

Air Velocity transducer TSI

Model 8475

Ominidirectional: omnidirectional probe tip, accurate at low velocities from 10 to 100 ft/min (0.05 to 0.5 m/s), ideal for unknown or varying flow direction.

SPECIFICATIONS

Accuracy: $\pm 3.0\%$ of reading², ²From 68 to 78.8°F (20 to 26°C), outside this range and within temperature compensation range add 0.28% per °F (0.5% per °C). Directional sensitivity of the Model 8475 is +5%/-20% of reading +0/-10 ft/min (+0/-0.05 m/s) over 270° solid angle regardless of flow direction.
 $\pm 1.0\%$ of full scale of selected range

Field selectable range:
10 ft/min to 100, 125, 150, 200, 250, 300, 400, 500 ft/min (0.05 m/s to 0.5, 0.75, 1.0, 1.25, 1.50, 2.0, 2.5 m/s)

Response to flow: 5 sec⁵, ⁵For 63% of final value, tested at 500 fpm (2.5 m/s)

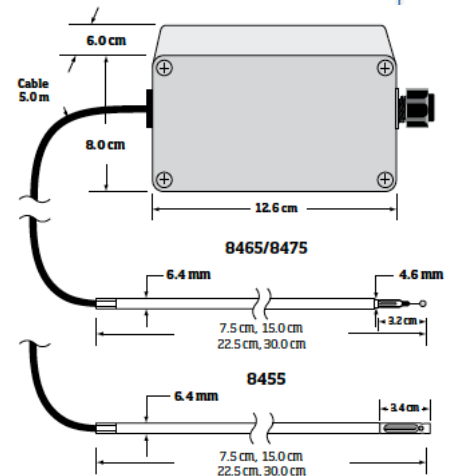
Temperature range:
Compensation 32 to 140°F (0 to 60°C)
Operating (electronics) 32 to 200°F (0 to 93°C)
Operating (sensor) 32 to 200°F (0 to 93°C)
Storage 32 to 200°F (0 to 93°C)

Resolution (minimum): 0.07% of selected full scale

Input power: 11 to 30 VDC or 18 to 38 VAC, 350 mA max⁶
⁶Input voltage must be maintained within specifications at the transducer

Output:
Impedance Voltage mode: less than 1 ohm, 20mA max source current
Resistance Current mode: 500 ohms maximum load
Signal Field selectable 0 to 5V, 0 to 10V, 0 to 20, 2 to 10V, mA, 4 to 20 mA
Time constant Field selectable 0.05 to 10 seconds

Probe length: 3 in., 6 in., 9 in., 12 in. (7.5 cm, 15 cm, 22.5 cm, or 30 cm)



All models contain on-board electronics and calibration curves that provide a linear signal output. This linear signal is sent out as either a current (mA) or a voltage (V) signal, allowing output to a variety of data loggers or data acquisition systems. In addition, the current and voltage output ranges are user-selectable for your convenience.

8475	
Range	10 to 500 fpm (0.05 to 2.54 m/s), selectable
Accuracy	$\pm(3\%$ of reading at 68.0-78.8°F (20 to 26°C) +1% of full scale of selected range)
Response time	5.0 seconds
Input power	11 to 30 VDC or 18 to 28 VAC, 350 mA maximum