

Eclipse ThermJet Burners

for Preheated Combustion Air

Model TJPCA0200

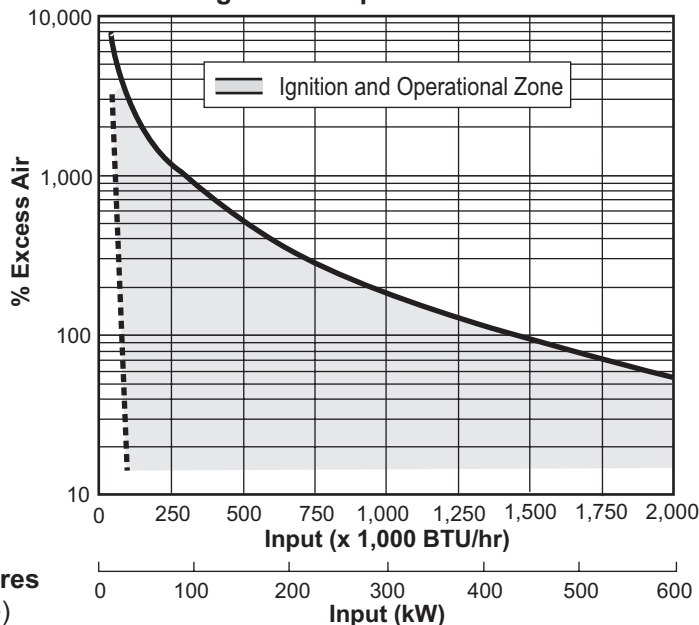
Version 2

Parameter			Specifications		
			Natural Gas	Propane	Butane
Maximum Input BTU/hr (kW)			2,000,000 (586)	2,000,000 (586)	2,000,000 (586)
Minimum Input, On-Ratio BTU/hr (kW)			200,000 (59)	200,000 (59)	200,000 (59)
Gas Inlet Pressure Required "w.c. (mbar) Fuel Pressure at Gas Inlet <i>(Tap "B" - see page 3)</i>	Combustion Air Temp	Ambient	7.1 (17.6)	8.5 (21.1)	6.9 (17.1)
		300°F (150°C)	8.7 (21.6)	10.5 (26.1)	8.9 (22.1)
		700°F (370°C)	11.6 (28.7)	14.1 (35.1)	12.5 (31.1)
		1000°F (540°C)	13.7 (34.1)	16.8 (41.8)	15.2 (37.9)
Air Inlet Pressure Required "w.c. (mbar) 15% Excess Air at Maximum Input <i>(Tap "A" - see page 3)</i>	Combustion Air Temp	Ambient	7.8 (19.4)	7.8 (19.4)	7.8 (19.4)
		300°F (150°C)	11.2 (27.9)	11.2 (27.9)	11.2 (27.9)
		700°F (370°C)	17.1 (42.6)	17.1 (42.6)	17.1 (42.6)
		1000°F (540°C)	21.5 (53.6)	21.5 (53.6)	21.5 (53.6)
High Fire Flame Length Inches (mm) <i>(Measured from End of Combustor)</i>			<36.0 (915)	<32.0 (810)	<32.0 (810)
Flame Detection			UV scanner available for all combustors.		
Fuel <i>For any other mixed gas, contact Eclipse for orifice sizing.</i>			Natural gas, propane, or butane		

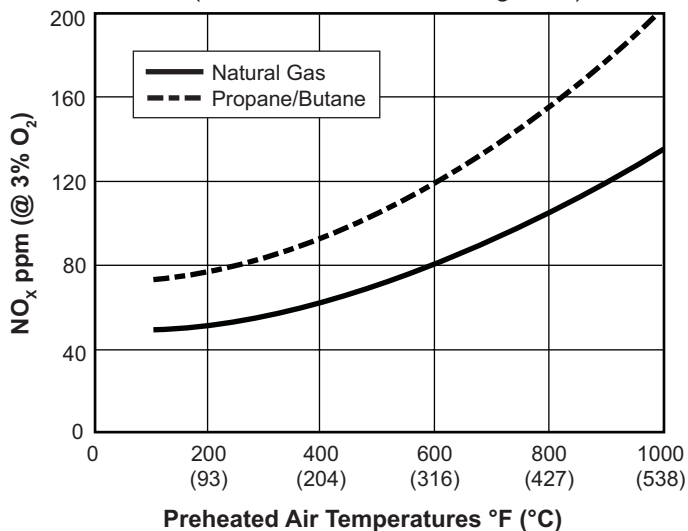
- All information is based on laboratory testing in neutral (0.0" w.c.) pressure chamber. Different chamber size and conditions may affect the data.
- All information is based on standard combustor design. Changes in combustor will alter performance and pressures.
- All inputs based upon gross calorific 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)

