MinebeaMitsumi Product Database
Passion to Create Value through Difference

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ミネベアミツミ株式会社

Outline

The MMR940 digitally outputs a micro differential pressure value which was corrected. Customers need no correction because it corrects and outputs the differences of sensors and temperature characteristics. It does not require complicated sensor drive or control circuit, and devices with high performance can be made only with this module and an external microcontroller which will be the host.

Applications

Devices using air pressure

Features

① Dual nozzle package
② A high-accuracy pressure value can be output
Operating pressure range -40~+40cmH2O
Effective resolution: 0.002cmH2ORMS
Pressure measurement error: ±0.5[%FS]
③ It corrects the differences of sensors and temperature characteristics when shipped from our factory
④ It digitally outputs pressure value (I2C)
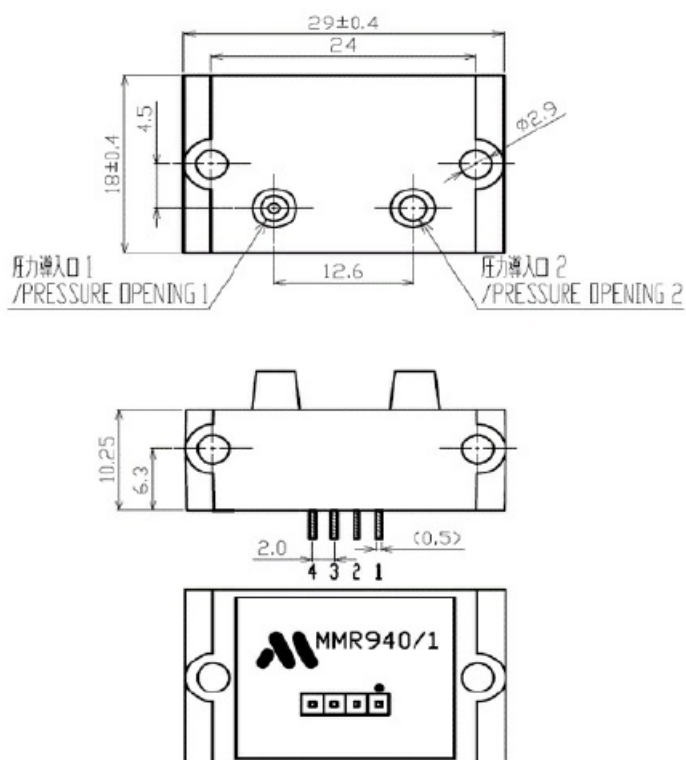⑤ Noise reduction is possible by a built-in LowPassFilter.

Main specifications

Pressure Type	Differential Pressure
Pressure Medium	Air (no Condensation)
Supply Voltage Range	3.0~3.6

[V]	3.0~3.6
Operating Temperature Range [deg.C]	0~50
Operating Pressure Range [kPa]	±2 / ±4 / ±7 / ±10
Current Consumption [μA]	800
Pressure accuracy [Pa]	±20 /±40 /±70 / ±100
Pressure effective resolution [PaRMS]	1.8 / 0.9 / 0.4 / 0.2
Conversion Time [ms]	0.4 / 0.8 / 1.6 / 3.2
Interface	I2C

Package

Package Size [mm]

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29.0 x 18.0 x 17.2