BL – Bottle Configuration Sampling Systems for Liquids

A Series

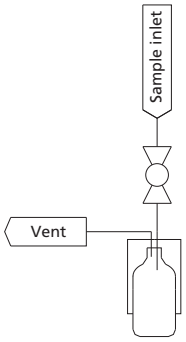
BLA1 - On-off Type

Features

◎ Sampling from low pressure devices or process lines: 0-145 psig (0-10 bar)

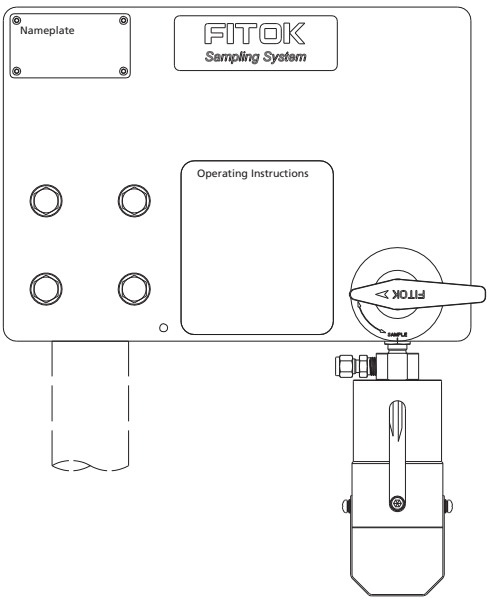
Basic Configuration

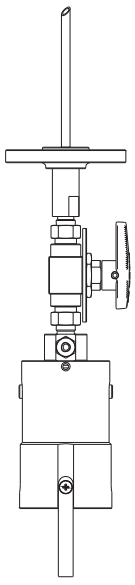
Wetted Material	316 SS
Sleeve Assembly	250 ml sleeve with bottle retaining clip
Needle Assembly	Process/vent needle ID: 1.4 mm (0.06")
Sampling Valve	BF Series 2-way ball valves: PTFE seat and FKM O-ring Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C) Temperature range: 0°F to 450°F (-18°C to 232°C)
Connections	1/4" tube fitting



Note: Products of other specifications are available upon request.

Typical Installation Mode

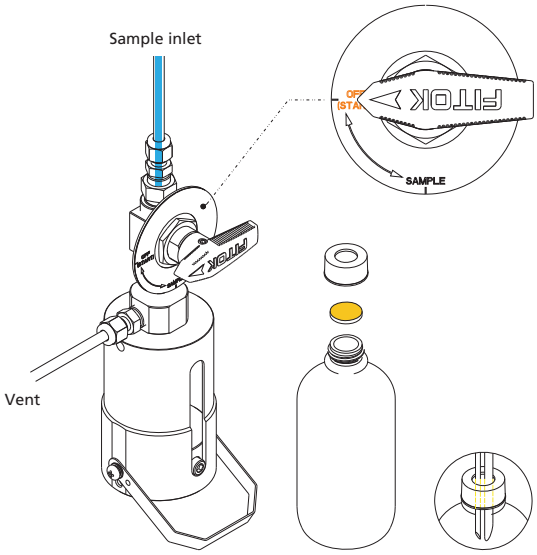




Operation

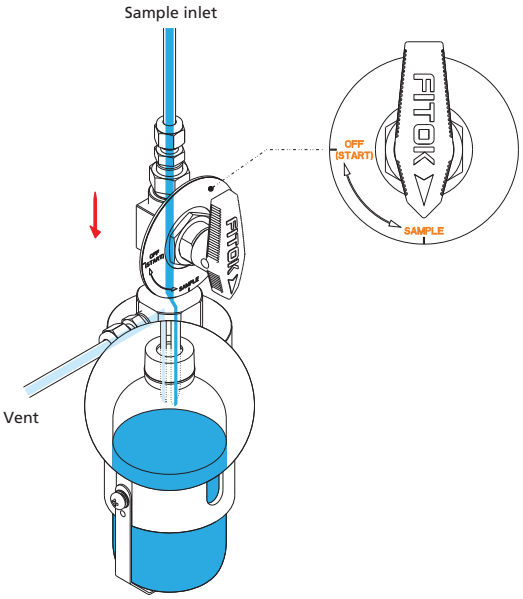
1 - Preparation

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.



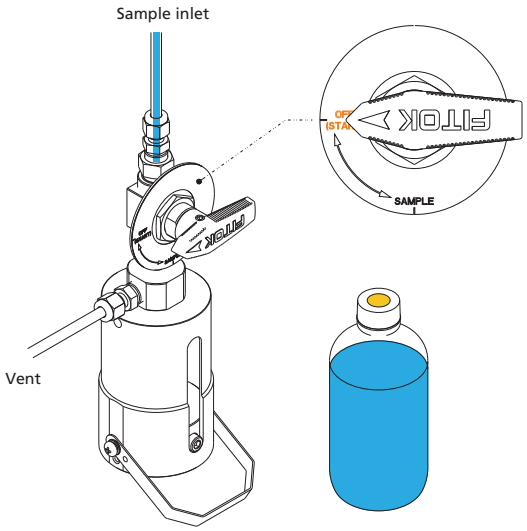
2 - Sampling

Turn the handle to the “SAMPLE” position, allowing the sample to flow into the bottle. When the required amount has been taken, turn the handle to the “OFF” position to close the sampling system.



3 - Off

Remove the bottle retaining clip and take out the bottle from the sleeve. The septum reseals automatically to complete the sampling process.



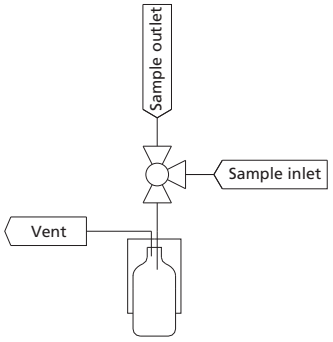
BLA2 - System Purge Type

Features

- Sampling from low pressure devices or process lines: 0-145 psig (0-10 bar)
- System purge

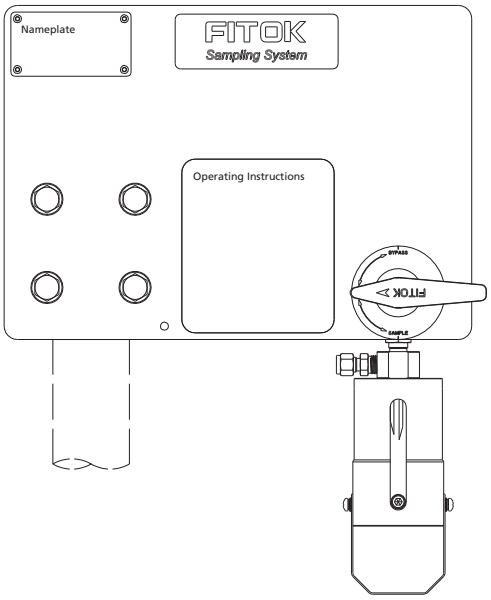
Basic Configuration

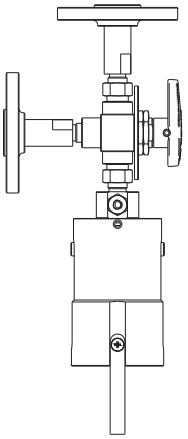
Wetted Material	316 SS
Sleeve Assembly	250 ml sleeve with bottle retaining clip
Needle Assembly	Process/vent needle ID: 1.4 mm (0.06")
Sampling Valve	BF Series 3-way ball valves: PTFE seat and FKM O-ring Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C) Temperature range: 0°F to 450°F (-18°C to 232°C)
Connections	1/4" tube fitting



Note: Products of other specifications are available upon request.

Typical Installation Mode

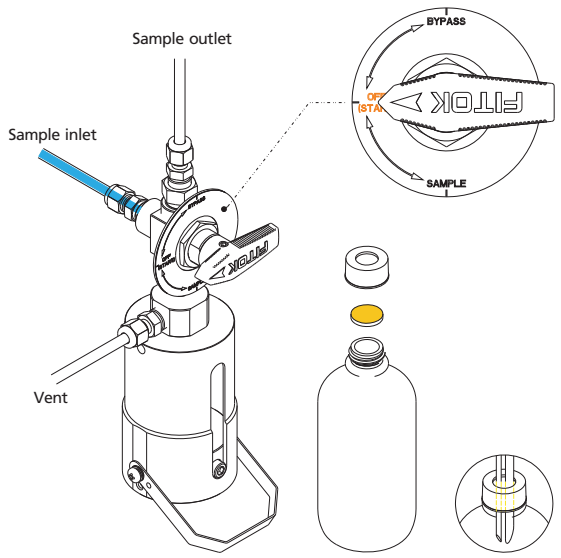




Operation

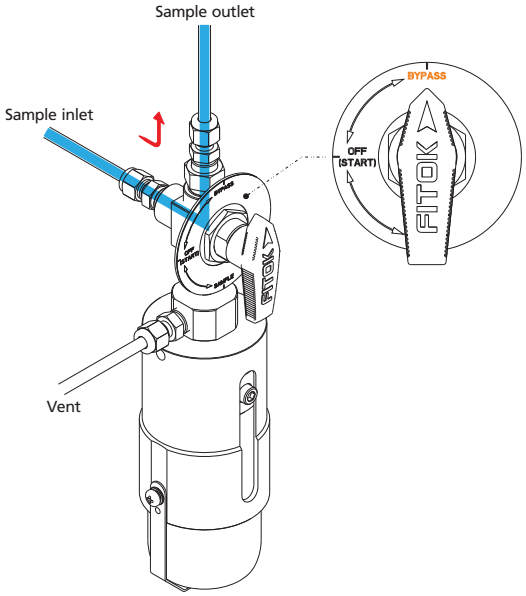
1 - Preparation

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.



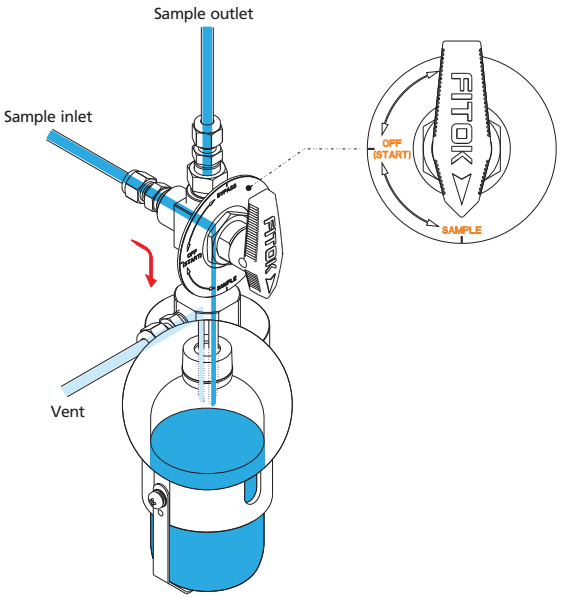
2 - System Purge

Turn the handle to the “BYPASS” position, allowing the sample to flow continuously through the system and purge system to ensure representative sampling.



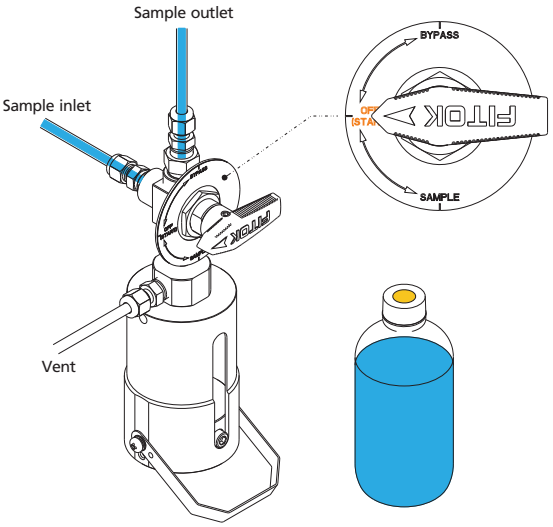
3 - Sampling

Turn the handle to the “SAMPLE” position, allowing the sample to flow into the bottle. When the required amount has been taken, turn the handle to the “OFF” position to close the sampling system.



4 - Off

Remove the bottle retaining clip and take out the bottle from the sleeve. The septum reseals automatically to complete the sampling process.



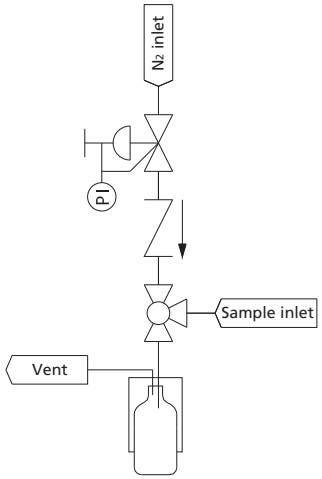
BLA3 - Back Purge Type

Features

- Sampling from low pressure devices or process lines: 0-145 psig (0-10 bar)
- Back purge

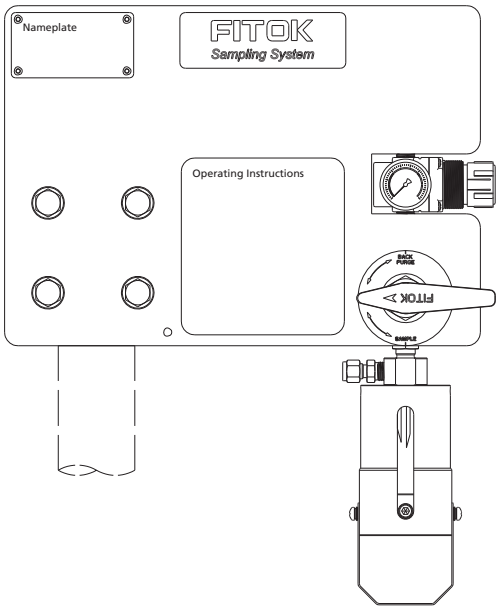
Basic Configuration

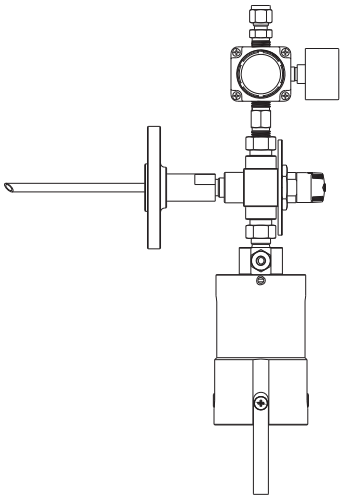
Wetted Material	316 SS
Sleeve Assembly	250 ml sleeve with bottle retaining clip
Needle Assembly	Process/vent needle ID: 1.4 mm (0.06")
Sampling Valve	BF Series 3-way ball valves: PTFE seat and FKM O-ring Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C) Temperature range: 0°F to 450°F (-18°C to 232°C)
Nitrogen Branch	Nitrogen regulator
	CV Series check valves
	Pressure gauge
Connections	1/4" tube fitting



Note: Products of other specifications are available upon request.

