

# TSI 4040/4140

## Mass Flowmeters for Gases

TSI 4000/4100 Series Flowmeters are designed for a multitude of gas flow measurement applications. Whether measuring gas flows in a laboratory or manufacturing setting, TSI general-purpose flowmeters provide accurate results with multiple data out-put options. TSI general-purpose flowmeters come complete with accessories making setup and operation fast and convenient.

### Highlights

- 4 millisecond flow response
- $\pm 2\%$  of reading for high accuracy
- High turndown ratio
- Low pressure drop
- Convenient analog output of flowrate
- Versatile digital output of flowrate, volume, pressure, temperature
- Built-in temperature and pressure compensation
- NIST-traceable calibration certificate included at no additional cost

**Perfect quality (Thailand)**  
**99 moo 11 nongsonghong**  
**khonkaen 40190 tel 0814537641**

**[www.สอบเทียบเครื่องมือแพทย์.com](http://www.สอบเทียบเครื่องมือแพทย์.com)**



### Applications

- Product Development, Prototypes, Production Testing:
  - Ventilators
  - Anesthesia systems
- Secondary calibration standard
- QA testing
- Laboratory
  - Aerosol science
  - Gas blending
  - Analytical instrumentation
  - Carrier gas measurement
- Fuel cells
- Reformers

### **Low Flow–Model 4140/4143**

**Flow Measurement:**

**Range:** 0.01 to 20 standard L/min

**Accuracy:**  $\pm 2\%$  of reading or 0.005 standard L/min, whichever is greater, for air and O<sub>2</sub>;  $\pm 3\%$  of reading or

0.010 standard L/min, whichever is greater, for N<sub>2</sub>O and N<sub>2</sub>

**Response:** 4 ms to 63% of full scale flow

**Overall Dimensions:** 127 × 49 × 32 mm (5 × 2 × 1.25 in.)

### **High Flow–Models 4040/4043/4045**

**Flow measurement:**

**Range:** Model 4040 and 4045: 0 to 300 standard L/min

Model 4043: 0 to 200 standard L/min

**Accuracy:**  $\pm 2\%$  of reading or 0.05 standard L/min, whichever is greater, for air and O<sub>2</sub>,  $\pm 3\%$  of reading or 0.10

standard L/min, whichever is greater, for N<sub>2</sub> and Air/O<sub>2</sub> mixture

**Response:** 4 ms to 63% of full scale flow

**Overall Dimensions:** 182 × 63 × 53 mm (7.2 × 2.5 × 2.1 in.)

### **All Models**

**Volume Measurement\*:**

**Range:** 0.01 to 99.9 liters

**Accuracy:**  $\pm 2\%$  of reading

**Pressure Measurement:**

**Range:** 50 to 199 kPa absolute

**Accuracy:**  $\pm 1$  kPa

**Response:** <4 ms to 63% of final value for step change

**Temperature Measurement:**

**Range:** 0 to 50°C

**Accuracy:**  $\pm 1^\circ\text{C}$  at flows greater than 1 standard L/min

**Response:** <75 ms to 63% of final value for step change

**Analog Output:** 0 to 10 VDC, zero and span adjustable via RS232

**DC Power Input:** 7.5 VDC  $\pm 1.5$  V, 300 mA max

*Specifications subject to change without notice*

*-Supplied through RS232 port only.*

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ID LINE : JOHNPERFECT / TEL 0814537641