


# Eclipse Furnnox Burners

Model FN0025

Data sheet Edition 04.18

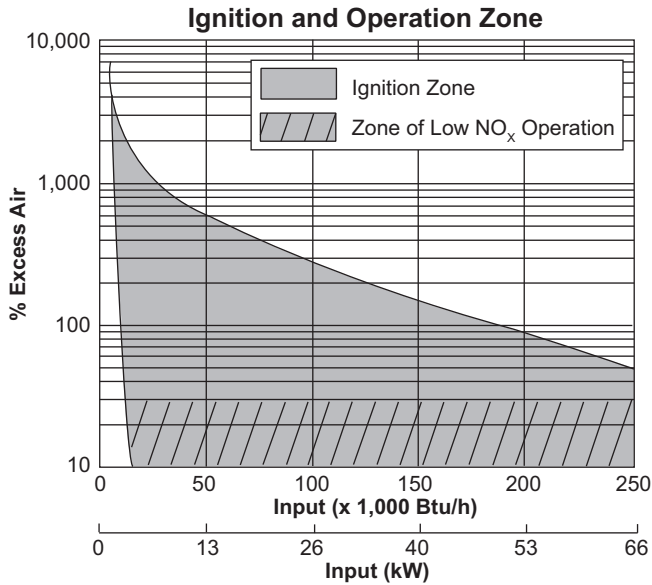
Version 1

| Parameter   |                        | Specification   |              |              |            |
|---|------------------------|---|--------------|--------------|------------|
|   |                        | Natural Gas   | Propane      | Butane       |            |
| <b>Maximum Input, Btu/h (kW)</b><br><i>Input limited during cold start. See page 2.</i>                                       |                        | 250,000 (66)  | 250,000 (66) | 250,000 (66) |            |
| <b>Minimum Input, Btu/h (kW)</b><br><i>For lower inputs, contact Eclipse, Inc.</i>  |                        | 25,000 (6.6)  | 25,000 (6.6) | 25,000 (6.6) |            |
| <b>Main Gas Inlet Pressure, "w.c. (mbar)</b><br><i>Fuel pressure at gas inlet (Tap B)</i>                                     | Combustion<br>Air Temp | Ambient Air   | 3.8 (9.5)    | 7.0 (17.4)   | 6.2 (15.4) |
|   |                        | 300°F (150°C)   | 5.8 (14.4)   | 7.4 (18.4)   | 6.5 (16.2) |
| <b>Air Inlet Pressure, "w.c. (mbar)</b><br><i>15% excess air at maximum input<br/>Tap A (see page 3)</i>                      | Combustion<br>Air Temp | Ambient Air   | 6.2 (15.4)   | 6.2 (15.4)   | 6.2 (15.4) |
|   |                        | 300°F (150°C)   | 8.9 (22.1)   | 8.9 (22.1)   | 8.9 (22.1) |
| <b>High Fire Visible Flame Length, inches (mm)</b><br><i>Measured from the outlet end of the combustor</i>                    |                        | < 22.0 (559)  | < 14 (355)   | < 14 (355)   |            |
| <b>Maximum Combustion Air Temperature, °F (°C)</b><br><i>For higher combustion air temperatures, contact Eclipse, Inc.</i>    |                        | 300 (150)   |              |              |            |
| <b>Minimum Operating Furnace Temperature, °F (°C)</b><br><i>For operation with low NO<sub>x</sub> and lowest CO emissions</i> |                        | 1400 (760)  |              |              |            |
| <b>Maximum Chamber Temperature, °F (°C)</b>   |                        | 2400 (1315)   |              |              |            |
| <b>Flame Detection</b>  |                        | UV Scanner  |              |              |            |
| <b>Fuels<sup>1</sup></b><br><i>For any other mixed gas, contact Eclipse, Inc.</i>   |                        | Natural Gas, Propane, Butane  |              |              |            |
| <b>Approvals</b>  |                        |  |              |              |            |

1) See Installation Guide 210 for more information about typical fuel composition and properties.

- All information based on laboratory testing in neutral (0.0" w.c.) pressure chamber. Different chamber sizes and conditions may affect the data.
- All imperial inputs based upon gross calorific values (HHV). All metric inputs based upon net calorific values (LHV).
- 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 general acceptable air and gas piping practices.

## Performance Graphs

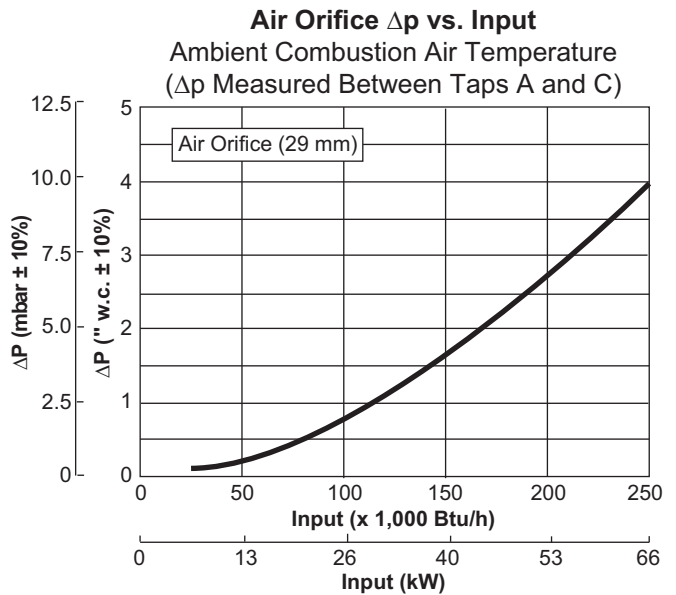
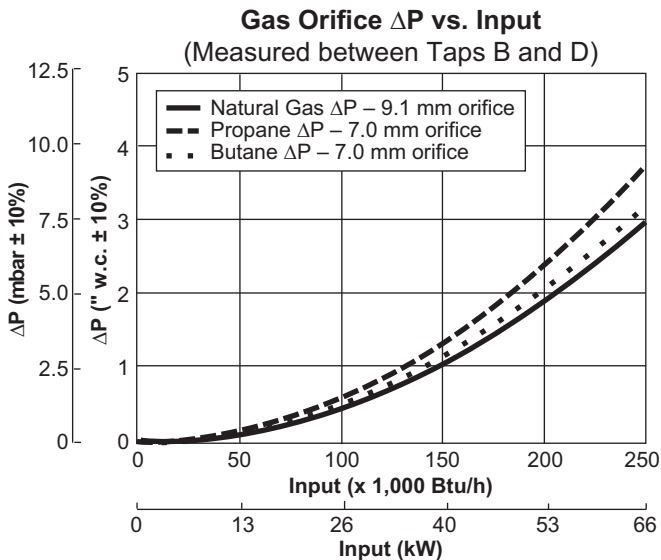


Input to be limited to 185 kBtu/h (49 kW) with Minimum of 30% EXA, while the chamber is below 1400°F (760°C).

Emissions from the burner are influenced by:

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

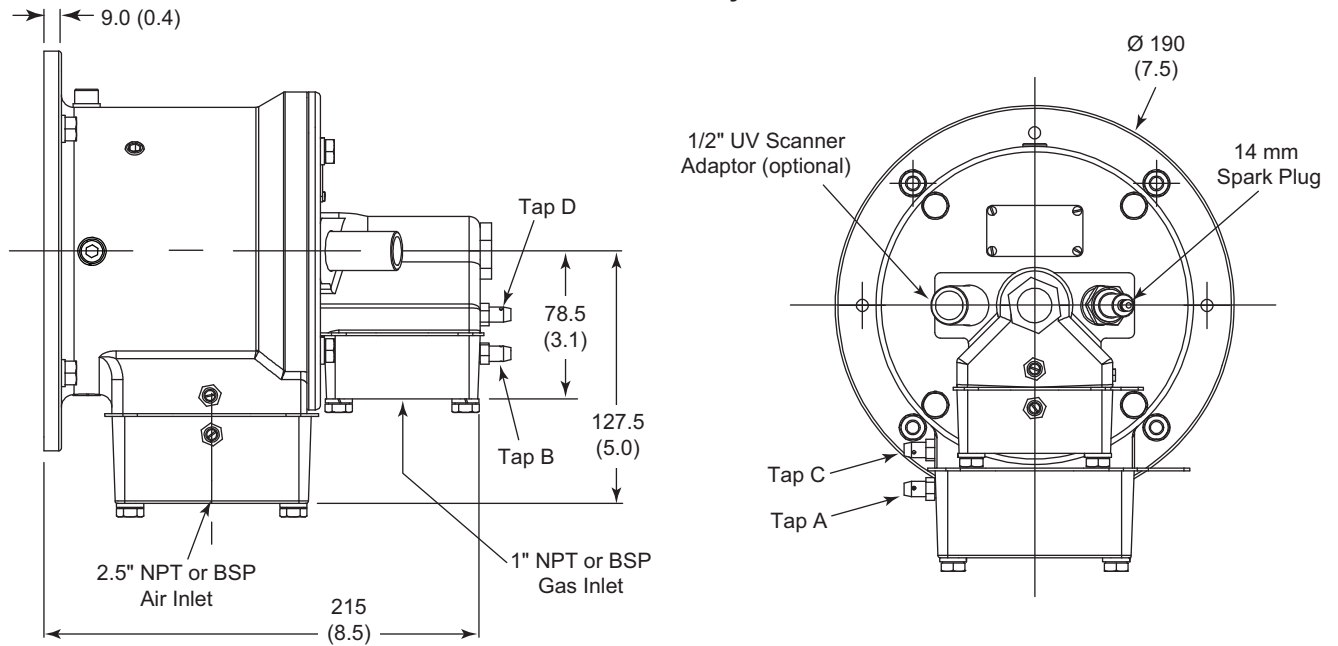
High fire NO<sub>x</sub> emissions with natural gas are typically below 30 ppm at 3% O<sub>2</sub> in furnace applications below 2000 °F. Contact Eclipse for an estimate of emissions for specific conditions.



## Dimensions and Specifications

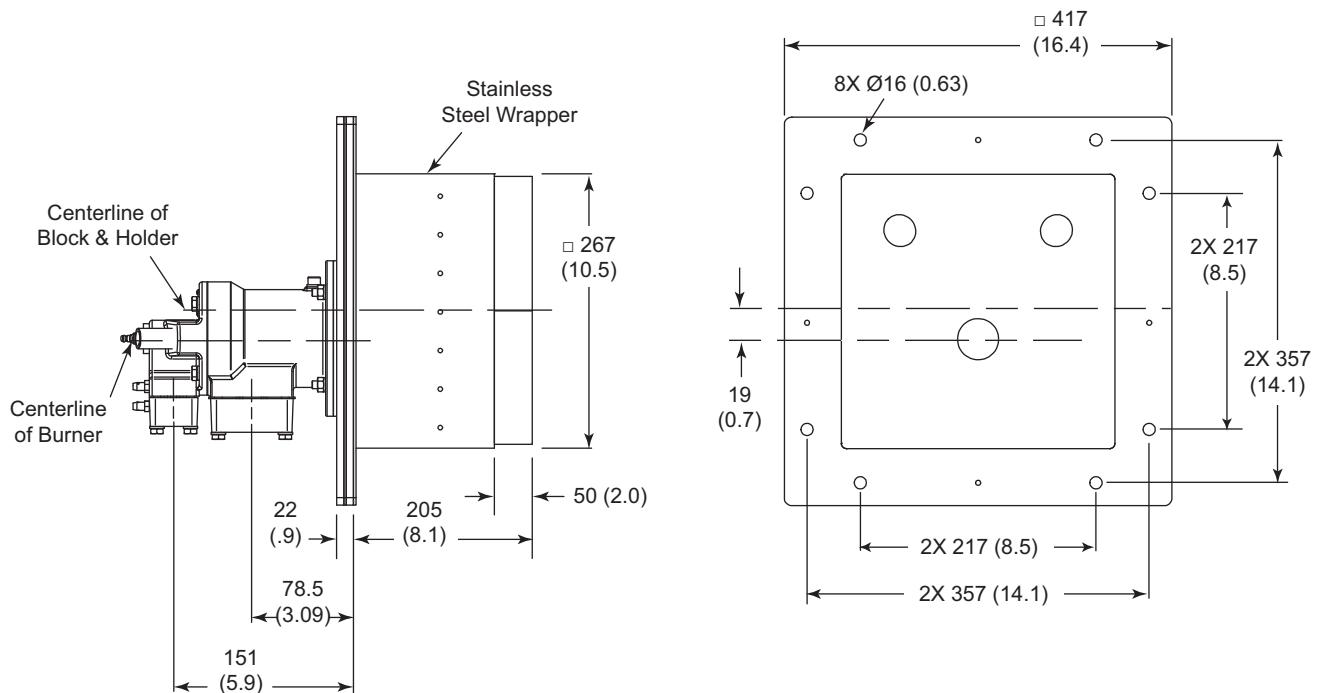
Dimensions in mm (inches)

### Burner Body



Burner Weight Less Block 16.7 kg (37 lb)

### Block and Holder



Block & Holder Weight 61.2 kg (135 lbs)

