

Installation Instructions for the AWM700 Series Airflow Sensors

ISSUE 2
PK 80150

GENERAL INFORMATION

AWM700 Series 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

PRODUCT 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.

CAUTION

PRODUCT DAMAGE

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

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

CONNECT SENSOR

1. Remove (unlatch) the connector from the AWM700.
2. Hand-crimp the interface wire to the appropriate pin on the connector (see Figure 1).
3. Insert the terminal contacts into the connector housing after carrier strip (lead-frame) is removed.
4. Reconnect (latch) connector to the sensor.

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. (See Table 1.)

Table 1. Related AMP Literature

Literature Number	Name
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

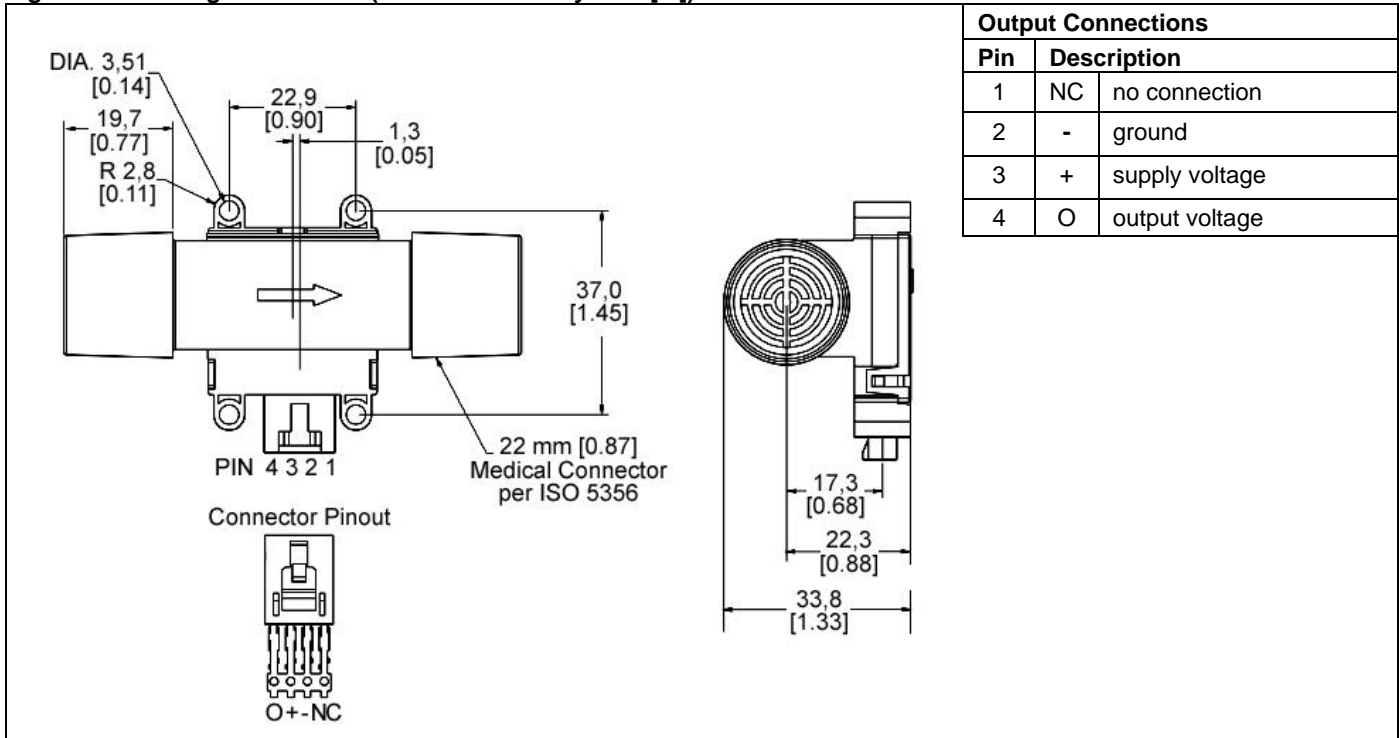
MOUNT SENSOR

Mount the AWM700 with 6-32 screws. Use washers below the screw head. Mounting torque is 0.68 N m [6.0 in-lb] max.

Table 2. Performance Specifications

Characteristic	Min.	Typ.	Max.	Unit
Power supply	8.000	10.000	15.000	Vdc
Power consumption	–	–	60	mW
Output loading:				
sinking	–	10	–	mA
sourcing	–	20	–	mA

Figure 1. Mounting Dimensions (For reference only. mm/[in])



⚠ 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.

WARRANTY/REMEDY
 Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, 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, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

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.

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