

Subminiature LVDTs for Multipoint High Reliability Measurements



Measurement Specialties, Inc. (NASDAQ: MEAS) has recently designed and brought to production a high temperature version of their subminiature LVDT (Linear Variable Differential Transformer), the highly reliable [Model XS-B](#). This small position sensor has a mere 3/16 inch [4.8mm] diameter with custom design capability to diameters of 1/8 inch [3.1mm]. The XS-B is now available for 430°F [220°C] operation in high-temperature applications such as MFC (Multi-Finger Calipers) for oil well casing integrity inspection. Efficiently manufactured under a strict ISO9001 quality system, these LVDTs are high-quality, yet cost effective linear measurement products.

The small diameter of these LVDTs allows for grouping many of them in a very small package for high density surface profile measurements in space restricted applications. The XS-B features a stainless steel housing, electromagnetic shielding, and resistance to shock and vibration. The 36-AWG lead-wires are PTFE-insulated providing resistance to abrasion and chemicals. The standard operating temperature range is -67°F to +302°F [-55°C to +150°C] with 430°F [220°C] optional.

Applications include but are not limited to:

- Servomechanisms
- Robotics
- Surfometers
- Measurement of films/delicate materials
- Multi-point measurement of small components
- Multi-finger calipers for pipe contour inspection
- Measurements at high displacement speeds

If you have an application for this product and wish to discuss it with our experts, please submit your specification and commercial requirements to inductive.position-OEM@meas-spec.com.

Measurement Specialties, Inc. designs and manufactures sensors and sensor-based systems. The company produces a wide variety of sensors and transducers to measure precise ranges of physical characteristics such as pressure, force, vibration, torque, position, temperature, humidity, fluid properties, mass air flow and photo optics. Measurement Specialties uses multiple advanced technologies – including piezo-resistive, electro-optic, electro-magnetic, variable reluctance, magneto resistive, digital encoders, thermistors, thermocouples, RTDs, capacitive, resonant beam, application specific integrated circuits (ASICs), micro-electromechanical systems (MEMS), piezoelectric polymers and strain gauges to engineer sensors that operate accurately and cost-effectively in customers' applications. *Measurement Specialties acquired Schaevitz Sensors and the Schaevitz® trademark in 2000.*