Typical Installation Mode

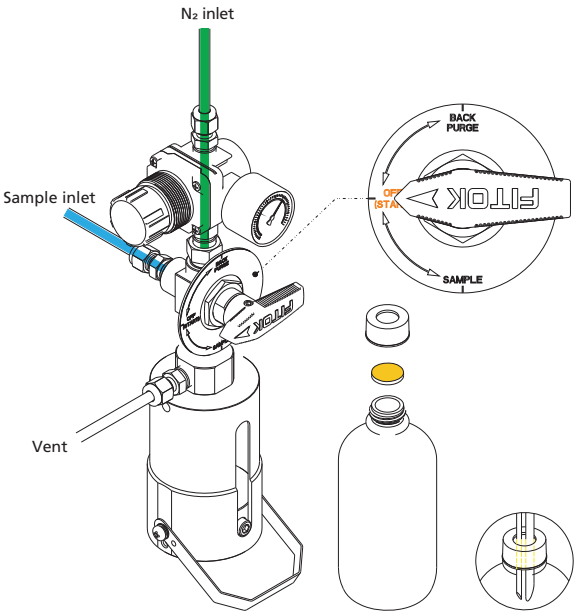




Operation

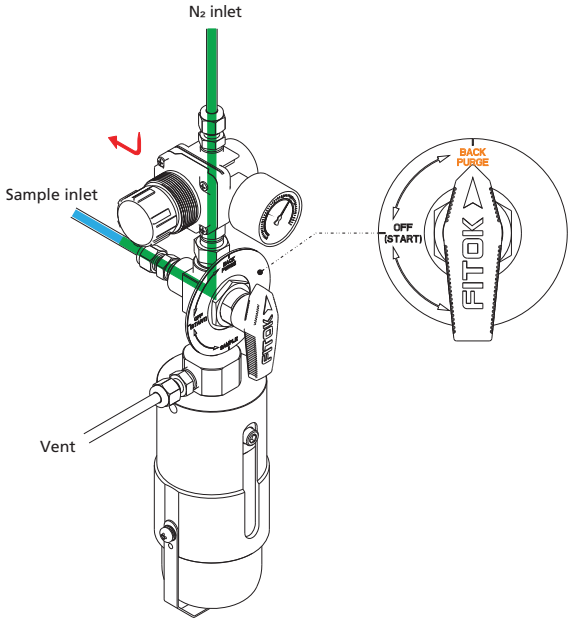
1 - Preparation

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.



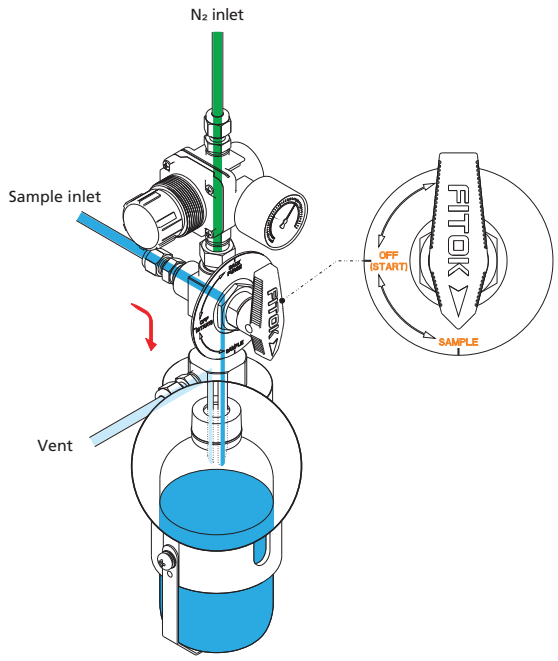
2 - Back Purge

Turn the handle to the “BACK PURGE” position, allowing Nitrogen to force the residual sample from the system into the process line to ensure representative sampling.



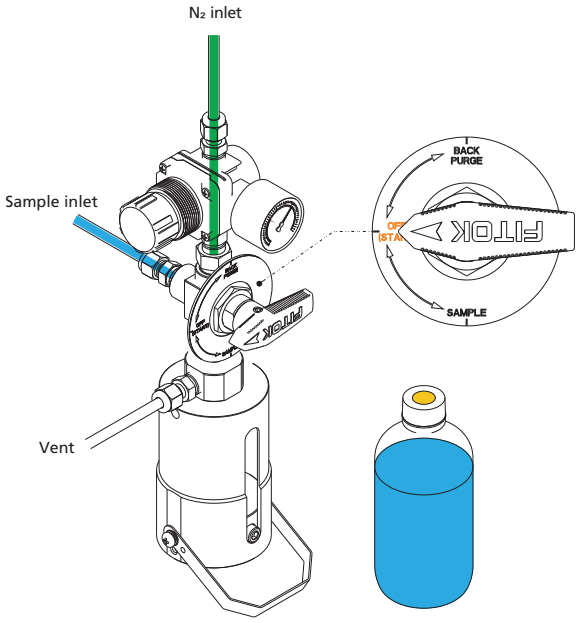
3 - Sampling

Turn the handle to the “SAMPLE” position, allowing the sample to flow into the bottle. When the required amount has been taken, turn the handle to the “OFF” position to close the sampling system.



4 - Off

Remove the bottle retaining clip and take out the bottle from the sleeve. The septum reseals automatically to complete the sampling process.



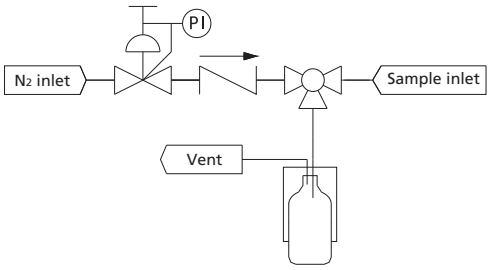
BLA4 - Needle Purge Type

Features

- Sampling from low pressure devices or process lines: 0-145 psig (0-10 bar)
- Needle purge

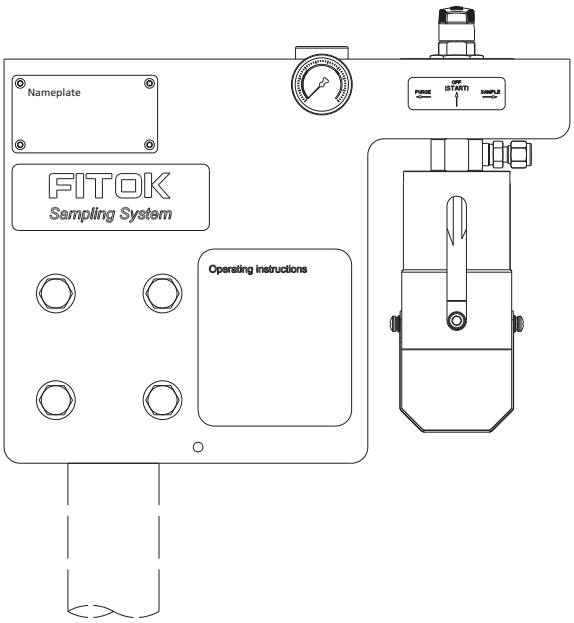
Basic Configuration

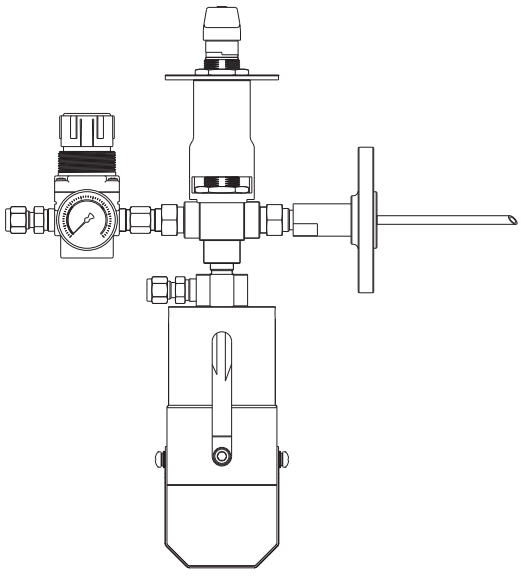
Wetted Material	316 SS
Sleeve Assembly	250 ml sleeve with bottle retaining clip
Needle Assembly	Process/vent needle ID: 1.4 mm (0.06")
Sampling Valve	BF Series 3-way ball valves: PTFE seat and FKM O-ring Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C) Temperature range: 0°F to 450°F (-18°C to 232°C)
Nitrogen Branch	Nitrogen regulator
	CV Series check valves
	Pressure gauge
Connections	1/4" tube fitting



Note: Products of other specifications are available upon request.

Typical Installation Mode

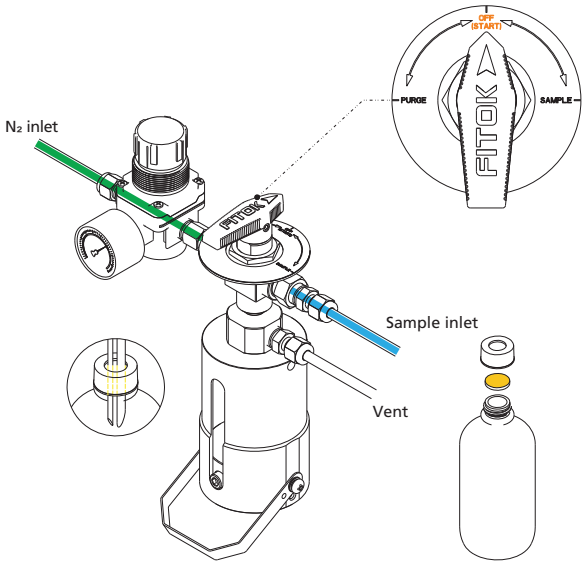




Operation

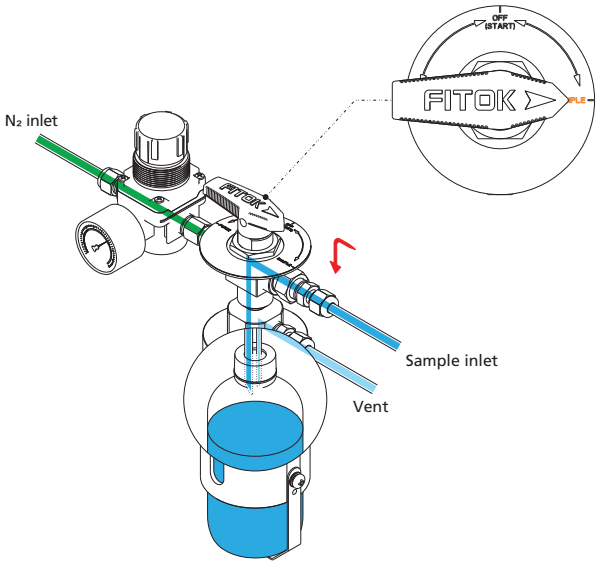
1 - Preparation

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.



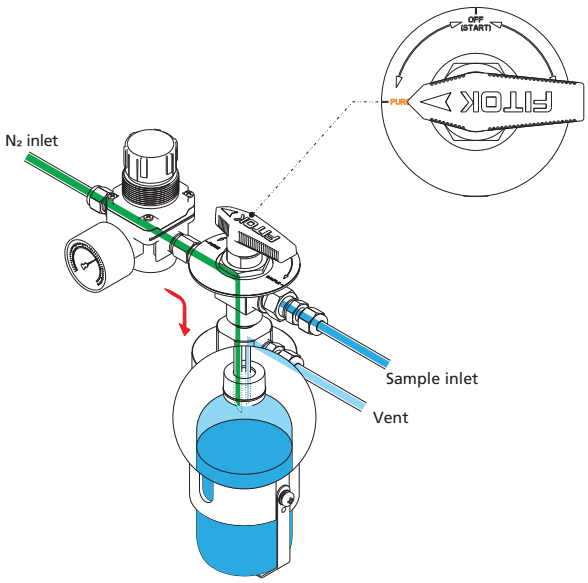
2 - Sampling

Turn the handle to the “SAMPLE” position, allowing the sample to flow into the bottle. When the required amount has been taken, turn the handle to the “OFF” position to close the sampling system.



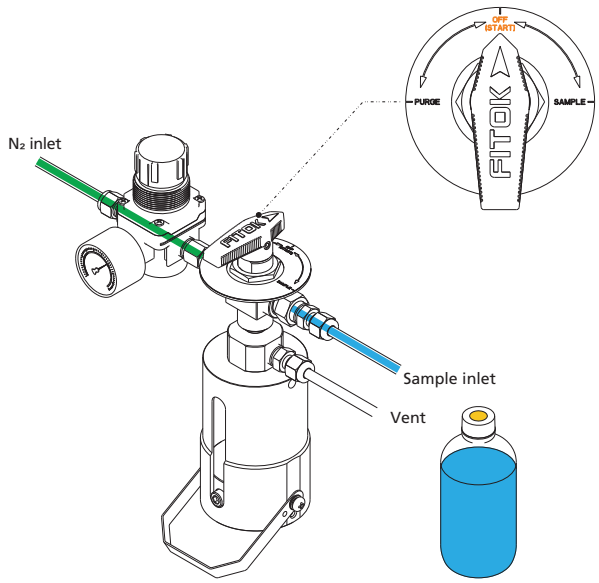
3 - Needle Purge

Turn the handle to the “PURGE” position, allowing Nitrogen to force the residual sample from the needle assembly into the bottle.



4 - Off

Turn the handle to the “OFF” position to close the sampling system. Remove the bottle retaining clip and take out the bottle from the sleeve. The septum reseals automatically to complete the sampling process.



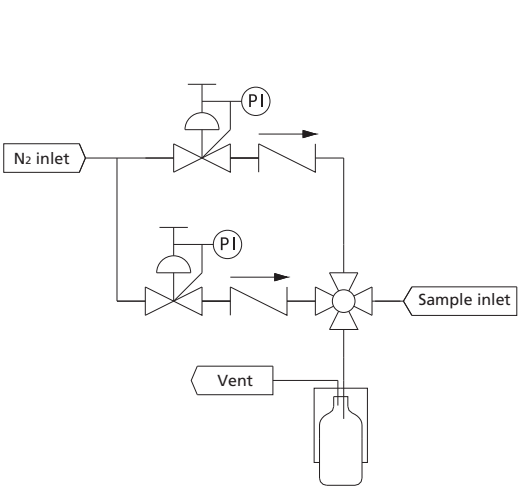
BLA5 - Back and Needle Purge Type

Features

- Sampling from low pressure devices or process lines: 0-145 psig (0-10 bar)
- Back purge and needle purge

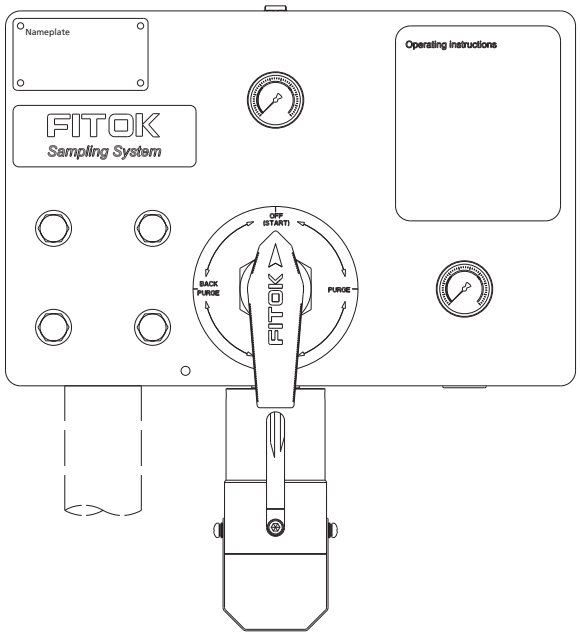
Basic Configuration

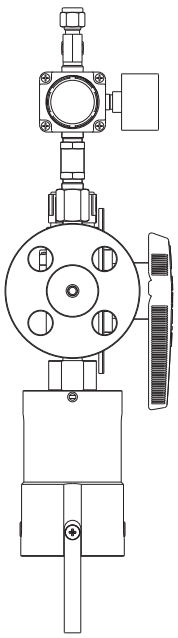
Wetted Material	316 SS
Sleeve Assembly	250 ml sleeve with bottle retaining clip
Needle Assembly	Process/vent needle ID: 1.4 mm (0.06")
Sampling Valve	BO Series 4-way ball valves: PTFE seat Max. working pressure: 2500 psig @ 70°F (172 bar @ 20°C) Temperature range: 50°F to 140°F (10°C to 65°C)
Nitrogen Branch	Nitrogen regulator
	CV Series check valves
	Pressure gauge
Connections	1/4" tube fitting



Note: Products of other specifications are available upon request.

