**Eclipse ImmersoJet Burners**

*Model 8” IJ  
Version 2*

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### Main Specifications

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>BLOWER SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blower Type</td>
<td>15’w.c. Packaged (60Hz)</td>
</tr>
<tr>
<td>Maximum Input (Btu/hr)</td>
<td>3,500,000</td>
</tr>
<tr>
<td>Minimum Input (Btu/hr)</td>
<td>300,000</td>
</tr>
<tr>
<td>Air Inlet Pressure (&quot;w.c.)</td>
<td>16.5</td>
</tr>
<tr>
<td>–Air pressure at burner inlet</td>
<td>19.5</td>
</tr>
</tbody>
</table>
| (Tap “A”)  
| Blower Motor Horse Power       | 3.0                          |
| Main Gas Pressure ("w.c.)      |                              |
| into regulator                 | Max. 125                     |
| Min. 25                        |
| Tube Backpressure ("w.c.)      | 2.0                          |
| Weight-less actuator (lbs)     | 290                          |
| CO emissions (ppm)             | <100                         |
| Piping                         | N.P.T. or B.S.P.             |
| Flame Detection                | Flamerod or U.V. Scanner.    |
| Fuel (1)                       | Natural gas, Propane, Butane  |
|                               | For any other mixed gas, contact Eclipse for orifice sizing. |

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(1) Different fuels require different orifices.

- All information is based on laboratory testing with a tube effective length of 51.7 feet. 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 caloric 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 Data

Typical Operational Curve & Ignition Zone
(Nat. Gas, Propane & Butane)

% Excess Air

Input as a percentage from low fire to high fire

Gas Orifice ∆P vs. Input
Measured from Tap "B" to Tap "D"

Air Orifice ∆P vs. Input
Measured from Tap "A" to Tap "C"

Low Fire
300,000 Btu/hr.
(Regardless of Blower)

High Fire:
3,500,000 Btu/hr (High Pressure w.c. Blower)
4,800,000 Btu/hr (Remote Blower)

* Note: A slow acting solenoid or a solenoid positioned between ratio regulator and burner is required.

Loading Line Pressure vs. Input
Measured at Tap "A"

* Typical Operational Curve & Ignition Zone (Nat. Gas, Propane & Butane)

Eclipse Model 8”IJ, v2, Data 330-7,9/15/07
**Dimensions & Specifications**

**Dimensions in mm (inches)**

Note: See Remote Blower drawing below for Tap locations.

### View AA

- **Dimensions:**
  - A: 362 mm (14.25"")
  - B: 294 mm (11.57"")
  - C: 560 mm (22.05"")
  - D: 676 mm (26.61"")

- **Diameter:**
  - ø328 mm (12.91"")
  - ø360 mm (14.17"")
  - ø167.5 mm (6.59"")

- **Angles:**
  - 8 x 45°
  - 22.5°

### Remote Blower

- **Gas Inlet:**
  - 1.5" NPT or BSP
  - 2.0" NPT or BSP

- **Air Inlet:**
  - 4" NPT or BSP

- **Taps:**
  - Tap "A"
  - Tap "B"
  - Tap "C"
  - Tap "D"

- **Adapter to tank wall:**
  - 501 mm (19.7"")
  - 211 mm (8.3"")
  - 126 mm (4.96"")

- **Spark and Flame Rod dimension details:**
  - Spark Rod: ø 8 x 12 mm (0.47"")
  - Flame Rod: ø 360 mm (14.17)"

- **High pressure blower:**
  - 533 mm (20.98"")
  - 362 mm (14.25"")
  - 320 mm (12.60"")

- **Table:**

<table>
<thead>
<tr>
<th>A</th>
<th>60 HZ</th>
<th>50 HZ</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5&quot; NPT or BSP Gas Inlet</td>
<td>533 mm (20.98&quot;)</td>
<td>362 mm (14.25&quot;)</td>
<td>320 mm (12.60&quot;)</td>
<td>1013 mm (39.88&quot;)</td>
</tr>
</tbody>
</table>

**Note:** See Remote Blower drawing below for Spark and Flame Rod dimension details.