

Eclipse ThermJet Burners

for preheated combustion air

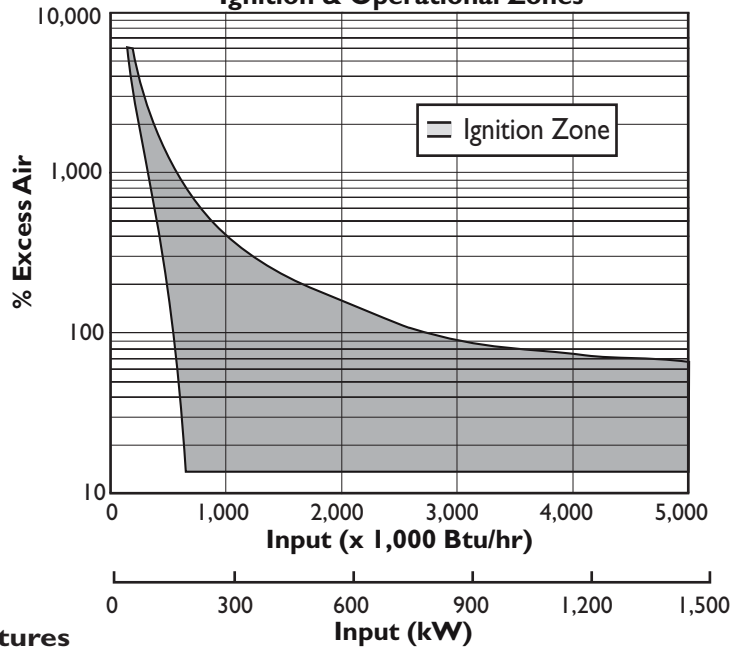
Model TJPCA0500
Version 2

PARAMETER		SPECIFICATION		
		Nat. Gas	Propane	Butane
Maximum Input Btu/hr (kW)		5,000,000 (1465)	5,000,000 (1465)	5,000,000 (1465)
Minimum Input, On-ratio Btu/hr (kW)		500,000 (146)	500,000 (146)	500,000 (146)
Gas Inlet Pressure "w.c. (mbar) • Fuel pressure at gas inlet (Tap "B" – see page 3)	ambient	5.5 (13.7)	6.0 (14.9)	5.5 (13.7)
	300° F	7.5 (18.5)	8.0 (19.8)	7.5 (18.5)
	700° F	11.0 (27.3)	11.5 (28.6)	11.0 (27.3)
	1000° F	-----	-----	-----
Air Inlet Pressure "w.c. (mbar) • 15% excess air at maximum input (Tap "A" – see page 3)	ambient	4.8 (12.0)	4.8 (12.0)	4.8 (12.0)
	300° F	6.8 (16.9)	6.8 (16.9)	6.8 (16.9)
	700° F	10.3 (25.6)	10.3 (25.6)	10.3 (25.6)
	1000° F	-----	-----	-----
High Fire Flame Length Inches (mm)		<100 (2550)	<100 (2550)	<105 (2670)
Flame Detection		U.V. scanner available for all combustors		
Fuel		Natural Gas, Propane, Butane <i>For any other mixed gas, contact Eclipse for orifice sizing.</i>		

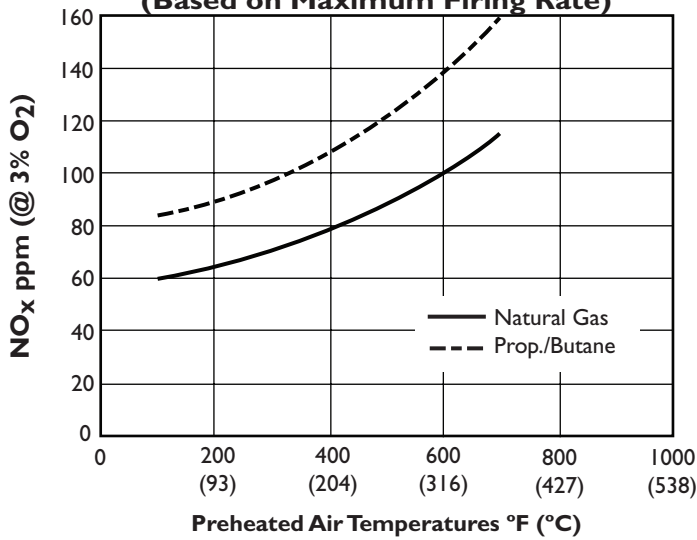
- All information is based on laboratory testing in neutral (0.0"w.c.) pressure chamber. Different chamber size and conditions may affect the data.
- All information is based on standard combustor design. Changes in the combustor will alter performance and pressures.
- All inputs based upon gross calorific values.
- 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.
- Plumbing of air and gas will affect accuracy of orifice readings. All information is based on generally acceptable air and gas piping practices.

