Different fuels require different nozzles and orifices.

- All information is based on laboratory testing with a tube effective length of 51.75 feet (15.77 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.

### ImmersoJet Burnsers

**Model IJ-4**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Low Pressure Packaged Blower (60 Hz)</th>
<th>High Pressure Packaged Blower (60 Hz)</th>
<th>Remote Blower</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Blower Type</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Maximum Input BTU/hr (kW)</strong></td>
<td>830,000 (243.3)</td>
<td>1,000,000 (293.1)</td>
<td>1,800,000 (527.5)</td>
</tr>
<tr>
<td><strong>Minimum Input BTU/hr (kW)</strong></td>
<td>100,000 (29.3)</td>
<td>100,000 (29.3)</td>
<td>100,000 (29.3)</td>
</tr>
<tr>
<td><strong>Air Inlet Pressure &quot;w.c. (mbar) @ Max Input</strong></td>
<td>7.8 (19.4)</td>
<td>10.5 (26.2)</td>
<td>33 (82.2)</td>
</tr>
<tr>
<td><strong>Blower Motor Hp (kW)</strong></td>
<td>0.5 (0.37)</td>
<td>1.0 (0.75)</td>
<td>As Specified</td>
</tr>
<tr>
<td><strong>Main Gas Pressure Supplied to Regulator &quot;w.c. (mbar)</strong></td>
<td>14 - 125 (34.9 - 311.4)</td>
<td>13 - 125 (32.4 - 311.4)</td>
<td>34 - 125 (84.7 - 311.4)</td>
</tr>
<tr>
<td><strong>Backpressure &quot;w.c. (mbar)</strong></td>
<td>2.0 (4.9)</td>
<td>3.8 (9.5)</td>
<td>12.2 (30.4)</td>
</tr>
<tr>
<td><strong>Weight lbs (kg)</strong></td>
<td>115 (52)</td>
<td>120 (54)</td>
<td>75 (34)</td>
</tr>
<tr>
<td><strong>CO Emissions (ppm)</strong></td>
<td>&lt;100</td>
<td>&lt;100</td>
<td>&lt;100</td>
</tr>
<tr>
<td><strong>Piping</strong></td>
<td>NPT or BSP</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Flame Detection</strong></td>
<td>Flamerod or UV Scanner</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fuel</strong></td>
<td>Natural Gas, Propane, Butane</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Approvals</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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- Packaged blower performance data based on 60 Hz.
Performance Graphs

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

Low Fire:
100,000 BTU/hr (29.31 kW)
(Regardless of Blower)

High Fire:
830,000 BTU/hr (243.25 kW) (6" w.c. Blower)
1,000,000 BTU/hr (293.07 kW) (10" w.c. Blower)
1,800,000 BTU/hr (527.53 kW) (Remote Blower)

Gas Orifice $\Delta p$ vs. Input
Measured from Tap “B” to Tap “D”

Air Orifice $\Delta p$ vs. Input @ 3% O$_2$
Measured from Tap “A” to Tap “C”
### Dimensions & Specifications
Dimensions in mm (Inches)

**Filter/silencer option shown in gray**

- **A**
  - To Center Line Gas Inlet: 775 (30.5)
- **B**
  - 3/4” NPT or BSP Gas Inlet: 426 (16.8)
  - 710 (28)
  - 110 SQ: 147 (5.8)
  - 8x Ø12 (0.5)
  - 8x Ø110.5 (4.4)
  - 22.5°
- **C**
  - 238 (9.4)
  - 39 (1.5)
  - Ø270 (10.6)
  - View AA
- **D**
  - 374 (14.7)
  - 226 (8.9)
  - 263 (10.3)
  - 725 (28.5)
  - 452 (17.8)
  - 100 (3.9)

**Remote Blower**
- **A**
  - 3/4” NPT or BSP Gas Inlet
- **B**
  - Tap “B”
- **C**
  - Tap “C”
- **D**
  - Tap “A”

**Table**

<table>
<thead>
<tr>
<th></th>
<th>A 60Hz</th>
<th>A 50Hz</th>
<th>B 60Hz</th>
<th>B 50Hz</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Pressure Blower</td>
<td>374 (14.7)</td>
<td>315 (12.4)</td>
<td>263 (10.3)</td>
<td>725 (28.5)</td>
<td>452 (17.8)</td>
<td></td>
</tr>
<tr>
<td>High Pressure Blower</td>
<td>404 (15.9)</td>
<td>348 (13.7)</td>
<td>304 (11.95)</td>
<td>786 (30.9)</td>
<td>512 (20.1)</td>
<td></td>
</tr>
</tbody>
</table>

*Note: See Remote Blower drawing below for Tap locations.*