# **BLC3 - Fixed Volume Type with Heating/Cooling Jacket**

### **Features**

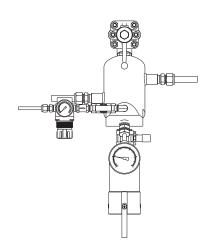
- O Sampling from vacuum, low or high pressure devices or process lines
- Fixed volume sampling
- Sampling with a piston valve to ensure zero dead volume
- Sampling for highly viscous liquids
- Meating/cooling jacket to ensure sampling within a certain range of temperature
- Needle purge

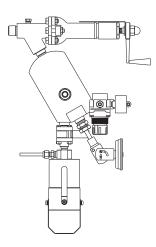
## **Basic Configuration**

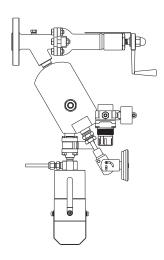
Wetted Material	316 SS	
Sleeve Assembly	250 ml sleeve with bottle retaining clip	
Needle Assembly	Process/vent needle ID: 1.4 mm (0.06")	
Sampling Valve	Piston valve: PTFE seat Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C) Temperature range: 0°F to 450°F (-18°C to 232°C)	Heating/cooling TI)
Nitrogen Branch	Nitrogen regulator	
	CV Series check valves, NB Series needle valves	
	Pressure gauge	N2 inlet
Connections	Process: 1/2" MNPT	Vent
	Vent/purge: 1/4" tube fitting	
	Heating/cooling: 3/8" FNPT	
Others	Heating/cooling jacket, sample chamber (200 ml), thermometer, BH Series ball valves	

Note: Products of other specifications are available upon request.

### **Typical Installation Mode**





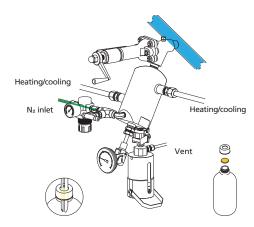




## **Operation**

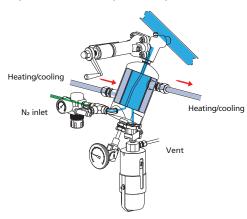
#### 1 - Preparation

Place a new septum on the sample bottle. Insert the bottle with cap and septum into the sleeve until the septum is pierced by the needles. Swing down the bottle retaining clip.



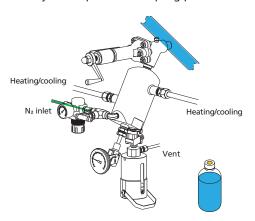
#### 3 - Heating/cooling

Allow the heating/cooling fluid to flow through the heating/cooling jacket. Hold for a sufficient time until the sample reaches the required temperature.



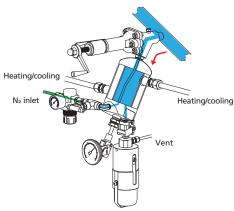
#### 5 - Off

Close the valve on the Nitrogen branch and the valve above the needle assembly. Remove the bottle retaining clip and take out the bottle from the sleeve. The septum reseals automatically to complete the sampling process.



#### 2 - Pre-sampling

Open the piston valve, allowing the sample to flow into the sample chamber. The amount of sample depends on the sample chamber volume and process pressure. Close the piston valve.



#### 4 - Sampling

Open the valve on the Nitrogen branch and the valve above the needle assembly, allowing Nitrogen to force the sample from the sample chamber into the bottle and purge the system.

