


# Eclipse RatioMatic

## Burners

Model RM0200

Version 5

Parameter	Specification		
	Chamber Pressure "w.c. (mbar)	50 Hz	60 Hz
<b>Blower Type</b>			
<b>Maximum Input, Btu/h (kW)<sup>1</sup></b>	-5.0 (-12.4)	-	2,450,000 (718)
<i>Contact factory for chamber pressures outside the given range, or varying chamber pressure conditions.</i>	-3.0 (-7.5)	-	2,350,000 (689)
	0.0 (0.0)	2,300,000 (673)	2,150,000 (630)
	1.0 (2.5)	2,200,000 (644)	2,050,000 (601)
	2.0 (5.0)	2,100,000 (615)	1,950,000 (571)
	<b>Minimum Input On-Ratio, Btu/h (kW)</b> <i>Lower inputs may be achieved. Contact factory.</i>	40,000 (12)	
<b>Main Gas Inlet Pressure, "w.c. (mbar)<sup>2</sup></b> <i>Fuel pressure at ratio regulator inlet</i>	Natural Gas	15 to 55 (38 to 137)	
	Propane/Butane	15 to 30 (38 to 75)	
<b>High Fire Flame Length, inches (mm)</b> <i>Measured from the outlet end of the combustor</i>	Natural Gas	50 (1270)	
	Propane/Butane	60 (1524)	
<b>Maximum Chamber Temperature, °F (°C)</b>	Alloy Tube	1500 (815)	
	SiC Tube	1900 (1038)	
<b>Flame Detection</b>	Flame rod or UV Scanner		
<b>Fuel</b> <i>For any other mixed gas, contact Eclipse, Inc.</i>	Natural Gas, Propane, Butane <sup>3</sup>		
<b>Blower Motor Power, Hp</b>	1.0		
<b>Weight, lbs (kg)<sup>4</sup></b>	Alloy Tube	141 (64)	
	SiC Tube	146 (66)	
<b>Approvals</b>			

<sup>1</sup> Maximum inputs for packaged blower versions are given for the standard combustion air blower without an inlet air filter.

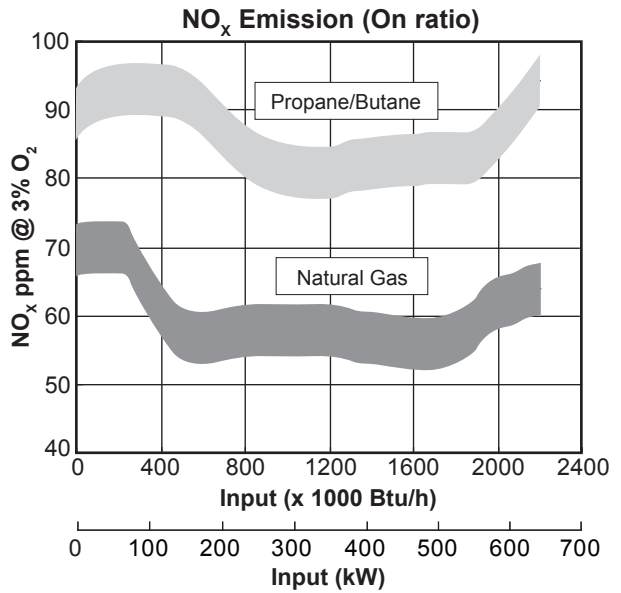
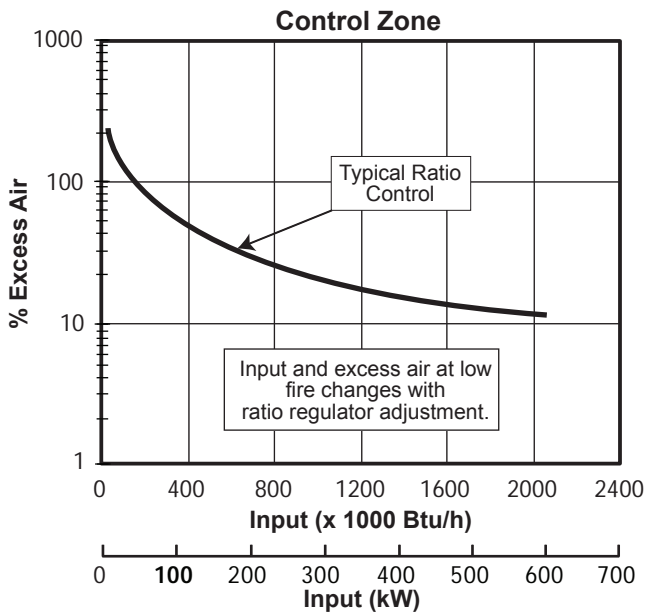
<sup>2</sup> For proper performance, this pressure must be kept constant across the burner operating range.

