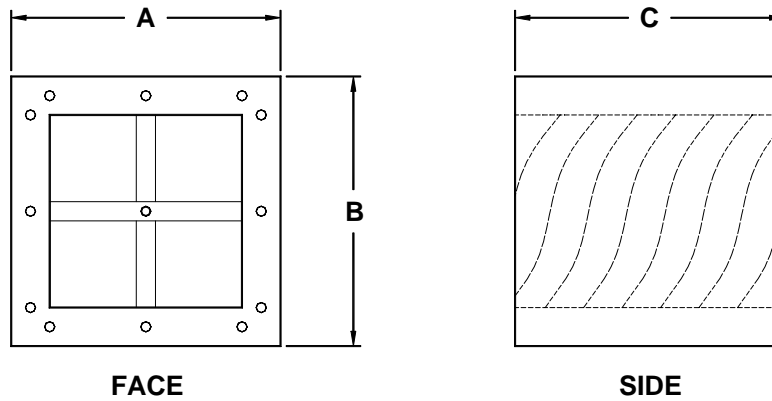




VA 1420-1S-IL

Inline Spiral Silencer



| Dimensions | | | | |
|------------|------------|------------|-----------------|------------|
| A = Width | B = Height | C = Length | Face Flow I.D. | Net Weight |
| 18 in. | 18 in. | 20 in. | 14 in. X 14 in. | 48 lbs. |

DYNAMIC INSERTION LOSS

| Octave Bands | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-----------------|------------------------------------|-----|-----|-----|------|------|------|------|
| Center Freq. Hz | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| Face Velocity | Dynamic Insertion Loss in Decibels | | | | | | | |
| -4000 | 18 | 22 | 26 | 34 | 35 | 40 | 55 | 57 |
| -3000 | 18 | 22 | 26 | 33 | 34 | 40 | 54 | 56 |
| -2000 | 17 | 21 | 25 | 33 | 34 | 40 | 54 | 56 |
| -1000 | 17 | 21 | 25 | 33 | 34 | 39 | 54 | 56 |
| +1000 | 17 | 21 | 25 | 33 | 34 | 39 | 53 | 56 |
| +2000 | 17 | 21 | 24 | 33 | 34 | 39 | 53 | 55 |
| +3000 | 17 | 21 | 24 | 33 | 33 | 39 | 53 | 55 |
| +4000 | 16 | 21 | 24 | 33 | 33 | 39 | 53 | 55 |

AERODYNAMIC PERFORMANCE DATA

| Static Pressure Loss in Inches of H ₂ O | | | | | | | | | | |
|--|-----|------|------|------|------|------|------|------|------|------|
| | .05 | .10 | .15 | .20 | .25 | .30 | .40 | .50 | .75 | 1.00 |
| Airflow in CFM | 700 | 1270 | 2020 | 2455 | 3050 | 3620 | 4100 | 4700 | 5375 | 5640 |

Tel: (909) 796-6200



Fax: (909) 796-6223



VA 1420-1S-IL

SELF GENERATED SOUND RATINGS

| Forward Flow | | | | | | | | |
|-----------------|---|------|------|------|------|------|------|------|
| Octave Bands | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Center Freq. Hz | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| Face Velocity | Generated Sound in Sound Power Level (Lw) (dB re 10 ⁻¹² Watts) | | | | | | | |
| 1000 | (53) | (40) | (30) | (22) | (18) | (19) | (24) | (28) |
| 2000 | (54) | (41) | 41 | 42 | 42 | 41 | (25) | (28) |
| 3000 | 58 | 44 | 42 | 43 | 44 | 42 | 34 | 40 |

| Reverse Flow | | | | | | | | |
|-----------------|---|------|------|------|------|------|------|------|
| Octave Bands | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Center Freq. Hz | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| Face Velocity | Generated Sound in Sound Power Level (Lw) (dB re 10 ⁻¹² Watts) | | | | | | | |
| 1000 | (53) | (40) | (30) | (22) | (18) | (19) | (24) | (28) |
| 2000 | (54) | (41) | 41 | 42 | 42 | 41 | (25) | (28) |
| 3000 | 58 | 44 | 42 | 43 | 44 | 42 | 34 | 40 |

NOTE: Sound power levels in parentheses have reached ambient levels in the test facilities test room or are determined by instrument limitations. Actual levels are less than or equal to levels indicated.

The above insertion loss values and self generated sound levels are extrapolated from actual test data from an independent testing facility per ASTM E477 "Standard Methods of Testing Duct Liner Materials and Prefabricated Silencers for Acoustical and Airflow Performance". Test reports available upon request.