Typical Installation Mode

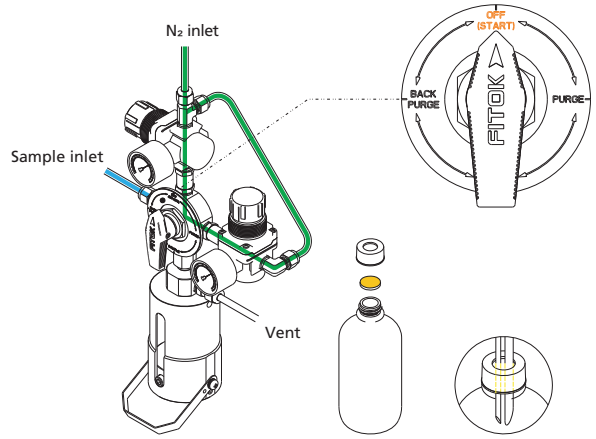




Operation

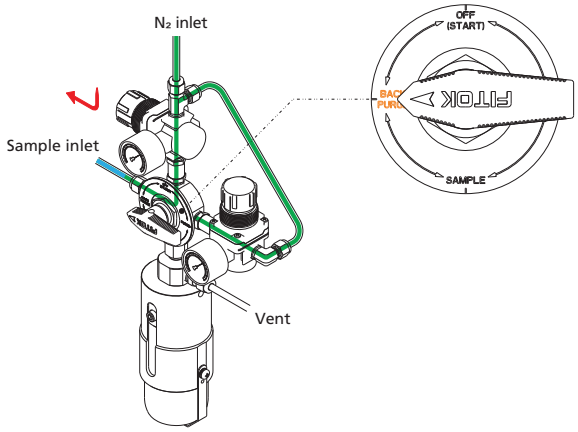
1 - Preparation

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.



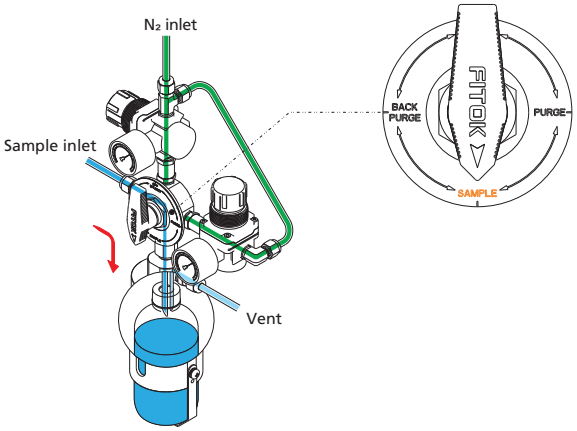
2 - Back Purge

Turn the handle to the “BACK PURGE” position, allowing Nitrogen to force the residual sample from the system into the process line to ensure representative sampling.



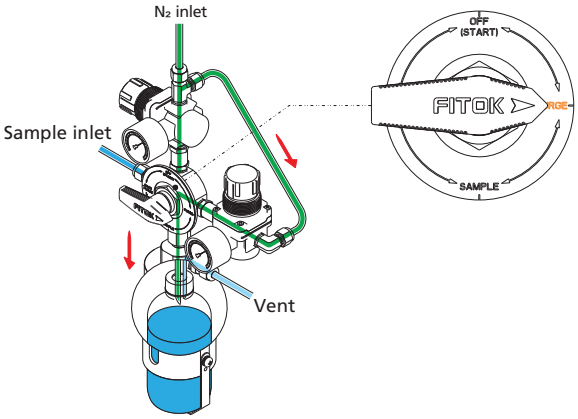
3 - Sampling

Turn the handle to the “SAMPLE” position, allowing the sample to flow into the bottle.



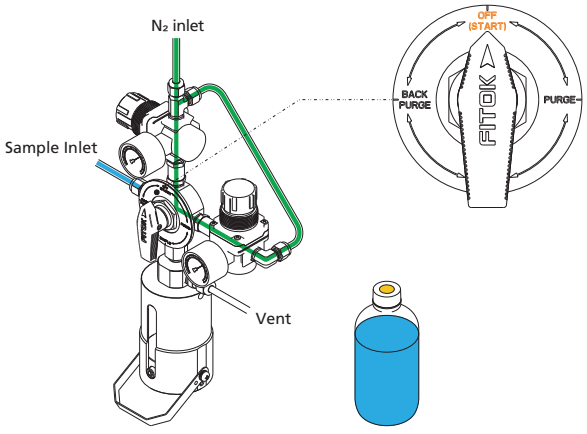
4 - Needle Purge

When the required amount has been taken, turn the handle to the “PURGE” position, allowing Nitrogen to force the residual sample from the needle assembly into the bottle.



5 - Off

Turn the handle to the “OFF” position to close the sampling system. Remove the bottle retaining clip and take out the bottle from the sleeve. The septum reseals automatically to complete the sampling process.



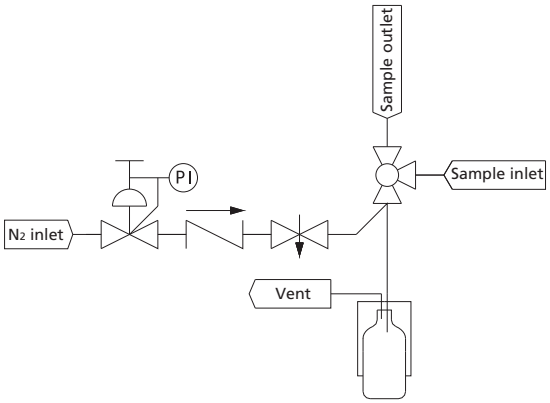
BLA6 - System Purge and Continuous Needle Purge Type

Features

- Sampling from low pressure devices or process lines: 0-145 psig (0-10 bar)
- System purge and continuous needle purge

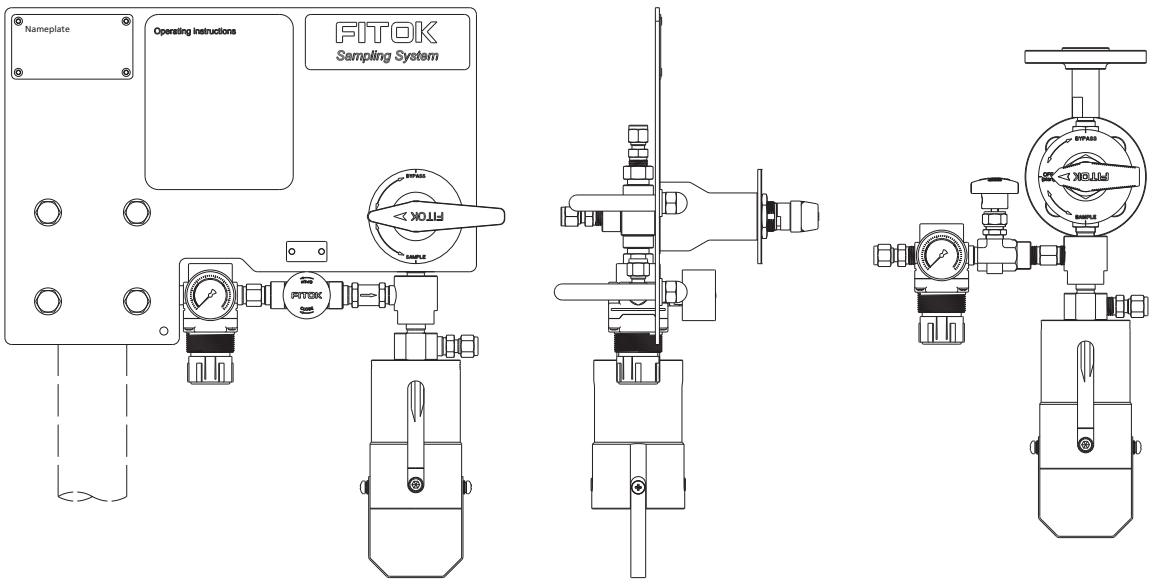
Basic Configuration

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	BF Series 3-way ball valves: PTFE seat and FKM O-ring Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C) Temperature range: 0°F to 450°F (-18°C to 232°C)
Nitrogen Branch	Nitrogen regulator
	CV Series check valves, NB Series needle valves
	Pressure gauge
Connections	1/4" tube fitting



Note: Products of other specifications are available upon request.

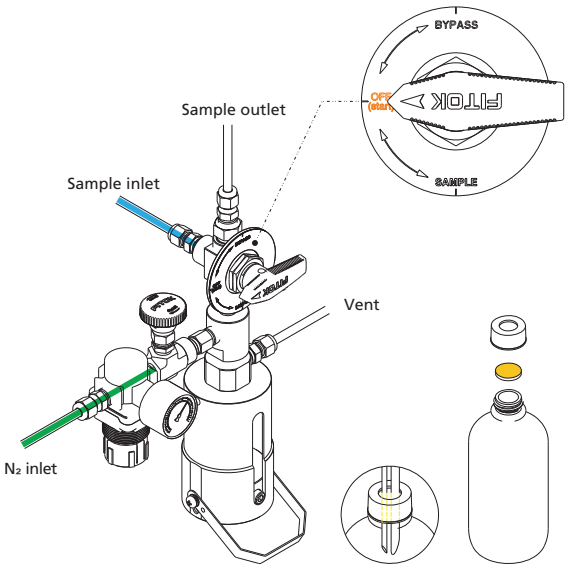
Typical Installation Mode



Operation

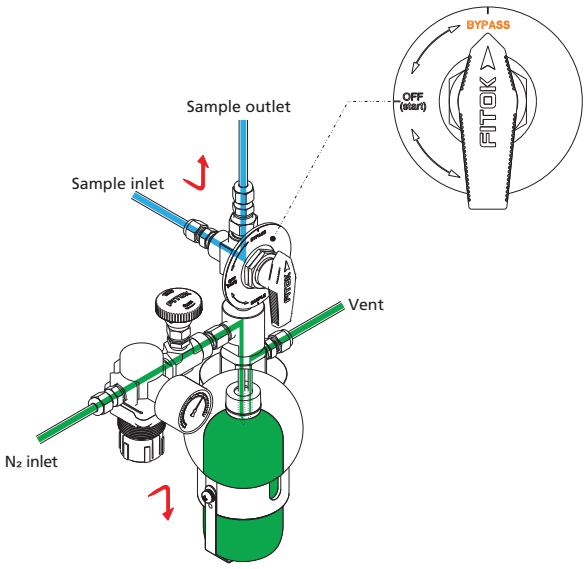
1 - Preparation

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.



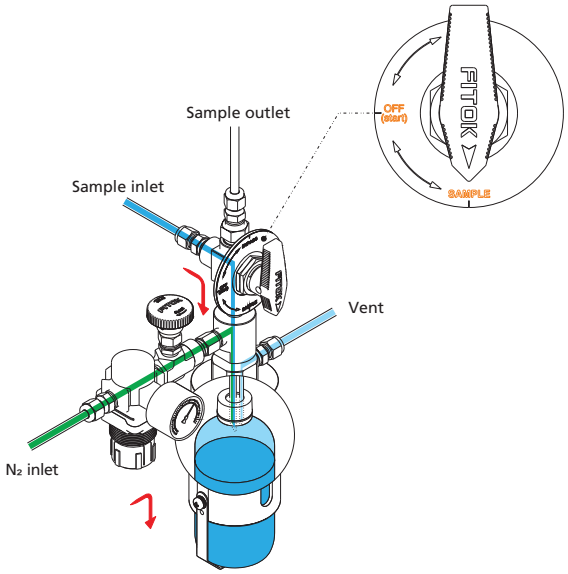
2 - Continuous Needle Purge and System Purge

Open the needle valve to purge the needle assembly and the bottle continuously with Nitrogen. Turn the handle to the "BYPASS" position, allowing the sample to flow continuously through the system and purge the system to ensure representative sampling.



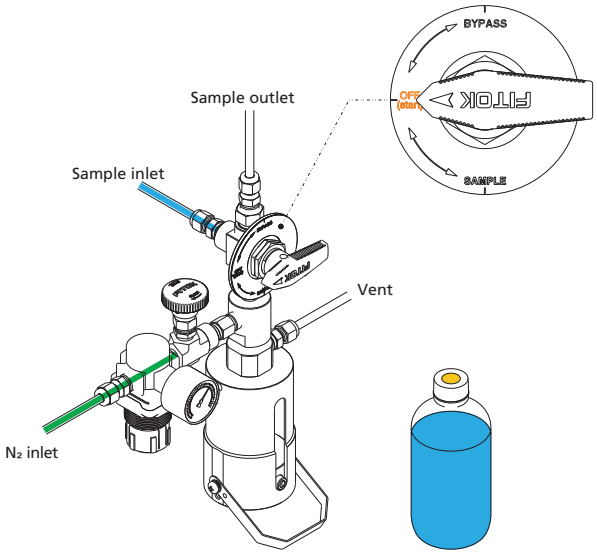
3 - Sampling

Turn the handle to the "SAMPLE" position, allowing the sample to flow into the bottle. When the required amount has been taken, turn the handle to the "OFF" position to close the sampling system.



