

Eclipse ThermJet Burners

for preheated combustion air

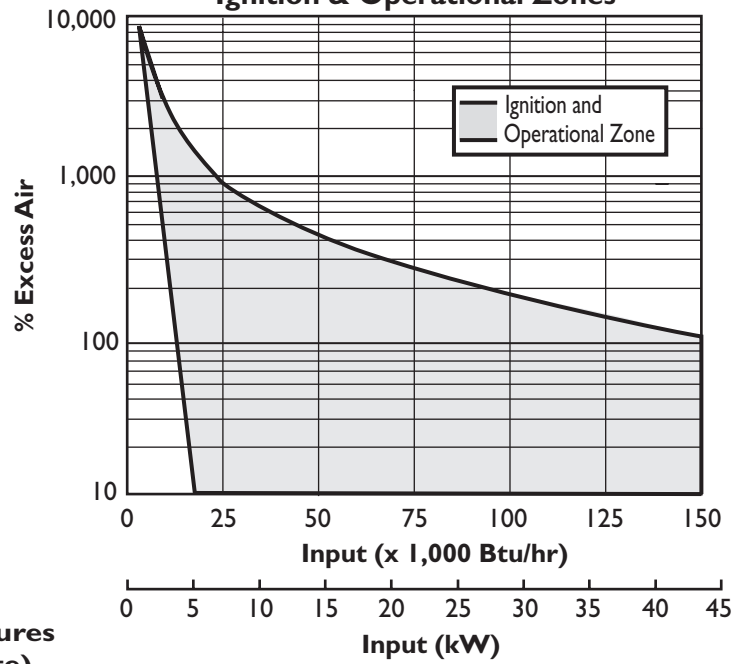
Model TJPCA0015
Version 2

| PARAMETER | | SPECIFICATION | | |
|---|---------|---|--------------|--------------|
| | | Nat. Gas | Propane | Butane |
| Maximum Input Btu/hr (kW) | | 150,000 (44) | 150,000 (44) | 150,000 (44) |
| Minimum Input, On-ratio Btu/hr (kW) | | 15,000 (4.4) | 15,000 (4.4) | 15,000 (4.4) |
| Gas Inlet Pressure "w.c. (mbar) • Fuel pressure at gas inlet (Tap "B"– see page 3) | ambient | 7.5 (18.6) | 7.5 (18.6) | 7.5 (18.6) |
| | 300° F | 9.8 (24.4) | 9.8 (24.4) | 9.8 (24.4) |
| | 700° F | 14.0 (34.9) | 14.0 (34.9) | 14.0 (34.9) |
| | 1000° F | 17.2(42.7) | 17.2(42.7) | 17.2(42.7) |
| Air Inlet Pressure "w.c. (mbar) • 15% excess air at maximum input (Tap "A" – see page 3) | ambient | 5.7 (14.2) | 5.7 (14.2) | 5.7 (14.2) |
| | 300° F | 8.0 (19.9) | 8.0 (19.9) | 8.0 (19.9) |
| | 700° F | 12.2 (30.4) | 12.2 (30.4) | 12.2 (30.4) |
| | 1000° F | 15.4 (38.3) | 15.4 (38.3) | 15.4 (38.3) |
| High Fire Flame Length Inches (mm) | | <11.0 (279) | <10.0 (254) | <11.0 (279) |
| 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> | | |

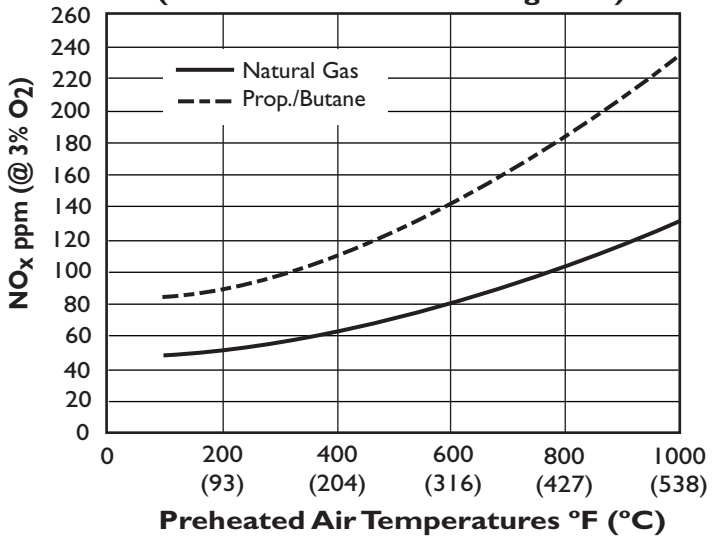
- All information is based on laboratory testing in neutral (0.0"w.c.) pressure chamber. Different chamber size and conditions may affect the data.
- All information is based on standard combustor design. Changes in the combustor will alter performance and pressures.
- All inputs based upon gross calorific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

