

## Differential Pressure Sensor for Wet Media and Low Pressure Ranges

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Press release from: [American Sensor Technologies](#)

American Sensor Technologies, Inc. (AST) offers the new AST5100 Wet / Wet differential pressure sensor (also termed differential pressure transducer or transmitter) for differential pressure measurement ranges as low as 0 to 5 inches of water column (0 to 0.18 PSI) and up to 0 to 15 PSID.

AST uses a Macro Sensors LVDT (Linear Variable Differential Transformer) to measure the movement of bellows and digitally amplifies the signal with new AST electronics. The LVDT is known throughout the sensor industry as a measurement device with accurate, repeatable measurements as low as a few millionths of an inch. The AST5100 is compensated from 0 to 55°C (30 to 130°F) using the same advanced electronics as the AST20HA pressure transducer. With its advanced linearity correction and thermal compensation, the AST5100 series meets the demanding performance characteristics industrial applications require.

The AST5100 is available with 1/8" NPT female pressure ports and two mounting holes for easy installation. With an optional 4-20mA or 0-5V output signal, the AST5100 is compatible with most PLC's and controllers. Each product is packaged with an M12x1 Eurofast electrical connection. AST also supplies the mating cable assembly in either a four foot or ten foot length.

Built to withstand a line pressure up to 200 PSI, the AST5100 series is designed for a variety of applications including; filter monitoring, flow calculation across an orifice and level measurement. By positioning the high pressure side (or upstream side) of the AST5100 before the filter and the low pressure side (or downstream side) after the filter, the cleanliness of the filter can be measured. As the pressure decreases, the output signal will increase. Pneumatic systems for clean rooms or water filtration equipment commonly utilize this type of device. With the use of an orifice, the AST5100 series can be used to measure flow rates of liquids or gases based on the size of the orifice. Level measurement of sealed tanks can be measured by mounting the high pressure side to the bottom of the tank, with the low pressure side connected into the top of the tank. The AST5100 series can also be used as a gauge pressure sensor. By leaving the low pressure side of the differential pressure sensor open to atmosphere, the AST5100 series will measure the differential pressure between the high side and atmosphere.

The product specifications for the AST5100 can be viewed on our website:

[www.astensors.com/differential\\_pressure\\_sensors/AST5100](http://www.astensors.com/differential_pressure_sensors/AST5100)

American Sensor Technologies, Inc. (AST) manufactures MEMS-based pressure sensors, pressure transducers and pressure transmitters that offer the best price-performance ratio in the industry. Manufactured in New Jersey, AST pressure sensing products are built with a full selection of hazardous area and industrial approvals to service customer applications. Common industries utilizing AST sensor products are industrial OEM hydraulic systems, fuel cells, medical gases, HVAC, refrigeration (ammonia, Freon, CO2), Oil & Gas exploration and production, and off-road vehicles. AST's exclusive, proprietary Krystal Bond™ Technology (an advanced process in which inorganic materials are molecularly diffused onto a metallic surface in the presence of certain gases), produces high-performance pressure sensing products through the use of a single piece of stainless steel. AST offers a variety of UL and CSA approvals for Explosion-proof, Intrinsically Safe, and Non-incendive pressure transmitter applications. For more information on AST pressure sensing products and technology, please visit [www.astensors.com](http://www.astensors.com). Through the acquisition of noted LVDT manufacturer Macro Sensors ([www.macrosensors.com](http://www.macrosensors.com)), AST also offers a full line of linear/rotary position sensors, as well as related instrumentation.

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