

Press release
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Manifold mountable ultra-low differential pressure sensors

First Sensor presents a new miniature manifold mountable version of its ultra-low differential pressure sensors with measuring ranges from 25 to 500 Pa (0.1 to 2 inH₂O) Full Scale. The low profile sensors of the LME series feature a total height of only 9 mm including pressure ports and allow for flexible direct manifold assemblies. Further, the devices are highly versatile to fit to custom adaptors for application-specific mounting requirements e.g. in the HVAC industry.

The micro-flow-based LME differential pressure sensors use an innovative First Sensor MEMS technology which integrates the flow channel including the sensing elements within the silicon sensor chip. Due to this extreme miniaturization, the flow through the LME sensor is decreased by several orders of magnitude compared to other flow-based pressure sensors. As a result, the LME ensures superior immunity to dust contamination and condensation. Additionally, there is no need to recalibrate or correct the sensor output signal when using long connecting tubes and input filters. The LME differential pressure sensors achieve a very high sensitivity and accuracy, as well as excellent offset long term stability better than 0.1 Pa/year. The surface-mount devices offer a digital SPI bus interface and an analog output at the same time.

Key features of the LME differential pressure sensors:

- Low profile, total height of only 9 mm including pressure ports
- Highly versatile to fit to application-specific mounting adaptors and manifolds
- Micro-flow channel integrated within the silicon sensor chip
- Superior immunity to dust contamination and condensation

Due to their very high immunity to dust-laden or humid air the LME manifold mountable pressure sensors from First Sensor achieve superior sensor lifetimes and expanded service intervals in HVAC and medical device applications. Therefore, the sensors are ideal for ultra-low differential pressure measurements e.g. in VAV controls, filter monitoring, burner controls, respiratory devices, anesthetic devices, CPAP machines, spirometers and oxygen concentrators.

Further product information: www.first-sensor.com/lme

About First Sensor AG

First Sensor AG is one of the world's leading suppliers in the field of sensor systems. Our company develops and manufactures both standardized and tailor-made sensor solutions for the detection of light, radiation, pressure, flow, level and acceleration for applications in the Industrial, Medical and Mobility growth markets. The company produces in-house and along the value-added chain from component to system level.

With over 800 employees, we are represented at six German locations and also have development, production and sales sites in the USA, Canada, China, the Netherlands, Great Britain, France, Sweden and Denmark along with a worldwide partner network. We guarantee our compliance through regular successful certifications of the sites according to ISO/TS 16949, ISO 14001, EN ISO 13485, EN 9100 and ISO 9001 - matching the respective business field.

First Sensor AG is listed in the Prime Standard of the German stock exchange in Frankfurt.

For more details on First Sensor, please visit: www.first-sensor.com

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