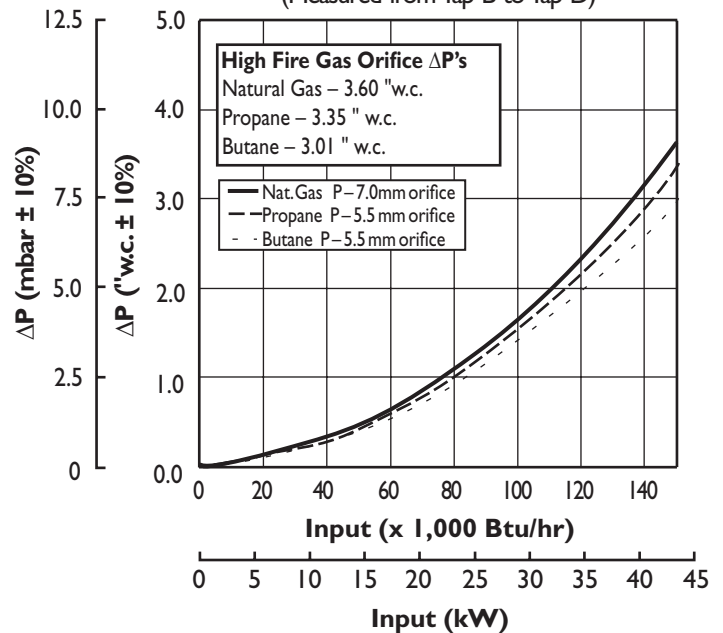


Emissions from the burner are influenced by:

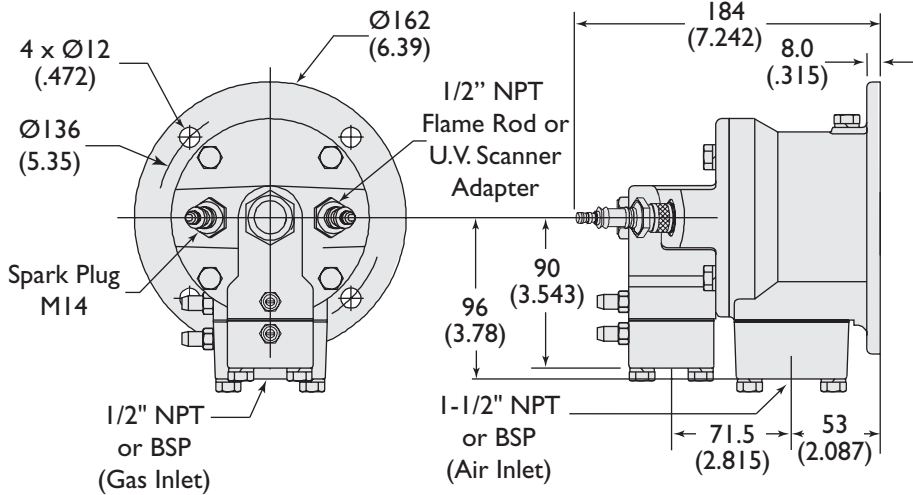
- Fuel type
- Combustion air temperature
- Firing rate
- Chamber Conditions
- Percent of excess air

For estimates of other emissions, contact Eclipse.