4 - Off

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



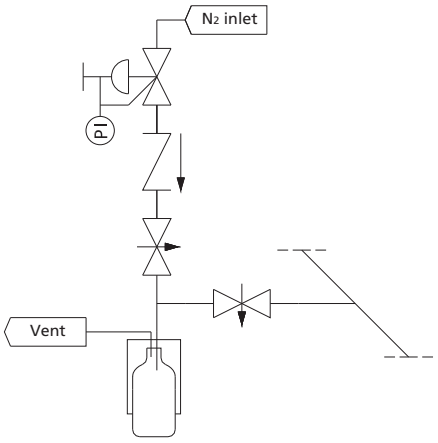
BLA7 - In-line and Needle Purge Type

Features

- Sampling from low pressure devices or process lines: 0-145 psig (0-10 bar)
- In-line sampling valve to save sampling time
- Needle purge

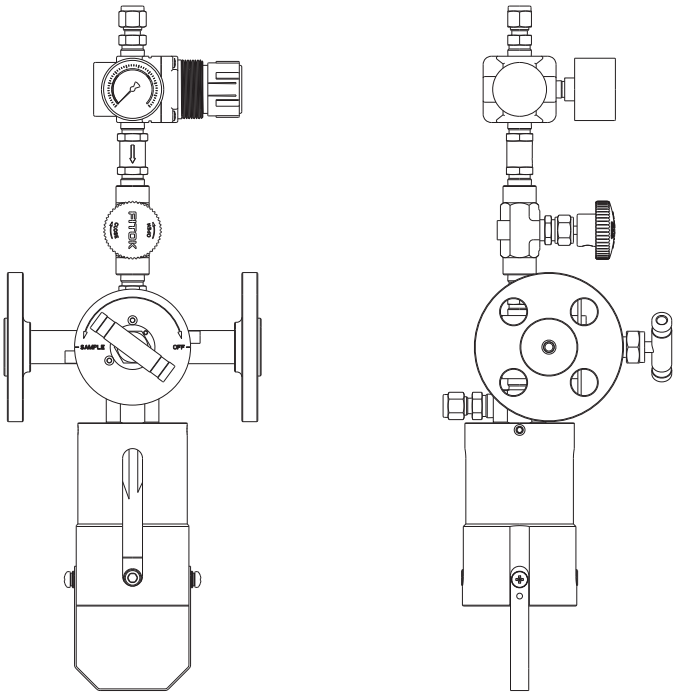
Basic Configuration

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	In-line valve: PTFE packing Max. working pressure: 3000 psig @ 70°F (206 bar @ 20°C) Temperature range: -4°F to 446°F (-20°C to 230°C)
Nitrogen Branch	Nitrogen regulator
	CV Series check valves, NB Series needle valves
	Pressure gauge
Connections	Process: 1/4" FNPT
	Purge/vent: 1/4" tube fitting



Note: Products of other specifications are available upon request.

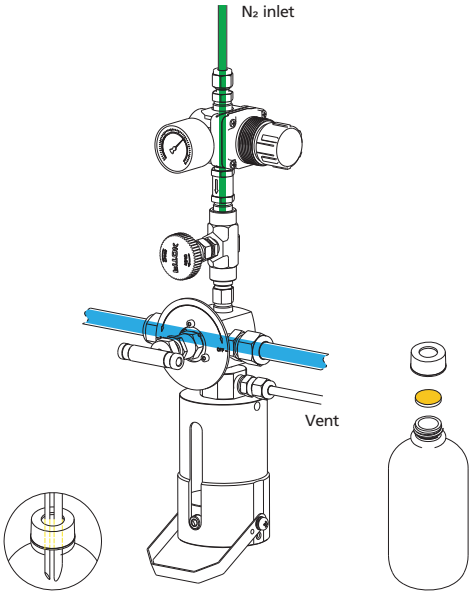
Typical Installation Mode



Operation

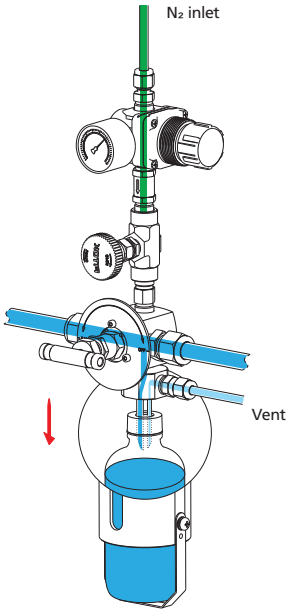
1 - Preparation

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.



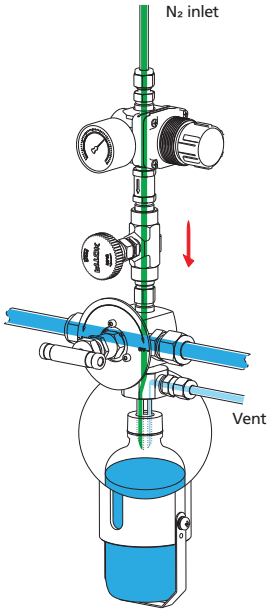
2 - Sampling

Turn the handle counterclockwise to open the sampling valve, allowing the sample to flow into the bottle. When the required amount has been taken, turn the handle clockwise to close the sampling valve.



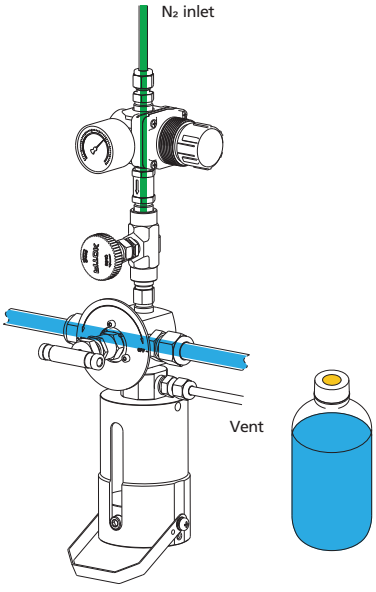
3 - Needle Purge

Open the valve on the Nitrogen branch, allowing Nitrogen to force the residual sample from the needle assembly and the valve into the bottle. Hold this position for a sufficient time.



4 - Off

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



B Series

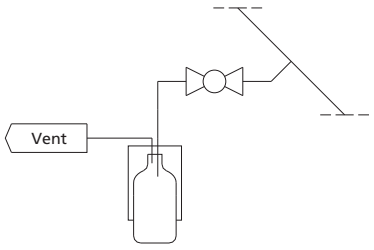
BLB1 - On-off Type with In-line Ball Valve

Features

- Sampling from low pressure devices or process lines: 0-145 psig (0-10 bar)
- In-line sampling
- Fire safe and antistatic ball valve

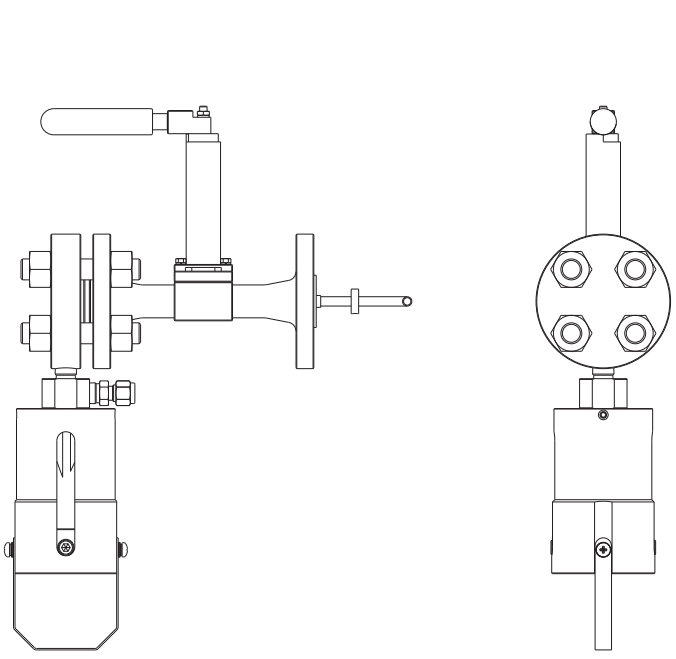
Basic Configuration

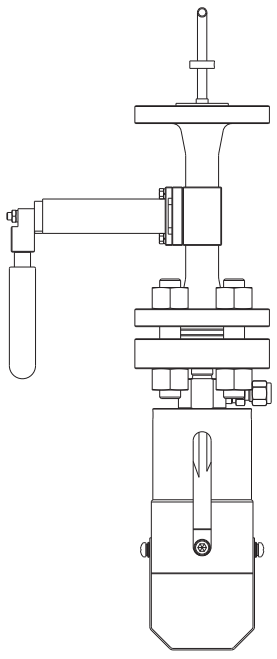
Wetted Material	316 SS
Sleeve Assembly	250 ml sleeve with bottle retaining clip
Needle Assembly	Process/vent needle ID: 1.4 mm (0.06")
Sampling Valve	In-line ball valve: PTFE seat, fire safe and antistatic Max. working pressure: 276 psig @ 70°F (19 bar @ 20°C) Temperature range: -18°F to 298°F (-28°C to 148°C)
Connections	Process: NPS 1/2, ANSI B16.5 Class 150 RF flange
	Vent: 1/4" tube fitting
Others	Spring return handle



Note: Products of other specifications are available upon request.

Typical Installation Mode

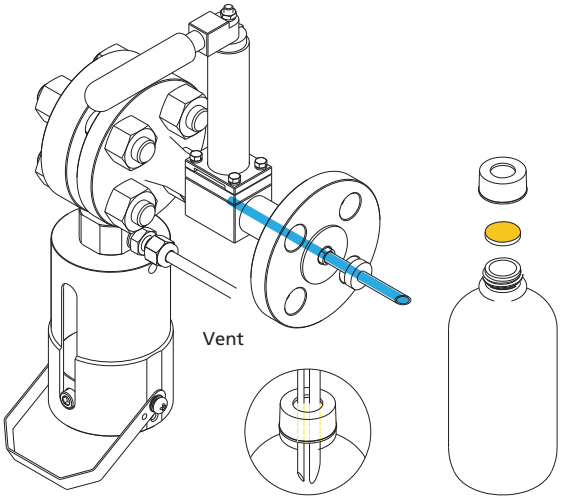




Operation

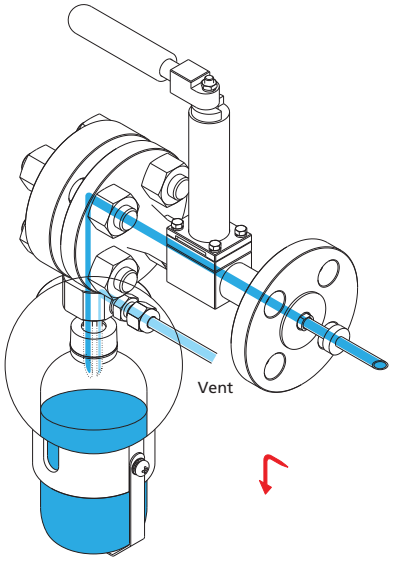
1 - Preparation

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.



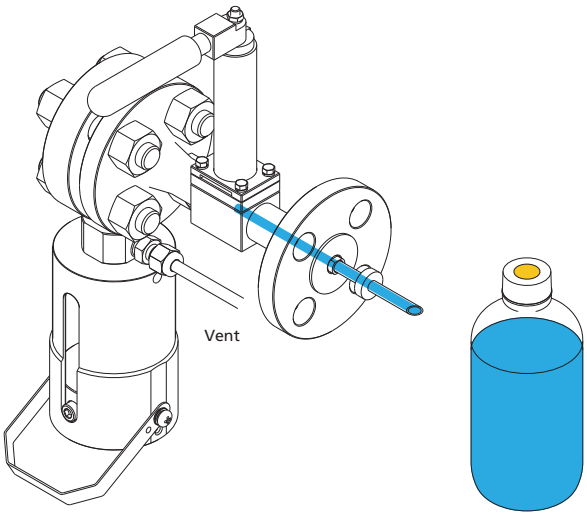
2 - Sampling

Open the in-line ball valve, allowing the sample to flow into the bottle. When the required amount has been taken, release the handle to close the valve automatically.



3 - Off

Remove the bottle retaining clip and take out the bottle from the sleeve. The septum reseals automatically to complete the sampling process.



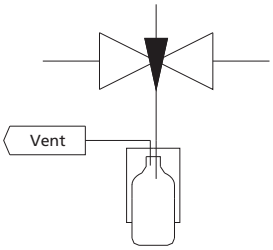
BLB2 - On-off Type with In-line Needle Valve

Features

- Sampling from low pressure devices or process lines: 0-145 psig (0-10 bar)
- In-line sampling

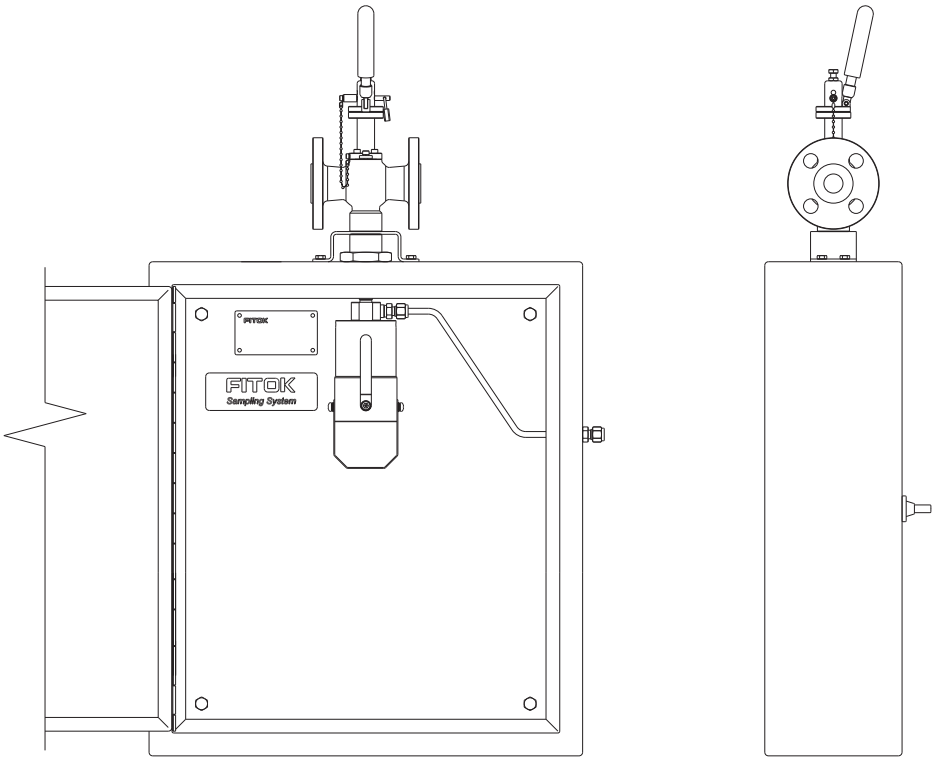
Basic Configuration

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	In-line needle valve: PTFE packing and PCTFE seat Max. working pressure: 276 psig @ 70°F (19 bar @ 20°C) Temperature range: -18°F to 298°F (-28°C to 148°C)
Connections	Process: NPS 3/4, ANSI B16.5 Class 150 RF flange
	Vent: 1/4" tube fitting
Others	Spring return handle



Note: Products of other specifications are available upon request.

