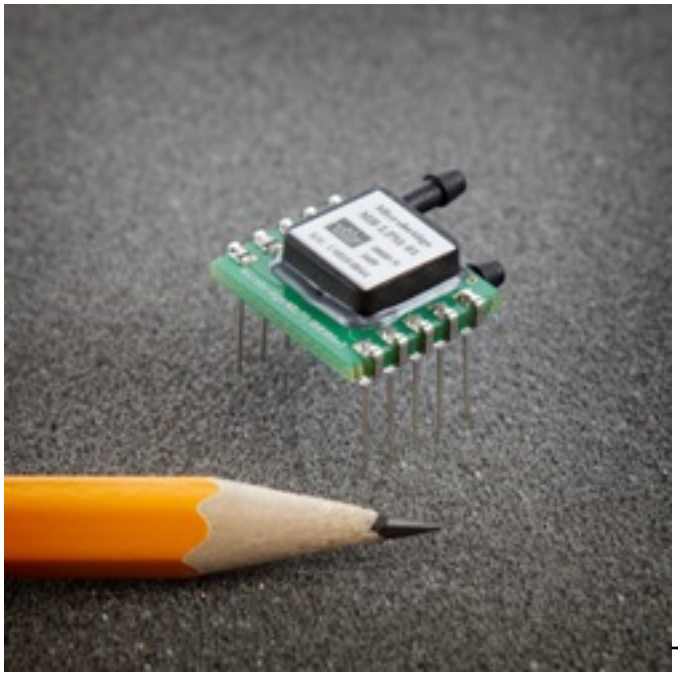
Ultra Low Pressure Sensors Measure Approx. 0.1 in. H2O



The LPSI/LPS2 Series offered by Servoflo Corporation are ultra low differential pressure sensors measuring from 0.1” to 5” of water in various non-directional or bi-directional calibration ranges. Based on a MEMS thermo-anemometer, the LPSI/LPS2 Series infers differential pressure from anano-liters per second gas flow through an integrated airflow channel.
The on-chip circuitry provides analog amplification and temperature compensation to send an accurate linear output over a wide temperature range (±2.5% FS from 5°C -55°C). The LSP1 comes in various ranges from 0.1” to 2” of water while the LPS2 is available from ranges between 1-5” of water. Standard input voltage is 5VDC, and a 3V model is also available.

Key features include immunity to dust contamination and humidity. In addition, the high flow impedance allows users to connect pneumatic tubing and filters without significantly affecting the pressure measurement. A small footprint of approximately 17.5 mm by 15 mm allows for installation in small areas. A typical response time of 1-2 ms provides flexibility in analyzing pressure readings. Modifications are possible to suit a specific application and budget.

These features make the LPSI/LPS2 Series ideal for HVAC, medical CPAP and other breath detection applications, fume hoods, biological safety cabinets, critical containment, leak detection and much more.

Source URL (retrieved on *07/12/2014 - 10:40am*):
http://www.mdtmag.com/product-releases/2011/09/ultra-low-pressure-sensors-

measure-approx-01-h2o