

## Installation Instructions for the AWM700 Series

ISSUE 1  
PK 80150

### WARNING

#### PERSONAL INJURY

- DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

**Failure to comply with these instructions could result in death or serious injury.**

#### GENERAL INFORMATION

AWM700 Series microbridge mass airflow sensors operate on the theory of heat transfer due to mass gas flow across the surface of the sensing element. The sensing element consists of a resistor bridge heater circuit and dual temperature-sensing resistor bridges. This configuration senses mass flow rates and flow direction. The AWM700 Series amplified sensors contain all necessary circuitry for heater control, sensing bridge supply, and amplifier functions.

### CAUTION

#### LARGE PARTICULATE DAMAGE

Use a 5-micron filter upstream of the sensor to keep media flow through the sensor free of condensing moisture and particulates. Large, high-velocity particles or conductive particles may damage the sensing element.

**Failure to comply with these instructions may result in product damage.**

#### PERFORMANCE SPECIFICATIONS

	Min.	Typ.	Max.	Units
Excitation	8.000	10.000	15.000	Vdc
Power Consumption			60	mW
Output Load				
Sinking		10		mA
Sourcing		20		mA

#### ELECTRICAL CONNECTION

The AWM700 Series accepts a latch detent connector, such as: AMP part number 103956-3.

Information and literature on latch detent connectors is available from the AMP Product Information Center, 1-800-522-6752 or the Customer Hotline, 1-800-722-1111.

#### RELATED AMP LITERATURE

82160	MTE Interconnection System (AMPMODU) Catalog
108-25034	Product Specification (technical performance information)
114-25026	Application Specification (describes product, proper assembly, full tooling information)
IS 6919	Instruction Sheet for assembly procedure

#### MAKING ELECTRICAL CONNECTIONS

1. Remove (unlatch) the connector from the AWM700.
2. Hand-crimp the interface wire to the appropriate pin on the connector. One possible tool: AMP Hand-Crimp Tool, part number 58342-1.
3. Insert the terminal contacts into the connector housing after carrier strip (lead-frame) is removed.
4. Reconnect (latch) connector to AWM700 device.

#### MOUNTING INSTRUCTIONS

Mount AWM700 Series sensors with 6-32 screws. Honeywell recommends using washers below screw head. Mounting torque is 0.68 N m [6.0 in lb] max.

### CAUTION

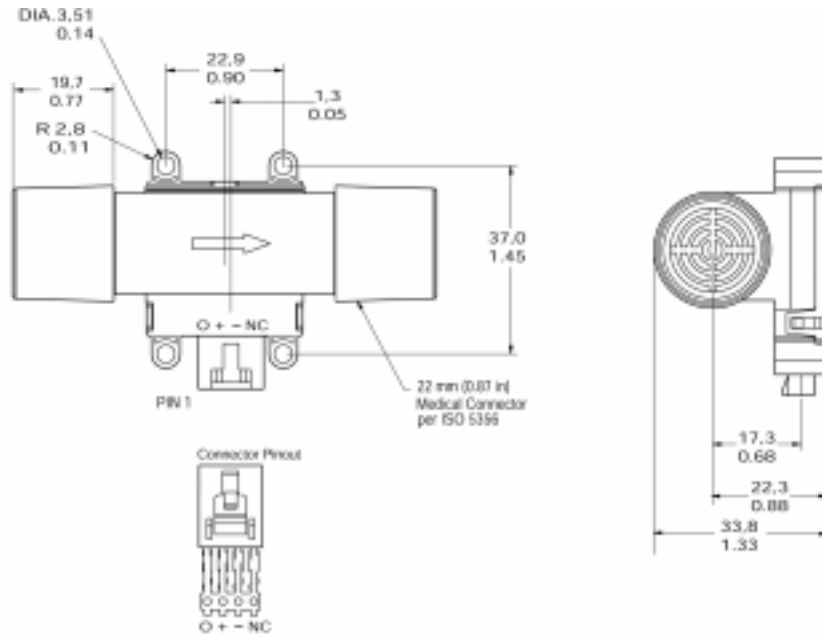
#### CLEANING DAMAGE

- Ultrasonic cleaning may damage the sensor microstructure.
- Solvent cleaning may attack the epoxy that seals the chip tube. Do not use III Tri-chloroethane, methylene chloride, methyl pyrrolidone, or any oxidizing type acid such as formic acid.

**Failure to comply with these instructions may result in product damage.**

Clean the sensor with water or isopropyl alcohol only and dry the device thoroughly. Avoid cleaning the sensor.

**MOUNTING DIMENSIONS** (for reference only) mm/in



**OUTPUT CONNECTIONS**

Pin 1	O	Output
Pin 2	+	Supply
Pin 3	-	Ground
Pin 4	NC	No connection

**WARRANTY/REMEDY**

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. The foregoing is Buyer's sole remedy and is **in lieu of all other warranties, expressed or implied,**

**merchantability and fitness for a particular purpose.**

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

For application assistance, current specifications, or name of the nearest Authorized Distributor, check the Honeywell web site or call:

- 1-800-537-6945 USA
- 1-800-737-3360 Canada
- 1-815-235-6847 International FAX
- 1-815-235-6545 USA
- INTERNET
- [www.honeywell.com/sensing](http://www.honeywell.com/sensing)
- [info.sc@honeywell.com](mailto:info.sc@honeywell.com)



**Sensing and Control**

Honeywell  
 11 West Spring Street  
 Freeport, Illinois 61032