Eclipse RatioMatic Burners

Model RM0700

Data sheet Edition 08.15

Version 6

Parameter	Specifications	
Blower Type	**Chamber Pressure "w.c. (mbar)**	**60 Hz**
Maximum Input, Btu/h (kW)[1] *For chamber pressures outside the given range or for varying chamber pressure conditions, contact Eclipse, Inc.*	-5.0 (-12.4)	7,640,000 (2240)
	-2.0 (-5.0)	7,260,000 (2130)
	0.0 (0.0)	7,000,000 (2050)
	2.0 (5.0)	6,720,000 (1970)
	5.0 (12.4)	6,290,000 (1840)
Minimum Input, Btu/h (kW)[2] *For lower inputs, contact Eclipse, Inc.*	80,000 (23)	
Main Gas Inlet Pressure, psig (mbar)[3] *Fuel pressure at ratio regulator inlet*	Natural Gas	1.0 to 2.5 (70 to 175)
	Propane	1.0 to 2.0 (70 to 140)
High Fire Visible Flame Length, inches (mm) *Measured from the outlet end of the combustor*	Natural Gas	75 (1900)
	Propane	88 (2200)
Maximum Chamber Temperature, °F (°C)	Alloy Tube	1500 (815)
	Block & Holder	1900 (1038)
Flame Detection	Alloy Tube	Flamerod or UV Scanner
	Block & Holder	UV scanner only
Fuels[4] *For any other mixed gas, contact Eclipse, Inc.*	Natural Gas, Propane, Butane	
Blower Motor Power, Hp	7.5	
Weight, lbs (kg)[5]	Alloy Tube	410 (186)
	Refractory	556 (252)
Approvals	АИ30	

[1] Maximum inputs for packaged blower versions are given for the standard combustion air blower without an inlet air filter.

[2] Turndown input based on neutral chamber conditions. Contact Eclipse for other chamber pressures.

[3] For proper performance, this pressure must be kept constant across the burner operating range.

[4] See Design Guide 110 for more information about typical fuel composition and properties.

[5] All weights are approximate.

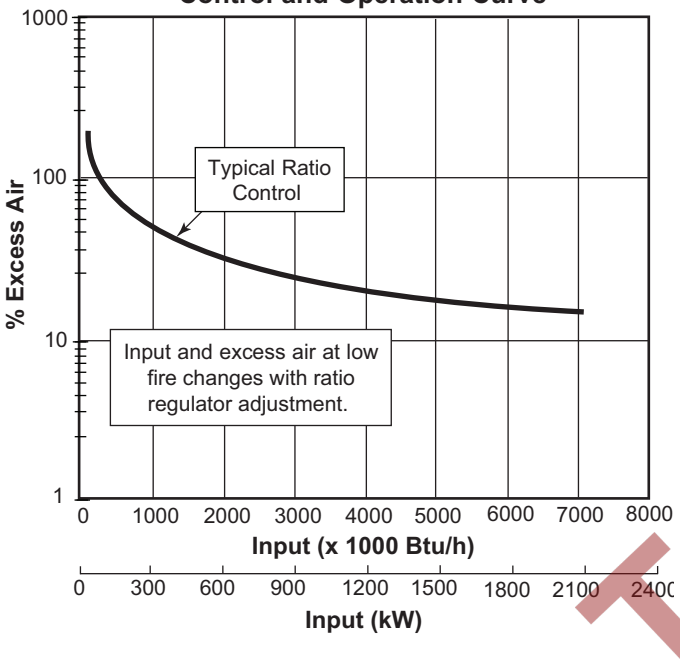
- All information is based on laboratory testing. Different chamber conditions will affect the data.
- All inputs based upon gross calorific values and standard conditions; 1 atmosphere, 70°F (21°C).
- Eclipse reserves the right to change the construction and/or configuration of our products at any time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

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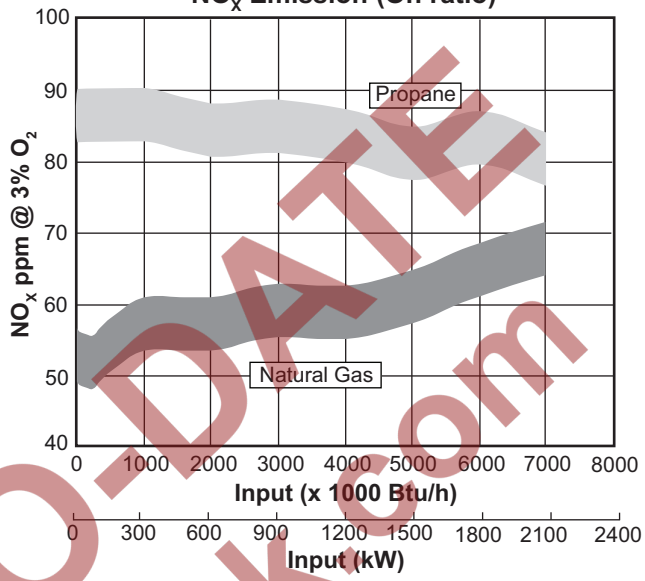
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Performance Graphs

