


# ImmersoJet

## Burners

Model IJ-2

Version 2

Parameter	Blower Size		
<b>Blower Type</b>	Low Pressure Packaged Blower	High Pressure Packaged Blower	Remote Blower
<b>Maximum Input Btu/h (kW)</b>	190,000 (55.6)	235,000 (68.9)	370,000 (108.4) Butane & Propane 340,000 (100) Natural Gas
<b>Minimum Input Btu/h (kW)</b>	25,000 (7.3)	25,000 (7.3)	25,000 (7.3)
<b>Air Inlet Pressure "w.c. (mbar) @ Max Input</b> Air pressure at burner inlet (Tap "A")	7.4 (18.4)	10.8 (26.8)	26.5 (65.9)
<b>Blower Motor Hp (kW)</b>	0.25 (0.2)	0.33 (0.3)	As Specified
<b>Main Gas Pressure Supplied to Regulator</b> "w.c. (mbar)	12.0 - 27.7 (29.9 - 68.9)	13.0 - 27.7 (32.3 - 68.9)	27.0 - 27.7 (67.2 - 68.9)
<b>Backpressure "w.c. (mbar)</b>	1.0 (2.5)	1.5 (3.7)	3.7 (9.2)
<b>Weight lbs (kg)</b>	70 (31.8)	75 (34.0)	45 (20.0)
<b>CO Emissions (ppm)</b>	<100	<100	<100
<b>Piping</b>	NPT or BSP		
<b>Flame Detection</b>	Flamerod or UV Scanner		
<b>Fuel</b> <i>For any other mixed gas, contact Eclipse.</i>	Natural Gas, Propane, Butane <sup>1, 2</sup>		
<b>Approvals</b>	 AI30		

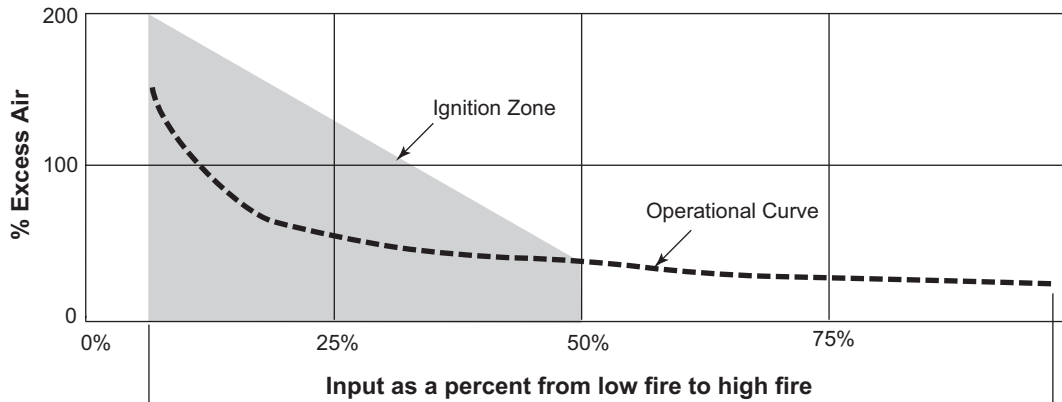
<sup>1</sup> Different fuels require different nozzles and orifices.

<sup>2</sup> See Design Guide 110 for more information about typical fuel composition and properties.

- All information is based on laboratory testing with a tube effective length of 21.6 feet (6.58 m). Different tube sizes and conditions may affect the data.
- All information is based on standard tube design. Changes in the tube will alter performance and pressures.
- All inputs based upon gross calorific values (HHV).
- 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.
- Packaged blower performance data based on 60 Hz.

# Performance Graphs

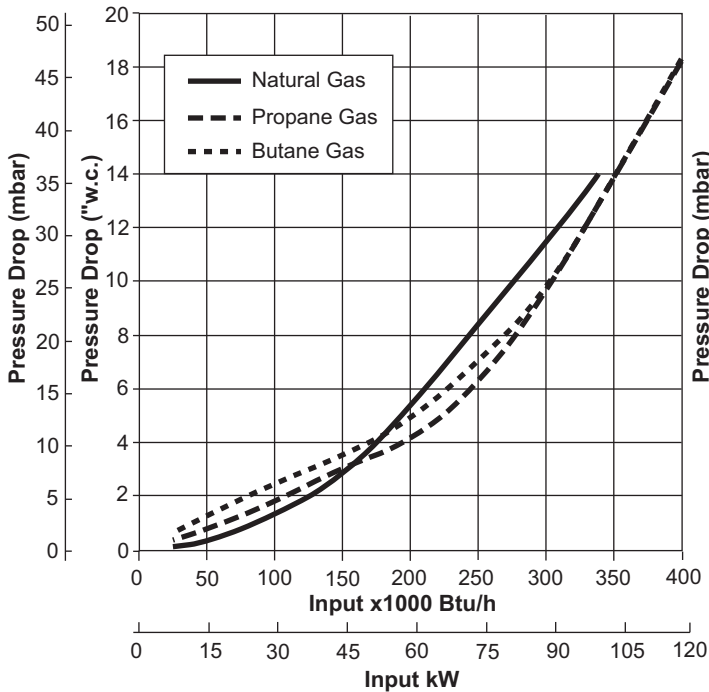
## Typical Operational Curve & Ignition Zone (Natural Gas, Propane, & Butane)



