar up to 0 ... 40 bar

application: gaseous and liquid media compatible

with stainless steel

type DSP 413 / DSP 415 (Ø = 15 mm)

with stainless steel diaphragm

pressure ranges: 0 ... 400 mbar up to 0 ... 600 bar

application: for submersible probes $\emptyset = 17 \text{ mm}$ as

well as for pressure transmitters with G 1/2" flush and hydraulic applications

type microfused

pressure ranges: 0 ... 3.5 bar up to 0 ... 700 bar application: hydraulic and oxygen applications

type thinfilm-sensor

pressure ranges: 0 ... 60 bar up to 0 ... 2200 bar

application: hydraulic applications

type strain gauge

pressure ranges: 0 ... 1000 bar up to 0 ... 6000 bar

application: hydraulic applications, high dynamic

pressure

BD SENSORS is one of the few companies worldwide using four elements of modern pressure measurement, offering sensors produced by BD SENSORS itself or by partner companies with BD SENSORS know-how.





capacitive ceramic sensor

type DSK 511 with flush diaphragm $[\emptyset = 18 \text{ mm}]$

pressure ranges: 0 ... 0,5 bar up to 0 ... 600 bar

application: for aggressive media and oxygen;

with flush diaphragm preferred

for highly viscuous or contaminated media

type DSK 516 with flush diaphragm $[\emptyset = 15 \text{ mm}]$

pressure ranges: $0 \dots 0.5$ bar up to $0 \dots 50$ bar

application: for submersible probes Ø 17 mm and pres

sure transmitter with G 1/2" flush

type DSK 611 in monolithic design $(\emptyset = 18 \text{ mm})$

pressure ranges: 0 ... 2 bar up to 0 ... 400 bar

application: OEM products with excellent price / perfor

mance ratio

typE DSK 701 (Ø = 32,4 mm)

pressure ranges: 0 ... 60 mbar up to 0 ... 20 bar

typ DSK 720 M (Ø = 18 mm)

pressure ranges: 0 ... 100 mbar up to 0 ... 50 bar

application: preferred for hydrostatic level measure

ment as screw-in transmitte or submersible probes, a.o. for aggressive

media (acids, lyes, etc.)

INDUSTRY

DMP SERIES

These transmitters can be used in all industrial areas where the medium is compatible with stainless steel.

The modular concept of these devices allows to combine different stainless steel sensors and electronic modules with a variety of electrical and mechanical versions.

Thanks a diversity of variations of these sensors are able to meet almost all requirements in industrial applications.



DMP 343

Nominal pressure ranges from 6 mbar up to 1000 mb

Characteristics silicon sensor without media isolation

Media for gases, pressurized air and non-aggressive low viscous

0.35 % Accuracy



SIL











DMP 331

Nominal pressure ranges from 100 mbar up to 40 bar

stainless steel sensor Characteristics

Media for all medias compatible with stainless steel

Accuracy 0,5 %



SIL

















DMP 333

Nominal pressure ranges from 60 bar up to 600 bar

Characteristics stainless steel sensor

Media for all medias compatible with stainless steel

Accuracy 0,25 % / 0,35 %













DMP 334

Nominal pressure ranges from 600 bar up to 2200 bar

Characteristics thin-film sensor with media isolation

Media for all medias compatible with stainless steel

0,35 % Accuracy













DMP 304

Nominal pressure ranges from 2000 bar up to 6000 bar

Characteristics strain gauge sensor

Media for all medias compatible with stainless steel

0,25 % / 0,5 % Accuracy



















DMP 457

Nominal pressure ranges from 100 mbar up to 600 bar

Characteristics stainless steel sensor

Media for all medias compatible with stainless steel

0,25 % / 0,35 % Accuracy



















INDUSTRY

DMK SERIES

Industrial pressure transmitters with ceramic sensor were especially designed for pasty, polluted or aggressive media and for oxygen applications at low pressure range.

As with all industrial pressure transmitters made by BD SENSORS, you may choose between various electrical and mechanical connections.

