

# Eclipse Winnox Burners

Model WX0100

Version 1

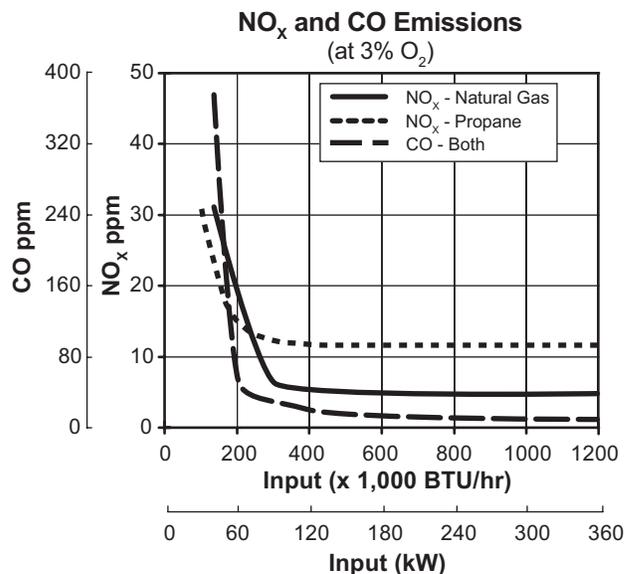
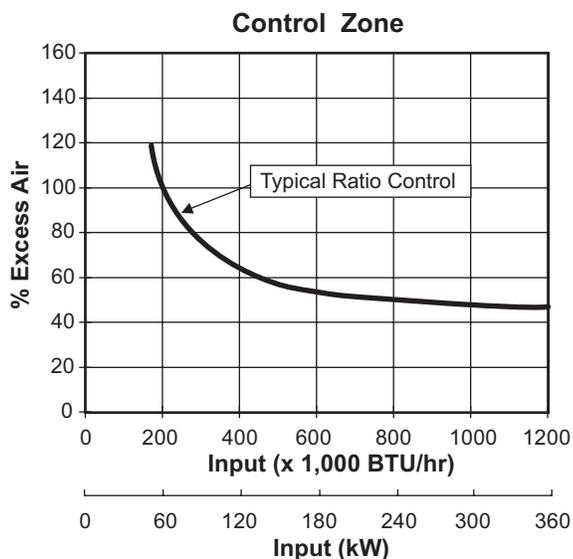
Parameter		Specifications	
<b>Blower Type</b>		Packaged Blower	Remote Blower
<b>Maximum Input, BTU/hr (kW)</b>  <i><b>NOTE:</b> Capacities given without air filter. Contact factory for chamber pressures outside the given range, or varying chamber pressure conditions.</i>	Chamber Pressure "w.c. (mbar)	Nominal (60Hz)	Pressure at Air Inlet 1 psig (70 mbar)
	-5.0 (-12.5)	1,135,000 (333)	1,300,000 (381)
	-3.0 (-7.5)	1,080,000 (316)	1,265,000 (371)
	0.0	1,000,000 (293)	1,200,000 (352)
	1.0 (2.5)	970,000 (284)	1,180,000 (346)
	2.0 (5.0)	940,000 (275)	1,155,000 (338)
<b>Minimum Input, BTU/hr (kW)</b>		130,000 (39)	130,000 (39)
<b>Fuel Inlet Pressure at Ratio Regulator, "w.c. (mbar)<sup>1</sup></b>	Maximum	27.7 (70)	27.7 (70)
	Minimum	22.0 (55)	26.0 (65)
<b>Maximum Chamber Temperature, °F (°C)</b> <i><b>NOTE:</b> Tube and plug temperatures should be reduced 150°F when using propane or butane.</i>		Standard combustion tube: 1300 (705) High temperature combustion tube: 1550 (845) Refractory plug: 1800 (985)	
<b>Flame Length</b>	Alloy Tube	Flame is inside tube at all times.	
<b>Excess Air, % at High Fire</b>		45%	
<b>Piping</b>		NPT or BSP burner piping available.	
<b>Flame Detection</b>		Flame rod or UV scanner.	
<b>Fuels</b>		Natural gas and propane <sup>2</sup> <i>For any other mixed gas, contact Eclipse Inc.</i>	
<b>Blower Motor Power, Hp</b>		1.5	-
<b>Weight, lbs (kg)</b>	Alloy Tube	192 (87)	124 (56)
	Refractory Plug	175 (79)	107 (48)
<b>Approvals</b>			

<sup>1</sup> For proper performance, this pressure must be kept constant across the burner operating range.

<sup>2</sup> See Design Guide for more information about typical fuel composition and properties.

- All information is based on laboratory testing. Different chamber size and conditions will affect data.
- Maximum inputs for packaged blower versions are given for the standard combustion air blower without an inlet air filter.
- All inputs are based on gross calorific values and standard conditions: one atmosphere, 70°F (20°C).
- Eclipse reserves the right to change the construction and/or configurations of our products at any time without being obliged to adjust earlier supplies accordingly.

