DESCRIPTION

The optional flow straightener accessory for ONICON F-2000 Series Vortex Flow Meters is a wafer-style flow conditioner that is designed to be installed between two ANSI class 150 or class 300 flanges (provided by installer) that are located a specified distance upstream of the flow meter.

Use of a flow straightener significantly reduces the upstream straight pipe length requirement for ONICON Vortex Flow Meters.

The size of the straightener should always match the meter size (as opposed to the original pipe size).

The flow straightener is made of 304/A 351 CF8 Stainless Steel.

<table>
<thead>
<tr>
<th>SIZE</th>
<th>DIM A</th>
<th>DIM B</th>
<th>DIM C</th>
<th>DIM D</th>
<th>NUMBER OF HOLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2”</td>
<td>3.93</td>
<td>1.0625</td>
<td>.28</td>
<td>2.14</td>
<td>35</td>
</tr>
<tr>
<td>3”</td>
<td>5.31</td>
<td>1.0625</td>
<td>.43</td>
<td>3.24</td>
<td>35</td>
</tr>
<tr>
<td>4”</td>
<td>6.26</td>
<td>1.0625</td>
<td>.55</td>
<td>4.22</td>
<td>35</td>
</tr>
<tr>
<td>6”</td>
<td>8.50</td>
<td>1.0625</td>
<td>.78</td>
<td>6.07</td>
<td>35</td>
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<tr>
<td>8”</td>
<td>10.62</td>
<td>1.0625</td>
<td>1.02</td>
<td>7.98</td>
<td>35</td>
</tr>
<tr>
<td>10”</td>
<td>13.23</td>
<td>1.0625</td>
<td>1.30</td>
<td>10.02</td>
<td>35</td>
</tr>
<tr>
<td>12”</td>
<td>15.00</td>
<td>1.0625</td>
<td>1.53</td>
<td>12.00</td>
<td>35</td>
</tr>
</tbody>
</table>

TABLE 1 - ALL DIMENSIONS SHOWN IN INCHES

0.125 GASKET THICKNESS, NOMINAL

SERRATIONS SHOWN LOCATED UNDER GASKET, IF PROVIDED

NOTE: DIMENSION D INDICATES I.D. FOR SERRATIONS
NOTES
1. Consult ONICON for meter size and applicable meter pipe run for each application. Install according to manufacturer's recommendations.
2. Provide eccentric reducer and expander when required.
3. Provide flow straightener when required to meet recommended minimum upstream pipe run requirements.
4. Flanges provided by contractor. Center straightener between flanges during installation.

Pressure Loss for Flow Straightener

\[ \Delta P = c \cdot \rho \cdot 0.023232 \]

\( \Delta P \): Pressure loss in psi
\( \rho \): Density(lb/ft³)
\( c \): Pressure loss coefficient

Pipe size flow rate
- Gas and steam (ft³/min)
- Liquid (GPM)