



AIRFLOW MEASURING STATION KMS SERIES

DESCRIPTION

The **Kele KMS Series airflow measuring stations** has or uses multiple averaging sensors for static pressure measurements and a bullet-nose probe for total pressure. The sensors are distributed across the flow stream to conform to the industry standard rules for equal-area averaging (the standard pitot traverse). The standard unit includes a 16-gauge galvanized casing with flanged duct connection, 3/8" hexagon-celled aluminum flow straightening vanes, and internal copper sensors constructed to ASTM B88. Instrument connections are 1/2" FNPT. Other configurations are available on request.

APPLICATION

When utilized with a differential pressure transmitter, the **KMS Series** provides an accurate, repeatable airflow signal for building automation and HVAC applications. Air velocity may be determined by the formula: $\text{Velocity (fpm)} = 4004 \sqrt{\Delta P}$, where ΔP is differential pressure in "W.C. Then, flow rate may be determined by the formula: $\text{CFM} = AV$, where A is the effective area of the flow measuring station in square feet, and V is the velocity obtained above. The proper range for a differential pressure transmitter to use with the **KMS Series** airflow measuring station may be determined by the formula: $\Delta P = (\text{Max Velocity}/4004)^2$.



SPECIFICATIONS

Accuracy	±2% within design flow range	Pressure Drop	<0.13" W.C. @ 2000 fpm
Connections	1/2" FNPT HI/LO pressure pickups, factory-mounted on the long side dimension when station is rectangular	Materials of Construction	16-gauge galvanized sheet steel; rigid copper (hard drawn to ANSI H23.1 and ASTM B88 standards); copper (ANSI B-16.22);
Minimum Velocity	1000 fpm (305 mpm)	Casing	3/8" aluminum hexagon cell
Maximum Velocity	6000 fpm (1830 mpm)	Pickup Sensors	Casing depth 12" (30.5 cm);
Mounting	Duct flanges standard	Internal Fittings	H x W dimensions made-to-order
Media Compatibility	Clean HVAC duct air	Straightening Vanes	1 year
Media Temperature Range	400°F (204°C) maximum	Dimensions	
Maximum Pressure	6" W.C. maximum duct static	Warranty	

ORDERING INFORMATION

MODEL	DESCRIPTION
KMS	Airflow measuring station
	SHAPE
811	Round with flanges
911	Rectangular with flanges
	DIMENSIONS
W x H	Diameter or width x height (inches)

Example: KMS-911-48 x 24 Rectangular airflow station with 16-gauge galvanized casing, 3/8" straightening vanes, and copper probes 48" wide x 24" high

Note: Standard location for flow connections is on the "long" dimensions side of a rectangular station. Stations can be rotated. If connections must be located on the "short" side, specify it on the order; a cost adder applies.

ACCESSORIES

KMS-PAK-B 1/2" FNPT to 1/4" OD tubing barb fitting