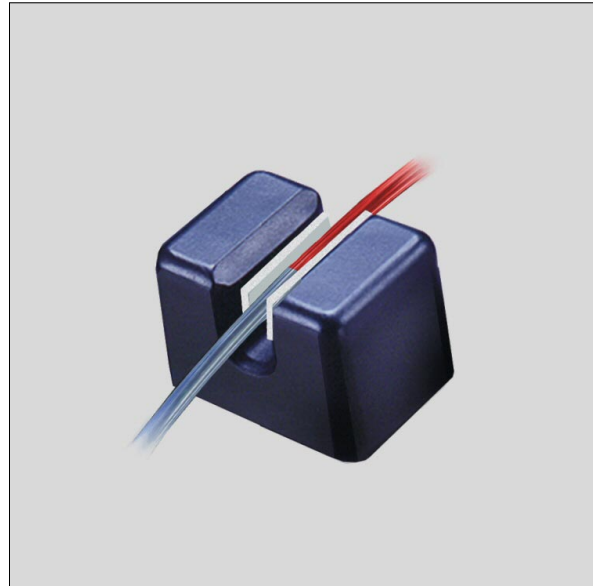


FEATURES

- Non-invasive optical technology
- Micro-controller based integral circuitry
- Immunity to ambient light
- High accuracy and reliability
- Detects blood per ANSI/AAMI RD5:2003



SPECIFICATIONS

Maximum ratings

Supply voltage (V_s)	5 V _{DC} (optional 6...24 V _{DC})
Supply current	typ. 150 mA
Temperature limits	
Storage	-20 ... 85 °C
Operating	5 ... 60 °C
Humidity limits	0 - 95 %RH (non-condensing)

ELECTRICAL CONNECTION

Sensor	1	Brown	Return
	2	Red	Power in
	3	Orange	CAL input
	4	Yellow	CAL output
	5	Green	Blood output
	6	Blue	Tube detect output
	7	Violet	Liquid detect output
	8		NC
	9		NC
	10		NC
	11	Gray	Red intensity analog output
	12	White	Blue intensity analog output
	13		NC
	14		NC

Note: Set CAL input (Pin 3) momentary high to begin calibration. CAL output (Pin 4) will be high if calibration is complete.

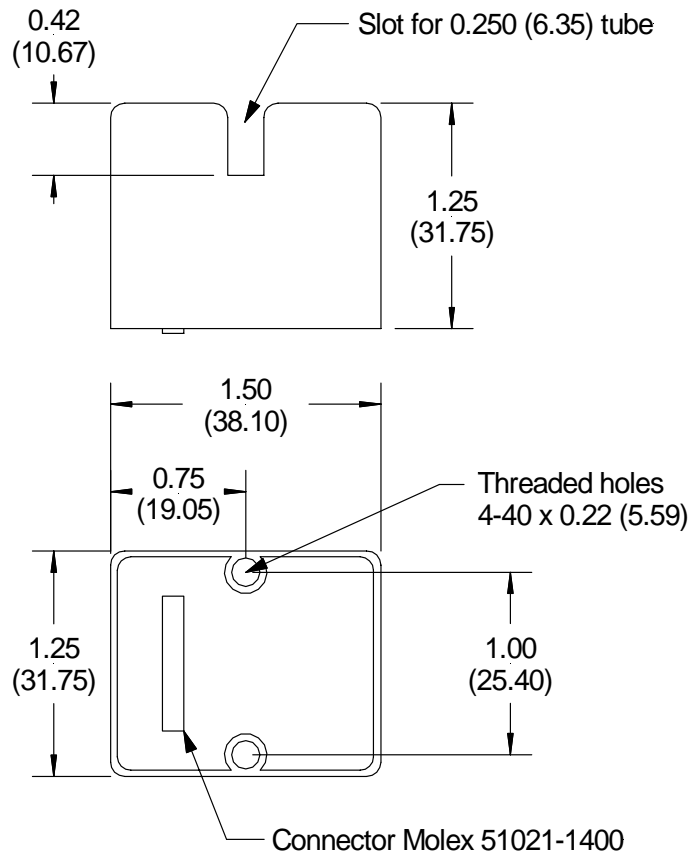
PERFORMANCE CHARACTERISTICS

Characteristics		Min.	Typ.	Max.	Units
Logic low voltage				0.6	V
Logic high voltage		$V_s - 0.7$			
CAL input min. width ¹		50			ms
Response time	Calibration ²			15	s
	Blood detect ³			500	ms
	Tube detect		100		
	Liquid detect		200		

Notes:

1. The minimum width for the CAL input to initiate a calibration cycle. Pulses shorter than this may be ignored
2. The maximum time to perform the tube calibration cycle.
3. The maximum time to detect blood levels rising above the limit or blood levels falling below the limit.

OUTLINE DRAWING



all dimensions in inches (mm)

ORDERING INFORMATION

Options	Series	Electrical	Options	Design type	Tubing size
	BCD	1 5 V input, logic output	000 Standard (threshold AAMI), 28 inch leads, no tube detection, no liquid detection	8 for rigid tubing	04 1/4 inch O.D.
		2 6...24 V input, logic output		9 for soft tubing	
		3 5 V input, analog and logic output			
		4 6...24 V input, analog and logic output			
Example: BCD - 1 000 - 8 04					

Notes: Sensortechincs is asking customers for a sample of their tubing. The sensor will then be calibrated for exactly this tubing. **For proper function the sensor should only be used with the tubing which was sent to Sensortechincs!**

Custom specific modifications are widely available. Please contact your nearest Sensortechincs sales office for further information.

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