FREE FLOAT DRAIN TRAP
MODEL SH6NLA/SH6NLG

DRAIN TRAP WITH TIGHT SHUT-OFF FOR INERT (SH6NLA) AND HAZARDOUS (SH6NLG) GASES

Benefits

High-pressure, inline repairable free float trap with tight shut-off. Automatically drains condensate from air and gas systems.

1. Constant water seal and unique rotational seating design eliminate concentrated wear to ensure long life.
2. Three-point seating provides a tight seal even under no-load conditions.
3. Easy, inline access to internal parts simplifies cleaning and lowers maintenance costs.
4. Built-in screen with large surface area ensures extended trouble-free service.

Specifications

<table>
<thead>
<tr>
<th>Orifice No.</th>
<th>10</th>
<th>15</th>
<th>22</th>
<th>30</th>
<th>40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size (in)</td>
<td>5</td>
<td>10</td>
<td>22</td>
<td>32</td>
<td>46</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>SH6NLA-M*</th>
<th>SH6NLA-R*</th>
<th>SH6NLG-M*</th>
<th>SH6NLG-R*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection</td>
<td>Screwed</td>
<td>Socket Weld</td>
<td>Flanged</td>
<td>Screwed</td>
</tr>
<tr>
<td>Orifice No.</td>
<td>5, 10, 22, 32, 46</td>
<td>10, 22, 40</td>
<td>10, 22, 40</td>
<td>10, 22, 40</td>
</tr>
<tr>
<td>Maximum Operating Pressure (psig)</td>
<td>PMO** 75, 150, 315, 450, 650</td>
<td>150, 315, 600</td>
<td>150, 315, 600</td>
<td>150, 315, 600</td>
</tr>
<tr>
<td>Maximum Differential Pressure (psig)</td>
<td>PMX** 75, 150, 315, 450, 650</td>
<td>150, 315, 600</td>
<td>150, 315, 600</td>
<td>150, 315, 600</td>
</tr>
<tr>
<td>Minimum Operating Temperature (F)</td>
<td>Vacuum</td>
<td>Vacuum</td>
<td>Vacuum</td>
<td>Vacuum</td>
</tr>
<tr>
<td>Maximum Allowable Pressure (psig)</td>
<td>PMA 925</td>
<td>925</td>
<td>925</td>
<td>925</td>
</tr>
<tr>
<td>Maximum Allowable Temperature (F)</td>
<td>TMA 428</td>
<td>428</td>
<td>428</td>
<td>428</td>
</tr>
</tbody>
</table>

* M: Metal orifice, R: Rubber orifice  ** For specific gravities other than 1.00, use table below

CAUTION

To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range.

Local regulations may restrict use of this product to below the conditions quoted.

For SH6NLG, consult TLV for delivery time required.

SH6NLA/SH6NLG are non-standard products, consult TLV for delivery time required.

Key:

1. Body
2. Cover
3. Float
4. Orifice
5. Orifice Gasket
6. Cover Gasket
7. Cover Bolt
8. Cover Nut
9. Screen
10. Screen Holder
11. Screen Holder Gasket
12. Orifice Plug
13. Orifice Plug Gasket
14. Socket
15. Flange**
16. Nameplate

SDS A3208-08

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Options
1. Body material stainless steel.
2. Flanged or screwed balancing port connection.
3. Orifice material NBR (Nitrile Rubber) or EPDM (Ethylene Propylene Rubber), with a TMO of 212 °F.

Dimensions

**SH6NLA**
Screwed & Socket Weld

**SH6NLG**
Flanged

Leakage Rating

<table>
<thead>
<tr>
<th>Model</th>
<th>Metal Orifice</th>
<th>Rubber Orifice</th>
</tr>
</thead>
<tbody>
<tr>
<td>SH6NLA</td>
<td>Class 3</td>
<td>Class 6</td>
</tr>
<tr>
<td>SH6NLG</td>
<td>Class 3</td>
<td>Class 6</td>
</tr>
</tbody>
</table>

* NPT, other standards available ** Socket weld only

Discharge Capacity

1. Line numbers within the graph refer to orifice numbers.
2. Differential pressure is the difference between the inlet and outlet pressure of the trap.
3. The chart is applicable to condensate below 212 °F.
4. The discharge capacity is for a liquid with specific gravity of 1.
5. Recommended safety factor: at least 1.5.

CAUTION

DO NOT use traps under conditions that exceed maximum differential pressure, as condensate backup will occur!

Capacity Conversion Factors

<table>
<thead>
<tr>
<th>Specific gravity (S.G.)</th>
<th>0.95</th>
<th>0.9</th>
<th>0.85</th>
<th>0.8</th>
<th>0.75</th>
<th>0.7</th>
<th>0.65</th>
<th>0.6</th>
<th>0.55</th>
<th>0.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conversion factor</td>
<td>1.03</td>
<td>1.06</td>
<td>1.08</td>
<td>1.12</td>
<td>1.16</td>
<td>1.19</td>
<td>1.24</td>
<td>1.29</td>
<td>1.35</td>
<td>1.41</td>
</tr>
</tbody>
</table>

Before using the capacity chart, multiply the required capacity (including safety factor) by the appropriate conversion factor for the specific gravity of the liquid. Choose from the table above or use the following formula: Conversion factor = \( \frac{1}{\sqrt{S.G.}} \).