An option between two variants of sensor materials standard 96% ceramic or special 99,9% ceramic for most aggressive medias.



DMK 331

Nominal pressure ranges from 400 mbar up to 600 bar

Characteristics thickfilm ceramic sensor

Media for pasty, polluted, abrasive or aggressive media,

oxygen applications, for biogas applications

0,5 % Accuracy

















DMK 351

Nominal pressure ranges from 40 mbar up to 20 bar

Characteristics capacitive ceramic sensor

Media for pasty, polluted, abrasive or aggressive media,

oxygen applications, for biogas applications

0,25 % / 0,35 % Accuracy





















DMK 457

Nominal pressure ranges from 400 mbar up to 600 bar

Characteristics thickfilm ceramic sensor

Media for shipbuilding and offshore applications

Accuracy 0,5 %

















DMK 458

Nominal pressure ranges from 40 mbar up to 20 bar

Characteristics capacitive ceramic sensor

Media marine, shipbuilding, offshore

0,1 %/ 0,25 % Accuracy























WITH SEPARATOR OR COOLING ELEMENT

DMP P / DMK P SERIES

The pressure transmitters designed for use in the food and pharmaceutical industry.

The compact design with hygienic process connections makes it possible to achieve an outstanding performance in terms of accuracy, temperature behavior and long term stability.

The modular construction concept allows a combination of various process connections with different filling fluids and a cooling element. Several electrical connections complete their profile.

These transmitters fulfill nearly all requirements in hygienic industrial processes.



DMP 331P

Nominal pressure ranges from 100 mbar up to 40 bar

Characteristics cooling element for media temperatures up to 300°C

Media variable process connection including standard threads,

clamp, diary pipe, sandwich or flange

0,25 % / 0,35 % Accuracy



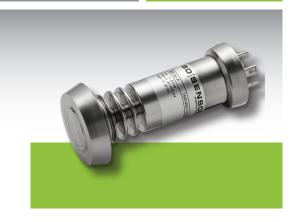












DMK 331P

Nominal pressure ranges from 60 bar up to 400 bar

cooling element for media temperatures up to 300°C Characteristics

Media suited for viscous and pasty media

Accuracy 0.5 %













PRECISION

DMP i / LMP i SERIES

Transmitters with excellent measurement qualities and attractive price. Standard accuracy is 0,1%.

Excellent thermal error in compensated range (0,01% FSO/10K).

The signal processing of sensor is done by digital electronics with 16-bit analog digital converter. Consequently it is possible to conduct an acitve compensation.



DMP 331i

LMP 331i

Nominal pressure ranges from 400 mbar up to 40 bar

Characteristics stainless steel sensor

Media for all medias compatible with stainless steel

Accuracy 0,1 %

















DMP 333i

Nominal pressure ranges from 60 bar up to 600 bar

Characteristics stainless steel sensor

Media for all medias compatible with stainless steel

0,1 % Accuracy

















XMP SERIES

Transmitters with excellent measurement qualities and attractive price. Standard accuracy is 0,1%. Excellent thermal error in compensated range (0,01 % FSO / 10 K).

Different process connections such as threads and flanges with an intenal of flush welded diaphragm are available and can be combined with a cooling element for media temperatures up to 300 °C.

The transmitter is as a standard equipped with HART-communication. Custommer can choose between a two chamber aluminum die cast case or a stainless field housing.



XMP i

Nominal pressure ranges from 400 mbar up to 600 bar

Characteristics stainless steel sensor

Media for all medias compatible with stainless steel

0,1 % Accuracy





















XMP ci

Nominal pressure ranges from 60 mbar up to 20 bar

Characteristics capacitive ceramic sensor

Media gases, steam, dust and fluids, viscous and pasty medias

0.1 % Accuracy





















xlact SERIES

Transmitters with excellent measurement qualities and atractive price.

Standard accuracy is 0,1%. Excellent thermal error in compensated range (0,01 % FSO / 10 K).