## Performance Graphs



**NOTE:** Input at low fire changes with ratio regulator adjustment.

### Secondary By-Pass Fuel Setting:

Fuel	$\Delta P$ "w.c. (mbar)*
Natural Gas	4.0 (10.0)
Propane	1.0 (2.5)

\*Measured between Tap "E" and the chamber @ low fire.

### Fuel/Input Measurement

System design must include fuel flow measurement upstream of the burner. Recommended is the Eclipse 4-5 FOM (Fuel Orifice Meter) assembly number 302084-5 for natural gas. See Bulletin 930 for details.

**NOTE:** Insure burner inlet pressures are met.

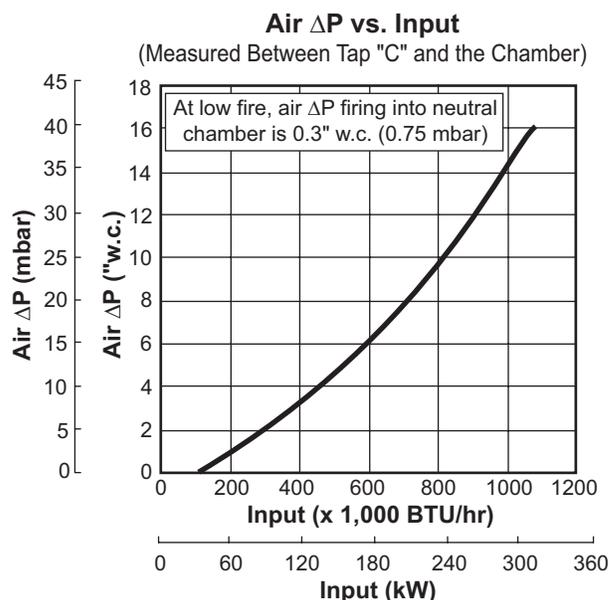
### NO<sub>x</sub> and CO emission data is given for:

- Ambient combustion air (~70°F, 20°C)
- Less than 1000°F (540°C) firing chamber
- Minimal process air velocity
- Low fire input adjusted to 143,000 BTU/hr (42 kW)
- Neutral chamber pressure

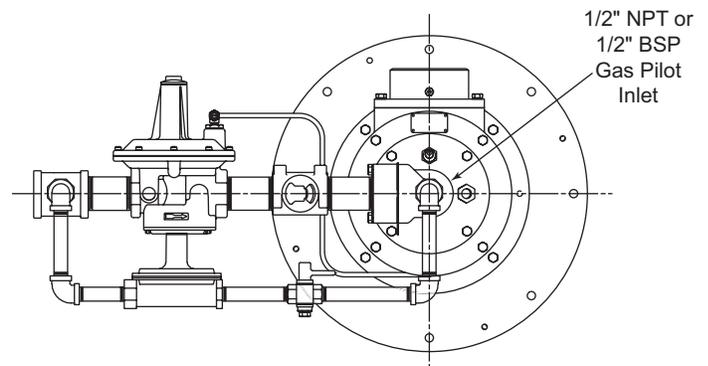
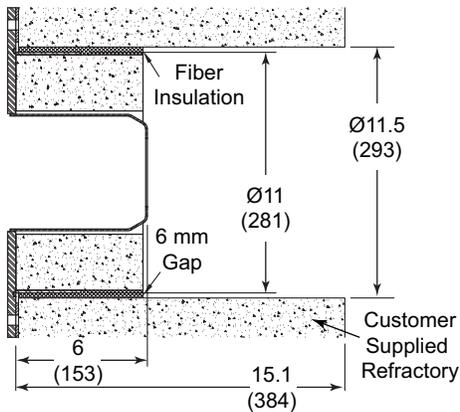
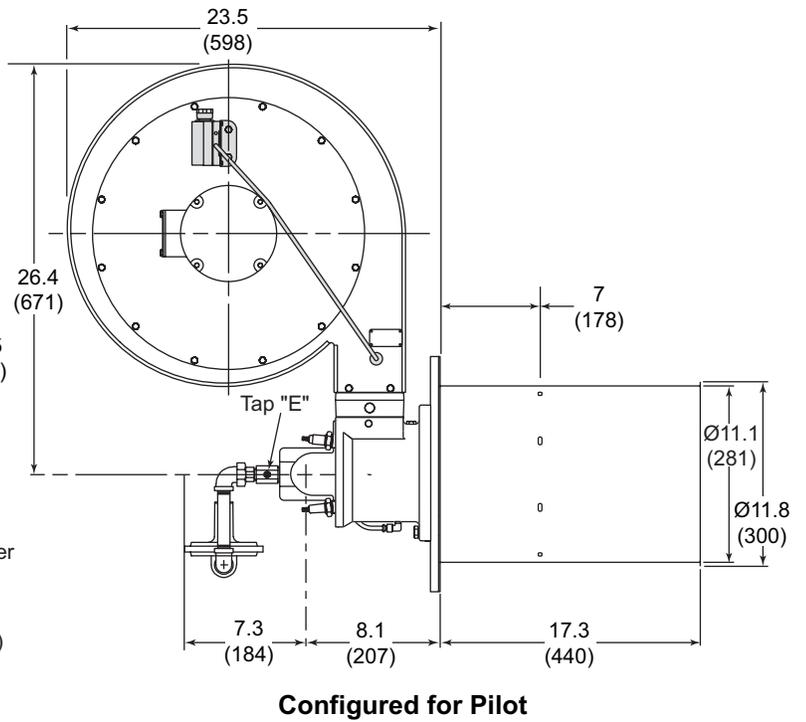
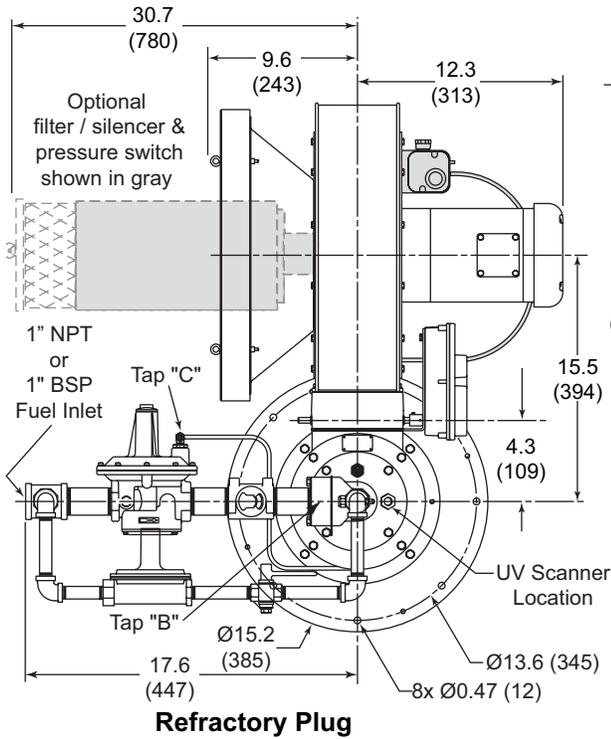
### Emissions are influenced by:

- Chamber conditions
- Fuel type
- Firing rate
- Ratio regulator adjustments
- Combustion air temperature

CO emission is largely influenced by chamber conditions. Contact your local Eclipse representative for an estimate of CO emission on your application.

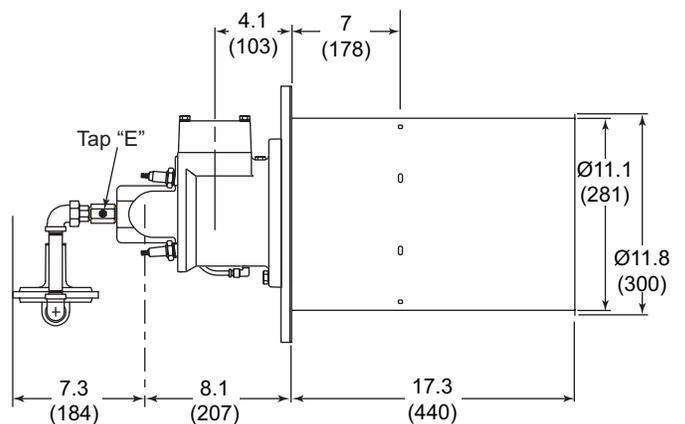
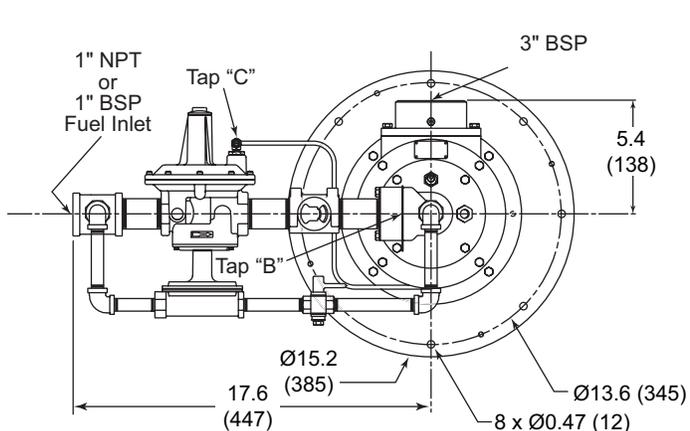


## Packaged Blower Dimensions in inches (mm)



## Remote Blower

**NOTE:** For Remote Blower applications, consult factory.





**Offered By:**

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