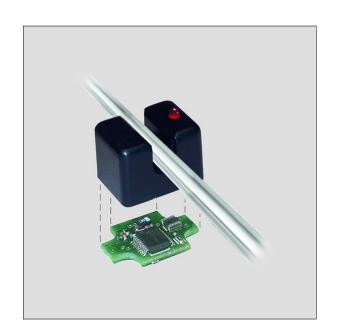


## AD8 / AD9 Series

#### Ultrasonic air bubble and air-in-line sensors

#### **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**

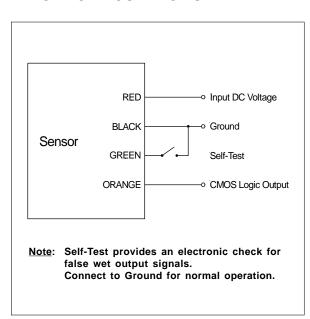
Operating

Downloaded from Elcodis.com electronic components distributor

Supply voltage ( $V_s$ )	5 V <sub>DC</sub> (± 10%)			
Supply current without LED with LED	15 mA 24 mA			
Temperature limits Storage	-20 85 °C			

Humidity limits 0 - 95 %RH (non-condensing)

#### **ELECTRICAL CONNECTION**



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5 ... 60 °C



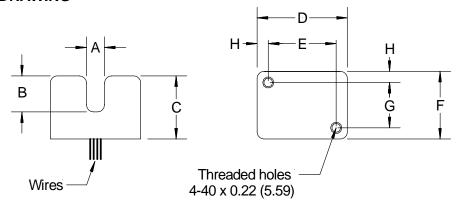
# AD8 / AD9 Series

### Ultrasonic air bubble and air-in-line sensors

#### PERFORMANCE CHARACTERISTICS

Characteristics		Min.	Тур.	Max.	Units		
Logic low voltage				0.5	V		
Logic high voltage		V <sub>s</sub> - 0.5			V		
Output sink current (output low)				5	A		
Output source current (output high)				5	mA mA		
Response time	wet to dry			0.215			
	dry to wet			46	ms		

#### **OUTLINE DRAWING**



#### **Dimensions**

Part no.	Tubing size	Α	В	C¹	D	Е	F	G	Н	
AD801	1/16" O.D.	0.045	0.150	0.750	1.12	0.80	0.88	0.55	0.165	
AD02	1/8" O.D.	0.100	0.325	0.620						
AD94M	4 mm O.D.	0.125	0.350	0.650						
AD03	3/16" O.D.	0.150	0.315	0.650						
AD04	1/4" O.D.	0.200	0.400	0.700	1.00	0.75	0.75	0.50	0.125	
AD906	3/8" O.D.	0.310	0.525	0.825						
AD908	1/2" O.D.	0.430	0.750	1.050						
AD910	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

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# AD8 / AD9 Series

#### Ultrasonic air bubble and air-in-line sensors

#### ORDERING INFORMATION

	Series	ı	Design type		Options		Application		Tubing size		
Options	AD	8	for rigid tubing	0000	· '	Ε	End of sample	01	1/16 inch O.D.		
		9	for soft tubing		36 inch cable	В	Bubble size equal	02	1/8 inch O.D.		
				0001	· '	to tube I.D.	4M	4 mm O.D.			
				36 inch cable S B	Bubble size down	03	3/16 inch O.D.				
	to 50 % of tube I.	to 50 % of tube I.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.		
01: 4M: 06: 08:							4M: or 06: or 08: or	nly as AD8E01 nly as AD9 nly as AD9-0000 nly as AD9-0000 nly as AD9-0000-E			
Example:	AD	9	-	0000	-	В		4M			

Notes:

Sensortechnics 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 Sensortechnics!

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

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