Control and Operation Curve



NO_x Emission (On ratio)



NOx Emission data is given for:

- Ambient combustion air ~70°F (21°C)
- Less than 1000°F (540°C) firing chamber
- Minimal process air velocity
- Low fire input adjusted to 80,000 Btu/h (23 kW)
- ppm volume, dry @ 3% O_2
- Neutral chamber pressure

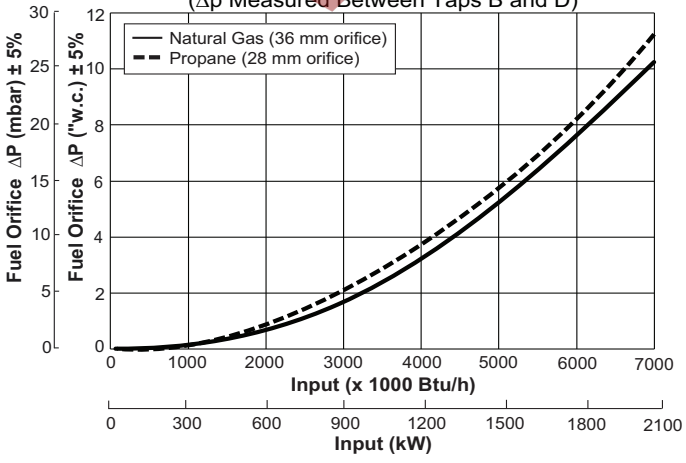
Emissions from the burner are influenced by:

- 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.

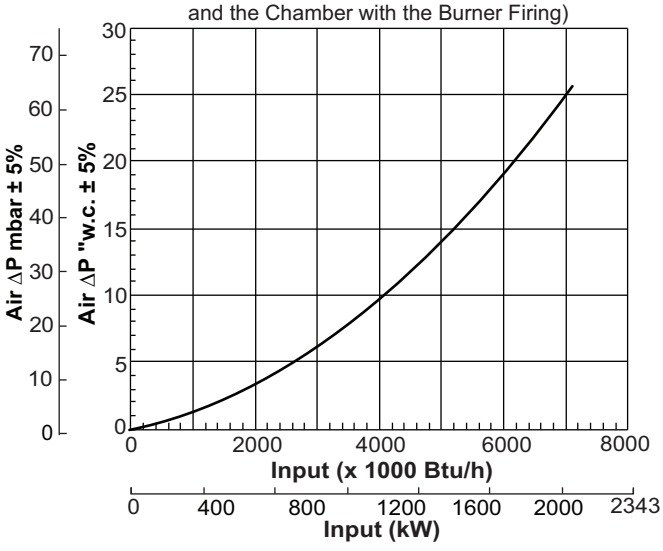
Fuel Orifice Δp vs. Input

(Δp Measured Between Taps B and D)