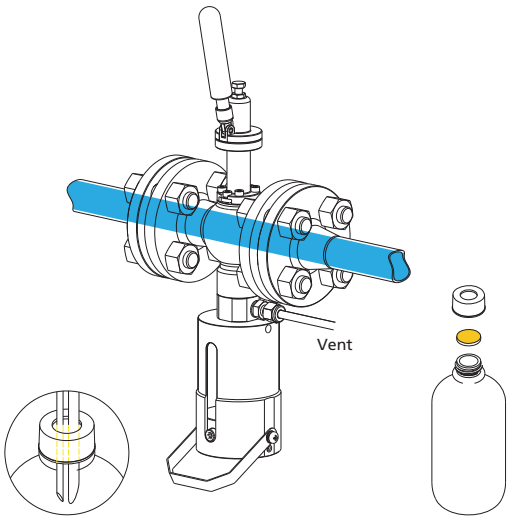
Typical Installation Mode



Operation

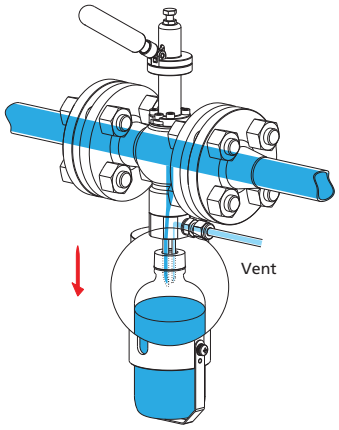
1 - Preparation

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.



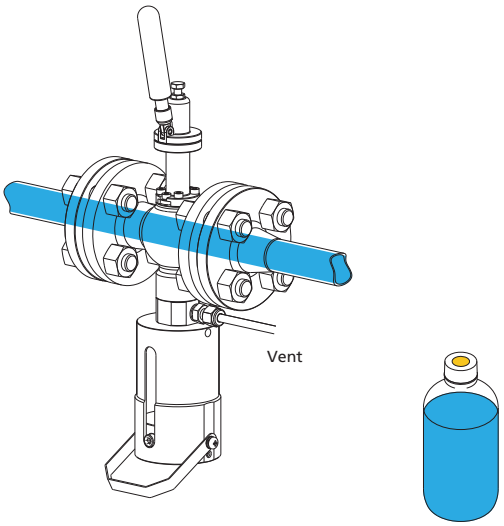
2 - Sampling

Open the in-line needle valve, allowing the sample to flow into the bottle. When the required amount has been taken, release the handle to close the valve automatically.



3 - Off

Remove the bottle retaining clip and take out the bottle from the sleeve. The septum reseals automatically to complete the sampling process.



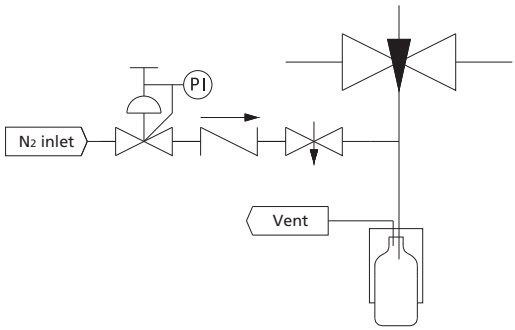
BLB3 - In-line and Continuous Needle Purge Type

Features

- Sampling from low pressure devices or process lines: 0-145 psig (0-10 bar)
- In-line sampling
- Sampling for viscous liquids
- Needle purge

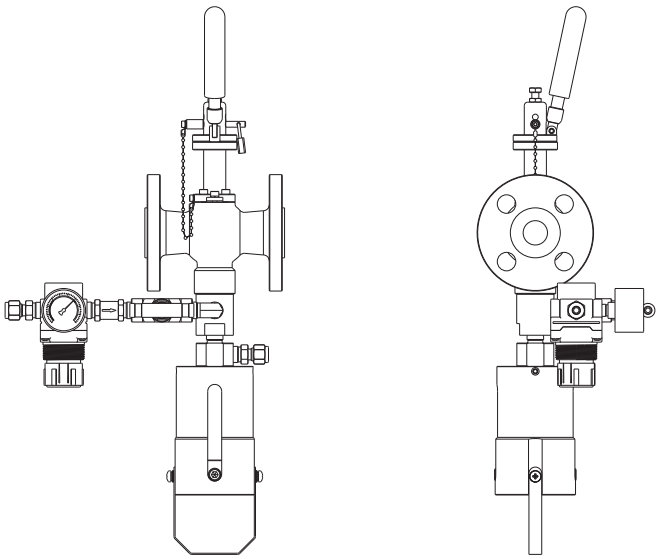
Basic Configuration

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	In-line needle valve: PTFE packing and PCTFE seat Max. working pressure: 276 psig @ 70°F (19 bar @ 20°C) Temperature range: -18°F to 298°F (-28°C to 148°C)
Nitrogen Branch	Nitrogen regulator
	CV Series check valves, NB Series needle valves
	Pressure gauge
Connections	Process: NPS 3/4, ANSI B16.5 Class 150 RF flange
	Vent/purge: 1/4" tube fitting
Others	Spring return handle, purge connection



Note: Products of other specifications are available upon request.

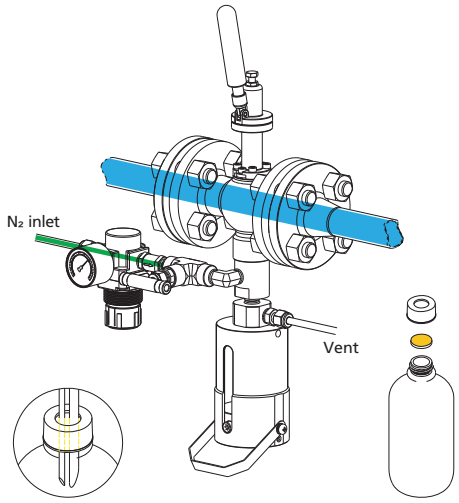
Typical Installation Mode



Operation

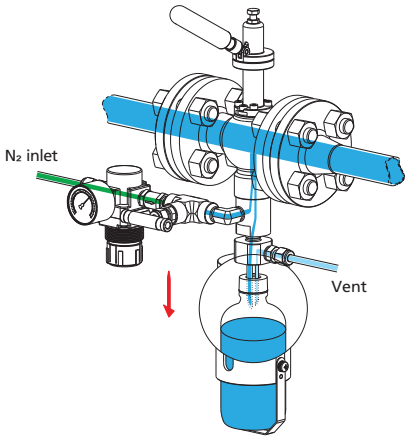
1 - Preparation

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.



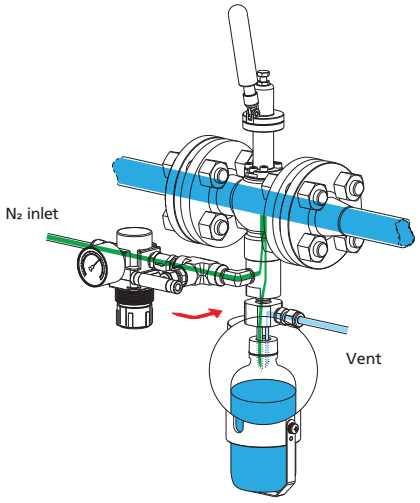
2 - Sampling

Open the in-line needle valve, allowing the sample to flow into the bottle. When the required amount has been taken, release the handle to close the valve automatically.



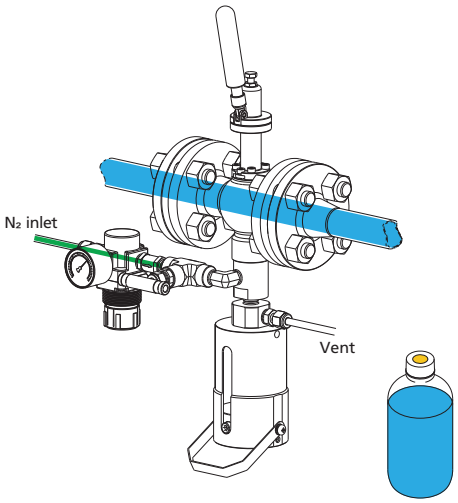
3 - Needle Purge

Open the valve on the Nitrogen branch, allowing Nitrogen to force the residual sample from the system into the bottle.



4 - Off

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



C Series

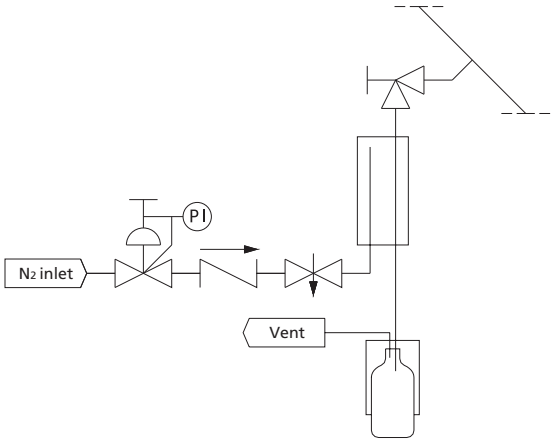
BLC1 - Purge Type

Features

- Sampling from vacuum, low or high pressure devices or process lines
- Sampling with a piston valve to ensure zero dead volume
- Sampling for highly viscous liquids
- Needle purge

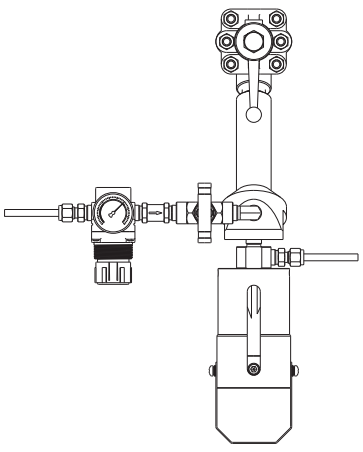
Basic Configuration

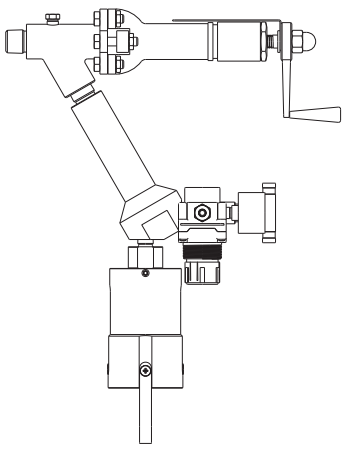
Wetted Material	316 SS
Sleeve Assembly	250 ml sleeve with bottle retaining clip
Needle Assembly	Process/vent needle ID: 1.4 mm (0.06")
Sampling Valve	Piston valve: PTFE seat Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C) Temperature range: 0°F to 450°F (-18°C to 232°C)
Nitrogen Branch	Nitrogen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

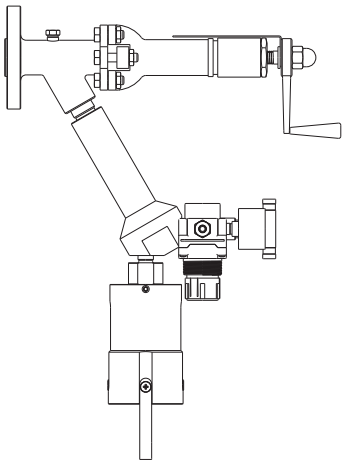


Note: Products of other specifications are available upon request.

Typical Installation Mode



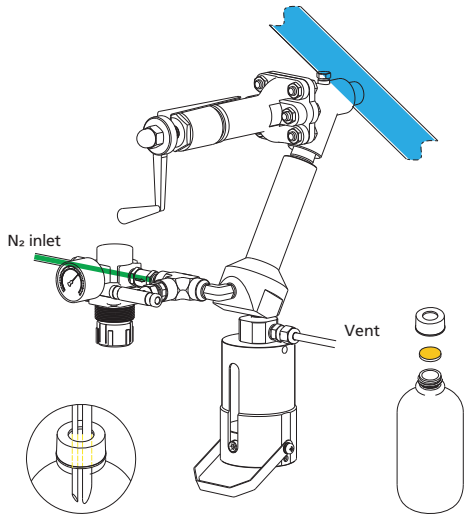




Operation

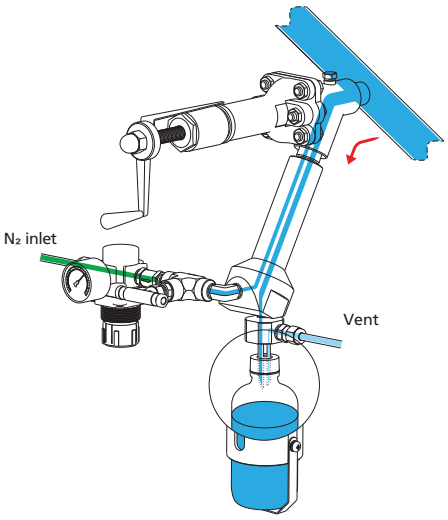
1 - Preparation

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.



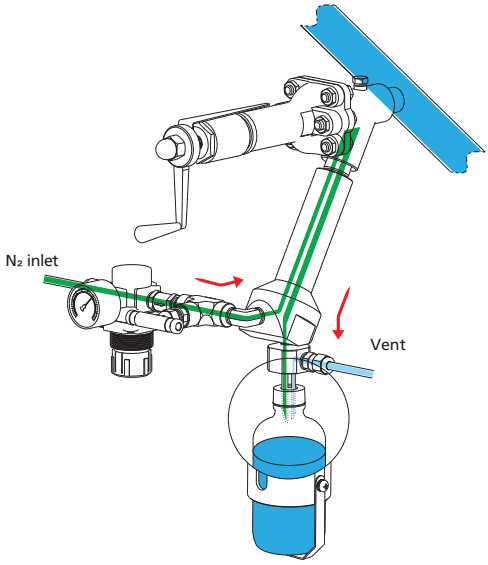
2 - Sampling

Open the piston valve, allowing the sample to flow into the bottle. When the required amount has been taken, close the piston valve.



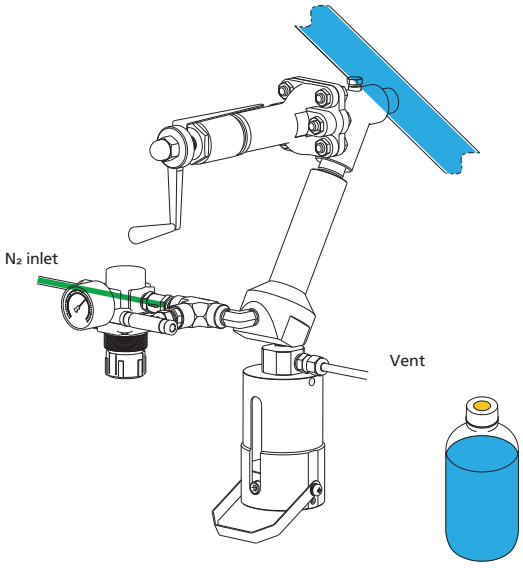
3 - Needle Purge

Open the valve on the Nitrogen branch, allowing Nitrogen to force the residual sample from the system into the bottle.



