

In recent years, there has been a notable shift in the market dynamics of pressure sensors. While pressure transmitters with analog output signals once held sway, the emergence of devices with digital interfaces is reshaping the landscape, driven by the imperatives of Industry 4.0. This evolution underscores the superior capabilities of digital output signals in ensuring accuracy and reliability in pressure sensing applications.

Digital signals offer distinct advantages over their analog counterparts, particularly in terms of signal fidelity and immunity to interference or loss. Unlike analog signals, which are susceptible to various forms of distortion, digital signals ensure that the transmitted data remains intact, delivering consistent and reliable results.

Prignitz Mikrosystemtechnik's pioneering line of sensors, based on advanced protocols such as IO-Link, I<sup>2</sup>C, PWM, CAN, MOD, exemplifies this paradigm shift, offering unparalleled accuracy, reliability, and compatibility with modern industrial applications.



## PMP-S/Sw100-IO-Link

### PRESSURE SENSORS/SWITCH SERIES WITH IO-LINK



#### ADVANTAGES:

- USEABLE AS IO-LINK PRESSURE SENSOR OR SWITCH WITH TEMPERATURE MEASUREMENT AND IO-LINK
- PLUG & PLAY, COMPACT AND OPTIMIZED DESIGN
- ADJUSTABLE AND READABLE VIA IO-LINK
- HIGH MEDIA RESISTANCE, NO INTERNAL SEALS, WITHOUT WELD SEAM (WITH P2P TECHNOLOGY)

#### MAIN FEATURE:

- **Pressure ranges:** from 0...60 mbar to -1...2000 bar
- **Mechanical connections\*:** 1/2"-14 NPT; 1/4"-18 NPT; G1/4"B Mano EN 837; G1/2"B Mano EN 837; G1/4"A Form E; 7/16 - 20UNF; G1/2" Form E flush membrane
- **Electrical connections\*:** M12x1 (S763); Cable output
- **Response time:** ≥ 3 ms
- **Accuracy:** ≤ 0.5 % FS

\*others on request. Different special custom-made solutions

## PMP-S100-I2C

### PRESSURE SENSORS SERIES WITH I<sup>2</sup>C DIGITAL INTERFACE



#### ADVANTAGES:

- HIGH MEDIA RESISTANCE, NO INTERNAL SEALS, WITHOUT WELD SEAM
- SIGNAL CONDITIONING WITH ASIC
- HIGH INTEGRATION DENSITY
- VACUUM-TIGHT AND ELASTOMER-FREE
- FLEXIBLE FOR CUSTOMISED REQUIREMENT

#### MAIN FEATURE:

- **Pressure ranges\*:** from 0...60 mbar to -1...2000 bar
- **Mechanical connections\*:** 1/2"-14 NPT; 1/4"-18 NPT; G1/4"B Mano EN 837; G1/2"B Mano EN 837; G1/4"A Form E; 7/16 - 20UNF
- **Electrical connections\*:** EN 175301-803-A; M12x1 (S763); Deutsch DT04-4P; EN 175301-803-C; Cable output
- **Wetted parts\*\*:** stainless steel 1.4404 (316L)/17-4
- **Response time:** 1 ms max 2 ms
- **Accuracy (25°C):** ≤ 0.5 % FS after limit-point calibration
- **Output :** I<sup>2</sup>C Communication protocol

\*others on request. Different special custom-made solutions



## PMP-S100-PWM

### PRESSURE SENSORS SERIES WITH PWM OUTPUT



#### ADVANTAGES:

- THE PRESSURE CELLS FROM 60 MBAR TO 2000 BAR ARE AVAILABLE FOR DIFFERENT FIELDS OF USE.
- HIGH MEDIA RESISTANCE, NO INTERNAL SEALS, WITHOUT WELD SEAM
- SIGNAL CONDITIONING WITH ASIC
- HIGH INTEGRATION DENSITY VACUUM-TIGHT AND ELASTOMER-FREE
- FLEXIBLE FOR CUSTOMISED REQUIREMENT

