



# Amber Instruments Ltd

## VE500 Series Exhaust Flow Meters

J-TEC's VE500 Exhaust Flow Meter has been designed to operate over a wide dynamic range at temperatures up to 1000°F. The signal output is directly proportional to the volumetric flows and can be used to calculate mass flow. This exhaust meter provides the same rugged design as J-TEC's other gas and liquid flow meters. No moving parts, low pressure drop and low cost make this product ideal for all exhaust flow measurement applications.

### SPECIFICATIONS

<b>Measured:</b>	Exhaust
<b>Flow rate measured:</b>	See table below
<b>Operating temperature:</b>	-20° to 1000°F (-28° to 537°C)
<b>Operating pressure:</b>	2 PSIG (0.14 BARg)
<b>Accuracy:</b>	+/- 2% full scale
<b>Repeatability:</b>	+/- 1%
<b>Input power:</b>	+24 to 28 VDC at 10 amps
<b>Output:</b>	0-5 VDC or frequency (3-wire)
<b>Construction:</b>	Stainless steel wetted parts with MACOR transducer assembly
<b>Ambient temperature:</b>	-20° to 150°F (-28° to 66°C)
<b>Pressure drop:</b>	Maximum 5" H <sub>2</sub> O
<b>Response time:</b>	300 ms for analog output, 10 ms for frequency
<b>Air supply to cool transducers:</b>	90-120 PSIG at 2 SCFM

### Tube ends – 2" exhaust flowmeter (end to end length: 34"): DFA1911

Inlet:	2-1/2" Sch. 10 pipe	O.D. 2.875"	I.D. 2.635"
Outlet:	2" Sch. 40 pipe	O.D. 2.375"	I.D. 2.067"

### Tube ends – 3" exhaust flowmeter (end to end length: 34"): DFA1912

Inlet:	3-1/2" Sch. 10 pipe	O.D. 4.000"	I.D. 3.760"
Outlet:	3" Sch. 40 pipe	O.D. 3.500"	I.D. 3.068"

FLOW RANGES								
For reference only. Consult factory for other line sizes								
Temp °F	ACFM				SCFM			
	2"		3"		2"		3"	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
-20	5	220	10	450	4	259	12	542
0	5	220	10	450	4	248	11	518
40	5	220	10	450	4	228	11	477
70	5	220	10	450	5	220	10	450
200	5	220	10	450	4	176	8	361
250	5	220	10	450	4	165	7	336
400	5	220	10	450	3	135	6	277
500	5	220	10	450	3	120	5	248
800	5	220	10	450	2	92	4	189
1000	5	220	10	450	2	80	4	163



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Torque Transducers, Load Cells (general purpose, weighing & fatigue rated). Multi-Axis Force/Torque, Weighing Instruments, Process Instruments, Portable Data Loggers, Pressure Sensors, Proximity Sensors, Laser (Distance Measuring) Sensors, & more.