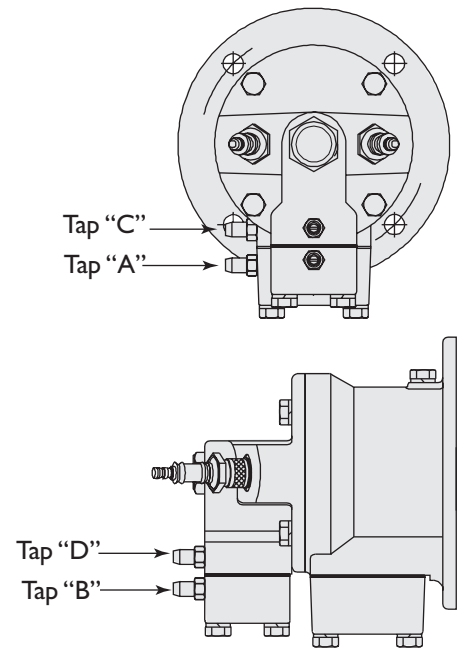
Gas Orifice ΔP vs. Input (Measured from Tap B to Tap D)



Dimensions & Specifications
Millimeters (Inches)

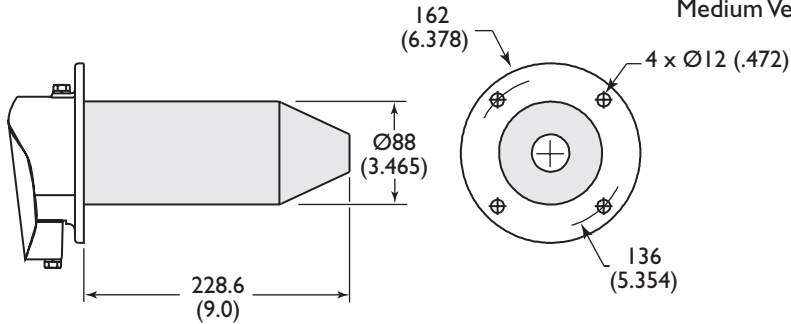


Burner Weight less combustor: 17.9 lb (8.1 kg)



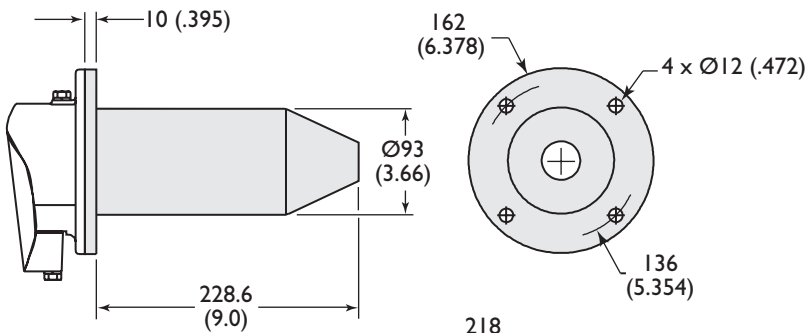
Combustor

Exhaust outlet diameter : High Velocity : Ø25 (.98)
 Medium Velocity : Ø32 (1.26)



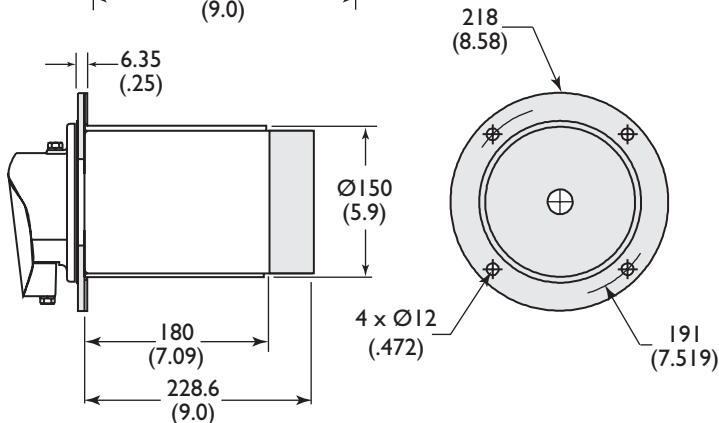
Alloy Tube (AISI 310)

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)



Eclipse Combustion

Offered By:

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