OEM FLOW SENSORS FOR EMBEDDED APPLICATIONS SERIES 840200, 840500, AND 840600

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.



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

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



SPECIFICATIONS

OEM FLOW SENSORS FOR EMBEDDED APPLICATIONS SERIES 840200, 840500, AND 840600







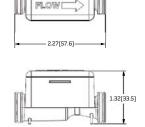
| Features | TSI Series 840200 | TSI Series 840500 | TSI Series 840600 |
|---|---|--|--|
| TSI Models (Listed by gas calibrations stored on-board) | Model 840205 Air Model 840206 Oxygen | Model 840521 Air Model 840522 Oxygen Model 840523 Air and Oxygen | Model 840621 Air Model 840622 Oxygen Model 840623 Air and Oxygen |
| Flow Range | 0 to 300 standard l/min | 0 to 300 standard l/min, Air and Oxygen | 0 to 300 slpm |
| Accuracy* | ±2.5% of reading ±0.1 l/min @ 21°C | ±2% of reading ±0.05 l/min @ 21°C | ±2.0% of reading or 0.05 slpm at 21°C, Air and Oxygen |
| Temperature Range | 0 to 65 ℃ | 0 to 50 °C | 0 to 50 °C |
| Pressure Drop | $18\mathrm{cm}\mathrm{H_2O}$ at $300\mathrm{l/min}$ | 12 cm H ₂ O at 300 l/min | 50 cm H ₂ 0 at 200 L/min |
| Response Time | 5 msec (0 to 63% of full-scale flow) | 5 msec (0 to 63% of full-scale flow) | 3 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 | 0 to 3.3 vdc non-linear, 2 Channels |
| Output Signal Temperature | 0 to 4.5 vdc non-linear | 0 to 2.5 vdc non-linear | 0 to 2.5 vdc non-linear |
| Input Voltage | 5 vdc ±5%, Regulated | 5 vdc ±5%, Regulated, 3.3 vdc eeprom | 5 vdc ±10%, regulated, EEPROM (+2.7V to +5.5V) |
| Power Consumption | 0.65 watts at full-scale flow | 0.8 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) | Molex 87832-1020 (2mm pitch, 2 row, 10 pin) |
| Eeprom Interface | SPI Communication | I ² C Communication | I ² C Communication |
| Warranty | 1 year | 1 year | 1 year |

TSI Series 840500

TSI Series 840200

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TSI Series 840600





Dimensions in inches (millimeters)

*Consult TSI for complete product specifications.

Specifications are subject to change without notice.

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