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



UNDERSTANDING, ACCELERATED

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 AirModel 840621 AirModel 840522 OxygenModel 840622 OxygenModel 840523 Air and OxygenModel 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 Air and 0xygen	
Temperature Range	0 to 65 °C	0 to 50 °C	0 to 50 °C
Pressure Drop	18 cm H ₂ 0 at 300 l/min	12 cm $\rm H_2O$ 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, EEPRO (+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 87832-1020 Molex 87568-1074/87568-1073 (IDC) (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



TSI Series 840600

1.32[33.5]



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Dimensions in inches (millimeters)

1.20

3.40 (86.4) 4.85 (123.7

*Consult TSI for complete product specifications.

Specifications are subject to change without notice.

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