# Kenco Injectors

## Models KINJ, KINJM and KRINJ

### Maximum Allowed Pipeline Flow Rate in Gallons Per Minute

**Note 4**

**For Gases Only**

**Metal Injectors (316 SS, Alloy 20, HC-276, etc.)**

<table>
<thead>
<tr>
<th>NOM. DIA.</th>
<th>1/2</th>
<th>3/4</th>
<th>1</th>
<th>1 1/4</th>
<th>1 1/2</th>
<th>2</th>
<th>2 1/2</th>
<th>3</th>
<th>3 1/2</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
<th>20</th>
<th>24</th>
</tr>
</thead>
</table>

### HOW TO READ THE TABLE:

1. Locate the pipe diameter that the injector will be installed into along the top row.
2. Locate the desired insertion length along the left side column.
3. Locate the box where the pipe diameter and the insertion length intersect.
4. The number in the box is the maximum flow rate past the injector tip in the pipeline in gallons per minute for which an injector with that insertion length will not suffer structural damage.

**Example:**

If you wish to install an injector with a 4" insertion length into a 2" nominal diameter pipe, the flow rate cannot exceed 798 gallons per min.

Reference: Calculations used to formulate this chart are based on "Stress Analysis of Thermowells", J.E. Brock, Naval Postgraduate School, Monterey, 1974

ASME PTC 19.3 - 1974 Temperature Measurement
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1. Locate the pipe diameter that the injector will be installed into along the top row.
2. Locate the desired insertion length along the left side column.
3. Locate the box where the pipe diameter and the insertion length intersect.
4. The number in the box is the maximum flow rate past the injector tip in the pipeline in gallons per minute for which the injector with that insertion length will not suffer structural damage.

#### Example:
If you wish to install an injector with a 16" insertion length into a 24" nominal diameter pipe, the flow rate cannot exceed 7,450 gallons per minute.

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**Kenco Injectors**

**Models KINJ, KINJM AND KRINJ**

**Maximum Allowed Pipeline Flow Rate in Gallons per Minute**

**For Gases Only**

**Metal Injectors (316 SS, Alloy 20, HC-276, etc.)**

<table>
<thead>
<tr>
<th>NOMINAL PROCESS PIPE DIAMETER, .375&quot; WALL THICKNESS</th>
<th>MAXIMUM ALLOWED PIPELINE FLOW RATE IN GALLONS PER MINUTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSERTION LENGTH</td>
<td>14</td>
</tr>
</tbody>
</table>

**Example:**

- If you wish to install an injector with a 16" insertion length into a 24" nominal diameter pipe, the flow rate cannot exceed 7,450 gallons per minute.

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**Reference:** Calculations used to formulate this chart are based on "Stress Analysis of Thermowells", J.E. Brock, Naval Postgraduate School, Monterey, 1974

**ASME PTC 19.3 - 1974 Temperature Measurement**

**NOTE:**

| 25 | 27 | 29 | 31 | 33 | 35 | 37 | 39 | 41 | 43 | 45 | 47 | 49 | 51 | 53 | 55 | 57 | 59 | 61 | 63 | 65 |
| 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 | 38 | 40 | 42 | 44 | 46 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 62 |

**ASME PTC 19.3 - 1974 Temperature Measurement**

**NOTE:**

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