The precise pressure transmitter x|act i has been especially designed for the food industry, pharmacy and biotechnology. The robust stainless steel globe housing has a high ingress protection IP 67 and all characteristics for a residue-free and antibacterial cleaning.

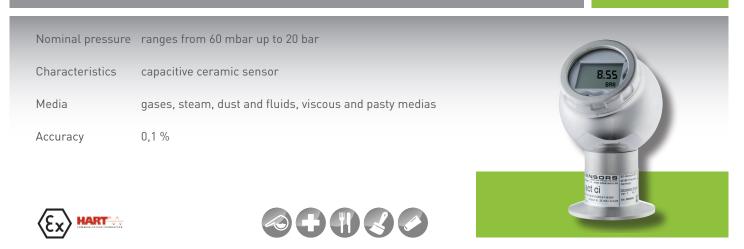
Different process connections such as threads and flanges with an internal or flush welded diaphragm are available and can be combined with a cooling element for media temperatures up to 300 $^{\circ}$ C.



x|act i

Nominal pressure	ranges from 400 mbar up to 40 bar	
Characteristics	stainless steel sensor	
Media	for all medias compatible with stainless steel	2.57 BRR
Accuracy	0,1 %	
(Ex) HART		

xlact ci



DIGITAL GAUGE

BAROLI SERIES

Due to the two sensor technologies in use (stainless steel or ceramic sensor), our digital pressure gauges are suitable for nearly all fluids pasty media and gases.

The display module is continuously rotatable, so that a clear readability is guaranteed even in unusual installation positions.

Min./max. function with reset, offset and end point calibration, setting the pressure unit and automatic switch-off configuration via display buttons.



BAROLI 02

Nominal pressure ranges from 100 mbar up to 600 bar

Characteristics stainless steel sensor

Media for all medias compatible with stainless steel

Accuracy 0,25 %

BAROLI 05

Nominal pressure ranges from 400 mbar up to 600 bar

Characteristics thickfilm caramic sensor

Media gases, steam, dust and fluids, viscous and pasty medias

Accuracy 0,5 %

DIGITAL GAUGE

DM 01 - TEST AND CALIBRATION EQUIPMENT

The digital pressure gauge DM 01 is a precision device fulfilling highest demands. It was conceived especially for the precess monitoring and calibration. The advantage: With the digital display DM 01, different pressure transmitters can be used for various measurement ranges.

The pressure transmitter can be selected and easily exchanged for the required pressure range on site - without tools or parameter setting.

Outstanding measuring qualities, an intuitive operation, as well as an innovative, modular sensor concept characterise the DM 01. The battery-powered digital pressure gauge can be used e.g. for controlling pressure courses or calibrating pressure transmitters.

The integrated data logger is able to record pressure and temperature values linearly and cyclically. These measurements can be transferred to a PC via USB and analysed by software BD|LOG.



DM 01

Nominal pressure ranges from 100 mbar up to 400 bar

Characteristics stainless steel sensor

class of accuracy 0,05%

for all medias compatible with stainless steel

modular sensor concept, datalogger including software, graphic display, communication interface USB 2.0, zero

point calibration, turn off automatic

construction of machines and equipment, laboratory Media

technology

0,05 % Accuracy













As an accessory, we offer a practical calibration case, which, among other things, contains a hand pump and various reductions.



DIFFFRENCIAL

DMD SERIES

The compact design allows the integration in machines and applications with limited space.

The DMD calculates the difference between the presure on the positive and the negative side and converts it into a proportional electrical signal.

As with all industrial pressure transmitters made by BD SENSORS, you may choose between various electrical and mechanical connections.



DMD 341

Nominal pressure differential pressure from 6 mbar up to 1 bar

Characteristics silicon sensor without media isolation

Media for gases, pressurized air and non-aggressive low

viscous oils

0,35 % / 1 % / 2 % Accuracy









DMD 331

Nominal pressure differential pressure from 20 mbar up to 16 bar

Characteristics stainless steel sensor

Media for all medias compatible with stainless steel

0,35 % / 1 % / 2 %

Accuracy











DIFFERENCIAL

XMD SERIES

The differential pressure transmitter XMD has been especially designed for the process indrustry and can be used for level measurement of closed, pressurized tanks, pump or filter controlling, etc.

