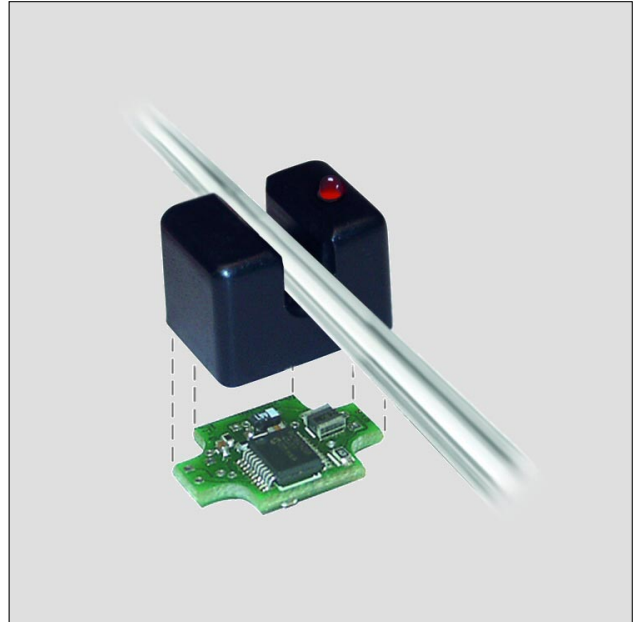


FEATURES

- Non-invasive pulse-type ultrasonic technology
- Compact design features integral programmable micro-controller
- High accuracy and reliability
- Dry coupled, no coupling gel required
- Output signal not affected by fluid or tubing colour
- High EMI and RFI noise immunity

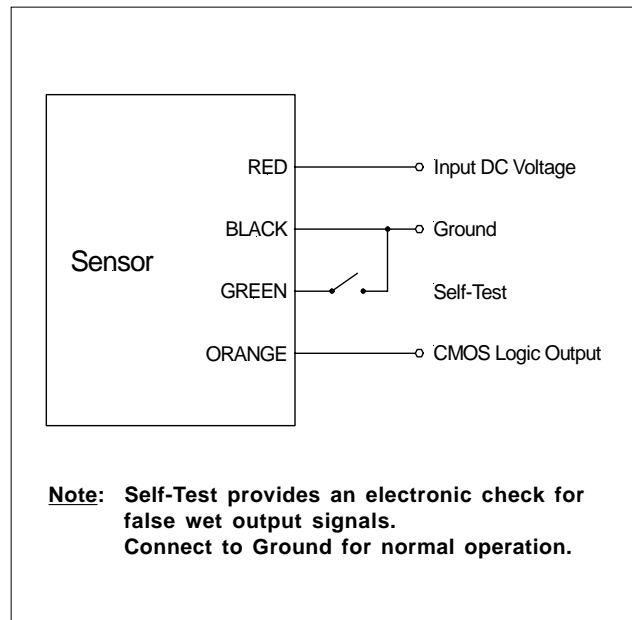


SPECIFICATIONS

Maximum ratings

| | |
|-------------------------------|--------------------------------|
| Supply voltage (V_s) | 5 V_{DC} ($\pm 10\%$) |
| Supply current without LED | 15 mA |
| with LED | 24 mA |
| Temperature limits | |
| Storage | -20 ... 85 °C |
| Operating | 5 ... 60 °C |
| Humidity limits | 0 - 95 %RH (non-condensing) |

