

Eclipse ThermJet Burners

for preheated combustion air

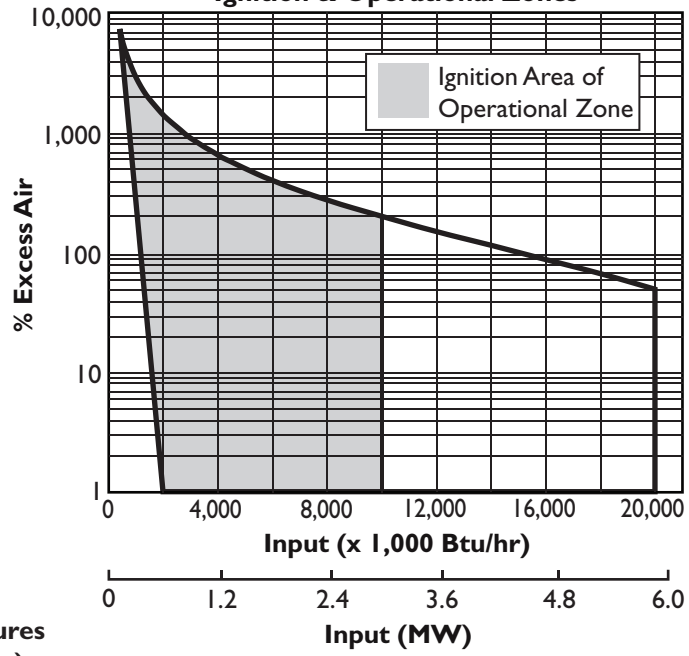
Model TJPCA2000
Version 2

PARAMETER		SPECIFICATION		
		Nat. Gas	Propane	Butane
Maximum Input Btu/hr (kW)		20,000,000 (5860)	20,000,000 (5860)	20,000,000 (5860)
Minimum Input, On-ratio Btu/hr (kW)		2,000,000 (586)	2,000,000 (586)	2,000,000 (586)
Gas Inlet Pressure "w.c. (mbar) • Fuel pressure at gas inlet (Tap "B" – see page 3)	ambient	3.6 (8.9)	3.6 (8.9)	3.6 (8.9)
	300° F	6.6 (16.3)	6.6 (16.3)	6.6 (16.3)
	700° F	12.0 (29.7)	12.0 (29.7)	12.0 (29.7)
	1000° F	16.0 (39.8)	16.0 (39.8)	16.0 (39.8)
Air Inlet Pressure "w.c. (mbar) • 15% excess air at maximum input (Tap "A" – see page 3)	ambient	7.3 (18.2)	7.3 (18.2)	7.3 (18.2)
	300° F	10.3 (25.6)	10.3 (25.6)	10.3 (25.6)
	700° F	15.7 (39.1)	15.7 (39.1)	15.7 (39.1)
	1000° F	19.7 (49.1)	19.7 (49.1)	19.7 (49.1)
High Fire Flame Length Inches (mm)		<168 (4267)	<216 (5486)	<216 (5486)
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>		

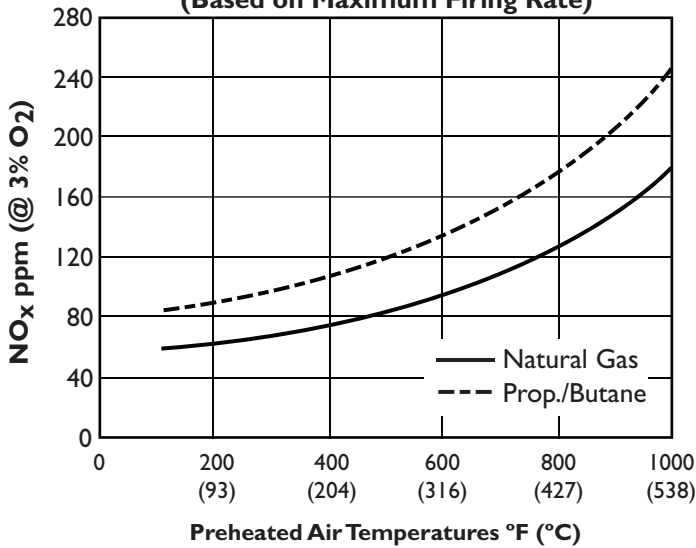
- All information is based on laboratory testing in neutral (0.0" w.c.) pressure chamber. Different chamber size and conditions may affect the data.
- All information is based on standard combustor design. Changes in the combustor will alter performance and pressures.
- All inputs based upon gross calorific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