Performance Graphs

Ignition & Operational Zones



NO_x vs Preheated Air Temperatures (Based on Maximum Firing Rate)

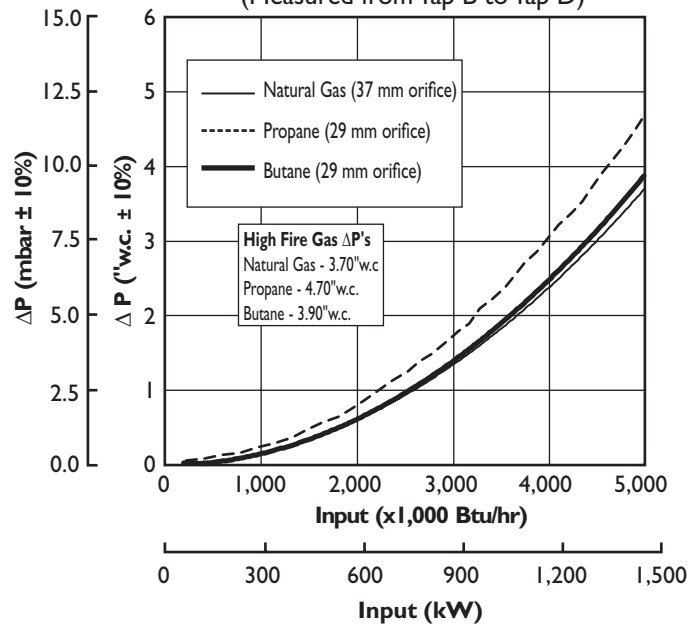


Emissions from the burner are influenced by:

- Fuel type
- Combustion air temperature
- Firing rate
- Chamber Conditions
- Percent of excess air

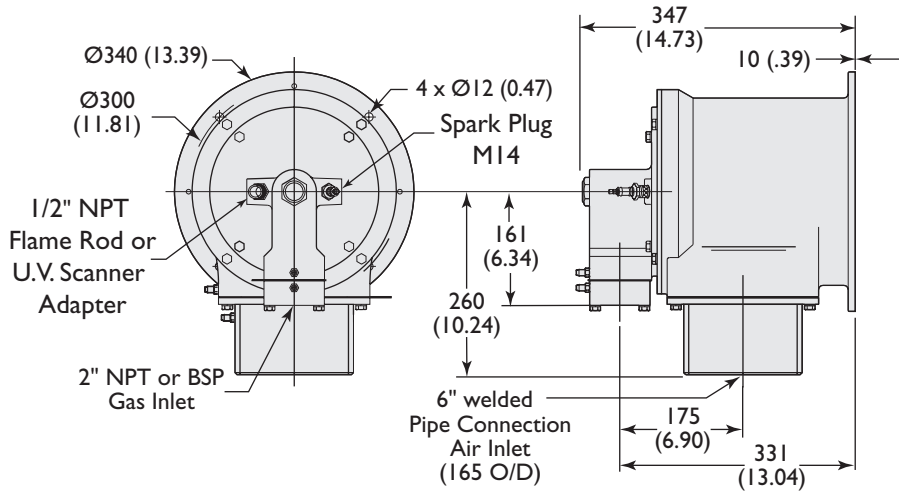
For estimates of other emissions, contact Eclipse.

Gas Orifice ΔP vs. Input (Measured from Tap B to Tap D)

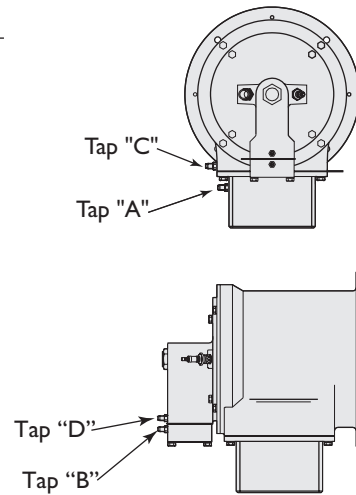


Dimensions & Specifications Millimeters (Inches)

