AeroCross™ K-Factors

AeroCross Sensor - Calibration Curves

Inlet Sensor Applications (All Units Except QCV)

Unit Size	Duct Area	K-Factor		Sensor	
	SQ FT	CFM	FPM	Qty.	Size
04	0.087	273	3138	1	4/5
05	0.136	390	2647	1	4/5
06	0.196	448	2286	1	6
07	0.267	667	2498	1	7
08	0.349	904	2590	1	8
09	0.442	1167	2640	1	9
10	0.545	1436	2635	1	10
12	0.785	1891	2409	1	12
14	1.069	3015	2820	1	14
16	1.395	3839	2752	1	16
20	0.778	2106	2707	1	8
22	0.778	2106	2707	1	8
26	1.000	2498	2498	1	8
40	2.667	7176	2691	2	14

Discharge Sensor Applications (For Dual Ducts)

Unit Size	Duct Area	K-Factor		Sensor	
	SQ FT	CFM	FPM	Qty.	Size
04	0.098	240	2444	1	4/5
05	0.157	384	2444	1	6
06	0.222	538	2423	1	7
07	0.292	733	2509	1	8
08	0.395	997	2525	1	9
09	0.625	1254	2007	1	12
10	0.773	1640	2122	1	12
12	1.003	2619	2611	1	14
14	1.401	3808	2718	1	16
16	1.680	4810	2863	1	16

Inlet Sensor Applications (For QCV's)

Unit Size	Damper	K-Factor		Sensor	
	SQ FT	CFM	FPM	Quantity	Size
A	0.174	320	1837	1	4/5
B	0.250	477	1908	1	4/5
C	0.333	629	1890	1	4/5
D	0.555	1047	1886	1	8
E	0.778	1539	1978	1	8
F	0.750	1472	1962	2	4/5
G	0.833	1676	2012	1	10
H	1.250	2619	2095	2	10
J	1.500	3036	2024	1	12
K	1.944	4385	2256	1	16
L	2.500	5582	2233	2	12
M	2.444	5847	2392	1	16
N	3.000	7413	2471	1	16
P	4.167	11224	2693	2	16
R	5.555	16496	2970	2	16

Equations:

$$CFM = K\sqrt{\Delta P}$$

$$\Delta P = \left(\frac{CFM}{K}\right)^2$$

ΔP = Differential Pressure On AeroCross, IN WG

K = Flow Required To Produce A 1.0 IN WG Differential Pressure On AeroCross, CFM