



# BURGESS-MANNING

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## Silencer Sizing for Rotary Positive Blower Applications

### SIZING FORMULA

$$\text{NOZZLE FLOW AREA REQUIRED (FT}^2\text{)} = \frac{\text{APPLICATION FLOW (ACFM)}}{\text{VELOCITY (FPM)}}$$

Recommended Velocity = 5,500 - 6,000 FPM

### SILENCER SIZE SELECTION TABLE

NOMINAL SIZE (inches)	NOZZLE FLOW AREA (FT <sup>2</sup> )
1/2"	0.0021
3/4"	0.0037
1"	0.0060
1-1/4"	0.0104
1-1/2"	0.0143
2"	0.0233
2-1/2"	0.0333
3"	0.0513
3-1/2"	0.069
4"	0.103
5"	0.156
6"	0.225
8"	0.381
10"	0.599
12"	0.850
14"	1.028
16"	1.350

NOMINAL SIZE (inches)	NOZZLE FLOW AREA (FT <sup>2</sup> )
18"	1.715
20"	2.123
22"	2.575
24"	3.071
26"	3.581
28"	4.162
30"	4.787
32"	5.455
34"	6.167
36"	6.922
38"	7.721
40"	8.564
42"	9.450
44"	10.380
46"	11.354
48"	12.371