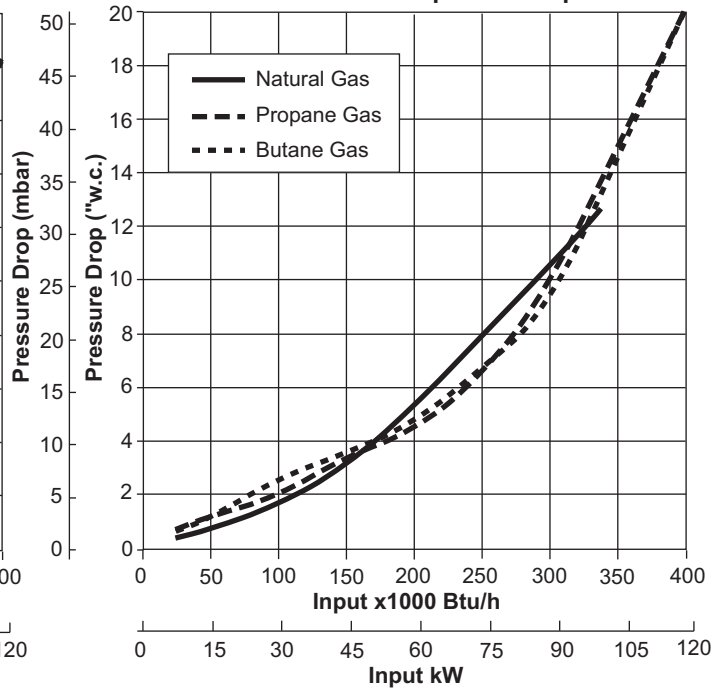
Low Fire:  
25,000 Btu/h (8,2 kW)  
(Regardless of Blower)

High Fire:  
190,000 Btu/h (55,7 kW) (6" w.c. Blower)  
235,000 Btu/h (68,9 kW) (10" w.c. Blower)  
340,000 Btu/h (100 kW) (Remote Blower) (Natural Gas)  
370,000 Btu/h (108,4 kW) (Remote Blower) (Butane & Propane)

