The ability to provide a jet purge adapter to a piston type sampling valve ensures optimal retrieval of a representative, contamination free sample. The DPJ type sampler in fixed volume configuration with cooling/heating jacket allows purging of the sample outlet of the valve to eliminate dead volume in addition to a fixed sample volume at the required temperature. A separate cooler/heater is not necessary. The jet purge adapter has two flow paths. The first flow path allows the product to flow into the sample bottle and the second flow path enables the jet purge adapter to be purged with an inert gas.

**1 OPERATION/FUNCTION**

0 - off
Provide a new septum on your sample bottle. Insert the bottle, with cap and septum into the sleeve until the septum is pierced by the needles. Put the bottle retaining clip in place.

1 - fill
Open the piston valve allowing the product to flow into the sample chamber. The fixed volume chamber determines the amount of sample. Close the piston valve.

2 - cooling/heating
Allow a cooling/heating fluid to flow through the jacket. Keep this position for the required time in order to cool/heat the liquid to the required temperature.

3 - sample
Open the purge valve and the block valve between needle assembly and jet purge adaptor. The inert gas will assist the sample to flow into the bottle and will purge the sampler. This position can be held for any required time.

4 - off
Close the valves. Remove the bottle retaining clip and pull the bottle out from the sleeve. The septum reseals automatically. Put a new bottle in place.

**2 TYPICAL P & ID**

Fixed volume cooling/heating jacket (C3)
3 FEATURES/ADVANTAGES/PROPERTIES

- Sampling independent of process conditions
- High pressure and vacuum applications
- Representative sampling
- Zero dead volume
- Closed sampling
- Fixed volume sampling
- Purging of sampler

4 BASIC SPECIFICATIONS

<table>
<thead>
<tr>
<th>Material</th>
<th>SS316, SS316L.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleeve type</td>
<td>60cc sleeve with bottle retaining clip.</td>
</tr>
<tr>
<td>Needle assembly</td>
<td>Single piece VTO needle assembly with vent to outlet connection 1/4“ FNPT. Process/vent needle ID: 1.35 mm.</td>
</tr>
<tr>
<td>Sample chamber</td>
<td>50 cc.</td>
</tr>
<tr>
<td>Valve</td>
<td>Piston valve, PTFE seats.</td>
</tr>
<tr>
<td></td>
<td>Pressure range ANSI B16.34.</td>
</tr>
<tr>
<td></td>
<td>Temperature range -29/+232°C (-20/+450°F).</td>
</tr>
<tr>
<td>Operation</td>
<td>Manual.</td>
</tr>
<tr>
<td>Connections</td>
<td>Process: 3/4“ MNPT</td>
</tr>
<tr>
<td></td>
<td>Vent: 1/4“ FNPT</td>
</tr>
<tr>
<td></td>
<td>Purge: 1/4“ FNPT, needle valve, regulator, gauge and check valve included.</td>
</tr>
</tbody>
</table>

Please note: the above is a basic specification only. DOPAK® Samplers can be offered with a wide variety of options as mentioned below.

5 OPTIONS

- Temperature indicator
- Solvent purge facility
- Lockable handle
- Mounting plate
- Pipe stand
- Block valve
- Enclosure
- Mounting bracket
- Steam sterilising cap
- Exotic materials

For more information please refer to our sheets: Options for DOPAK® process samplers, sampling into a bottle. Components for DOPAK® process samplers.