



INSTALLATION AND OPERATION MANUAL DIAMOND FLOW SENSOR K-FACTORS FOR FAN COIL UNITS

Model Series:

35FH WITH OAI OPTION

37FH WITH OAI OPTION

Inlet Size	Type	Duct Area (sq. ft.)	K-Factor (cfm)	Velocity (fpm)	F-Factor (amp.)
4	ROUND	0.087	182	2092	3.67
5		0.136	325	2390	2.81
6		0.196	455	2321	2.98
8		0.349	899	2576	2.42
10		0.545	1497	2747	2.13

Equations:

$$Q = K \times \sqrt{\Delta P} \quad \Delta P = \left(\frac{Q}{K} \right)^2 \quad F = \left(\frac{4005 \times A}{K} \right)^2$$

Where: Q = Airflow Rate (cfm)

ΔP = Sensor Differential Pressure ("w.g.)

K = K-Factor Calibration Constant (standard air)

F = Amplification Factor (sensor gain)

A = Nom. Duct Area (sq. ft.)

The K-Factors tabulated in the above tables are the airflow required to produce a 1.0" w.g. differential pressure at the Diamond Flow Sensor.

Dimensions are in inches (mm).