4 - Off

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



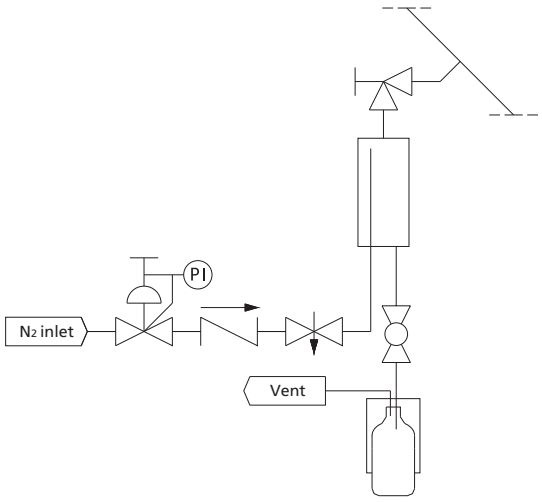
BLC2 - Fixed Volume and Purge Type

Features

- 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
- Needle purge

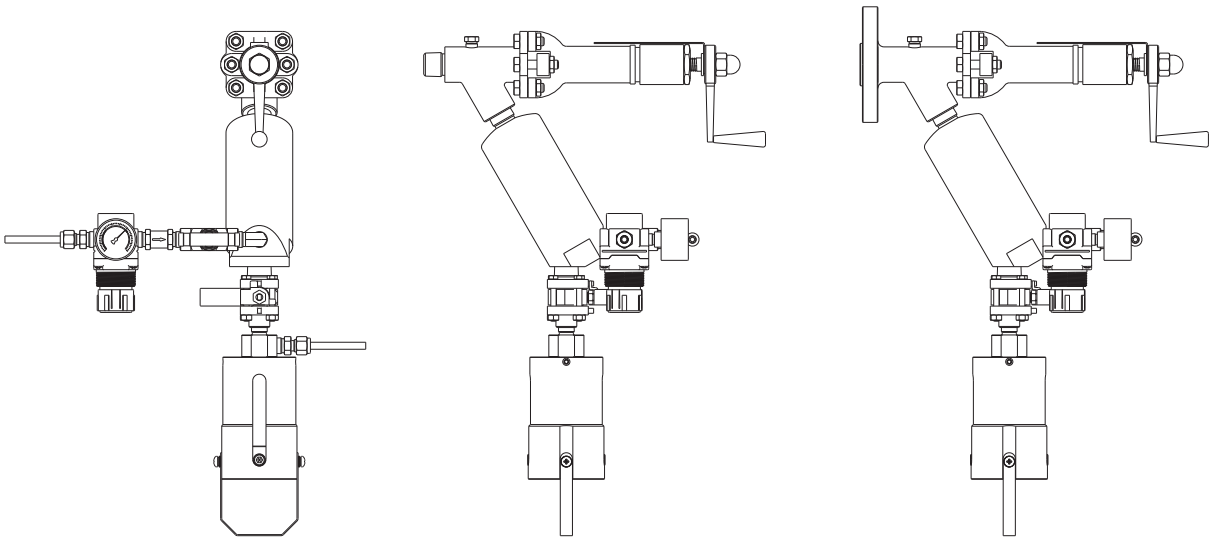
Basic Configuration

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)
Nitrogen Branch	Nitrogen regulator
	CV Series check valves, NB Series needle valves
	Pressure gauge
Connections	Process: 1/2" MNPT
	Vent/purge: 1/4" tube fitting



Note: Products of other specifications are available upon request.

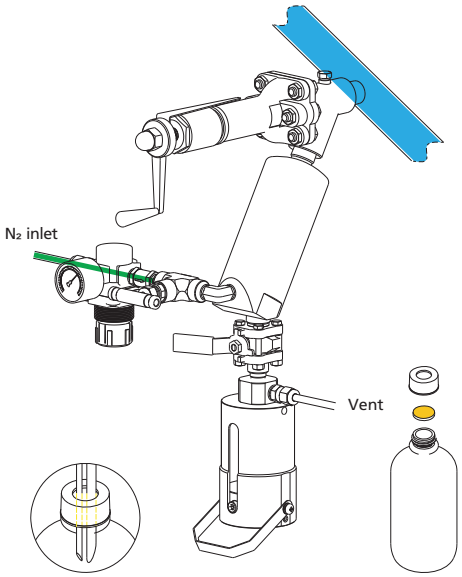
Typical Installation Mode



Operation

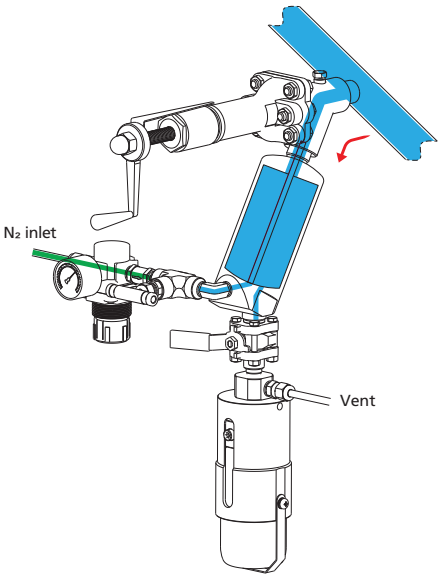
1 - Preparation

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.



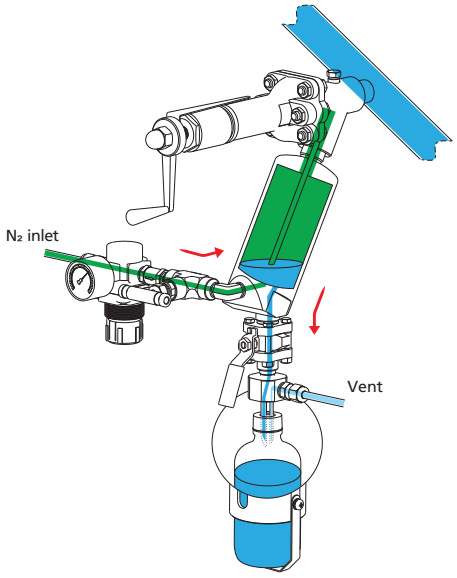
2 - Pre-sampling

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.



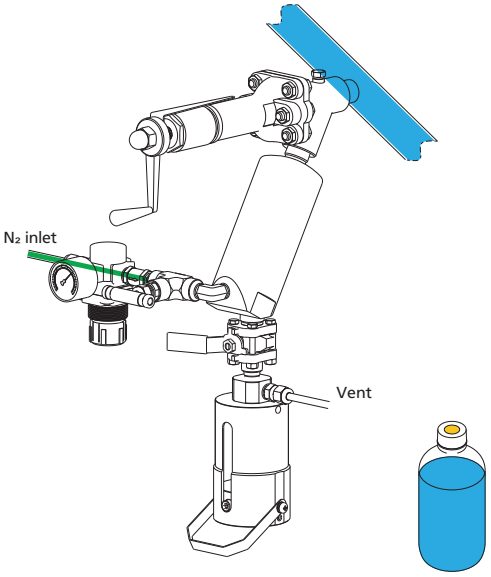
3 - Sampling

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.



4 - 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.



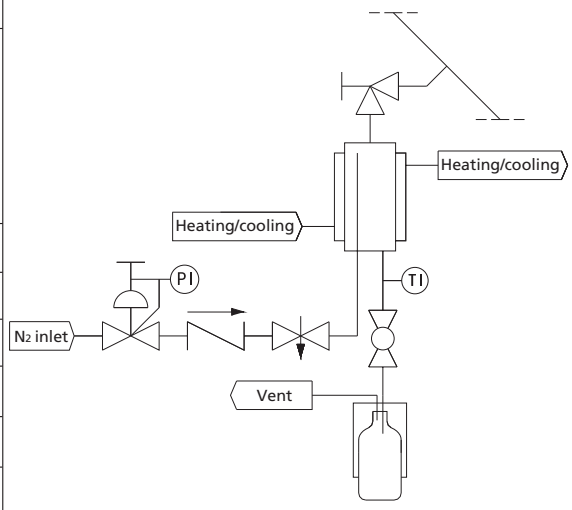
BLC3 - Fixed Volume Type with Heating/Cooling Jacket

Features

- 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
- Heating/cooling jacket to ensure sampling within a certain range of temperature
- Needle purge

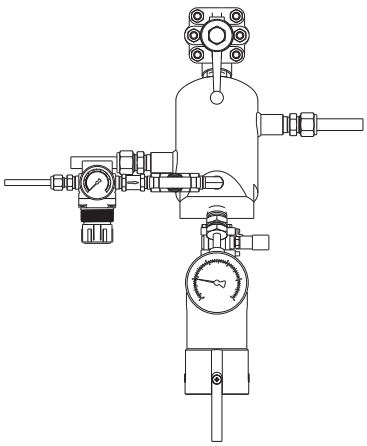
Basic Configuration

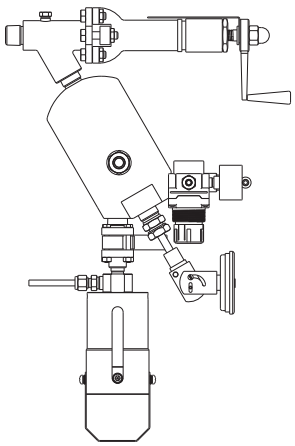
Wetted Material	316 SS
Sleeve Assembly	250 ml sleeve with bottle retaining clip
Needle Assembly	Process/vent needle ID: 1.4 mm (0.06")
Sampling Valve	Piston valve: PTFE seat Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C) Temperature range: 0°F to 450°F (-18°C to 232°C)
Nitrogen Branch	Nitrogen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

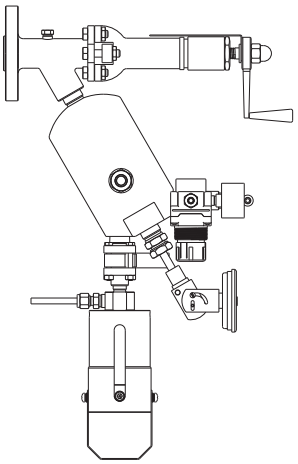


Note: Products of other specifications are available upon request.

Typical Installation Mode



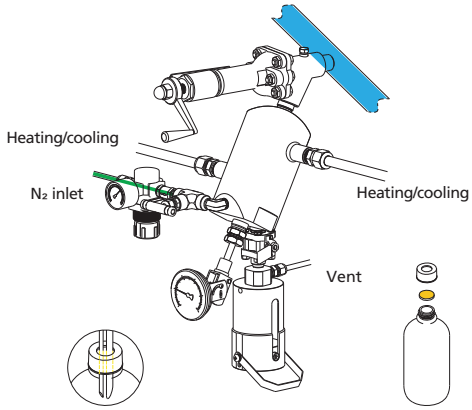




Operation

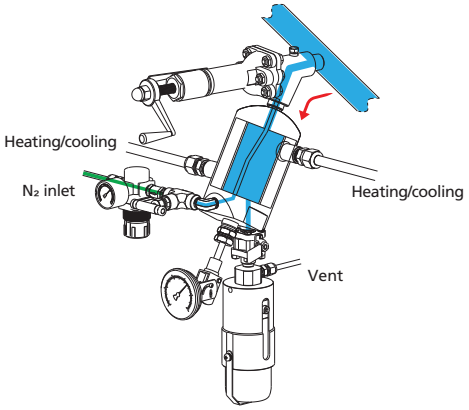
1 - Preparation

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.



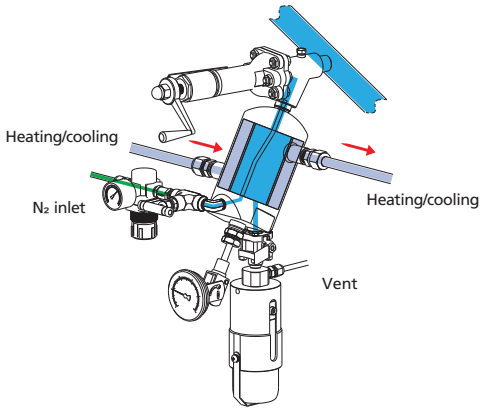
2 - Pre-sampling

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.



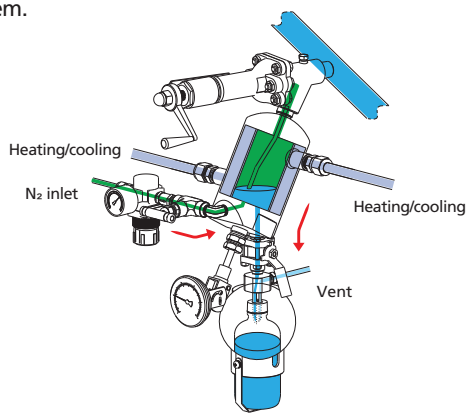
3 - Heating/cooling

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



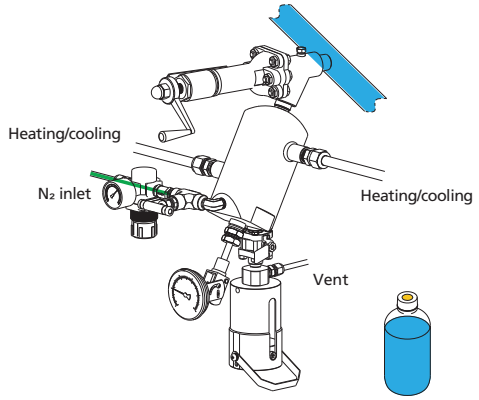
4 - Sampling

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.



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.



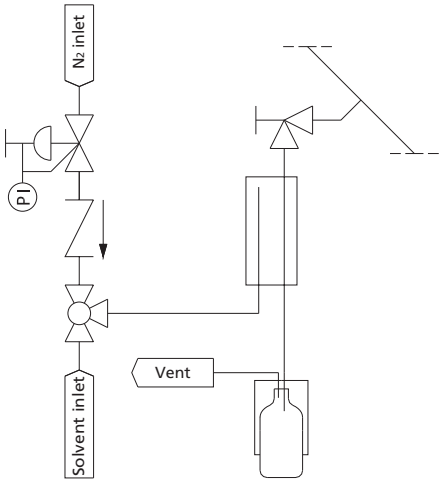
BLC4 - Solvent Purge Type

Features

- Sampling from vacuum, low or high pressure devices or process lines
- Sampling with a piston valve to ensure zero dead volume
- Sampling for highly viscous liquids
- Needle purge and solvent purge

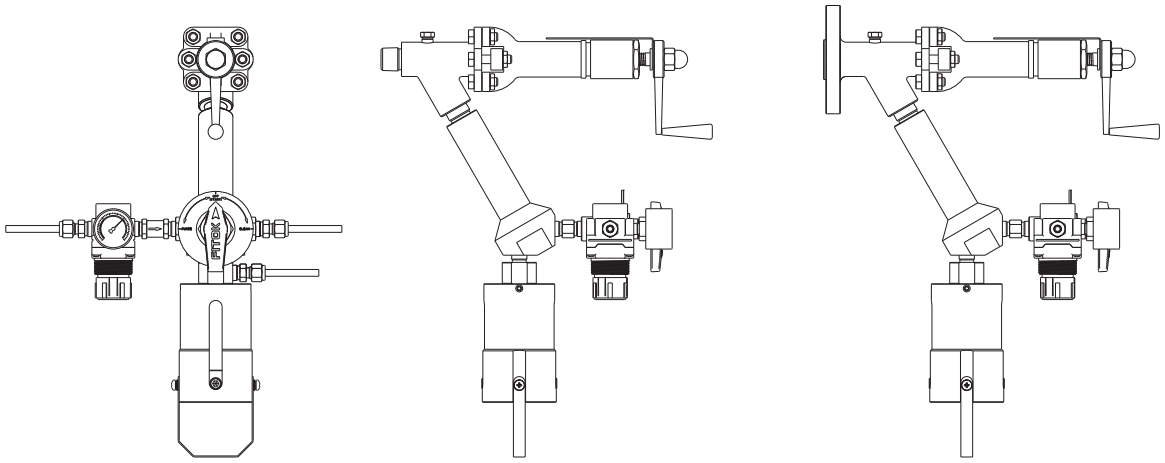
Basic Configuration

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)
Purge Branch	Nitrogen regulator
	CV Series check valves, BF Series 3-way ball valves
	Pressure gauge
Connections	Process: 1/2" MNPT
	Vent/purge/solvent: 1/4" tube fitting



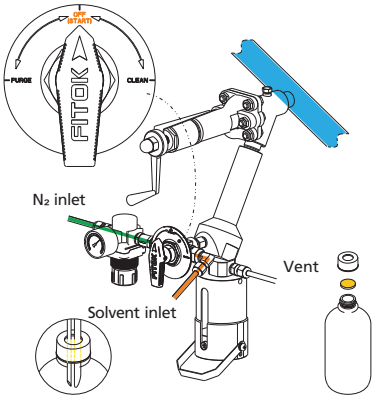
Note: Products of other specifications are available upon request.

