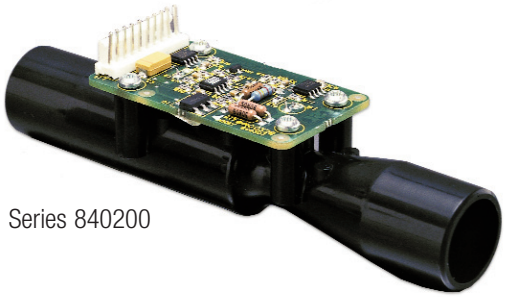
FLOW INSTRUMENTS

OEM Flow Sensors

Series 840500



Series 840200

OEM Flow Sensors For Embedded Applications

Series 840200 & 840500

TSI, a worldwide leader in air and gas flow measurement technology, designed these affordable high-performance flow sensors to measure air, oxygen, and other gases for embedded applications. A compact size and standard configurations make it easy to design into your products. You save engineering time, reduce costs and get your products to market faster.

Features and Benefits

- Fully calibrated and ready to install
  - – Calibration data stored on-board
  - – No additional calibration required
- Mass flow measurements
  - – Independent of temperature and pressure
- Fast response
  - – Ideal for dynamic flow measurements
  - – Improves control performance
- Accuracy as a percent of reading
  - – Assures high accuracy over a wide flow range
  - – Wide dynamic operating range
- Low pressure drop
  - – Eliminates sensor effects on flow rate
  - – Reduces pump/blower size and power

Applications

- Patient Ventilators
  - – Critical and sub-acute care
  - – Pediatric and neonatal
  - – Portable and transport
- Anesthesia Systems
  - – Fresh gas delivery
  - – Ventilator system
- Medical Equipment
  - – Nitric oxide delivery
  - – Oxygen generation
  - – Other gas flow systems

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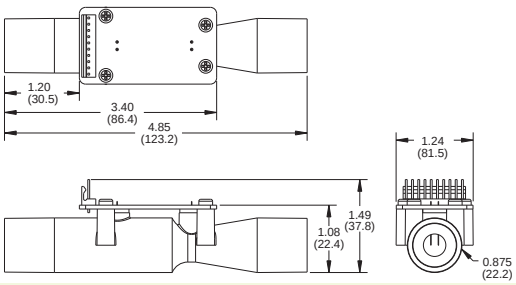
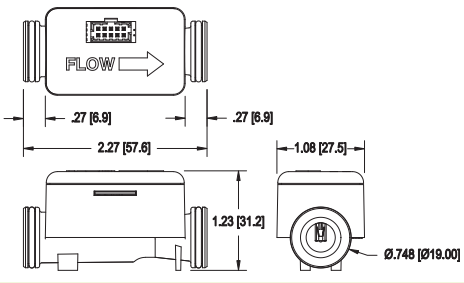
OEM Flow Sensors

Specifications

Series 840200 & 840500

OEM Flow Sensors For Embedded Applications

Features	TSI Series 840200	TSI Series 840500
TSI Models (Listed by gas calibrations stored on-board)	Model 840201 Air Model 840202 Oxygen	Model 840521 Air Model 840522 Oxygen Model 840523 Air and Oxygen Model 840533 Air, Oxygen, and Heliox
Flow Range	0 to 300 standard l/min	0 to 300 standard l/min, Air and Oxygen 0 to 80 standard l/min, Heliox 80/20 Mix
Accuracy*	±2.5% of reading ±0.1 l/min @ 21°C	±2.5% of reading ±0.05 l/min @ 21°C
Temperature Range	0 to 65 °C	0 to 50 °C
Pressure Drop	18 cm H_2O at 300 l/min	12 cm H_2O at 300 l/min
Response Time	5 msec (0 to 63% of full-scale flow)	5 msec (0 to 63% of full-scale flow)
Output Signals Flow	0 to 4 vdc non-linear, 1 Channel	0 to 2.5 vdc non-linear, 2 Channels
Output Signal Temperature	0 to 4.5 vdc non-linear	0 to 2.5 vdc non-linear
Input Voltage	5 vdc ±5%, Regulated	5 vdc ±5%, Regulated, 3.3 vdc eeprom
Power Consumption	0.65 watts at full-scale flow	0.8 watts at full-scale flow
Mating Connector	Amp 1-640456-0	Molex 51110-1060 (Wire) or Molex 87568-1074/87568-1073 (IDC)
Eeprom Interface	SPI Communication	I²C Communication
Warranty	1 year	1 year
Dimensions in Inches (mm)		

Consult TSI for complete product specifications. Specifications are subject to change without notice.

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