<sup>3</sup> See Design Guide 110 for more information about typical fuel composition and properties.

<sup>4</sup> All weights are approximate.

- All information is based on laboratory testing. Different chamber conditions will affect the data.
- All inputs based upon gross calorific values and standard conditions; 1 atmosphere, 70°F (21°C).
- Eclipse reserves the right to change the construction and/or configuration of our products at any time without being obliged to adjust earlier supplies accordingly.

## Performance Graphs



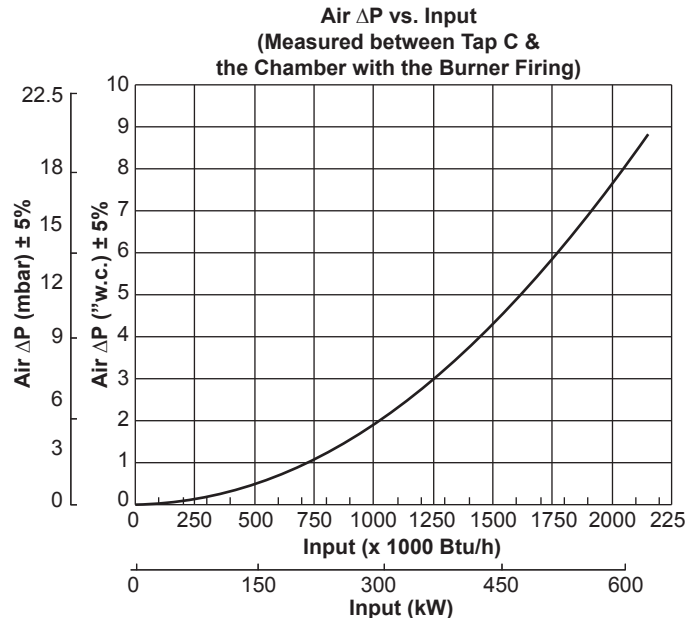
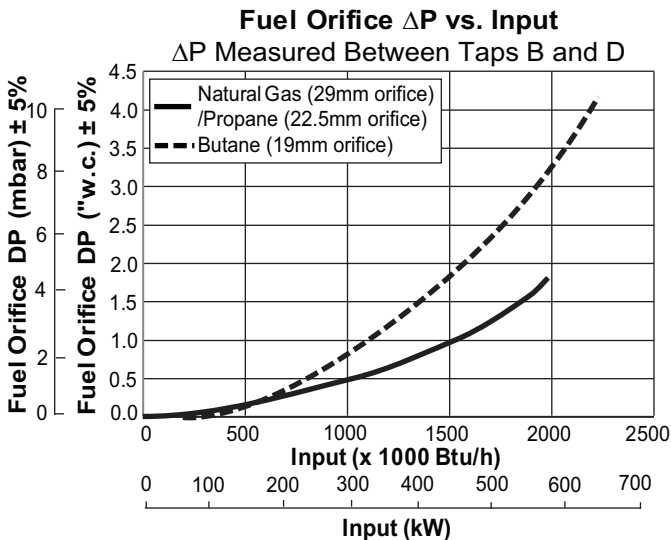
### NOx Emission data is given for:

- Ambient combustion air ~70°F (21°C)
- Less than 700°F (370°C) firing chamber
- Minimal process air velocity
- Low fire input adjusted to 20,000 Btu/h (6 kW)
- ppm volume, dry @ 3% O<sub>2</sub>
- Neutral chamber pressure

