

making sense with sensors

Pressure Overview

We offer an extensive range of pressure sensors from heavy industrial to board level.

- Gauge, absolute, differential and sealed pressure to 0.01% accuracy
- Wide range of threaded pressure ports, mounting options and materials
- Choice of electrical outputs: mV, mA, Voltage, Ratiomatic, RS232, RS485, I²C, 16 & 24 Bit SPI, SDI12
- ATEX, Marine approvals. Certifications AS9100, TS16949
- Ranges from 0.05 to 5000 Bar, vacuum, sealing up to IP68
- High operating temperatures available



OEM Sensors

SMD (surface mounted device) Pressure Sensors for gases/air, Piezoresistive (PR) technology offering high accuracy and long term stability

- Up to 24 bit digital sensor
- Barometric to 30 Bar ranges
- Temperature compensated, low power consumption
- Gauge or absolute pressures

Board mounted Piezoresistive (PR) for gas/air. High accuracy, long term stability

- Ranges 70 mBar to 30 Bar, special low pressure on request
- mV output, temperature compensated, 0.1% accuracy
- Gel fill for humid applications
- Gauge, absolute or differential pressures

Sensing elements, various compensation options, high stability

- 0.1% Typical accuracy, gauge or absolute versions
- mV or amplified output (0.5-4.5 VDC)
- Threads, connector/pins/lead & vent tube options
- Stainless steel, titanium or hastelloy materials

Stainless steel sensing elements – ultra small 9mm size

- Pressures to 700 Bar (10kpsi), 100mV, 0.25% non-linearity
- Thread or weld options, sealed gauge or absolute
- -40°c to 125°c range
- Cable, pins, temperature compensation options

Differential pressure sensing elements, stainless steel DP Sensors from 70 mBar (1 PSI) to 35 Bar (500 PSI)

- O'ring or options with threads prefitted
- Typical 0.1% non-linearity
- Compact size, true wet/wet DP, high stability

Acceleration | Force | Position | Pressure | Strain | Tilt | Torque | Vibration | Weight www.strainsense.co.uk

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Innovative sensor and instrumentation solutions for the R&D, test and high-tech industries



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Static Sensors

General industrial pressure sensors for gas or liquid, plug and play, OEM or end user

- Titanium, ATEX, Marine options
- Ranges 70 mBar to 3000 Bar, temperature to 150°c
- Thread, output, material, connector options
- Low cost, 0.25% typical performance
- Fast deliveries on request

Bonded foil (Schaevitz) pressure sensors, proven track record for overpressure, stability and long term performance

- Mechanical overtravel stops to prevent hydraulic hammer damage
- Options of digital compensation, Inconel welted parts, ATEX
- Shock/vibration resistant, very heavy duty
- Performance to calibration/test standards

Miniature static sensors for high end testing, military, research and small space envelopes

- Temperatures to 230°C
- Sizes start from 11mm diameter
- Milspec connectors, severe environments, including vibration/shock & overpressure
- Frequency response options to 4kHz
- Optional integral or separate amplifiers, materials, threads, outputs, custom product available

Miniature combined pressure and temperature

- Temperature sensing utilising PT1000 direct in the process
- Small size M8 thread, 150°c
- Voltage output, sealed gauge or absolute
- 3-350 Bar ranges (specials on request)

Food, beverage, process transmitter

- 100 mBar to 25 Bar versions
- 25/40/50mm flanges to DIN 11851
- Flexible connector, outputs and accuracy's
- Hastelloy option on request, ATEX on request

Digital output/CAN output

- RS232, RS485 outputs, specials on request
- Surge protection options
- Stainless steel or titanium construction
- 100 mBar to 1000 Bar ranges

Differential pressure

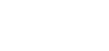
- Wet/wet differential pressure from 70 mBar (1 psi upwards)
- Large over pressure capability (even one sided)
- Options Inconel, ATEX, connectors, threads



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Pressure Overview

Dynamic Sensors

Sub miniature dynamic sensors for testing and research

- Silicon technology with frequency response to 1.7MHz
- Gas or liquid options, fully customised
- Sizes from 1.6mm diameter
- Pressure ranges 5-5000 PSI

Packaged bonded foil gauge sensors

- High performance, miniature threads
- Frequency to 230kHz
- Stainless steel flush diaphragm
- Options to 220°c
- Ranges to 500 Bar (7500 PSI)

Miniature pressure transducers, available in stainless steel or titanium

- Frequency response to 750kHz
- Flush diaphragm, silicon technology
- Options to 150°c
- Custom product available
- Ranges to 1000 Bar (15000 PSI)

High temperature miniature pressure sensor

- Ranges 10 to 700 Bar
- Temperatures to 220°C
- Sandshift technology eliminates zero shift by installation torque
- Frequency to 150kHz (depending on range)
- Amplifier option for voltage output

Options:

- Heat shields to withstand high blast temperatures to 1650°C
- High frequency response for static applications available
- Fully customisable to meet your needs
- Integral or external amplifiers available







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Pressure Overview

Submersible Sensors

Products for high accuracy depth and level measurement for process, oceanographic, water management, ground water and surface water applications

- Depth ranges from 1m to 11000m. Pressure ranges from 0.1 Bar to 2000 Bar
- Output signal options including RS485, RS232, mV, V and mA
- Stainless steel, titanium, Hastelloy and Inconel material options
- Sea water use, ATEX, marine approvals, data logging, SDI12
- High accuracy 0.1% FS to 0.01% FS
- Hyperbaric housings to 7000m depth/2000 Bar pressure rating

Pressure Switches

Range of pressure switches, from compact cylindrical models for OEM use, to larger, enclosed units for rugged process applications

- Low ranges 50 mBar to 1 Bar. High range 1 to 200 Bar
- Adjustable or factory set points
- Optional threads, ranges, wetted parts including diaphragm material
- Blade contact
- 350 mBar to 400 Bar ranges
- Relay contract options SPST, SPDT or DPDT contracts
- Adjustable switch point
- Optional diaphragm Nitrile, EPDM, Vitron or Neoprene



- Vacuum pressure switches
- 1.5"Hg to 28"Hg (50 to 1000 mBar)
- Sensitive diaphragms for accuracy
- Compact versions, material options

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