

Eclipse ThermJet Burners

for preheated combustion air

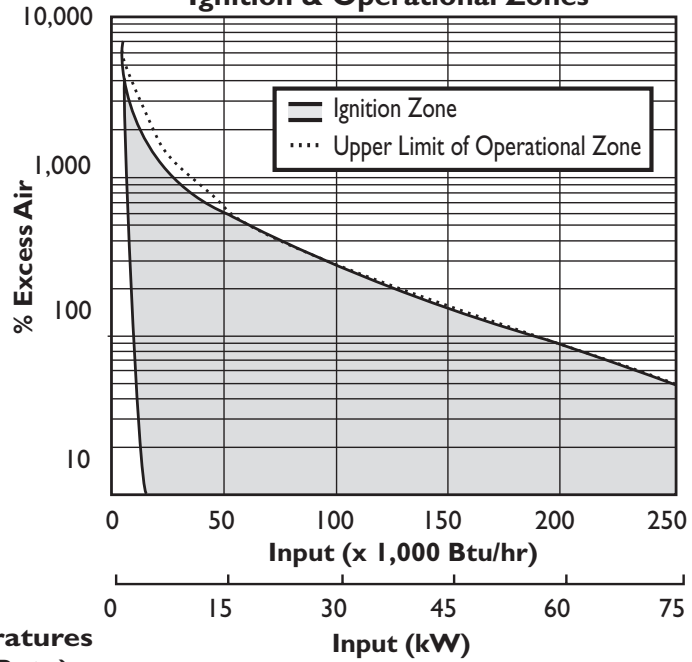
Model TJPCA0025
Version 2

PARAMETER		SPECIFICATION		
		Nat. Gas	Propane	Butane
Maximum Input Btu/hr (kW)		250,000 (73)	250,000 (73)	250,000 (73)
Minimum Input, On-ratio Btu/hr (kW)		25,000 (7.3)	25,000 (7.3)	25,000 (7.3)
Gas Inlet Pressure "w.c. (mbar) • Fuel pressure at gas inlet (Tap "B" – see page 3)	ambient	6.8 (16.9)	7.4 (18.4)	7.0 (17.4)
	300° F	8.8 (21.9)	9.4 (23.4)	9.0 (22.4)
	700° F	12.5 (31.1)	13.1 (32.6)	12.7 (31.6)
	1000° F	15.3 (38.0)	15.9 (39.5)	15.5 (38.5)
Air Inlet Pressure "w.c. (mbar) • 15% excess air at maximum input (Tap "A" – see page 3)	ambient	5.0 (12.5)	5.0 (12.5)	5.0 (12.5)
	300° F	7.0 (17.4)	7.0 (17.4)	7.0 (17.4)
	700° F	10.7 (26.6)	10.7 (26.6)	10.7 (26.6)
	1000° F	13.5 (33.6)	13.5 (33.6)	13.5 (33.6)
High Fire Flame Length Inches (mm)		<14.0 (356)	<14.0 (356)	<14.0 (356)
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>		

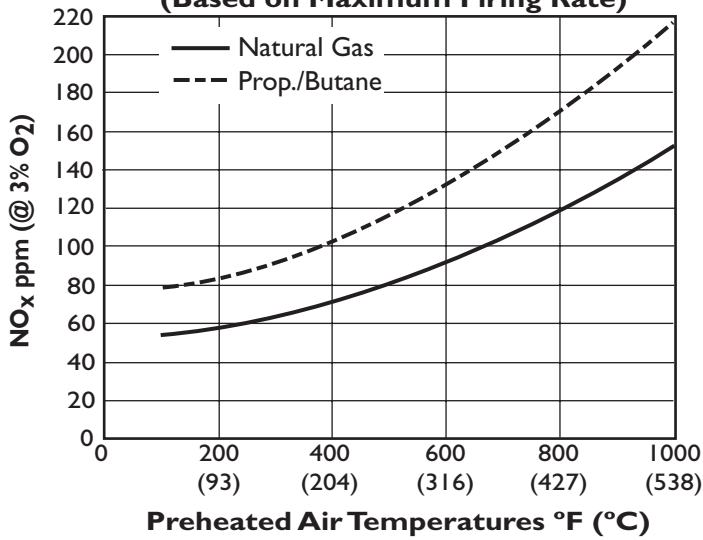
- All information is based on laboratory testing in neutral (0.0"w.c.) pressure chamber. Different chamber size and conditions may affect the data.
- All information is based on standard combustor design. Changes in the combustor will alter performance and pressures.
- All inputs based upon gross calorific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