Another attribute is the possibility to switch the output signal from linear to square root extraction by what the flow rate of the mediu can be issued.

Static overpressure 130 bar, HART® communication, Ex ia or Ex d.



XMD

Nominal pressure nominal pressure from 75 mbar up to 20 bar

Characteristics stainless steel sensor

Media for all medias compatible with stainless steel

0,1 % Accuracy























DPS SERIES

These transmitters were developed specially for the differential pressure measuring of dry, non aggressive gases and compressed air.

DPS will be most frequently used in heating, ventilation or air conditioning systems.



DPS 300

Nominal pressure nominal pressure from 1,6 mbar up to 1 bar

Characteristics silicon sensor without media isolation

Media for gases, compressed air and non-aggressive medias,

two switching contacts

Accuracy 0,5 %











OEM PRODUCTS

OEM SERIES

Low cost products with excellent price efficiency ratio. Using of all our basic sensors in combination with various mechanical and electrical connections predestinate these products for applications in almost all industrial branches.



18.600 G

Nominal pressure nominal pressure from 100 mbar up to 6 bar

Characteristics silicon sensor without media isolation

Media for gases, pressurized air and non-aggressive low

viscous oils

0,5 % Accuracy





18.605 G

Nominal pressure nominal pressure from 1 m H20 up to 10 m H20

Characteristics stainless steel sensor, submersible, cable gland with

for all medias compatible with stainless steel Media

0,5 % Accuracy













OEM PRODUCTS

17.600 G

Nominal pressure from 1 bar up to 400 bar

Characteristics sensor type Microfused

Media for all medias compatible with stainless steel, oxygen

applications

0,5 % Accuracy















26.600 G

Nominal pressure nominal pressure from 6 bar up to 600 bar

Characteristics thickfilm ceramic sensor

Media gases, steam, dust and fluids, oxygen applications

0,5 % Accuracy













30.600 G

Nominal pressure nominal pressure from 1,6 bar up to 250 bar

Characteristics thickfilm ceramic sensor

Media gases, steam, dust adn fluids, oxygen applications

1 % Accuracy













SUBMERSIBLE PROBES

LMK SERIES

These probes were designed for continuous level measurement in waste water with abrasives, sewage, higher viscosity or aggressive fluids.

Basic element is a capacitive ceramic sensor which offers a high overload resistance and medium compatibility. Plastic or stainless steel housing, reduced diameter (19 mm), different kinds of cable or seals materials available.

We also offer probes for marine and offshore. These probes are in a consequence of the certification by Germanischer Lloyd predestined for shipbuilding and offshore applications.



LMK 858

Nominal pressure ranges from 40 cm H20 up to 100 m H20

Characteristics PVC housing, diameter 45 mm, separable cable part

Media waste water, sewage, aggressive medias

Accuracy 0,25 % / 0,35 %











Nominal pressure ranges from 40 cm H20 up to 200 m H20

Characteristics CuNiFe or Stainless steel, diameter 39,5 mm,

screw-in and flange version

Media

shipbuilding, offshore, ballast tanks

Accuracy 0,1 % / 0,25 %



















LMK 358

Nominal pressure ranges from 40 cm H20 up to 100 m H20

Characteristics stainless steel housing, diameter 39,5 mm, separable

cable part

waste water, sewage, fuel storage Media

0,25 % / 0,35 % Accuracy



















LMK 807

Nominal pressure ranges from 4 m H20 up to 100 m H20

Characteristics PVC housing, diameter 35 mm

Media waster water, sewage, aggressive medias

0,5 % Accuracy

SIL











LMK 809

Nominal pressure ranges from 40 cm H20 up to 100 m H20

Characteristics PP or PVDF housing, diameter 45 mm

Media waste water, sewage, aggressive medias, most of

acids and lyes

0,25 % / 0,35 % Accuracy













LMP SERIES

These probes were designed for continuous level measurement in water and clean or waste fluids.

