



# ULTRAC AMS

## *Airflow Measuring Stations*

### APPLICATIONS

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ULTRATECH ULTRAC Airflow Measuring Stations (AMS) provide accurate, repeatable measurement of air movement through ducts and piping. Lightweight, rugged construction coupled with ease of installation and economical pricing make these devices particularly applicable to the HVAC trade. Durable, quality construction ensures long-term, trouble-free operation. ULTRAC Airflow Measuring Stations are compatible with manometers, differential pressure gauges, and differential pressure transmitters used for airflow indication and control.

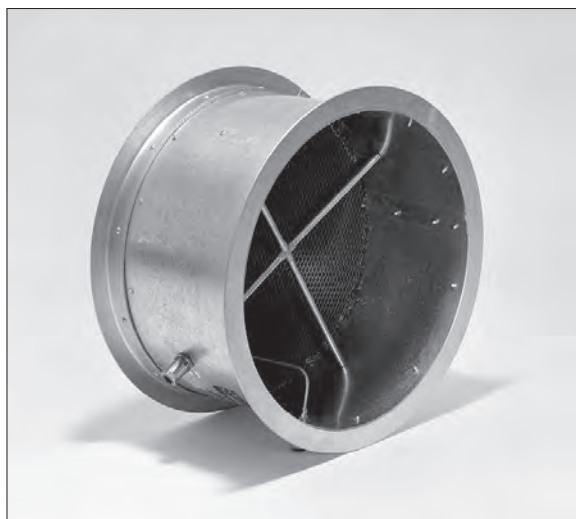


ULTRAC AMS 911

### DESCRIPTION

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ULTRAC Airflow Measuring Stations use multiple averaging Pitots to determine total velocity and static pressure measurements. The Pitot sensors are placed across the flow stream according to industry standards for equal-area averaging (the standard Pitot traverse). ULTRAC's unique AMS construction eliminates non-essential hardware that can cause build-up of dirt and foreign matter on the measuring assembly.



ULTRAC AMS 811

ULTRAC Airflow Measurement Stations are available in round, rectangular and oval configurations. All configurations feature a sensor assembly that allows for duct expansion and contraction. The 12-inch flanged steel casing has an aluminum, hexagon-celled straightening vane section that is mechanically fastened to the inlet. This eliminates turbulence and corrects flow direction, thereby increasing the velocity profile.

Various casing and sensor designs are available, as are most types of proprietary duct connecting systems. Please contact ULTRATECH about these options.

# SUGGESTED SPECIFICATIONS

Airflow measuring stations shall be of the multiple averaging Pitot, static pressure sensor type, with all total pressure sensors distributed for equal-area averaging of flows. They shall be of unitary (spool-piece) construction, of not less than 16-gauge sheet steel with flanged duct connections. Flow-straightening vanes shall be incorporated into the structure. Internal Pitot and static sensor shall be constructed of copper to ASTM B88 standards. Instrument connections shall be 1/2" NPT Female. Mounting hardware shall not penetrate the sensor assembly.

The airflow measuring stations shall be ULTRAC AMS, as manufactured by ULTRATECH INDUSTRIES, INC., Garner, NC, U.S.A.

## SPECIFICATIONS FOR STANDARD UNITS

- ACCURACY: +/-2% to 6000 feet per minute (+/-0.5% at 2000 feet per minute)
- TEMPERATURE: Maximum operating 400°F
- PRESSURE: Maximum operating, 6-in. w.c.
- PRESSURE DROP: Less than 0.13 in. w.c. at 2000 feet per minute with 3/8" cell
- FLOW STRENGTHENING VANES: 3/8" aluminum hexagon cell
- MAXIMUM DESIGN FLOW: 6000 ft./min.
- CASING: 16-gauge galvanized sheet metal  
Length: 12-in. overall
- PITOT AND STATIC SENSORS: rigid copper, hard drawn, to ANSI H 23.1 and ASTM B88 standards
- INTERNAL FITTINGS: copper, to ANSI B16.22 standards
- PROCESS CONNECTIONS: 1/2-in. NPT Female

## ORDERING INFORMATION

ULTRAC AMS - \_\_\_\_\_ - \_\_\_\_\_ x \_\_\_\_\_ (- \_\_\_\_\_)

**CASING DESIGN** \_\_\_\_\_

- 3 - Rectangular with no flanges
- 4 - Flat oval with no flanges
- 5 - Round with no flanges
- 6 - Rectangular with angle flanges
- 7 - Flat oval with angle flanges
- 8 - Round with angle flanges
- 9 - Rectangular with sheet metal flanges
- Z - Special

**MATERIALS** \_\_\_\_\_

- 1 - Standard - 16-ga. galv. casing, aluminum straightening vanes, copper probes
- 2 - All stainless steel
- 3 - Stainless steel casing
- 4 - Stainless steel straightening vanes
- 5 - Stainless steel probes
- 6 - Stainless steel casing & straightening vanes
- 7 - Stainless steel casing & probes
- 8 - Stainless steel straightening vanes & probes
- 9 - Coated (specify)
- Z - Special

**PROBE/STRAIGHTENING VANE DESIGN** \_\_\_\_\_

- 1 - Standard-3/8" straightening vanes, multiple total, single bullet-nose static
- 2 - 3/4" straightening vanes (produces approx. 50% of specified pressure drop)
- 3 - Multiple static probes on cylinder surface
- 4 - Multiple bullet-nose static probes
- 5 - 2 & 3 above
- 6 - 2 & 4 above
- Z - Special

**DIMENSIONS:** long side x short side or diameter \_\_\_\_\_

**OPTIONS** \_\_\_\_\_

- B - Bolt holes in flanges (specify)
- C - Special instrument connections (specify)
- D - Damper with actuator (specify)
- H - Above standard process air pressure (specify)
- W - All welded construction
- Z - Special

NOTE: Materials and design are standard unless noted otherwise. For special options, please contact ULTRATECH. Standard stainless steel is type 304. For other alloy, please specify.