

Discharge of Air Through an Orifice

In cubic feet of free air per minute at standard atmospheric pressure of 14.7 lb. per sq. in. absolute and 70°F.

Table is based on 100% coefficient of flow.

Gauge Pressure Before Orifice in Pounds per sq. in.	DIAMETER OF ORIFICE										
	1/64"	1/32"	1/16"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
	Discharge in cubic feet of free air per minute										
1	.028	.112	.450	1.80	7.18	16.20	28.70	45.00	64.70	88.10	115.00
2	.040	.158	.633	2.53	10.10	22.80	40.50	63.30	91.20	124.00	162.00
3	.048	.194	.775	3.10	12.40	27.80	49.50	77.50	111.00	152.00	198.00
4	.056	.223	.892	3.56	14.30	32.10	57.00	89.20	128.00	175.00	228.00
5	.062	.248	.993	3.97	15.90	35.70	63.50	99.30	143.00	195.00	254.00
6	.068	.272	1.09	4.34	17.40	39.10	109.00	156.00	213.00	213.00	278.00
7	.073	.293	1.17	4.68	18.70	42.20	117.00	168.00	230.00	230.00	300.00
9	.083	.331	1.32	5.30	21.20	47.70	132.00	191.00	260.00	260.00	339.00
12	.095	.379	1.52	6.07	24.30	54.60	152.00	218.00	297.00	297.00	388.00
15	.105	.420	1.68	6.72	26.90	60.50	168.00	242.00	329.00	329.00	430.00
20	.123	.491	1.96	7.86	31.40	70.70	126.00	196.00	283.00	385.00	503.00
25	.140	.562	2.25	8.98	35.90	80.90	144.00	225.00	323.00	440.00	575.00
30	.158	.633	2.53	10.10	40.50	91.10	162.00	253.00	365.00	496.00	648.00
35	.176	.703	2.81	11.30	45.00	101.00	180.00	281.00	405.00	551.00	720.00
40	.194	.774	3.10	12.40	49.60	112.00	198.00	310.00	446.00	607.00	793.00
45	.211	.845	3.38	13.50	54.10	122.00	216.00	338.00	487.00	662.00	865.00
50	.229	.916	3.66	14.70	58.60	132.00	235.00	366.00	528.00	718.00	938.00
60	.264	1.060	4.23	16.90	67.60	152.00	271.00	423.00	609.00	828.00	1082.00
70	.300	1.202	4.79	19.20	76.70	173.00	307.00	479.00	690.00	939.00	1227.00
80	.335	1.340	5.36	21.40	85.70	193.00	343.00	536.00	771.00	1050.00	1371.00
90	.370	1.48	5.92	23.70	94.80	213.00	379.00	592.00	853.00	1161.00	1516.00
100	.406	1.62	6.49	26.00	104.00	234.00	415.00	649.00	934.00	1272.00	1661.00
110	.441	1.76	7.05	28.20	113.00	254.00	452.00	705.00	1016.00	1383.00	1806.00
120	.476	1.91	7.62	30.50	122.00	274.00	488.00	762.00	1097.00	1494.00	1951.00
125	.494	1.98	7.90	31.60	126.00	284.00	506.00	790.00	1138.00	1549.00	2023.00
150	.582	2.37	9.45	37.50	150.00	338.00	600.00	910.00	1315.00	1789.00	2338.00
200	.761	3.10	12.35	49.00	196.00	441.00	784.00	1225.00	1764.00	2401.00	3136.00
250	.935	3.80	15.18	60.30	241.00	542.00	964.00	1508.00	2169.00	2952.00	3856.00
400	1.220	5.98	23.81	94.50	378.00	851.00	1512.00	2360.00	3402.00	4630.00	6048.00
500	1.519	7.41	29.55	117.30	469.00	1055.00	1876.00	2930.00	4221.00	5745.00	7504.00
750	2.240	10.98	43.85	174.00	696.00	1566.00	2784.00	4350.00	6264.00	8525.00	11136.00
1000	2.985	14.60	58.21	231.00	924.00	2079.00	3696.00	5790.00	8316.00	11318.00	14784.00