

Melexis

INSPIRED ENGINEERING

MLX90821

VERY LOW RELATIVE PRESSURE SENSOR

FACTORY CALIBRATED VERY LOW PRESSURE SENSOR FOR DEMANDING AUTOMOTIVE APPLICATIONS



The diving bell spider is the only spider known to live inside an air bubble under water. In this way, it resembles our MLX90821 pressure sensor, capable of sensing very small variations in pressure, since this sensor lives in a fuel gas bubble on the fuel surface.

BRINGING SOLUTIONS TO COPE WITH FUEL VAPOR BUILD-UP IN HYBRID OR CLASSIC ICE CARS

MLX90821

The MLX90821 is a packaged and factory calibrated automotive relative pressure sensor IC with an analog and a SENT output that can be used in applications demanding very low pressures from 50 mbar up to 700 mbar in automotive harsh media applications such as fuel vapor.

The MLX90821 is the ideal solution for measuring very low pressures in applications requiring extended mission profiles when high robustness is needed.

The same product can be used at 700 mbar to cope with the fuel vapor build-up in hybrid cars as 50 mbar, the classic range for fuel vapor in non-electrified powertrains.

KEY FEATURES

- ✓ High accuracy relative pressure sensor with ratiometric analog output or digital SENT output including compensated $\pm 1^\circ\text{C}$ accurate NTC media temperature information
- ✓ Large automotive temperature range (-40°C to 150°C)
- ✓ Automotive qualified and automotive diagnostic features (clamping levels, broken track diagnostics, multiple internal fault diagnostics)
- ✓ Factory calibrated or fully programmable or reconfigurable through the connector for customized calibration curves at customers
- ✓ Backside exposed relative pressure sensor for higher resistance to common automotive media
- ✓ Assembled in a robust easy-to-seal package



Measurement of fuel vapor pressure

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