

■ Switches

Piston/Diaphragm



Gems offers a choice of pressure switches, from compact cylindrical models for OEM use, to larger enclosed units for rugged process applications. A piston/diaphragm design, incorporating the high proof pressure of piston technology allows these switches to operate with the sensitivity and accuracy of a diaphragm design. Repeatability ranges from 0.2 to 2% of the highest set point. Enclosures include aluminum, stainless steel, baked-on enamel coating, reinforced plastic and zinc-plated steel. All are NEMA4 or NEMA4X certified.

■ Transducers

Capacitive



Capacitive transducers are simple, durable and fundamentally stable. Variable capacitor technology, a rugged physical configuration, stainless steel wetted parts and a careful marriage of the mechanical assembly to the electronic circuitry combine to create highly repeatable transducers with low hysteresis and only .5% long-term-drift full scale per year, for low pressure applications. This large family of sensors includes models for positive pressures to 10,000 psi (700 bar), absolute vacuums, differential pressures, barometric pressure, low pressures (0-15 psi/ 0-1 bar), and clean-in-place 3A sanitary applications.

■ Switches

Solid-State



Utilizing our proven pressure sensor and ASIC design, Gems solid state pressure switches offer greater accuracy and repeatability in high shock and vibration environments. They also provide an advantage over electromechanical switches when actuations exceed 50 cycles/minute and a broad frequency response is needed. Available with a large selection of pressure port and electrical connection options.

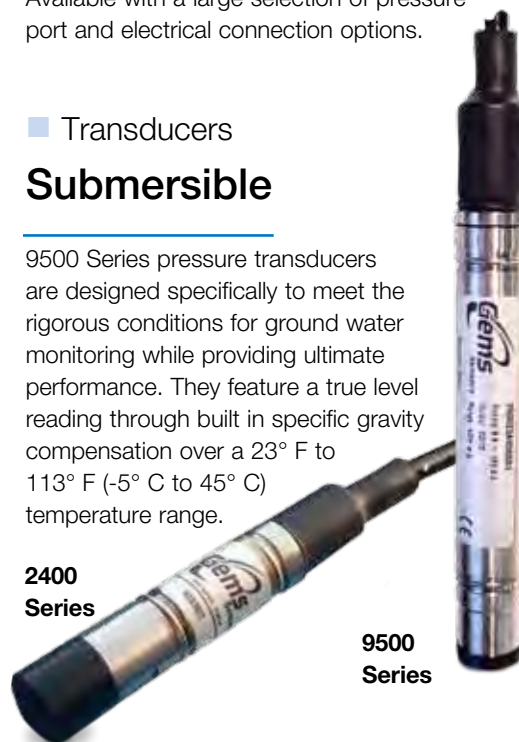
■ Transducers

Submersible

9500 Series pressure transducers are designed specifically to meet the rigorous conditions for ground water monitoring while providing ultimate performance. They feature a true level reading through built in specific gravity compensation over a 23° F to 113° F (-5° C to 45° C) temperature range.

2400 Series

9500 Series



The 2400 Series features silicon-based Micro-Electro-Mechanical Systems (MEMS). Its complete 'system-on-chip' enables an ultra-slim design for bore hole applications.

Both series are impervious to the effects of water, even in the highest humidity and long-term submersion.

■ Transducers

Sputtered Thin Film

Sputtered thin film technology provides years of worry-free measurements under demanding real-world conditions. Sputtered metallic strain gauge sensors have terrific thermal properties and superior stability specifications. Ideal for harsh applications demanding long-term service where precise laboratory-type measurements are required.



- **4000 Series** — The King of Stability: just 0.06% drift per year (non-cumulative). A broad range of models include submersible, high temperature, and weather proof versions.



3100/3200 Series

- **3100 Series** — Delivers an output signal for both temperature and pressure, providing full scale accuracy of 0.25% and long term drift to just 0.1% over the full scale per year. Unbeatable price to performance ratio in a compact package.
- **3200 Series** — Features thicker diaphragm and pressure snubber to withstand pressure spikes and cavitation.

■ Transducers

Chemical Vapor Deposition

Gems Chemical Vapor Deposition (CVD) pressure transducers and transmitters are based on a solid, proven technology. Our CVD instruments provide an effective method of overcoming the often severe limitations of other low-cost pressure measuring products. A state-of-the-art ASIC chip in each transducer provides greater linearity correction than traditional thermal compensation methods.



2600 Series

2200 Series

3300 Series

Thicker Diaphragm

Handles pulsating pressures—all stainless steel wetted parts.

CVD Sensor

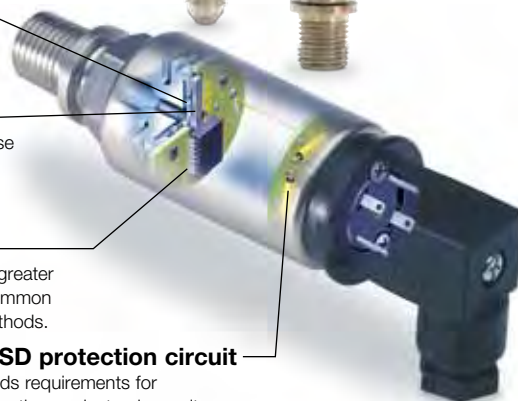
Stability and high sensitivity allow use of our thicker diaphragm. 17-4 PH SS sensor beam is laser welded for distortion-free construction.

ASIC Chip

Programmability provides greater linearity correction than common thermal compensation methods.

RFI/EMI & ESD protection circuit

Meets and exceeds requirements for CE marking. Protecting against noise, voltage spikes and static discharge.



- **1200/1600 Series** — 4X full-scale proof pressure. Typical 0.5% full-scale accuracy.
- **2200/2600 Series** — 2X full-scale proof pressure. Typical 0.25% full-scale accuracy.
- **3300 Series** — Compact versions for pressures to 600 PSI (41 bar).
- **6000 Series** — 5 to 1 turndown. Typical 0.15% full-scale accuracy.