Typical Installation Mode

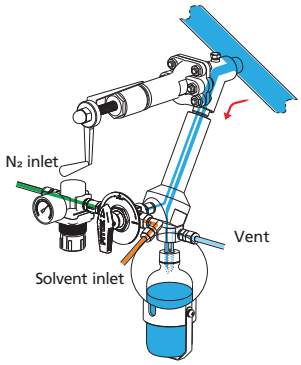


Operation

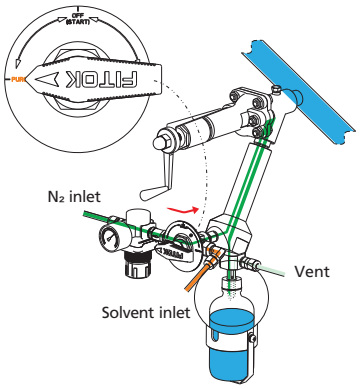
1 - Preparation
Place a new septum on the sample bottle. Insert the bottle with cap and septum into the sleeve until the septum is pierced by the needles. Swing down the bottle retaining clip.



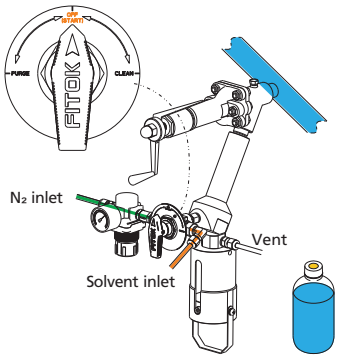
2 - Sampling
Open the piston valve, allowing the sample to flow into the bottle. When the required amount has been taken, close the piston valve.



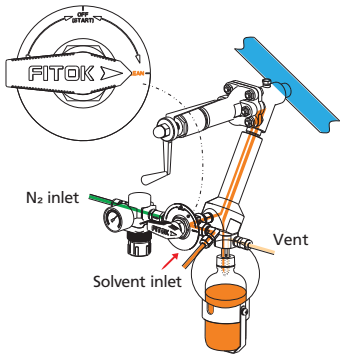
3 - Nitrogen Purge
Turn the handle to the “PURGE” position, allowing Nitrogen to force the residual sample from the system into the bottle.



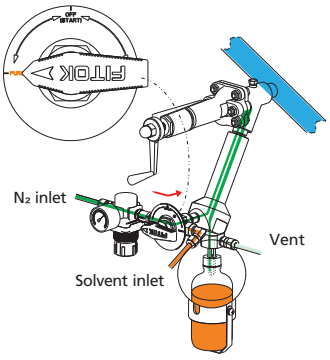
4 - Off
Turn the handle to the “OFF” position. Remove the bottle retaining clip and take out the bottle from the sleeve. The septum reseals automatically.



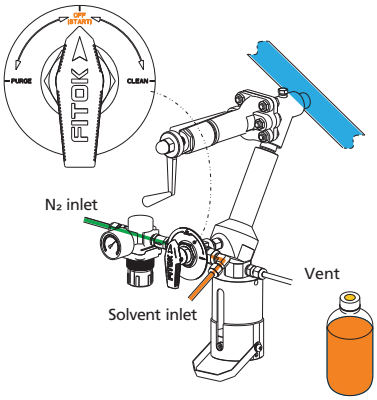
5 - Solvent Purge
Replace the bottle with a new one. Turn the handle to the “CLEAN” position, allowing the solvent to flow through the system into the bottle.



6 - Nitrogen Purge
Turn the handle to the “PURGE” position, allowing Nitrogen to force the residual solvent from the system into the sample bottle.



7 - Off
Turn the handle to the “OFF” position. Remove the bottle retaining clip and take out the bottle from the sleeve. The septum reseals automatically to complete solvent purging process.



D Series

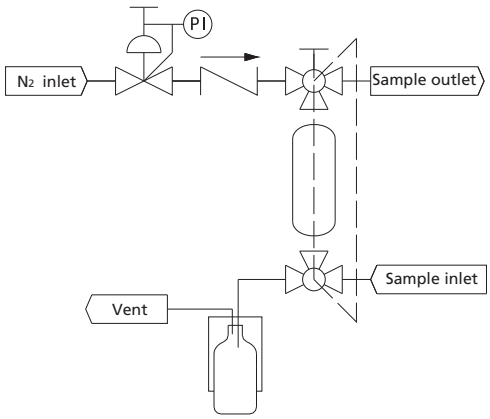
BLD1 - Threaded Connection Type

Features

- Sampling from medium or high pressure devices or process lines
- Fixed volume sampling
- System purge and needle purge
- Easy operation with a single handle by linkage valve

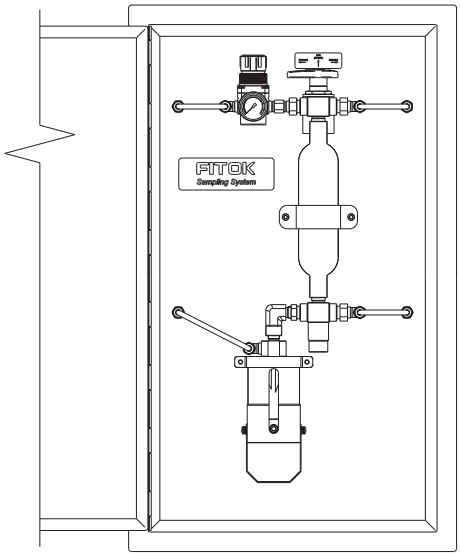
Basic Configuration

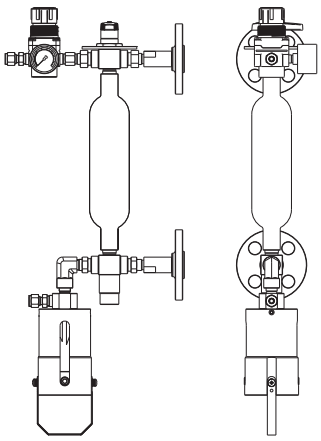
Wetted Material	316 SS
Sleeve Assembly	250 ml sleeve with bottle retaining clip
Needle Assembly	Process/vent needle ID: 1.4 mm (0.06")
Sampling Valve	BF Series 3-way ball valves (rod linkage): PTFE seat and FKM O-ring Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C) Temperature range: 0°F to 450°F (-18°C to 232°C)
Nitrogen Branch	Nitrogen regulator
	CV Series check valves
	Pressure gauge
Connections	1/4" FNPT
Others	Sample chamber (200 ml)



Note: Products of other specifications are available upon request.

Typical Installation Mode

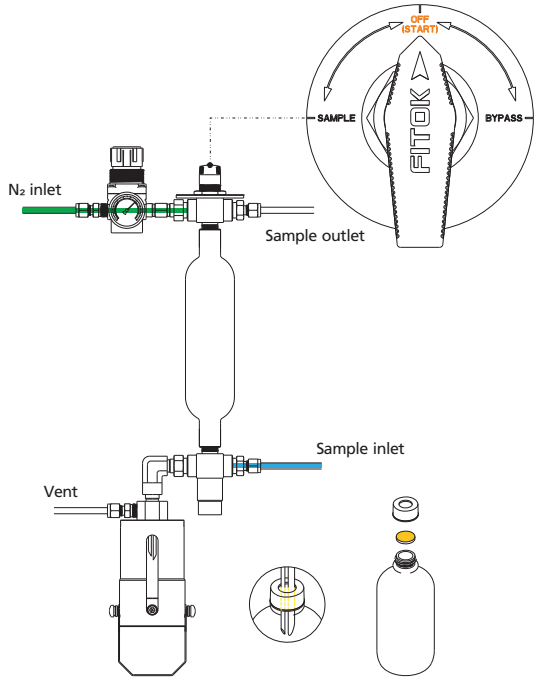




Operation

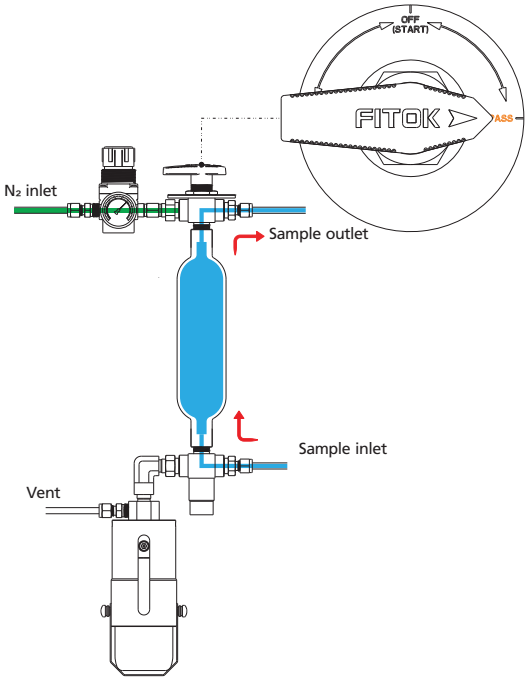
1 - Preparation

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.



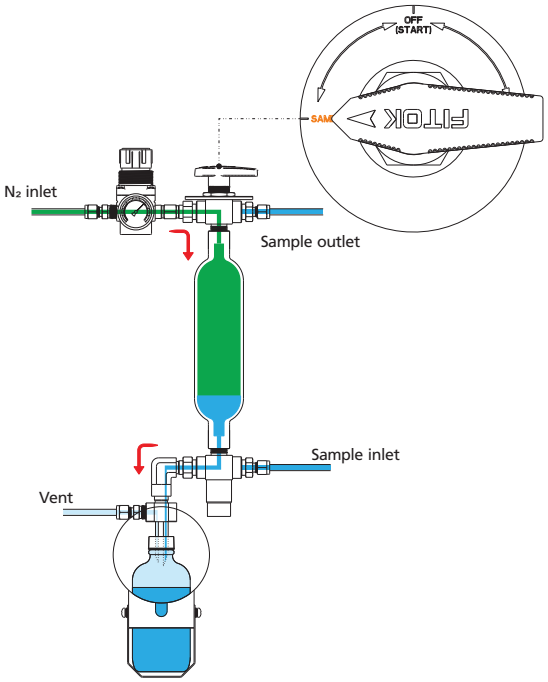
2 - System Purge

Turn the handle to the “BYPASS” position, allowing the sample to flow continuously through the sample chamber. Hold for a period of time to ensure representative sampling.



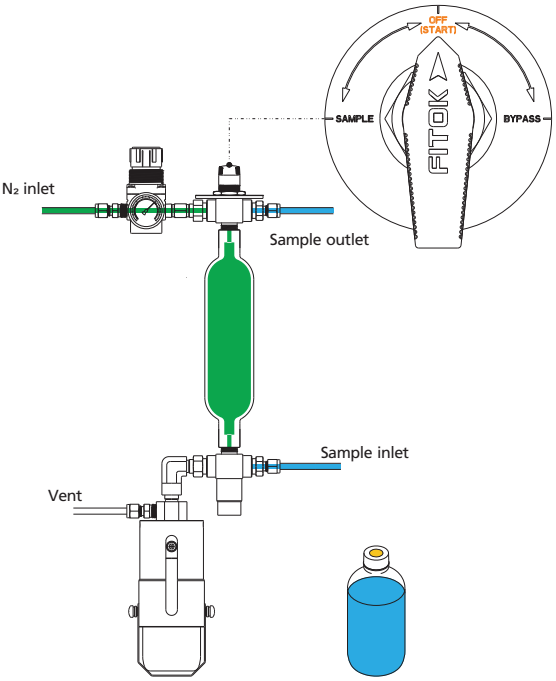
3 - Sampling

Turn the handle to the “SAMPLE” position, allowing Nitrogen to force the sample from the sample chamber into the bottle and purge the sample chamber and needle assembly. The amount of sample depends on the sample chamber volume.



4 - Off

Turn the handle to the “OFF” position to close the sampling system. Remove the bottle retaining clip and take out the bottle from the sleeve. The septum reseals automatically to complete the sampling process.



