**North American Fire•All™ Dual-Fuel™ Burners**

**DIMENSIONS in inches**

<table>
<thead>
<tr>
<th>Burner designation</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D₁</th>
<th>D₂</th>
<th>D₃</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>M</th>
<th>N</th>
<th>P</th>
<th>Q</th>
<th>R</th>
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<tbody>
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<td>1¼</td>
<td>1</td>
<td>¼</td>
<td>5</td>
<td>8½</td>
<td>9½</td>
<td>½</td>
<td>5¼</td>
<td>2</td>
<td>½</td>
<td>4½</td>
<td>8½</td>
<td>11½</td>
<td>15½</td>
<td>18½</td>
<td>5¼</td>
<td>10½</td>
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<tr>
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<td>¼</td>
<td>5</td>
<td>8½</td>
<td>9½</td>
<td>½</td>
<td>5¼</td>
<td>2</td>
<td>½</td>
<td>4½</td>
<td>8½</td>
<td>11½</td>
<td>15½</td>
<td>18½</td>
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<td>10½</td>
<td>6</td>
<td>12</td>
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<td>½</td>
<td>5¼</td>
<td>2</td>
<td>½</td>
<td>4½</td>
<td>8½</td>
<td>11½</td>
<td>15½</td>
<td>18½</td>
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<td>9½</td>
<td>½</td>
<td>5¼</td>
<td>2</td>
<td>½</td>
<td>4½</td>
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<td>8½</td>
<td>9½</td>
<td>½</td>
<td>5¼</td>
<td>2</td>
<td>½</td>
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<td>10</td>
<td>11</td>
<td>%½</td>
<td>6½</td>
<td>2½</td>
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<td>15½</td>
<td>20½</td>
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<td>%½</td>
<td>6½</td>
<td>2½</td>
<td>2½</td>
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<td>10</td>
<td>11</td>
<td>%½</td>
<td>10½</td>
<td>2½</td>
<td>1¼</td>
<td>5½</td>
<td>11</td>
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<td>20½</td>
<td>22½</td>
<td>6½</td>
<td>12½</td>
<td>6½</td>
<td>13½</td>
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</tbody>
</table>

1. Pilot, Flame Detector, and Observation Port positions are interchangeable, as long as pilot and flame detector are in adjacent holes.
2. Opening in furnace shell should be about ½" larger than dimension D₁ to allow for fillets and draft on mounting plate.
3. For 6422-LC, -L4 and -L9 Burners only. Opening in oven shell should be about ¼" larger than dimension D₂.
4. ¼" body air pressure tap on -2, -3, -4, -5, and -6. ⅜" body air pressure tap on -7-A, -7-B and -8-A.
5. Pipe nipple not furnished by Fives.
6. Dimensions M and N assume the use of a ¾" NPT close nipple between burner and Sensitrol Oil Valve.
7. For 6422-8-A, air and gas connections cannot be piped in the same plane because the "flower pot" type air connection flange would interfere with the 2½" gas line.
8. Metal tubing is offered as an extra cost option (order as P.N. 3-0310-7).
9. Optional (recommended) Sensitrol Oil Valve is not included as part of the burner assembly, and must be ordered separately.
**ALTERNATIVE MODELS**

6422 Burners for Fiber Lined Furnaces. For furnaces with ceramic fiber walls, special mounting/tile construction is available: 11¼" diameter tile, jacketed in RA330 expanded metal for all but 2" of its length; a circular mounting flange factory-installed from 2" to 9" ("Z" dimension) from the hot face of the tile.

Customer must specify this dimension to nearest ½" so tile face is about flush with inside furnace wall.

This construction is suitable for 2000 F furnace temperature.

See Supplement DF-M2 for detailed tile installation recommendations for fiber-lined furnaces.

**Dimensions in inches**

<table>
<thead>
<tr>
<th>Size designation</th>
<th>A</th>
<th>B</th>
<th>Z</th>
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<tbody>
<tr>
<td>-2 thru -6</td>
<td>5</td>
<td>13½</td>
<td>†</td>
</tr>
<tr>
<td>-7-A thru -8-A</td>
<td>7</td>
<td>14½</td>
<td>†</td>
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</tbody>
</table>

† "Z" dimension variable in ½" increments from 2" to 9".

To order, specify: 6422-(code)-(A or B if applicable) (Z) Burner complete. (Order 1813 Sensitrol Oil Valve separately--it is not included in complete burner assembly.) Include Z dimension in the burner description: between 2" and 9", written to the nearest 0.5" as a decimal.

**Example:** Line Item 10 = 6422-7-AZ Burner complete with Z dimension of 6.0"

Line Item 20 = 1813-02-C Sensitrol Oil Valve.
6422 Burners with Extra Pilot and Flame Detector Location.
The fixed relationship between 6422 Burner air connections and
pilot/flame detector holes occasionally presents problems in
mounting pilots and flame detectors clear of furnace buckstays or
other structural members.

6422-2 through -6 Burners can be furnished with a 4-hole OC3-
2042 burner body that has a set of pilot and flame detector holes
on each side. Either set can be used and one on the other side
used for an observation port--plug any unused holes.

To order, specify: 6422D-(code) Burner complete. (Order 1813 Sensitrol Oil Valve separately--it is not included in complete burner assembly.)

Example: Line Item 10 = 6422D-2 Burner complete with Special Double-Boss Body
Line Item 20 = 1813-02-A Sensitrol Oil Valve