Basic element is a high quality stainless steel sensor with high requirements for exact measurement with excellent long term stability. Plastic or stainless steel housing, reduced diameter (19 mm), different kinds of cable or seals materials available.

Separable probes were developed to facilitate storage and maintenance. The transmitter's head is plugged to the cable assembly with a connector and can be changed easily without



LMP 307

Nominal pressure ranges from 1 m H20 up to 250 m H20

Characteristics stainless steel housing, diameter 27 mm

Media clear water, waste water without abrasives

0,25 % / 0,35 % Accuracy















LMP 308

Nominal pressure ranges from 1 m H20 up to 250 m H20

Characteristics stainless steel housing, diameter 35 mm

separable cable part

Media clear water, waste water without abrasives

0,25 % / 0,35 % Accuracy















LMP 808

Nominal pressure ranges from 1 mH20 up to 100 m H20

PVC housing, diameter 35 mm Characteristics

separable cable part

Media clear water, waste water without abrasives

Accuracy 0,25 % / 0,35 %

SIL













PRECISION PROBES

LMP i SERIES

Transmitters with excellent measurement qualities and attractive price.

Standard accuracy is 0,1%. Excellent thermal error in compensated range (0,01 % FSO / 10 K).

The signal processing of sensor signal is done by digital electronics with 16-bit analog digital converter. Consequently it is possible to conduct an active compensation.



LMP 307i

Nominal pressure ranges from 1 m H2O up to 250 m H2O Characteristics stainless steel housing, diameter 27 mm Media clear water, waste water without abrasives Accuracy 0,1 % **#**











LMP 308i

Nominal pressure ranges fromd 4 m H20 up to 250 m H20 stainless steel housing, diameter 35 mm Characteristics separable cable part Media clear water, waste water without abrasives

Accuracy 0,1 %













SCREW-IN PROBES

LMP SERIES

These probes were designed for continuous level measurement in water and clean or waste fluids.

Basic element is a high quality stainless steel sensor with high requirements for exact measurement with excellent long term stability. Optional features like e.g. an intrinsically safe version or a functionally safe version (SIL 2) increase the advantages in launching and realizing projects for plants and systems.



LMP 331

23

Nominal pressure ranges from 1 m H20 up to 400 m H20

Characteristics stainless steel housing, G ¾" flush

Media clear water, waste water without abrasives

Accuracy 0,25 % / 0,35 %















LMK SERIES

Level probes with ceramics sensor has been especially designed for pasty, polluted or aggressive media and for oxygen applications at low pressure range.

You may choose between various electrical and mechanical connections and two variants of sensor meterials: standard 96% ceramic or special 99,9% ceramic for extra aggressive medias.

PVDF housing for using in aggressive medias. Usage in more viscous or polluted media is possible because of the semi-flush sensor.



LMK331

Nominal pressure ranges from 4 m H20 up to 600 m H20

Characteristics PVDF or stainless steel housing, G 3/4" flush

Media waste water, sewage, aggressive medias, most of

acids and lyes

0,5 % Accuracy

















LMK 351

Nominal pressure ranges from 40 cm H20 up to 200 m H20

PVDF or stainless steel housing, G1 1/2" flush Characteristics

waste water, sewage, aggressive medias, most of Media

acids and lyes

0,25 % / 0,35 % Accuracy

















PRESSURE SWITCHES

WITHOUT DISPLAY

These electronic pressure switches are used in hydraulic and pneumatic applications for monitoring and controlling the pressure via switching outputs.

The 1 or 2 freely programmable contacts whose status is indicated by differently coloured LED's can be configured quickly and comfortably either by the optionally available tools P-SET (PC software and programming adapter) or via the programming device P6.





DS 4

Nominal pressure ranges from 1 bar up to 10 bar

Characteristics silicon sensor without media isolation

Media dry air, pneumatics, vacuum technology

Accuracy 1 %

DS 6

Nominal pressure ranges from 2 bar up to 400 bar

Characteristics thickfilm ceramic sensor

Media mechanical engineering, hydraulics, oxygen application

Accuracy 1 %

WITH DISPLAY

Pressure switch with up to 4 contacts.