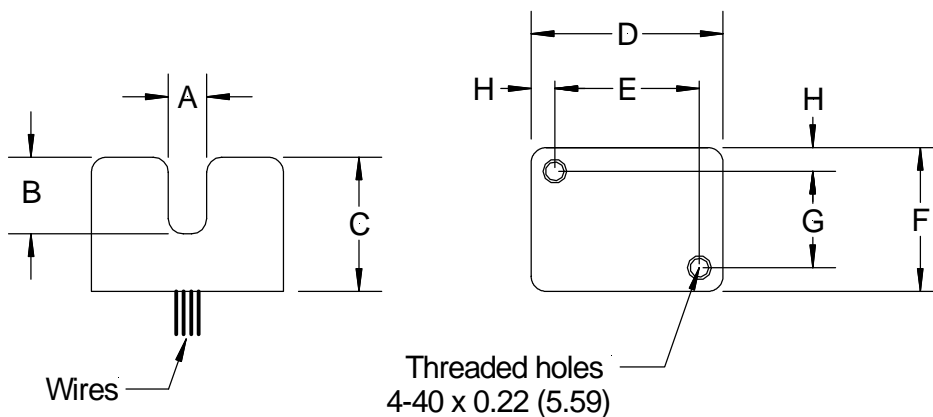
ELECTRICAL CONNECTION



PERFORMANCE CHARACTERISTICS

| Characteristics | Min. | Typ. | Max. | Units |
|-------------------------------------|-------------|------|-------|-------|
| Logic low voltage | | | 0.5 | V |
| Logic high voltage | $V_s - 0.5$ | | | |
| Output sink current (output low) | | | 5 | mA |
| Output source current (output high) | | | 5 | |
| Response time | wet to dry | | 0.215 | ms |
| | dry to wet | | 46 | |

OUTLINE DRAWING



Dimensions

| Part no. | Tubing size | A | B | C ¹ | D | E | F | G | H |
|----------|-------------|-------|-------|----------------|------|------|------|------|-------|
| AD8...01 | 1/16" O.D. | 0.045 | 0.150 | 0.750 | 1.12 | 0.80 | 0.88 | 0.55 | 0.165 |
| AD...02 | 1/8" O.D. | 0.100 | 0.325 | 0.620 | 1.00 | 0.75 | 0.75 | 0.50 | 0.125 |
| AD9...4M | 4 mm O.D. | 0.125 | 0.350 | 0.650 | | | | | |
| AD...03 | 3/16" O.D. | 0.150 | 0.315 | 0.650 | | | | | |
| AD...04 | 1/4" O.D. | 0.200 | 0.400 | 0.700 | | | | | |
| AD9...06 | 3/8" O.D. | 0.310 | 0.525 | 0.825 | | | | | |
| AD9...08 | 1/2" O.D. | 0.430 | 0.750 | 1.050 | | | | | |
| AD9...10 | 5/8" O.D. | 0.520 | 0.850 | 1.150 | | | | | |

Note:

1. The following products come with an extension base which adds another 0.30 inches to dimension C:

- AD8...02, ...03, ...04
- AD9...4M, ...08, ...10

all dimensions in inches

ORDERING INFORMATION

| Options | Series | Design type | | Options | | Application | | Tubing size | |
|-----------------|-----------|-------------|------------------|-------------|-------------------------------|-------------|---------------------------------------|--|----------------|
| | AD | 8 | for rigid tubing | 0000 | without LED, 36 inch cable | E | End of sample | 01 | 1/16 inch O.D. |
| | | 9 | for soft tubing | 0001 | with LED, 36 inch cable | B | Bubble size equal to tube I.D. | 02 | 1/8 inch O.D. |
| | | | | | | S | Bubble size down to 50 % of tube I.D. | 4M | 4 mm O.D. |
| | | | | | | | | 03 | 3/16 inch O.D. |
| | | | | | | | | 04 | 1/4 inch O.D. |
| | | | | | | | | 06 | 3/8 inch O.D. |
| | | | | | | | | 08 | 1/2 inch O.D. |
| | | | | | | | | 10 | 5/8 inch O.D. |
| | | | | | | | | Notes: 01: only as AD8-...E01 4M: only as AD9-... 06: only as AD9-0000... 08: only as AD9-0000... 10: only as AD9-0000-E... | |
| Example: | AD | 9 | - | 0000 | - | B | | 4M | |

Notes: Sensortech 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 Sensortech!

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

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