Don’t Gamble with your Sample

Aseptic Sampling Valve

Working principle
The Keofitt Aseptic Sampling Valve is designed for sterilization before and after each sampling.

Open valve: Sampling
The manual valve is opened by rotating the handle (adjustable valve) or by activating the lever (on/off valve). The stem and the membrane are then retracted, allowing liquid to pass.

Closed valve: Sterilizing
Using the reverse procedure the built-in spring closes the valve, keeping the channel between the hose pieces open for sterilization. If using steam a small pressure relief valve (optional) on the outlet is recommended.

Standard Design
The Keofitt Aseptic Sampling valve consists of three parts, a valve body, a valve head and a membrane. The rubber membrane is placed on the stem of the valve head and works as a stretchable plug. The valve bodies and valve heads are interchangeable.

The valve is available in two sizes:
- M4 valve for low viscosity products like water, beer, wine and liquid milk.
- W9 for high viscosity products like fruit yoghurt, syrup and ice cream.

W9 valve is available with micro ports, to enable sampling by hyperdermic needle.

Valve bodies:
Type T: Tank (welding).
Type P: Pipe (welding).
Type C: Clamp.
Type S: Socket (threaded).

Valve heads:
Type H: Turning handle.
Type K: Removable key.
Type Q: Quick lever.
Type N: Manually and pneumatically operated.
Type B: Turning handle (for pressure up to 12 bar).
The valve is authorized to use the 3A symbol.

Fig. 1. Principle.
**Dimensions (mm)**

<table>
<thead>
<tr>
<th>Pos.</th>
<th>M4</th>
<th>W9</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>70</td>
<td>90</td>
</tr>
<tr>
<td>B</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>C</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>D (Tank)</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>D (Pipe)</td>
<td>25°</td>
<td>25°</td>
</tr>
<tr>
<td>D (Clamp)</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>D (½” Clamp)</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>D (1” Clamp)</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>D (Socket)</td>
<td>M28x1.5</td>
<td>M28x1.5</td>
</tr>
<tr>
<td>E</td>
<td>47</td>
<td>68</td>
</tr>
</tbody>
</table>

* only for DIN

**Materials**
- Valve body: Stainless steel 1.4404 (316L).
- Valve head: Stainless steel 301, 303, 316L, PEHD/black, PTFE.
- Membrane: Silicone rubber, EPDM rubber, PTFE.

**Technical data**

**Pressure**
- Max. working pressure: 600 kPa (6 bar).
- M4 Type B: 1500 kPa (15 bar)
- W9 Type B: 1500 kPa (15 bar)

**Temperature**
- Temperature range: 1°C - 130°C.
- Max. sterilization temperature: 121°C
- Steam must be dry, since condensate will damage the membrane.
- It is recommended that the membrane be changed every 100 samples/sterilizations or depending on working conditions or experience.

<table>
<thead>
<tr>
<th>Valve</th>
<th>Viscosity (cP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M4</td>
<td>0-100</td>
</tr>
<tr>
<td>W9</td>
<td>0-1000</td>
</tr>
<tr>
<td>W15</td>
<td>0-50000</td>
</tr>
<tr>
<td>W25</td>
<td>0-250000</td>
</tr>
</tbody>
</table>

**Options**
- Key ring for valve head, type K.
- Valve head for pneumatic and manual operation, type N (A dimension increases).
- Valve head, type B (blocking) without spring, to be used if risk of pressure shocks (handle is white).
- For various accessories please see Ordering Leaflet.

**Ordering**

Please state the following when ordering:
- Valve size, M4 or W9.
- Type of valve body.
- Type of valve head.
- Accessories.
- Other options.

**Note!**
For further information, see also instruction IM 70783.

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*Fig. 2. Dimensions.*

*Fig. 3. Valve bodies and valve heads (interchangeable).*