Depending on the requirements, the universal pressure measuring devices with display and switching contacts can be used as pressure transmitter, electronic pressure switch or digital pressure gauge.

Due to the simple handling as well as the variety of software features (switching points and hysteresis freely configurable, delay function, Min/Max-value data storage, display and analogue output signal scalable, etc.) the DS 2XX series is especially suitable as an intelligent pressure switch for general plant and machine construction and the processing industry.



DS 210

Nominal pressure ranges from 10 mbar up to 1 bar

Characteristics silicon sensor without media isolation

Media gases, pressurized air, non aggressive steel

Accuracy 0,25 % / 0,35 %













DS 200

Nominal pressure ranges from 100 mbar up to 600 bar

Characteristics stainless steel sensor

Media for all medias compatible with stainless steel

0,25 % / 0,35 % Accuracy















DS 200P

Nominal pressure from 0 ... 100 mbar up to 0 ... 40 bar

Characteristics The electronic pressure switch DS 200P is the successful

combination of intelligent pressure switch and digital display

Media

viscous and pasty media

0,25 % / 0,35 % / 0,5 %

Accuracy













DISPLAY AND HYGIENIC DESIGN

Pressure switch with up to 2 contacts.

Depending on the requirements, the universal pressure measuring devices with display and switching contacts can be used as pressure transmitter, electronic pressure switch or digital pressure gauge.

Due to the simple handling as well as the variety of software features (switching points and hysteresis freely configurable, delay function, Min/Max-value data storage, display and analogue output signal scalable, etc.) the DS 4XX series is especially suitable as an intelligent pressure switch for general plant and machine construction and the processing industry.



DS 400

Nominal pressure ranges from 100 mbar up to 600 bar

Characteristics stainless steel sensor

Media for all medias compatible with stainless steel

Accuracy 0.25 % / 0.35 %















DS 401

Nominal pressure ranges from 400 mbar up to 600 bar

Characteristics thickfilm ceramic sensor

Media viscous, pasty or highly contaminated media

0,5 % Accuracy















DISPLAYS AND EVALUATION DEVICES

PA 430

PA 440



Plug-on display for pressure transmitter with output signal: 4 ... 20 mA / 2-wire or 0 ... 10 V / 3-wire. IS version available.

Switch mode, hysteresis, parameterizable decelaration of the contacts. Display and connector rotalable. 1 or 2 contacts.





Field display for pressure transmitter with output signal: 4 ... 20 mA / 2-wire or 0 ... 10 V / 3-wire. IS version available.

Switch mode, hysteresis, parameterizable deceleration of the contacts (1 or 2 contacts.) Plastic or aluminium housing.





SPACE

www.bdsensors.cz/en/space

IOT DATAFLY

www.datafly.cz/EN/

BIOMETRIC SYSTEMS

www.bdsensors.cz/en/biometrics/biometrics

INDUSTRY 4.0

www.smart4factory.cz

For large production
batches as well as for small
production numbers, no
matter for what medium
or external factors, with
almost any mechanical or
electrical connection - we
solve your problem!

ARGUMENTS 29

INDUSTRIES



▶ plant and machine engeneering



▶ chemical and biochemical industry



▶ energy industry



▶ renewable energy



▶ semiconductor industry / cleanroom technology



► HVAC



▶ hydraulics



▶ refrigeration



▶ calibration techniques



▶ laboratory techniques



▶ medical technology



▶ food and beverage



▶ vehicles and mobile hydraulics



▶ oil and gas industry



▶ pharmaceutical industry



▶ marine / shipbuilding / offshore



▶ heavy industry



▶ environmental industry



▶ packaging and paper industry

MÉDIA



▶ sewage



▶ aggressive media



▶ colours



▶ gases



▶ fuels and oils



▶ pasty and viscous media



▶ oxygen



▶ water



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