Introduction
Pressure range: 0-5.8 psi (40 kPa);

Product Features:
- Solid, MEMS technology, high reliability
- Low cost
- Wide monitoring and control media
- The application of a wide temperature range
- Easy to use, choose from a variety of range. Easy to use, easy to install in OEM equipment

Application areas:
- Automotive: tire pressure, car air pump, MAP sensor, diagnostic equipment, automotive sensors.
- Industry: Air brake switch, portable pressure gauge, such as digital pressure gauge, environmental monitoring, consumer and sports
- Health care: patient monitoring and diagnostic equipment, such as blood pressure monitors, medical instrumentation and monitoring

Range: 40 kPa (differential pressure)
Output: mV signal
Electricity supply: 5 VDC or constant current 1 mA
Linear accuracy: 0.25% FS

Measure the pressure range of 580 PSIG, 40 KPaG
Max pressure capacity of three times the measuring range
Work power supply 5 VDC,
Input impedance of 4 - 6 kΩ
The output impedance of 4 - 6 kΩ
Operating temperature: -40 - 85 °C / -40 °F - +185 °F
Storage Temperature: -40 - 125 °C / -40 °F - +257 °F
Accessible media, clean, dry, non-corrosive gases
Bias voltage ± 25 mV
Full-scale output voltage: 50 - 100 mV
Bridge Resistance to 4 - 6 kΩ
Linearity ± 0.3% F.S.
Hysteresis ± 0.7% F.S.
Bias Temperature coefficient ± 0.08% of F.S. / °C
Temperature coefficient of sensitivity -0.21% FS/ °C
This amplifier uses both inverting and non-inverting inputs with a gain of one to produce an output equal to the difference between the inputs. It is a special case of the differential amplifier. You can also choose the resistances to amplify the difference.
Pressure Sensor MPS20N0040D-S

\[ V_{\text{out}} = (V_2 - V_1) \frac{R_3}{R_1} \]

If the resistors forming the voltage divider for \( V_2 \) and \( V_1 \) are each multiplied by the same number, preserving their ratio, the small signal is unchanged.

Dimensions