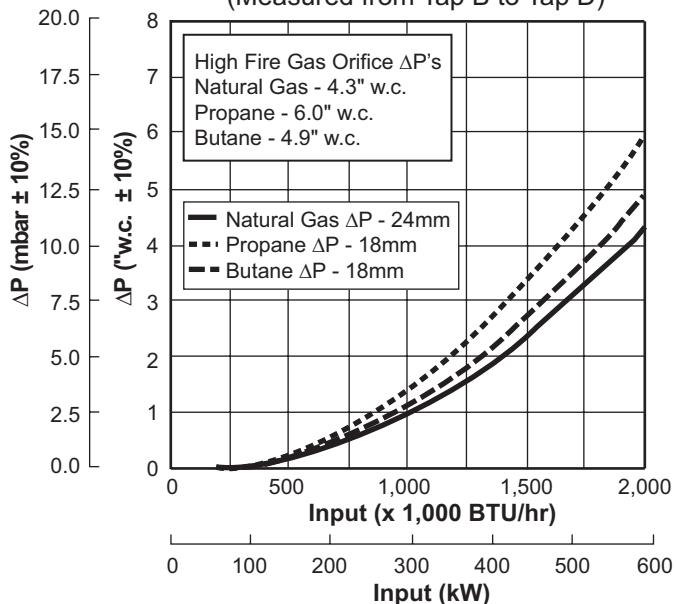


Emissions from the burner are influenced by:

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

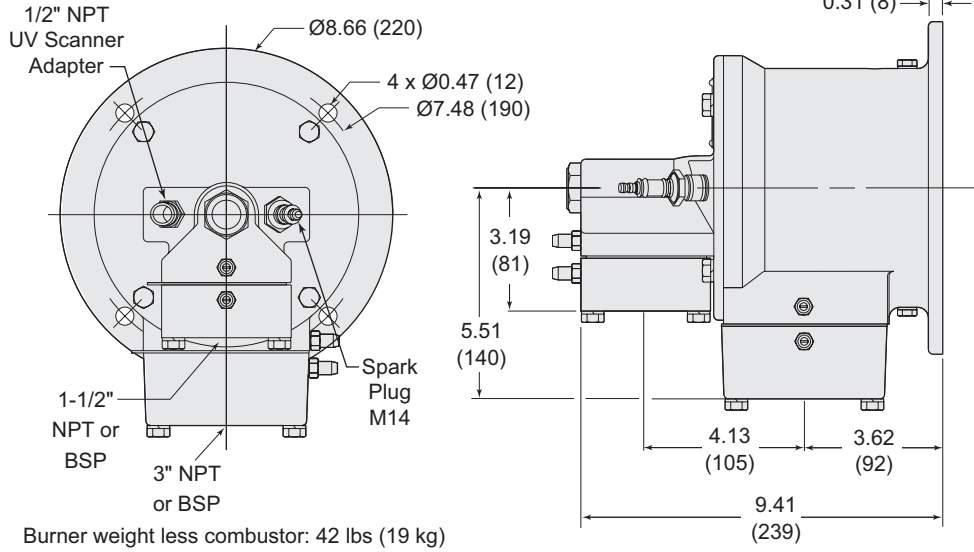
For estimates of other emissions, contact Eclipse.