#### MAIN FEATURE:

- **Pressure ranges\***: from 0 mbar...60 mbar to -1...2000 bar
  - **Mechanical connections\***: 1/2"-14 NPT; 1/4"-18 NPT; G1/4"B Mano EN 837; G1/2"B Mano EN 837; G1/4"A Form E; 7/16 - 20UNF
  - **Electrical connections\***: M12x1 (S763); EN 175301-803-A; Cable output; Packard Metri-Pack; EN 175301-803-C
  - **Wetted parts\***: stainless steel 1.4404 (316L)/17-4
  - **Response time**: 1 ms max 2 ms
  - **Accuracy (25°C)**: ≤ 0.5 % FS after limit-point calibration
  - **Output** : PWM Signal with 5 KHz or 500 Hz
- \*others on request. Different special custom-made solutions

## PMP-S100-CAN

### PRESSURE SENSORS SERIES WITH CAN DIGITAL OUTPUT



#### ADVANTAGES:

- OIL-FILLED OR STAINLESS STEEL MEASURING CELL FOR RELATIVE AND ABSOLUTE PRESSURES.
- HIGH MEDIA RESISTANCE, NO INTERNAL SEALS,
- WITHOUT WELD SEAM
- SIGNAL CONDITIONING WITH ASIC
- HIGH INTEGRATION DENSITY
- VACUUM-TIGHT AND ELASTOMER-FREE
- FLEXIBLE FOR CUSTOMISED REQUIREMENT

#### MAIN FEATURE:

- Pressure ranges\***: from 0 mbar...60 mbar to -1...2000 bar
  - Mechanical connections\***: 1/2"-14 NPT; 1/4"-18 NPT; G1/4"B Mano EN 837; G1/2"B Mano EN 837; G1/4"A Form E; 7/16 - 20UNF
  - Electrical connections\***: EN 175301-803-A; M12x1 (S763); Deutsch DT04-4P; EN 175301-803-C; Cable output
  - Wetted parts\***: stainless steel 1.4404 (316L)/17-4
  - Response time**: 1 ms max 2 ms
  - Accuracy (25°C)**: ≤ 0.5 % FS after limit-point calibration
  - Output** : CANopen 2.0A or CAN J1939
- \*others on request. Different special custom-made solutions

## PMP-C200-MOD

### PRESSURE SENSORS SERIES WITH MODBUS DIGITAL OUTPUT



#### ADVANTAGES:

- PRESSURE TRANSDUCER FOR AN APPLICATION WITH HIGH AND VERY HIGH ACCURACY REQUIREMENTS OVER A WIDE TEMPERATURE RANGE
- HAS ESPECIALLY BEEN ADAPTED TO THE CHEMICAL AND PHYSICAL PROPERTIES OF HYDROGEN
- HIGH MEDIA RESISTANCE, NO INTERNAL SEALS,
- WITHOUT WELD SEAM
- SIGNAL CONDITIONING WITH ASIC
- HIGH INTEGRATION DENSITY
- VACUUM-TIGHT AND ELASTOMER-FREE
- FLEXIBLE FOR CUSTOMISED REQUIREMENT

#### MAIN FEATURE:

- Pressure ranges\***: from 0 mbar...20 mbar to -1...2000 bar
- Mechanical connections\***: 1/2"-14 NPT; 1/4"-18 NPT; G1/4"B Mano EN 837; G1/2"B Mano EN 837; G1/4"A Form E; 7/16 - 20UNF
- Electrical connections\***: M12x1(S763); Cable output; Deutsch DT04-4P
- Wetted parts\***: stainless steel 1.4404 (316L)/17-4
- Response time\***: typ 1 ms
- Accuracy (25°C)**: ≤ 0.2 % FS after limit-point calibration
- Output**: RS485 MODBUS RTU

## APPLICATION:



INJECTION-MOULD MACHINES



SPECIAL-PURPOSE  
MACHINE BUILDING



GAS INDUSTRY



MACHINE TOOLS



POWER PACKS



HVAC



AUTOMATION ENGINEERING



AUTOMOTIVE INDUSTRY



CHEMICAL INDUSTRY



HYDRAULICS AND PNEUMATICS



ENERGY TECHNOLOGY



INDUSTRIAL PROCESS  
CONTROLE



DATASHEETS OF  
SENSORS