FORGED CARBON STEEL Y STRAINER CLASS 800

Size: DN 1/4” to 2“
Ends: Female - Female BSP or NPT, Socket Welding
Min Temperature: -29°C
Max Temperature: +425°C
Max Pressure: 136 Bars (Class 800)
Specifications: With draining cap
               Removable stainless steel filter

Materials: Forged carbon steel A105N
FORGED CARBON STEEL Y STRAINER CLASS 800

SPECIFICATIONS:

- With draining cap
- Removable stainless steel filter
- Respect the flow direction indicated by the arrow
- Horizontal or vertical position with descendant fluid
- Mesh 8/10° mm (800 µ)
- Class 800

USE:

- Petroleum industry, steam, high pressure
- Min and max Temperature Ts: -29°C to +425°C
- Max Pressure Ps: 136 bars (see graph)

PRESSURE / TEMPERATURE RELATION:

<table>
<thead>
<tr>
<th>Pressure (bar)</th>
<th>136.2</th>
<th>136.2</th>
<th>136.2</th>
<th>124.1</th>
<th>120.7</th>
<th>116.6</th>
<th>110</th>
<th>100.7</th>
<th>98.6</th>
<th>97.9</th>
<th>92.7</th>
<th>75.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature (°C)</td>
<td>-29</td>
<td>0</td>
<td>38</td>
<td>93.5</td>
<td>149</td>
<td>204.5</td>
<td>260</td>
<td>315.5</td>
<td>343.5</td>
<td>371</td>
<td>399</td>
<td>425</td>
</tr>
</tbody>
</table>

PRESSURE / TEMPERATURE GRAPH:

[Graph showing pressure vs. temperature relation]
FORGED CARBON STEEL Y STRAINER CLASS 800

HEAD LOSS GRAPH:

- Flow (L/min)
- Pressure (Bar)
- Size (DN 1/2" 3/4" 1" 1 1/2" 2")
FORGED CARBON STEEL Y STRAINER CLASS 800

**MATERIALS:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Designation</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Body</td>
<td>ASTM A105 N</td>
</tr>
<tr>
<td>2</td>
<td>Bonnet</td>
<td>ASTM A105 N</td>
</tr>
<tr>
<td>3</td>
<td>Filter</td>
<td>SS ASTM A240 316L</td>
</tr>
<tr>
<td>4</td>
<td>Gasket</td>
<td>AISI 316 + graphite</td>
</tr>
<tr>
<td>5</td>
<td>Cap</td>
<td>ASTM A105 N</td>
</tr>
<tr>
<td>6</td>
<td>Screw (only for DN50)</td>
<td>ASTM A193 B7</td>
</tr>
</tbody>
</table>

DN 8 – 40 (NPS 1/4" - 1"1/2)  

DN 50 (NPS 2")
FORGED CARBON STEEL Y STRAINER CLASS 800

**SIZE (in mm):**

- **DN 8 – 40 (NPS 1/4" - 1"1/2)**
- **DN 50 (NPS 2")**

### Filter Size:

<table>
<thead>
<tr>
<th>Ref.</th>
<th>DN (mm)</th>
<th>8</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>32</th>
<th>40</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NPS (&quot;)</td>
<td>1/4&quot;</td>
<td>3/8&quot;</td>
<td>1/2&quot;</td>
<td>3/4&quot;</td>
<td>1&quot;</td>
<td>1&quot;1/4</td>
<td>1&quot;1/2</td>
<td>2&quot;</td>
</tr>
<tr>
<td>231</td>
<td>L</td>
<td>90</td>
<td>90</td>
<td>90</td>
<td>110</td>
<td>130</td>
<td>160</td>
<td>160</td>
<td>160</td>
</tr>
<tr>
<td></td>
<td>H</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>75</td>
<td>93</td>
<td>120</td>
<td>120</td>
<td>145</td>
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<tr>
<td></td>
<td>H2</td>
<td>105</td>
<td>105</td>
<td>105</td>
<td>140</td>
<td>155</td>
<td>195</td>
<td>195</td>
<td>205</td>
</tr>
<tr>
<td>232</td>
<td>G (NPT)</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>1/4&quot;</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ø D</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>22</td>
<td>28</td>
<td>41,5</td>
<td>41,5</td>
<td>49,5</td>
</tr>
<tr>
<td></td>
<td>H1</td>
<td>41</td>
<td>41</td>
<td>41</td>
<td>60</td>
<td>75</td>
<td>100,5</td>
<td>100,5</td>
<td>100,5</td>
</tr>
<tr>
<td>231/234</td>
<td>L1</td>
<td>10</td>
<td>13</td>
<td>14</td>
<td>16</td>
<td>20</td>
<td>22</td>
<td>22</td>
<td>26</td>
</tr>
<tr>
<td>232</td>
<td>E (SW)</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Ø F (SW)</td>
<td>14.2</td>
<td>17.6</td>
<td>21.72</td>
<td>27.05</td>
<td>33.78</td>
<td>42.54</td>
<td>48.64</td>
<td>61.11</td>
</tr>
<tr>
<td>231/232/234</td>
<td>Weight (Kg)</td>
<td>0.85</td>
<td>0.78</td>
<td>0.73</td>
<td>1.22</td>
<td>1.88</td>
<td>4.75</td>
<td>4.45</td>
<td>6.5</td>
</tr>
</tbody>
</table>
FORGED CARBON STEEL Y STRAINER CLASS 800

STANDARDS:

- Fabrication according to ISO 9001:2008
- DIRECTIVE 2014/68/EU: CE N° 1115
  Risk category III Module H
- Certificate 3.1 on request
- Designing according to ASME B16.34
- Pressure Tests according to API 598, table 6
- Threaded NPT female ends according to ASME B1.20.1
- Threaded BSP cylindrical female ends according to ISO 7/1 Rp
- ATEX Group II Category 2 G/2D Zone 1 & 21 Zone 2 &22 (optional marking) according to directive 2014/34/EU

INSTALLATION POSITIONS:

Horizontal position

Vertical position (descend and fluid)
GENERAL GUIDELINES:

- Ensure that the strainers to be used are appropriate for the conditions of the installation (type of fluid, pressure and temperature).
- Be sure to have enough valves to be able to isolate the sections of piping as well as the appropriate equipment for maintenance and repair.
- Ensure that the strainers to be installed are of correct strength to be able to support the capacity of their usage.
- Installation of all circuits should ensure that their function can be automatically tested on a regular basis (at least two times a year).

INSTALLATION INSTRUCTIONS:

- Before installing the strainers, clean and remove any objects from the pipes (in particular bits of sealing and metal) which could obstruct and block the strainers.
- Ensure that both connecting pipes either side of the strainer (upstream and downstream) are aligned (if they’re not, the strainer may not work correctly).
- Make sure that the two sections of the pipe (upstream and downstream) match, the strainer unit will not absorb any gaps. Any distortions in the pipes may affect the tightness of the connection, the working of the strainer and can even cause a rupture. To be sure, place the kit in position to ensure the assembling will work.
- The theoretical lengths given by ISO/R7 for the tapping are typically longer than required, the length of the thread should be limited, and check that the end of the tube does not press right up to the head of the thread.
- Never use a vice to tighten the fixings of the strainer.
- If sections of piping do not have their final support in place, they should be temporarily fixed. This is to avoid unnecessary strain on the strainer.
- Fluids in the strainer must not contain solid objects (it could damaged the seat).