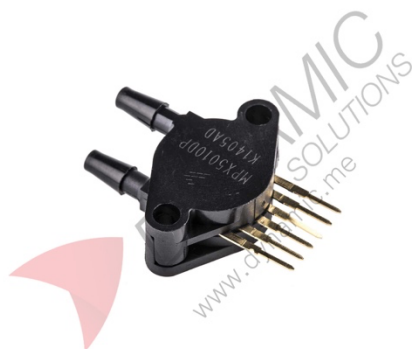


MPX5010DP Differential Pressure Sensor



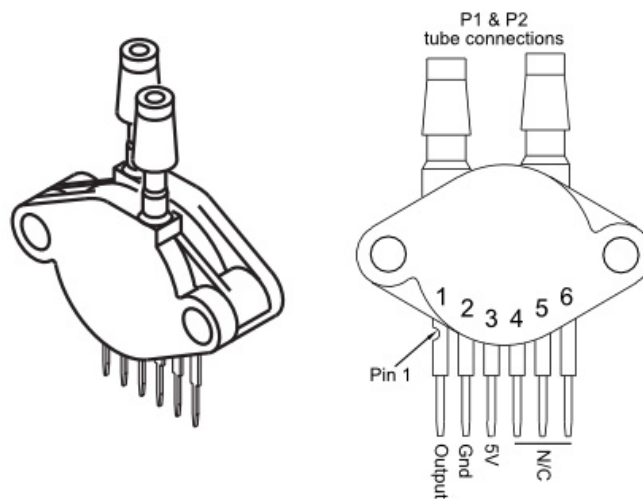
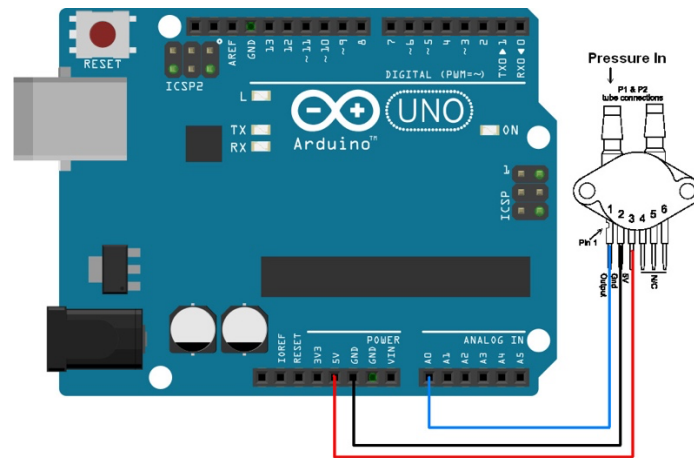
Features:

The MPX5010DP is a state-of-the-art piezoresistive differential pressure sensor with integrated signal conditioning, temperature compensation, and calibration. Its monolithic silicon design provides precise, ratiometric analog output proportional to applied pressure. Designed for microcontroller and microprocessor systems, the sensor is suitable for industrial, medical, and HVAC applications. The axial port supports industrial-grade tubing, and its epoxy unibody plus thermoplastic surface mount package ensures durability and long-term reliability.

Specifications	
Pressure Range	0–10 kPa (0–1.45 psi / 0–1019.78 mm H ₂ O)
Supply Voltage	4.75–5.25 Vdc
Supply Current	Normally 5 mA, can reach up to 10 mA.
Zero Pressure Offset	0–0.425 Vdc
Full Scale Output	4.475–4.925 Vdc
Full Scale Span	4.275–4.725 Vdc
Accuracy	±5 %VFSS
Sensitivity	450 mV/mm H ₂ O
Response Time	1.0 ms
Output Source Current	0.1 max mAdc
Warm-Up Time	20 ms
Offset Stability	±0.5 %VFSS
Operating Temperature	–40 to +125 °C
Storage Temperature	–40 to +125 °C
Maximum Pressure	40 kPa
Usage	Differential and gauge pressure sensing for microcontroller-based systems

Pinouts:

Pin Name	Type	Description
VOUT	Analog	Analog output voltage
GND	Power	Power ground
Vs	Power	Supply voltage (4.75–5.25 Vdc)
NC	—	No connection
NC	—	No connection
NC	—	No connection



Product Pictures:

