


# Eclipse Furnnox Burners

Model FN0150

Data sheet Edition 04.18

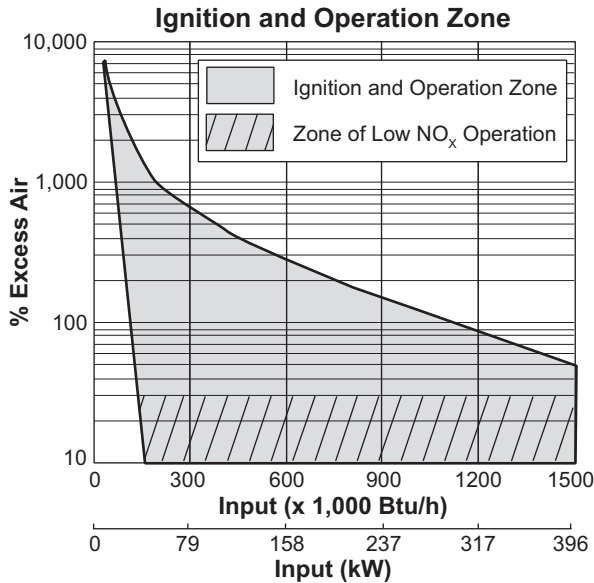
Version 1

Parameter		Specification			
		Natural Gas	Propane	Butane	
<b>Maximum Input, Btu/h (kW)</b> <i>Input limited during cold start. See page 2.</i>		1,500,000 (396)	1,500,000 (396)	1,500,000 (396)	
<b>Minimum Input, Btu/h (kW)</b> <i>For lower inputs, contact Eclipse, Inc.</i>		150,000 (39.6)	150,000 (39.6)	150,000 (39.6)	
<b>Main Gas Inlet Pressure, "w.c. (mbar)</b> <i>Fuel pressure at gas inlet (Tap B)</i>	Combustion Air Temp	Ambient Air	7.1 (17.7)	9.2 (22.9)	8.4 (20.9)
		300°F (150°C)	6.4 (15.9)	8.0 (19.9)	7.3 (18.2)
<b>Air Inlet Pressure, "w.c. (mbar)</b> <i>15% excess air at maximum input Tap A (see page 3)</i>	Combustion Air Temp	Ambient Air	12.9 (32.1)	12.9 (32.1)	12.9 (32.1)
		300°F (150°C)	18.5 (46.0)	18.5 (46.0)	18.5 (46.0)
<b>High Fire Visible Flame Length, inches (mm)</b> <i>Measured from the outlet end of the combustor</i>		<38.0 (965)	<42.0 (1067)	<43.0 (1092)	
<b>Maximum Combustion Air Temperature, °F (°C)</b> <i>For higher combustion air temperatures, contact Eclipse, Inc.</i>		300 (150)			
<b>Minimum Operating Furnace Temperature, °F (°C)</b> <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> <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

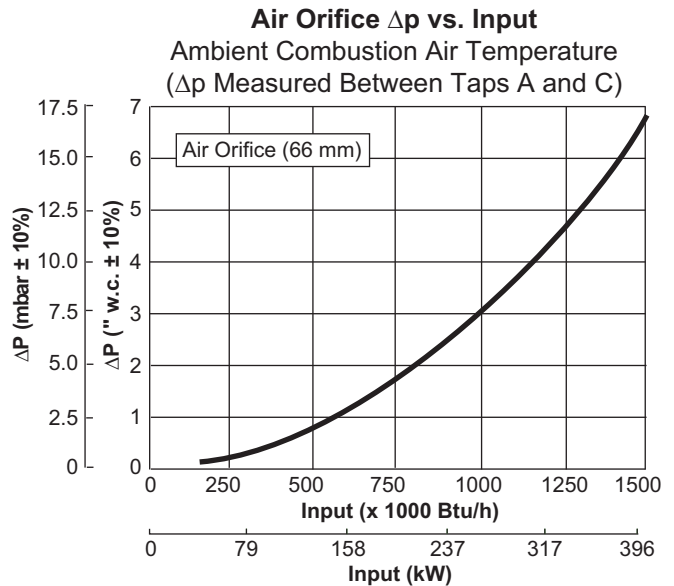
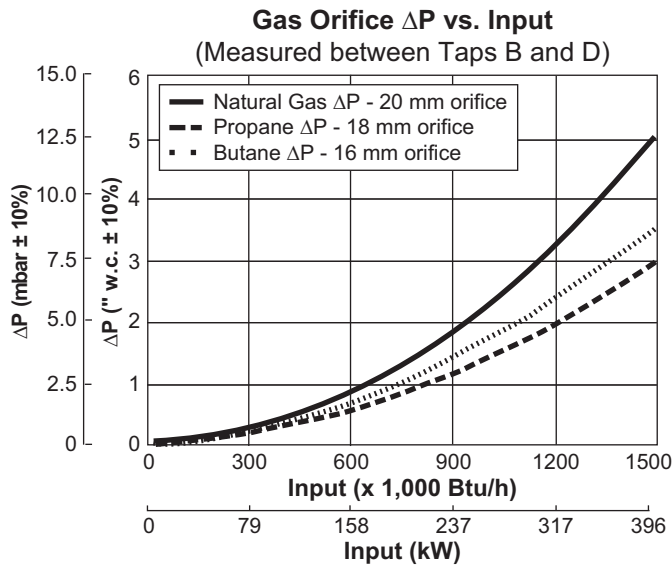


Input to be limited to 1.13 MMBtu/h (298 kW) with Minimum of 30% EXA, while the chamber is below 1400°F (760°C).

Emissions from the burner are influenced by:

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

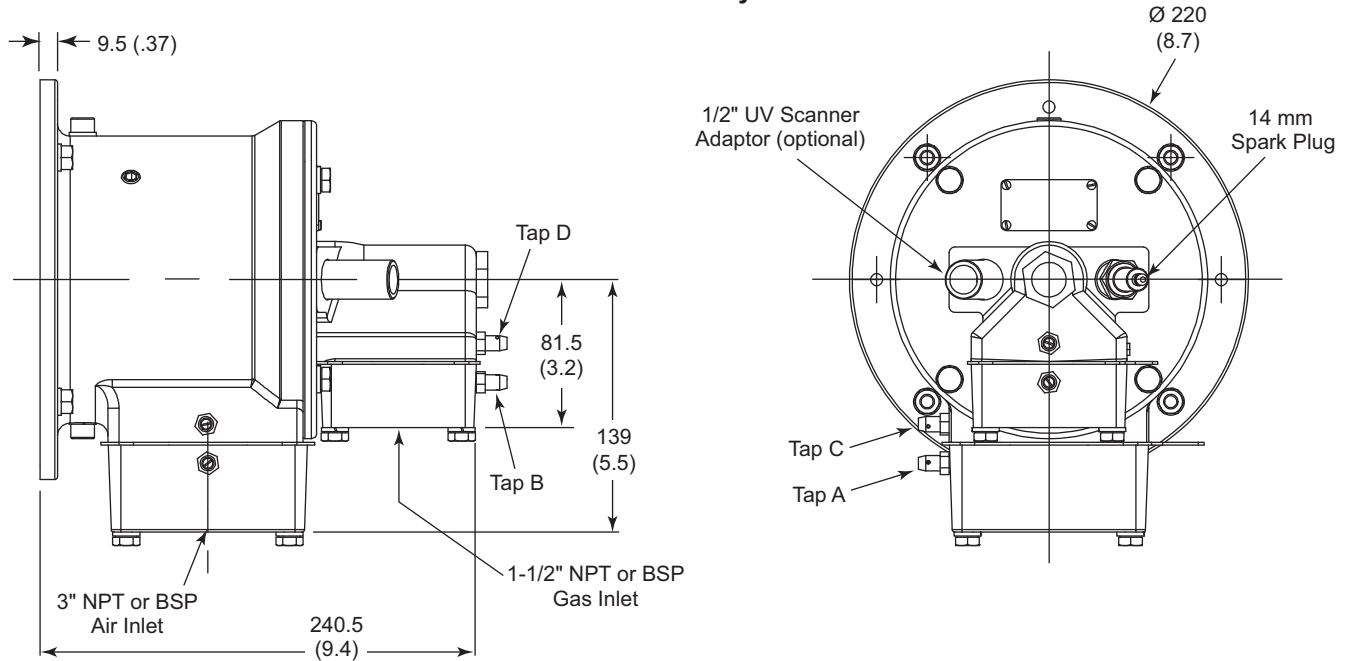
High fire NO<sub>x</sub> emissions with natural gas are typically below 30 ppm at 3% O<sub>2</sub> in furnace applications below 2000 °F. Contact Eclipse for an estimate of emissions for specific conditions.



## Dimensions and Specifications

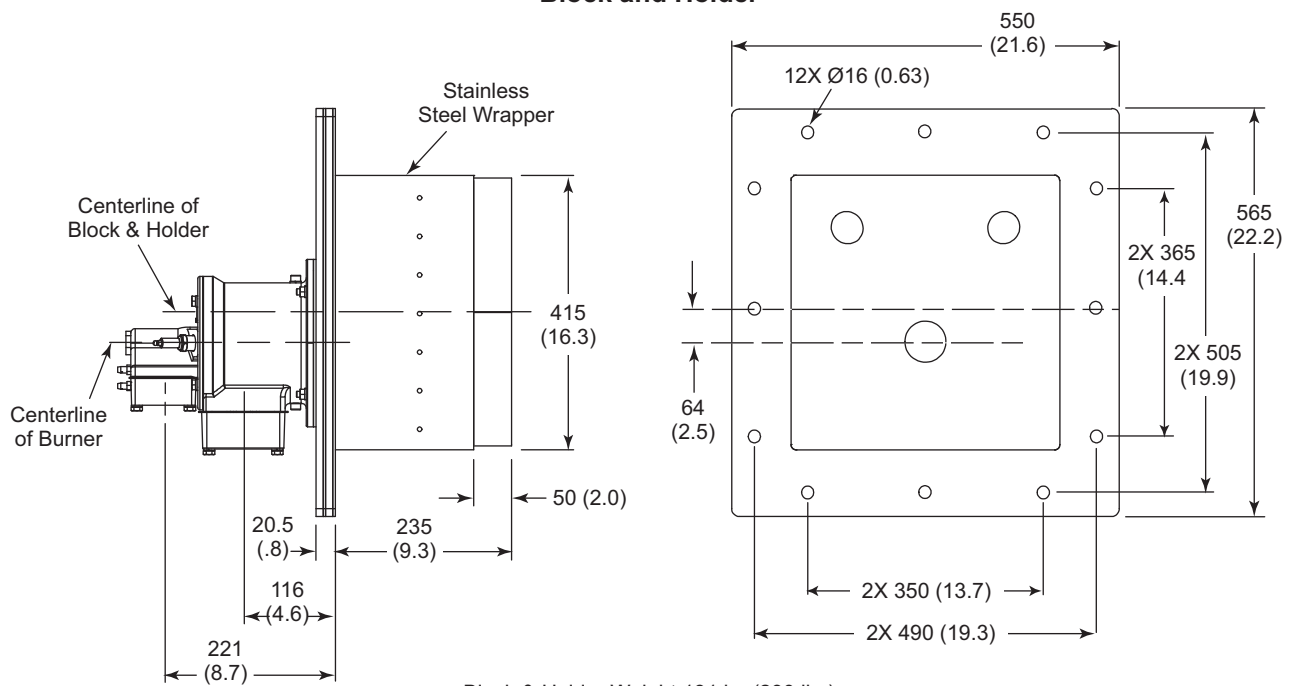
Dimensions in mm (inches)

### Burner Body



Burner Weight Less Block 19 kg (42 lbs)

### Block and Holder



Block & Holder Weight 131 kg (290 lbs)