Air Δp vs. Input

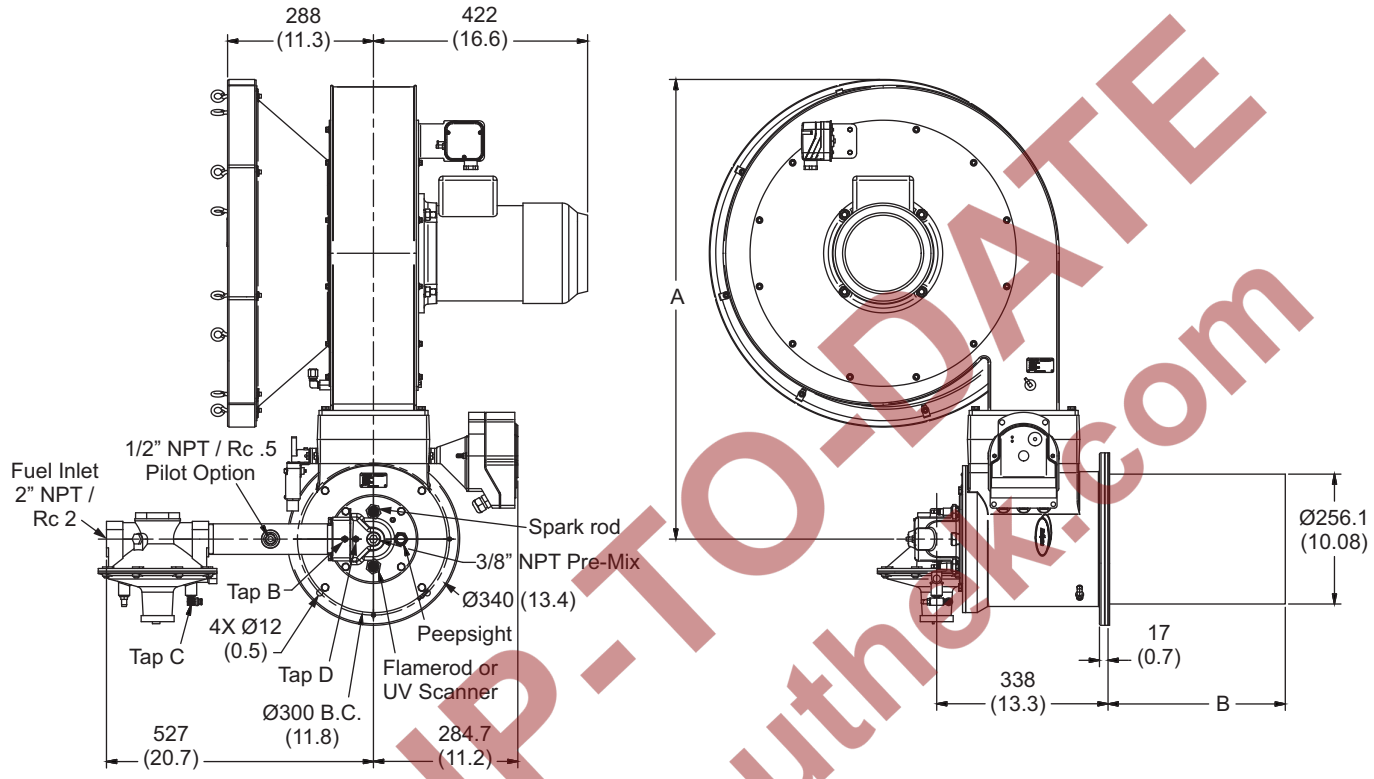
(Δp Measured Between Tap C and the Chamber with the Burner Firing)



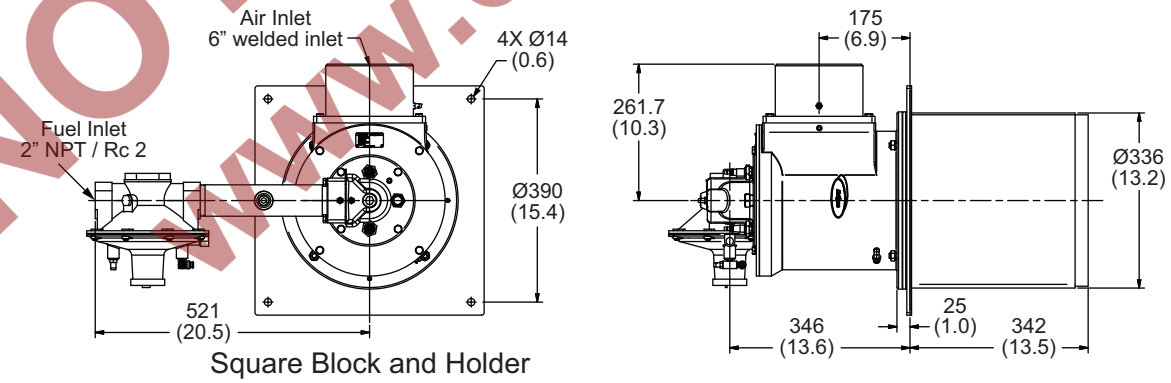
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Dimensions and Specifications

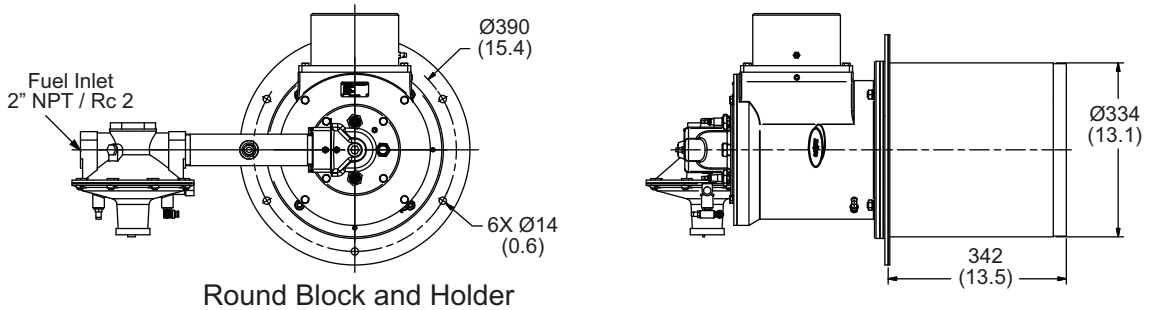
Dimensions in mm (inches)