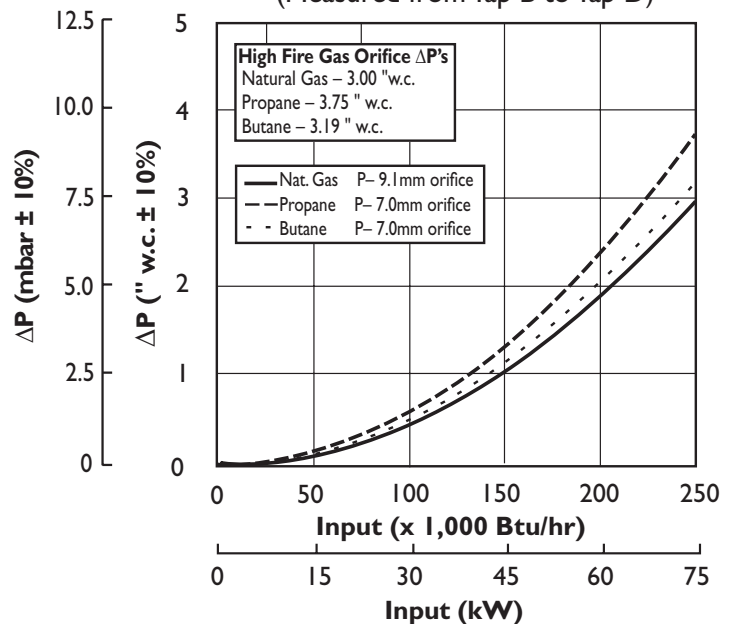


Emissions from the burner are influenced by:

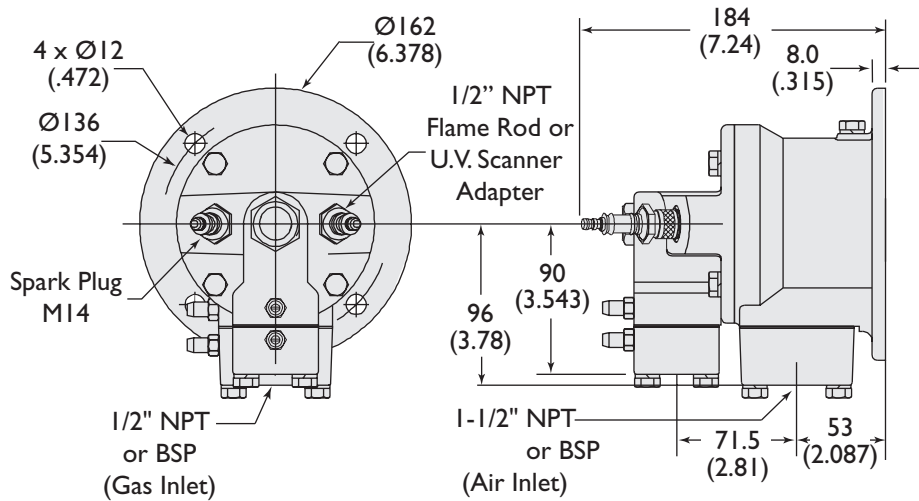
- Fuel type
- Combustion air temperature
- Firing rate
- Chamber Conditions
- Percent of excess air

For estimates of other emissions, contact Eclipse.