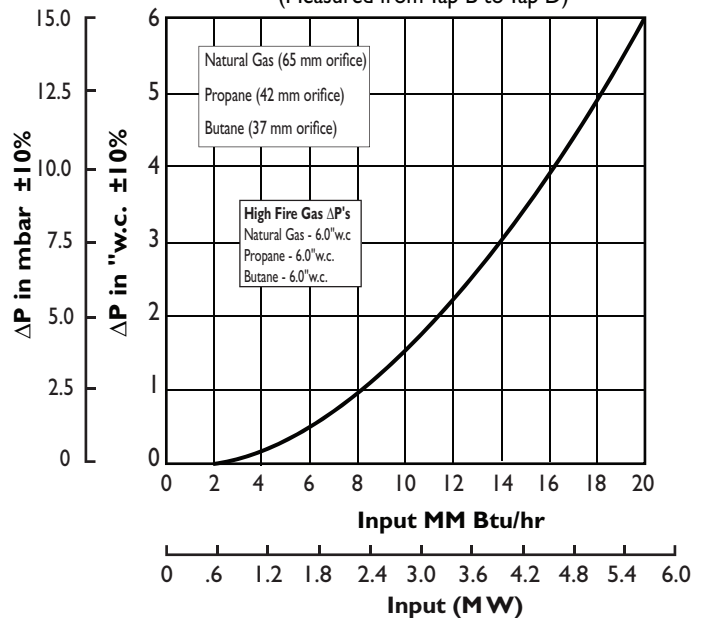
Emissions from the burner are influenced by:

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

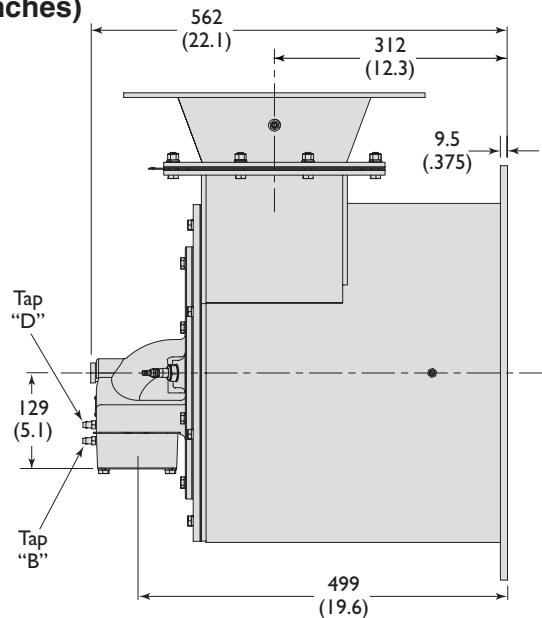
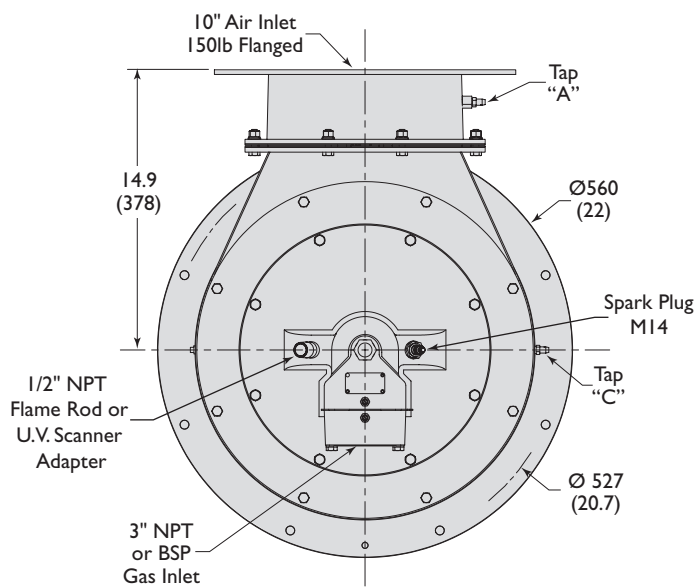
For estimates of other emissions, contact Eclipse.