Combustor Type	B
Straight Stainless Steel Alloy Tube	349.6 (13.8)
Straight Stainless Steel Alloy Tube	425.6 (16.8)



Square Block and Holder

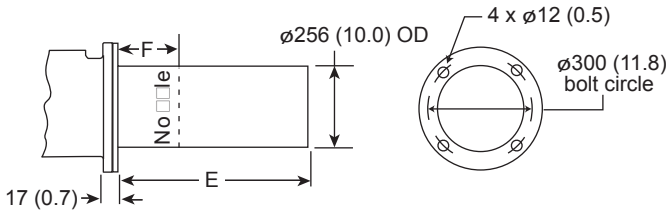


Round Block and Holder

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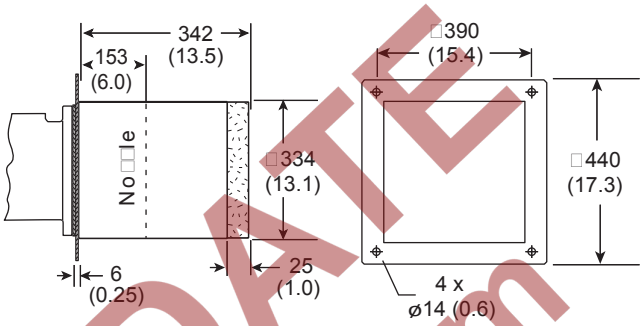
Combustor Options

Alloy Combustor

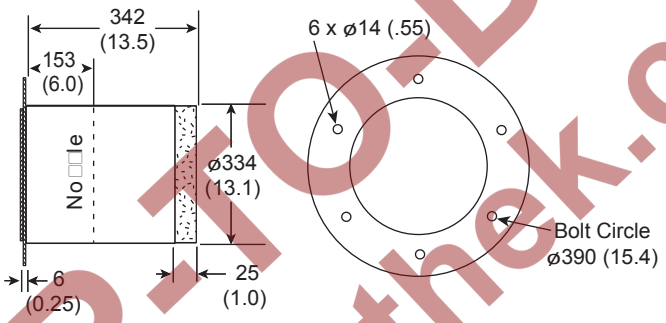


E	F
350 (13.8)	153 (6.0)
426 (16.8)	229 (9.0)

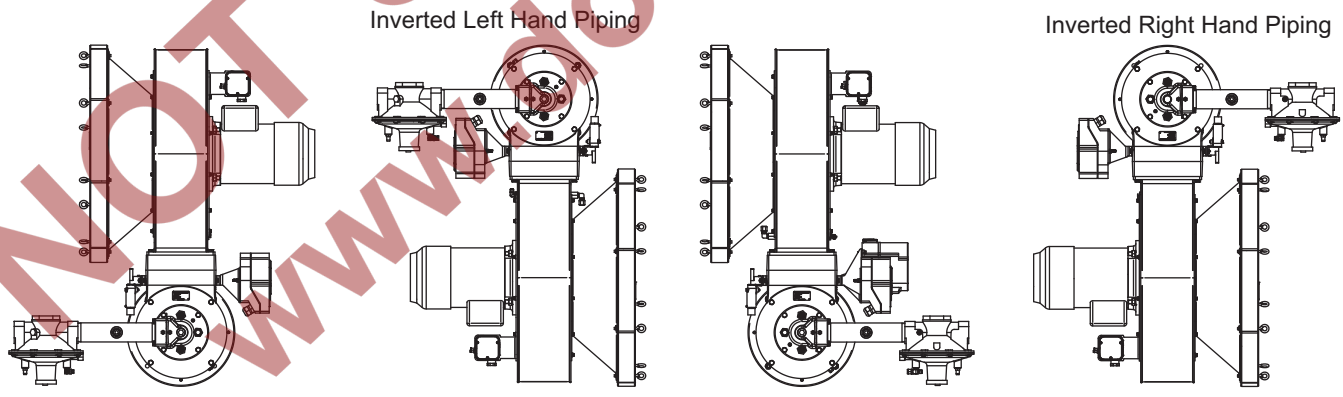
Square Block & Holder



□ound Block & Holder



Burner Configurations



Even though the blower motor is on the "left" side of the inverted units, it is still a "right hand" motor in relationship to the blower assembly.

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