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

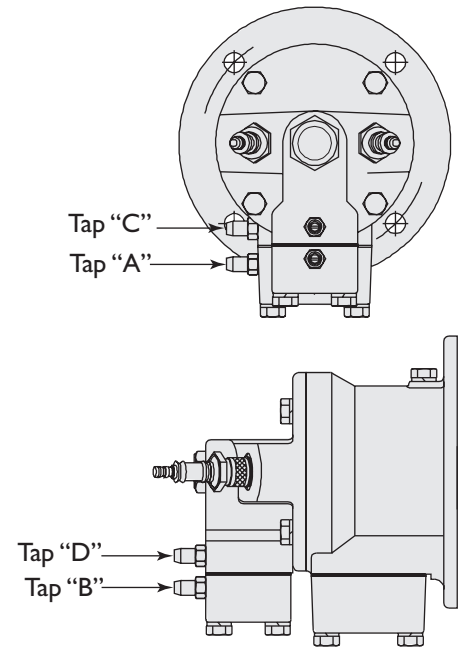


Dimensions & Specifications
Millimeters (Inches)
Burner Housing



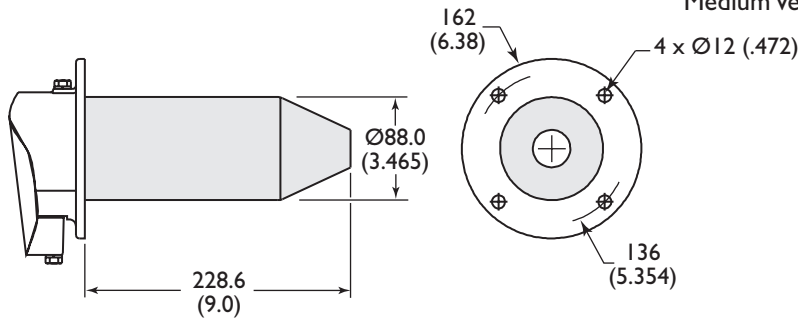
Burner Weight less combustor: 17.9 lb (8.1 kg)

Tap Locations



Combustor

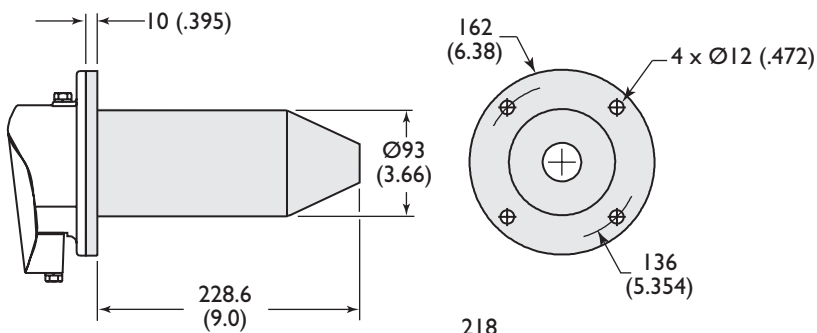
Exhaust outlet diameter : High Velocity : $\text{Ø}32$ (1.26)
 Medium Velocity : $\text{Ø}42$ (1.65)



Alloy Tube (AISI 310)

Weight: 2.1 lbs. (0.95 kg)

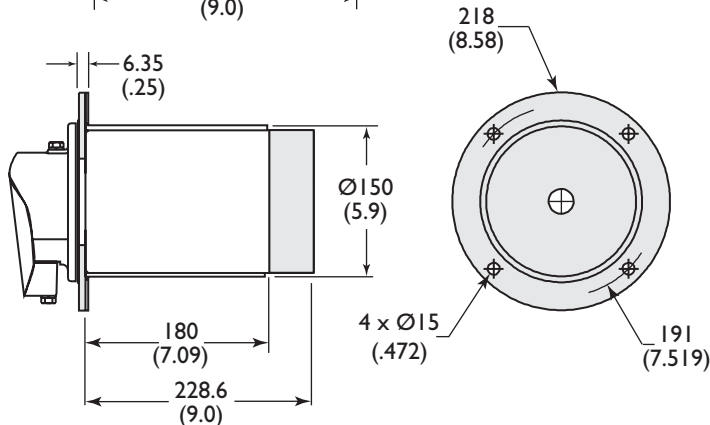
Max. Chamber Temp: 1,750°F (950°C)



Silicon Carbide Tube

Weight: 3.6 lb (1.63 kg)

Max. Chamber Temp: 2,500°F (1371°C)



Refractory Block (w/330 SS wrapper)

Weight: 14 lb (6.35 kg)

Max. Chamber Temp: 2,800°F (1538°C)



Offered By:

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