Burner Housing



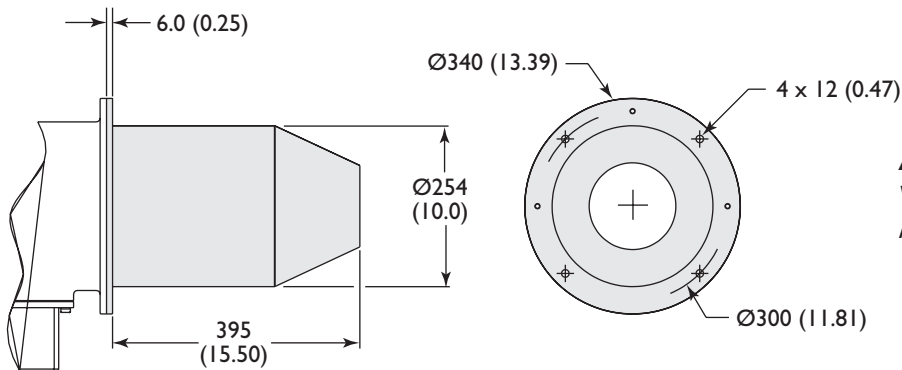
Tap Locations



Burner weight less combustor: 93 lb (42 kg)

Combustor

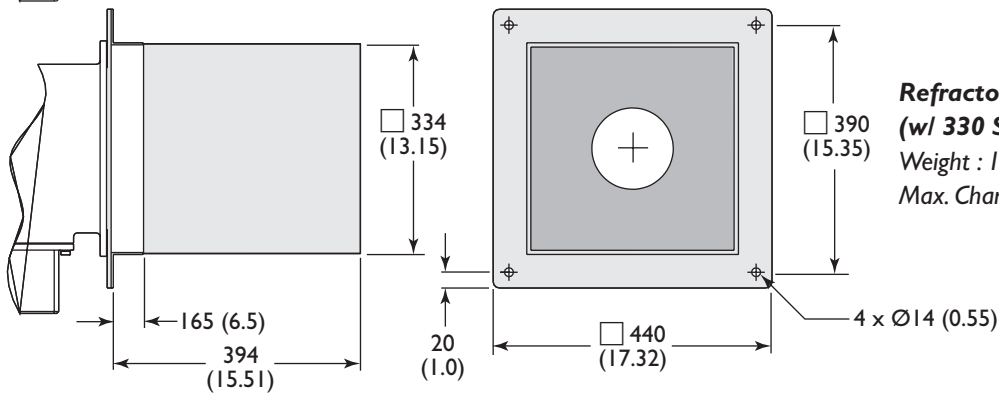
Exhaust outlet diameter : High Velocity : $\text{Ø}125$ (4.92)
Medium Velocity : $\text{Ø}177$ (6.97)



Alloy Tube (AISI 310)

Weight : 14.5 lb (6.6 kg)

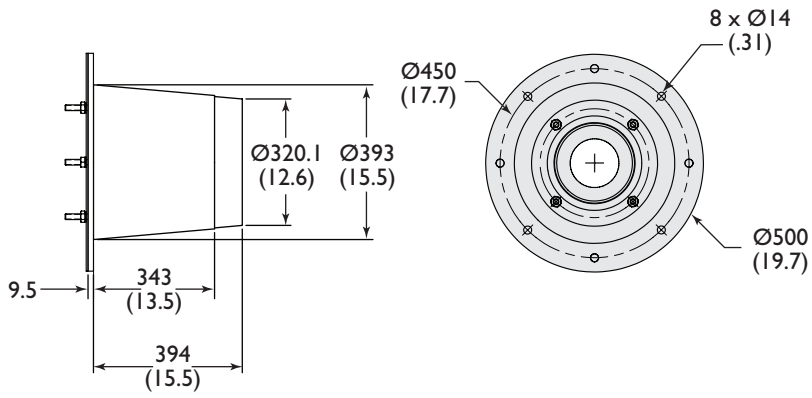
Max. Chamber Temp : 1,750 °F (950°C)



Refractory Block (w/ 330 SS wrapper)

Weight : 160 lb (73 kg)

Max. Chamber Temp : 2,800 °F (1535°C)



Down Firing Block
 Weight: 1b 185 (83.91kg)
 Max. Chamber Temp: 2800°F (1535°C)



Offered By:

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