### Emissions from the burner are influenced by:

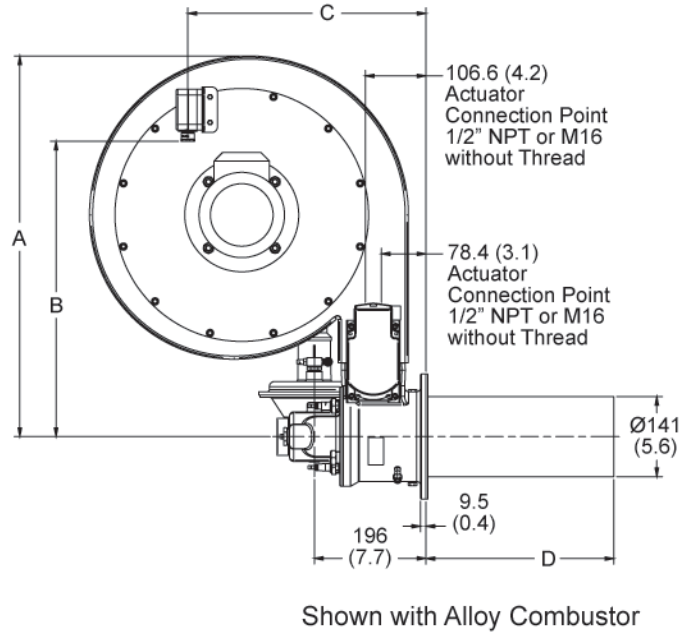
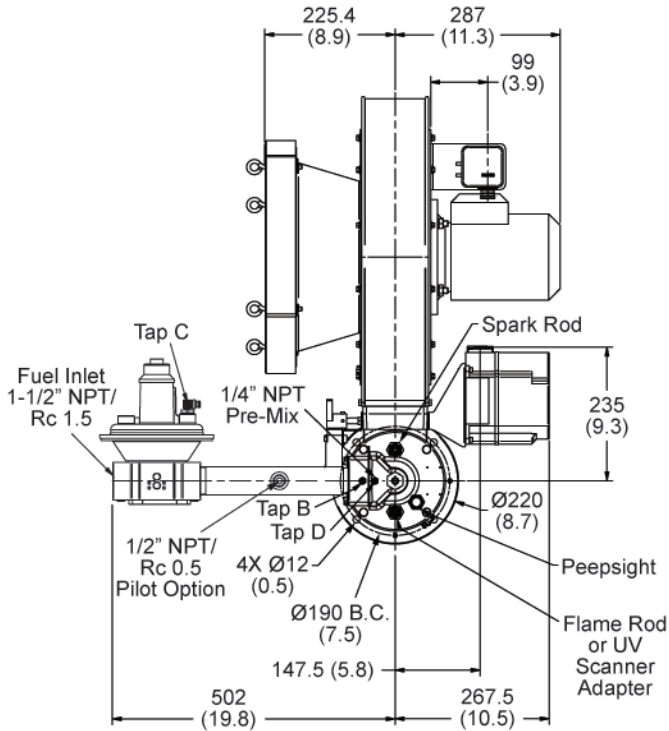
- Chamber conditions
- Fuel type
- Firing rate
- Ratio regulator adjustment
- Combustion air temperature

CO emission is largely influenced by chamber conditions. Contact your local Eclipse representative for an estimate of CO emission on your application.



