

NOTES:

1.0 INPUT REQUIREMENTS

- 1.1 THIS UNIT IS DESIGNED TO MEASURE A MAXIMUM MASS AIRFLOW RATE OF 260 G/SEC
- 1.2 THIS UNIT IS TO BE MOUNTED IN LINE WITH ENGINE AIR INDUCTION SYSTEM DOWN STREAM OF AIR CLEANER ASSEMBLY.
- 1.3 THE FLOW SHALL BE IN THE DIRECTION AS SHOWN AND SHALL ENTER THE TUBE WITH A SYMMETRICALLY DISTRIBUTED VELOCITY PROFILE.
- 1.4 IGNITION VOLTAGE APPLIED SHALL BE BETWEEN 11 AND 16 VOLTS- THE SENSOR SHALL NOT DRAW MORE THAN 1.4 AMPS AT 13.8 VOLTS APPLIED


2.0 DESIGN PERFORMANCE REQUIREMENTS

- 2.1 WITH A 1.0K OHM RESISTOR FROM TERMINAL B TO A'S V SUPPLY, THE VOLTAGE ON TERMINAL B SHALL SWITCH FROM LESS THAN 0.5 VOLTS TO GREATER THAN 4.5 VOLTS AT A FREQUENCY INDICATED IN THE CHART SHOWN IN 2.2 BELOW.
- 2.2 THE FREQUENCY RANGE GENERATED BY A GIVEN UNIT AT 20°C ±5°C, RELATIVE HUMIDITY OF 50% ±10% AND IGNITION VOLTAGE OF 14.0V ±0.2V AND USING TEST SET UP PER ES-1670, FIG. 5, IS AS FOLLOWS:

⊙ POTTED DATA

FLOW G/SEC.	FREQUENCY RANGE (HZ)
1 260.0	135.26 ~ 139.78 HZ
2 150.0	116.64 ~ 119.16 HZ
3 20.0	57.09 ~ 58.77 HZ
4 5.0	38.77 ~ 39.65 HZ

2.3 THIS UNIT MUST CONFORM TO ES-1670

2.4 THE LEAKAGE RATE SHALL NOT EXCEED 60cc/HR AT 0.5 #/sq.  (H)

	FLOW G/SEC.	FREQUENCY (HZ)
1	5.0	41.28
2	7.5	46.65
3	10.0	51.12
4	15.0	58.07
5	20.0	63.70
6	30.0	73.27
7	40.0	81.66
8	50.0	89.07
9	60.0	95.56
10	80.0	105.95
11	100.0	114.12
12	120.0	120.84
13	140.0	126.77
14	150.0	129.48
15	160.0	132.09
16	180.0	136.96
17	200.0	141.52
18	220.0	145.85
19	240.0	149.94
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Flows 9%
MORE THAN
87 MAF

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3.0 OUTPUT CHARACTERISTICS

- 3.1 THE NOMINAL FREQUENCY GENERATED BY A GIVEN UNIT AT 20°C ±5°C, RELATIVE HUMIDITY OF 50% ±10% AND IGNITION VOLTAGE OF 14.0V ±0.2V AND USING TEST SET UP PER ES-1670, FIG. 5, IS AS FOLLOWS:

⊙ POTTED DATA

	FLOW G/SEC.	FREQUENCY (HZ)
1	260.0	137.02
2	240.0	133.84
3	220.0	130.71
4	200.0	127.36
5	180.0	123.78
6	160.0	119.91
7	150.0	117.90
8	140.0	115.73
9	120.0	111.01
10	100.0	105.61
11	90.0	99.25
12	80.0	90.89
13	50.0	85.37
14	40.0	78.27
15	30.0	69.07
16	20.0	57.93
17	15.0	52.70
18	10.0	47.13
19	7.5	43.73
20	5.0	39.20
21	3.5	35.60
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