### Gas Orifice $\Delta p$ vs. Input Measured from Tap "B" to Tap "D"

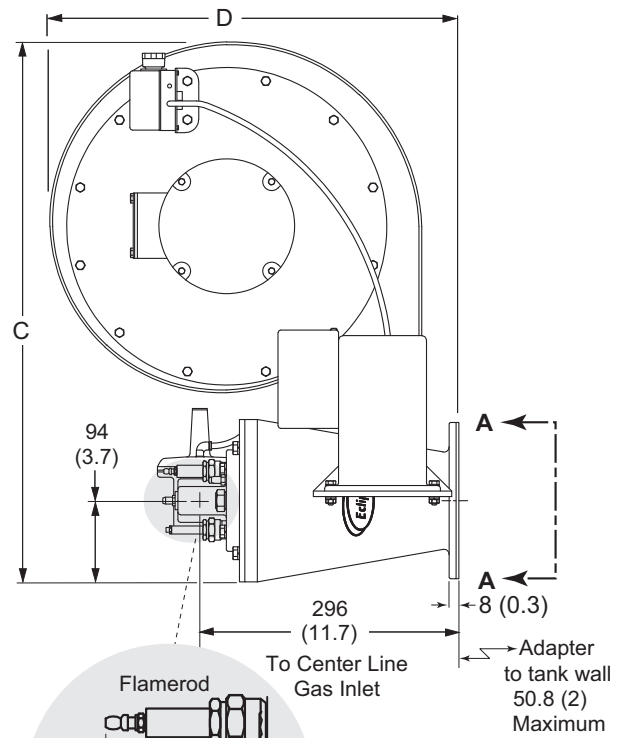
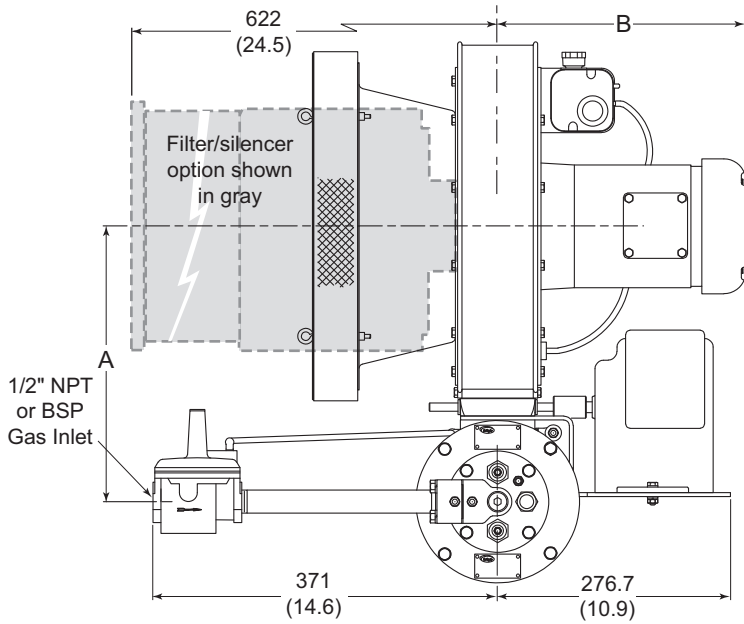


### Air Orifice $\Delta p$ vs. Input @ 3% O<sub>2</sub> Measured from Tap "A" to Tap "C"

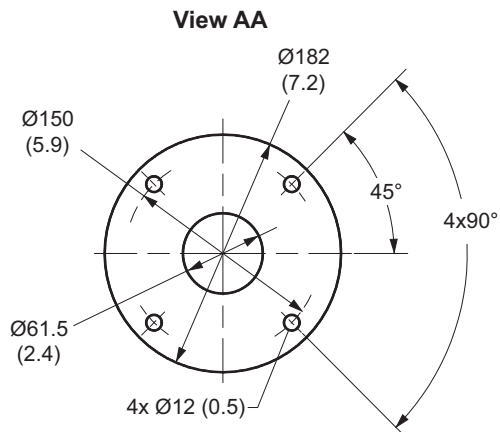
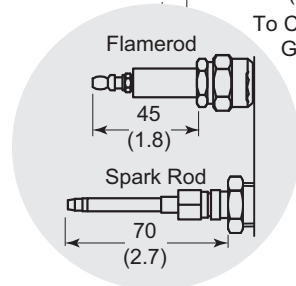


# Dimensions & Specifications

Dimensions in mm (inches)

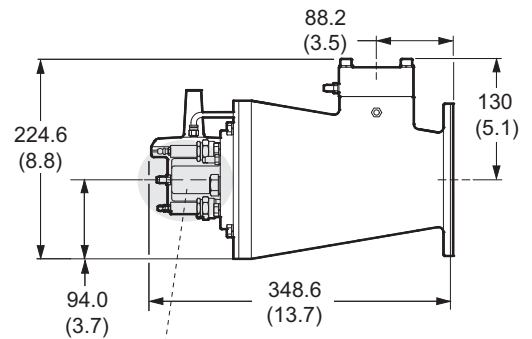
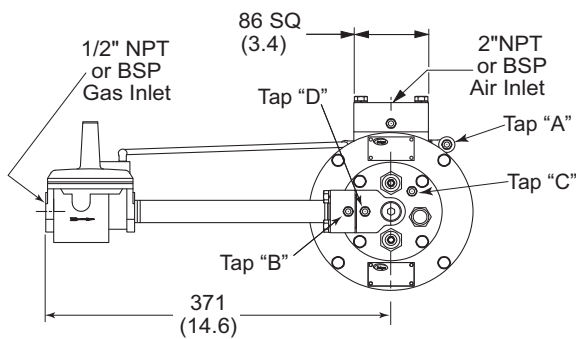


Note: See Remote Blower drawing below for Tap locations.



	A	B		C	D
		60Hz	50 Hz		
Low Pressure Blower	279 (11)	190 (7.5)	232 (9.1)	559 (22)	414 (16.2)
High Pressure Blower	319 (12.5)	287 (11.2)	232 (9.1)	629 (24.7)	473 (18.6)

## Remote Blower



See above drawing for Spark and Flame Rod dimension details.