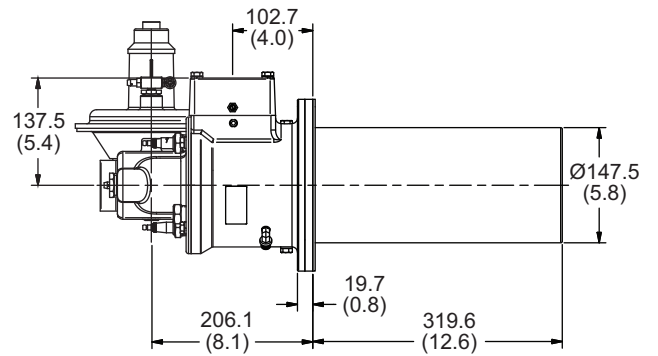
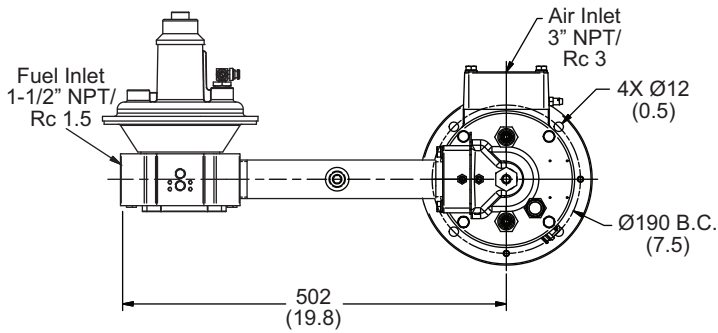
## Dimensions & Specifications

Dimensions in mm (in)



Blower Size	A	B	C
50 Hz	670 (26.4)	492 (19.4)	362 (14.3)
60 Hz	575 (22.6)	431 (17.0)	353 (13.9)

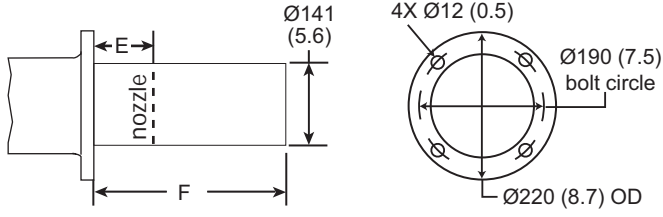
Combustor Type	D
Straight Stainless Steel Alloy Tube	330 (13)
Straight Stainless Steel Alloy Tube	406 (16)



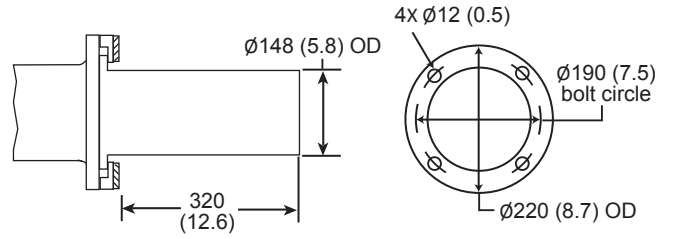
Shown with Silicon Carbide Combustor

## Combustor Options

### Alloy Combustor

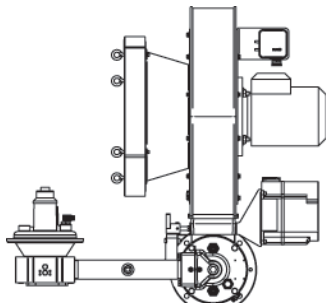


### Silicon Combustor

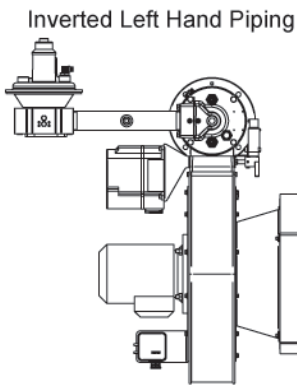


E	F
152 (6.0)	330 (13.0)
228 (9.0)	406 (16.0)

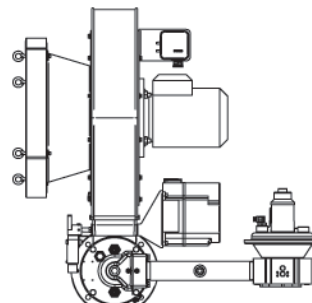
## Burner Configuration



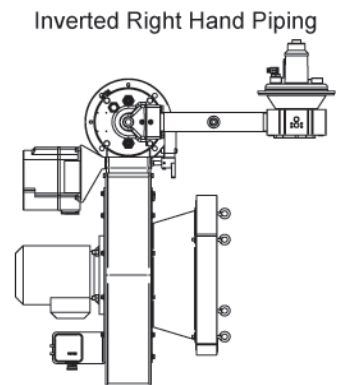
Upright Left Hand Piping



Inverted Left Hand Piping



Upright Right Hand Piping



Inverted Right Hand Piping