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

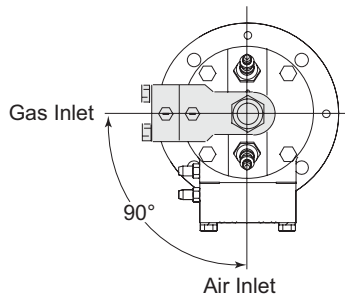
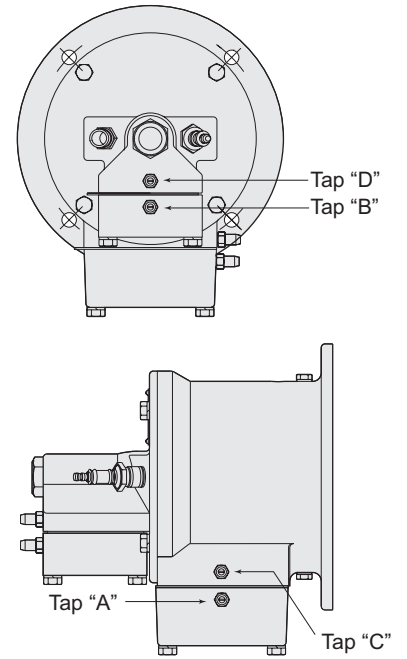


Dimensions in inches (mm)

Burner Housing



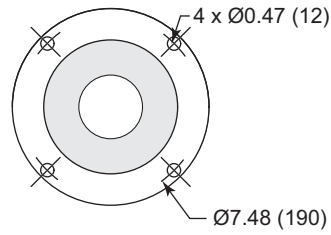
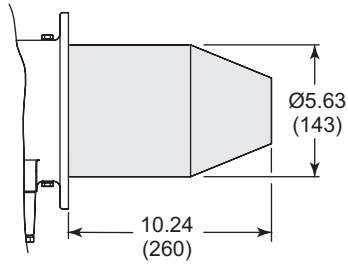
Tap Locations



Do not install the burner with the gas inlet rotated 90° clockwise with respect to the air inlet if operating on Natural Gas and using a flamerod.

Combustor

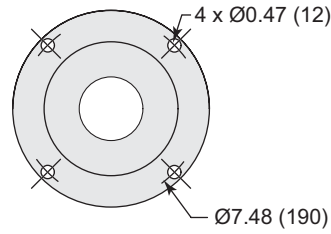
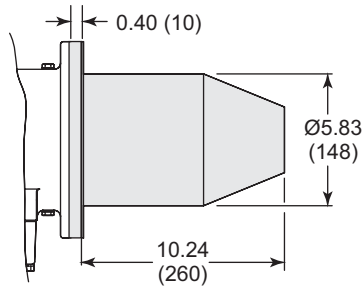
Exhaust Outlet Diameter: Medium Velocity $\varnothing 4.13$ (105)



Alloy Tube (AISI 310)

Weight: 4.2 lbs (1.9 kg)

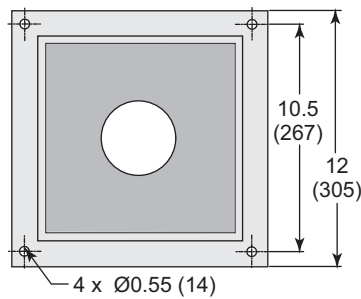
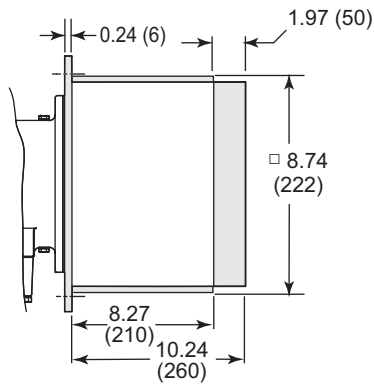
Maximum Chamber Temp: 1,750°F (940°C)
(Not suitable for preheated air over 700°F)



Silicon Carbide Tube

Weight: 3.1 lbs (1.5 kg)

Maximum Chamber Temp: 2,200°F (1200°C)



Refractory Block

(w/330 SS Wrapper)

Weight: 66 lbs (30 kg)

Maximum Chamber Temp: 2,800°F (1538°C)



Offered By:

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www.peconet.com