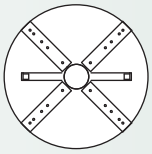
TABLE 60: K-FACTORS FOR AIR FLOW SENSORS

VELOCITY WING SENSOR										
Inlet Size	**5**	**6**	**7**	**8**	**9**	**10**	**12**	**14**	**16**	**24x16**
K-Factor	287	469	612	867	1098	1353	1802	2469	3366	6358
Area (sq. ft)	0.130	0.188	0.258	0.338	0.430	0.532	0.769	1.050	1.375	2.667



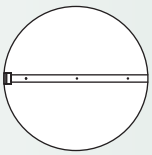
Airflow Calculations

Velocity Wing Sensors
Sensor $\Delta P = (CFM/K)^2$
$CFM = K(\sqrt{\Delta P})$

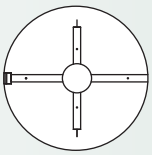
Example: For a 12" inlet unit with a sensor ΔP signal of 0.60 inches w.g., the CFM is calculated to be 1400 CFM.

$CFM = K(\sqrt{\Delta P}) = 1802(\sqrt{0.60}) = 1400$ For a 12" inlet unit with 1400 CFM,
the sensor ΔP signal is calculated to be 0.60 inches w.g. $\Delta P = (CFM/K)^2 = (1400/1802)^2 = 0.60$" w.g.

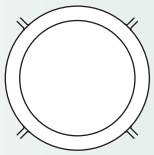
Inlet Size	TRAVERSING STYLE AIR FLOW SENSOR						
	High Range (H)	**Lo Range (L)**	**ORIFICE AMPLIFYING PLATES**				
5	380	250	217 (S)	134 (S12)	90 (S29)		
6	584	400	316 (S)	221 (S3)	148 (S2)	110 (S1)	
7	801	595	560 (S17)	445 (S)	300 (S18)		
8	1088	800	770 (S19)	600 (S)	436 (S4)	316 (S5)	
10	1767	1300	1350 (S15)	950 (S)	713 (S11)	626 (S7)	515 (S6)
12	2542	2000	2000 (S20)	1407 (S)	1265 (S8)	840 (S14)	
14	3629	2800	2950 (S23)	2483 (S28)	2074 (S)	1505 (S10)	1090 (S9)
16	4427	4000	3800 (S25)	3300 (S24)	2728 (S)	1490 (S27)	



Inlet Size	MODEL PX-2 CROSS AIR FLOW SENSOR						
	High Range (P)	**Lo Range (Q)**	**ORIFICE AMPLIFYING PLATES**				
5	380	250	217 (S)	134 (S12)	90 (S29)		
6	584	400	316 (S)	221 (S3)	148 (S2)	110 (S1)	
7	801	595	560 (S17)	445 (S)	300 (S18)		
8	1088	800	770 (S19)	600 (S)	436 (S4)	316 (S5)	
10	1767	1300	1350 (S15)	950 (S)	713 (S11)	626 (S7)	515 (S6)
12	2542	2000	2000 (S20)	1407 (S)	1265 (S8)	840 (S14)	
14	3629	2800	2950 (S23)	2483 (S28)	2074 (S)	1505 (S10)	1090 (S9)
16	4427	4000	3800 (S25)	3300 (S24)	2728 (S)	1490 (S27)	



MODEL SW SIDEWALL NON-OBSTRUCTIVE AIR FLOW SENSOR							
Inlet Size	**5**	**6**	**8**	**10**	**12**	**14**	**16**
K-Factor	276	391	772	1020	1614	2001	2929
Area (sq. ft)	0.130	0.188	0.338	0.532	0.769	1.050	1.375



K-factors shown represent the flow rate, CFM, resulting in a sensor signal $\Delta P = 1.00$" wg (non-dynamic signal measurement)
Example: 10" Model XAFT valve with PX-2 cross sensor, S orifice plate, operating at 500 CFM. Find K-factor of 950 CFM.
To determine sensor signal: $\Delta P = (CFM/K)^2 = (500/950)^2 = .28$" wg.