Gas Orifice ΔP vs. Input

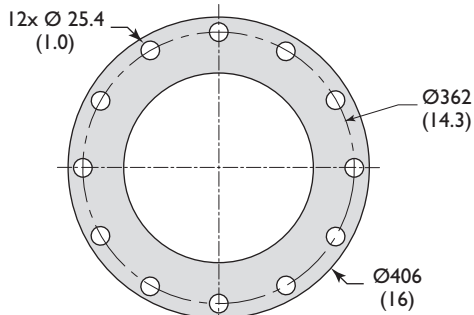
(Measured from Tap B to Tap D)



Dimensions & Specifications Millimeters (Inches)



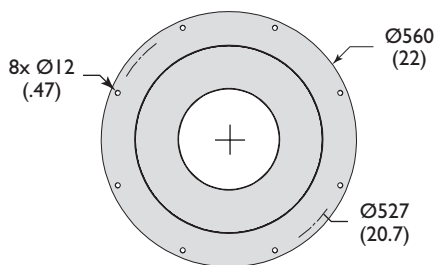
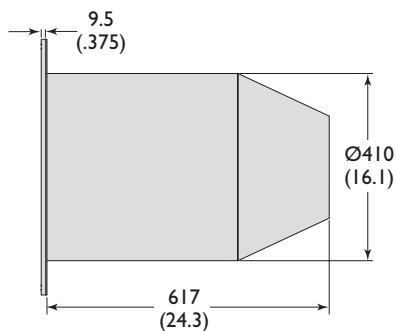
Burner weight less combustor: 208 lb (95 kg)



Air Inlet Mounting Detail

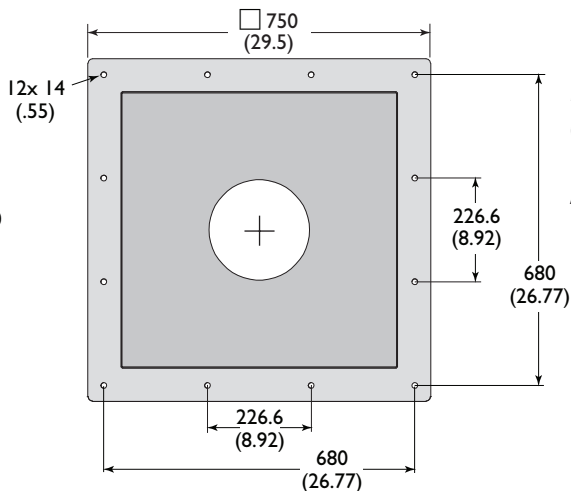
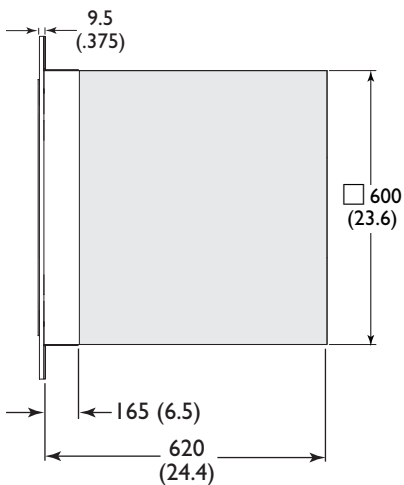
Combustor

Exhaust outlet diameter : High Velocity (tapered) : Ø260 (10.2)
Medium Velocity (straight) : Ø406 (16)



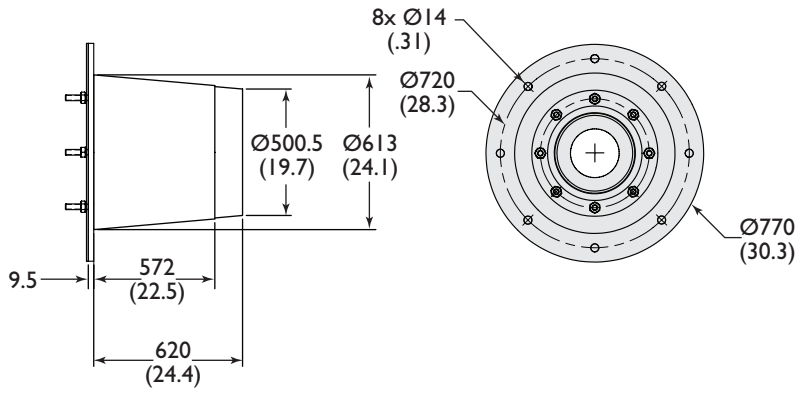
Alloy Tube (AISI 310)

Weight : 44 lb (20 kg)
Max. Chamber Temp : 1,750 °F (950°C)



Refractory Block (w/ 330 SS wrapper)

Weight : 1100 lb (499 kg)
Max. Chamber Temp : 2,800 °F (1535°C)



Down Firing Block
 Weight: 590lb (267.62 kg)
 Max. Chamber Temp: 2800°F (1535°C)



Offered By:

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