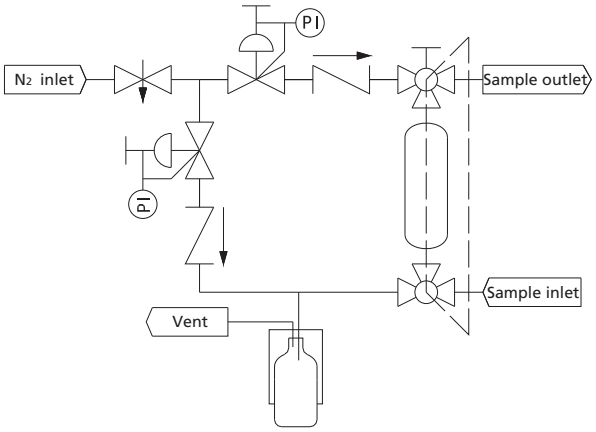
BLD2 - Continuous Needle Purge Type

Features

- Sampling from medium or high pressure devices or process lines
- Fixed volume sampling
- Continuous needle purge and system purge
- Easy operation with a single handle by linkage valve

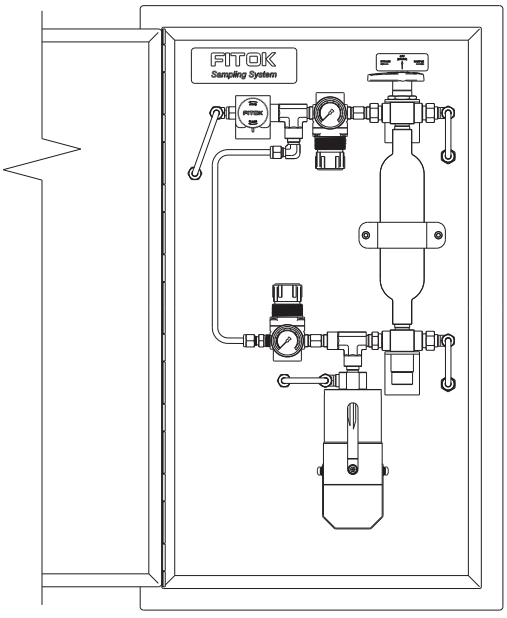
Basic Configuration

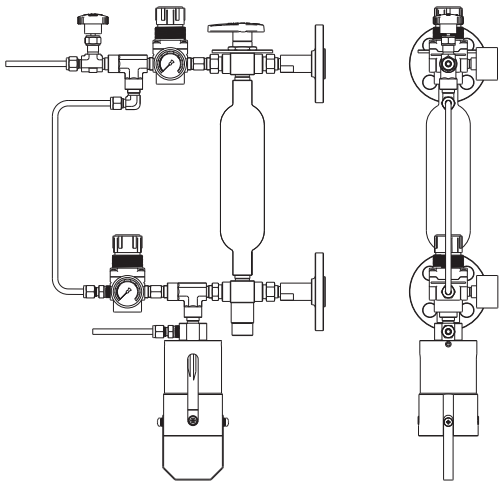
Wetted Material	316 SS
Sleeve Assembly	250 ml sleeve with bottle retaining clip
Needle Assembly	Process/vent needle ID: 1.4 mm (0.06")
Sampling Valve	BF Series 3-way ball valves (rod linkage): PTFE seat and FKM O-ring Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C) Temperature range: 0°F to 450°F (-18°C to 232°C)
Nitrogen Branch	Nitrogen regulator
	CV Series check valves, NB series needle valves
	Pressure gauge
Connections	1/4" tube fitting
Others	Sample chamber (200 ml)



Note: Products of other specifications are available upon request.

Typical Installation Mode

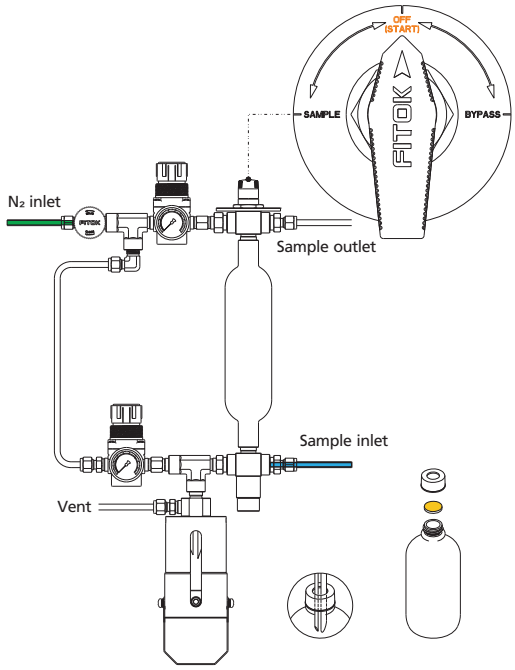




Operation

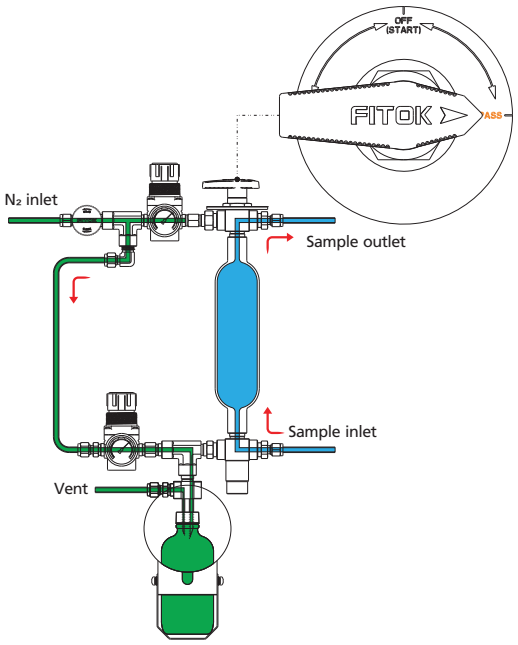
1 - Preparation

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.



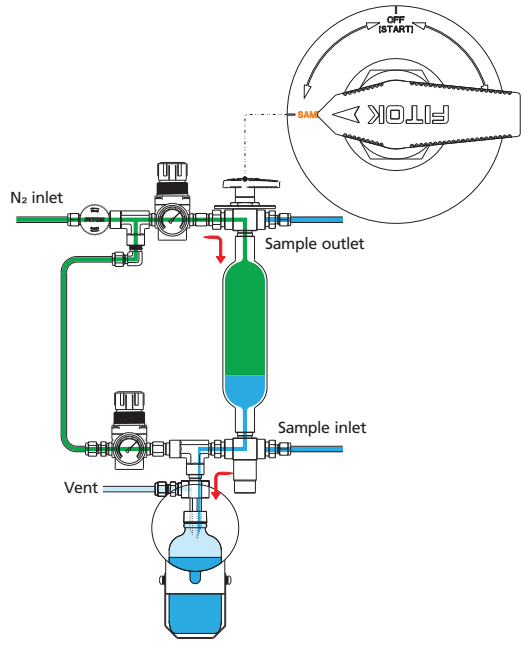
2 - Needle Purge and System Purge

Open the needle valve, allowing Nitrogen to purge the needle assembly and bottle continuously. Turn the handle to the "BYPASS" position to allow a continuous flow of sample through the sample chamber. Hold for a period of time to ensure representative sampling.



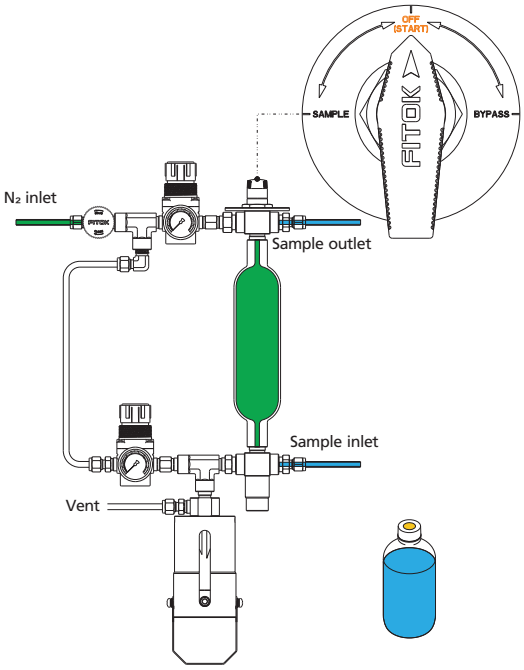
3 - Sampling

Turn the handle to the "SAMPLE" position, allowing Nitrogen to force the sample from the sample chamber into the bottle and purge the sample chamber and needle assembly. The amount of sample depends on the sample chamber volume.



4 - Off

Close the needle valve. Turn the handle to the "OFF" position to close the sampling system. Remove the bottle retaining clip and take out the bottle from the sleeve. The septum reseals automatically to complete the sampling process.



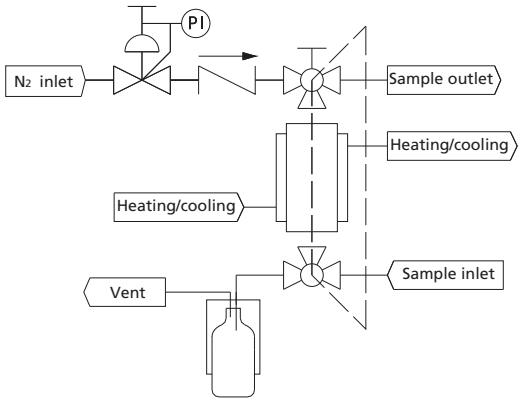
BLD3 - Heating/Cooling Type

Features

- Sampling from medium or high pressure devices or process lines
- Fixed volume sampling
- System purge and needle purge
- Heating/cooling jacket to ensure sampling within a certain range of temperature
- Easy operation with a single handle by linkage valve

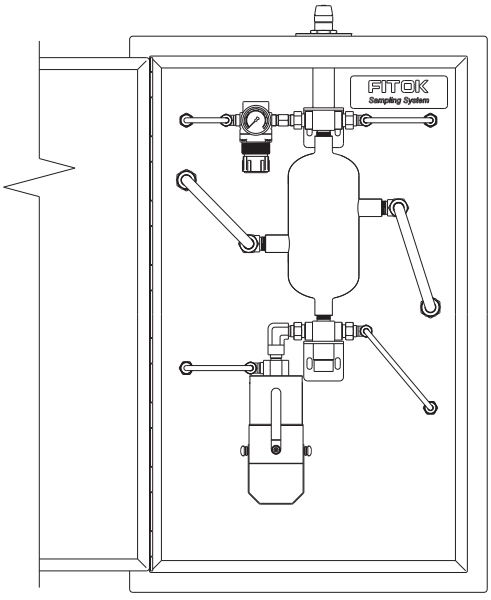
Basic Configuration

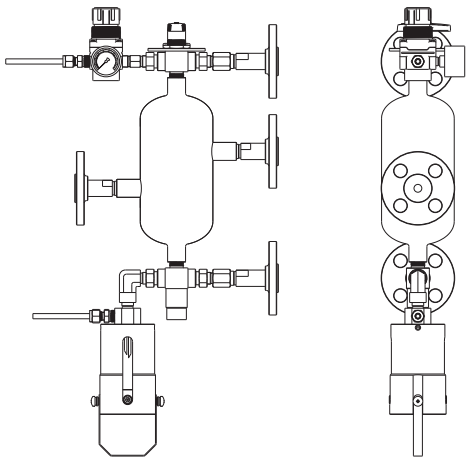
Wetted Material	316 SS
Sleeve Assembly	250 ml sleeve with bottle retaining clip
Needle Assembly	Process/vent needle ID: 1.4 mm (0.06")
Sampling Valve	BF Series 3-way ball valves (rod linkage): PTFE seat and FKM O-ring Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C) Temperature range: 0°F to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



Note: Products of other specifications are available upon request.

Typical Installation Mode

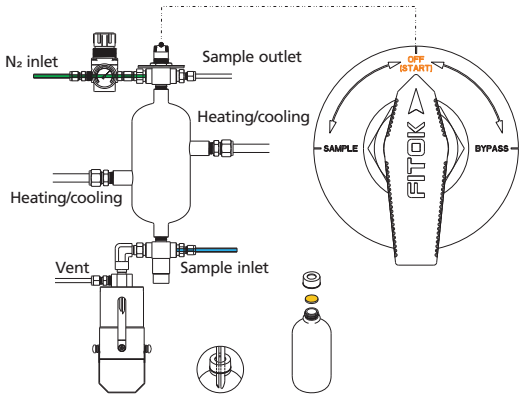




Operation

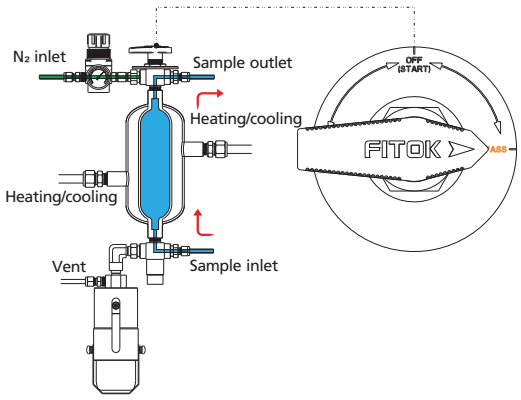
1 - Preparation

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.



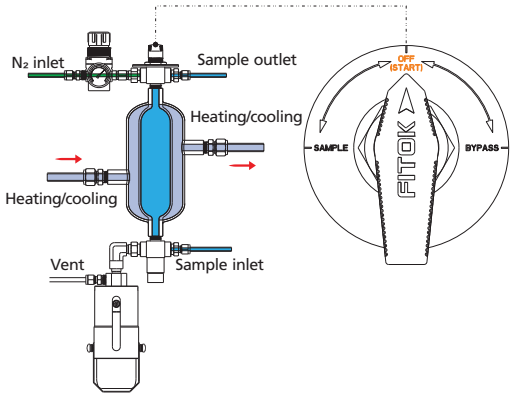
2 - System Purge

Turn the handle to the “BYPASS” position, allowing the sample to flow continuously through the sample chamber. Hold for a period of time to ensure representative sampling.



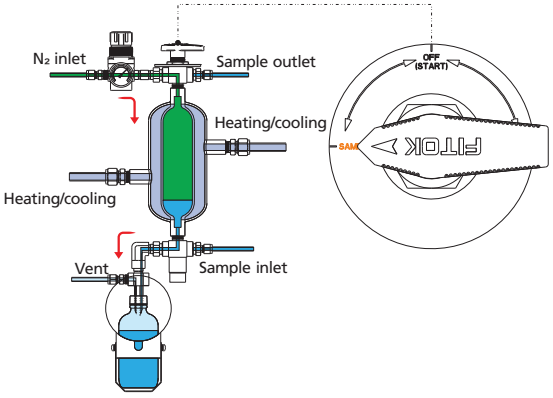
3 - Heating/cooling

Turn the handle to the “OFF” position, allowing the heating/cooling fluid to flow through the heating/cooling jacket. Hold for a sufficient time until the sample reaches the required temperature.



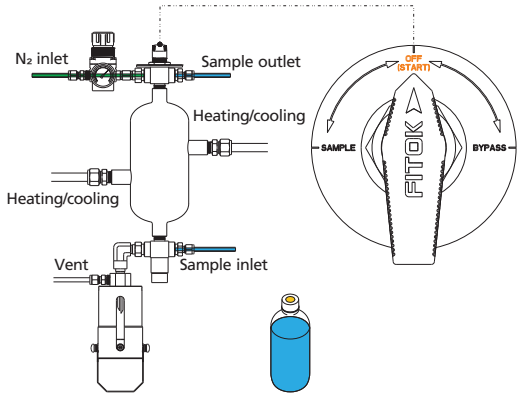
4 - Sampling

Turn the handle to the “SAMPLE” position, allowing Nitrogen to force the sample from the sample chamber into the bottle and purge the sample chamber and needle assembly. The amount of sample depends on the sample chamber volume.



5 - Off

Turn the handle to the “OFF” position to close the sampling system. Remove the bottle retaining clip and take out the sample bottle from the sleeve. The septum reseals automatically to complete the sampling process.



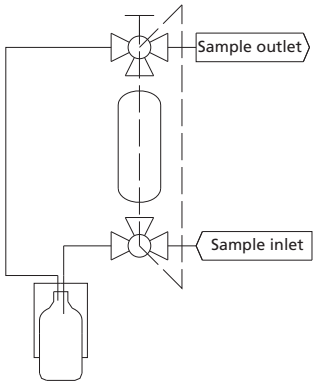
BLD4 - Sampling by Gravity Type

Features

- Sampling from medium or high pressure devices or process lines
- Fixed volume sampling
- System purge
- Sampling by gravity without Nitrogen purge
- Easy operation with a single handle by linkage valve

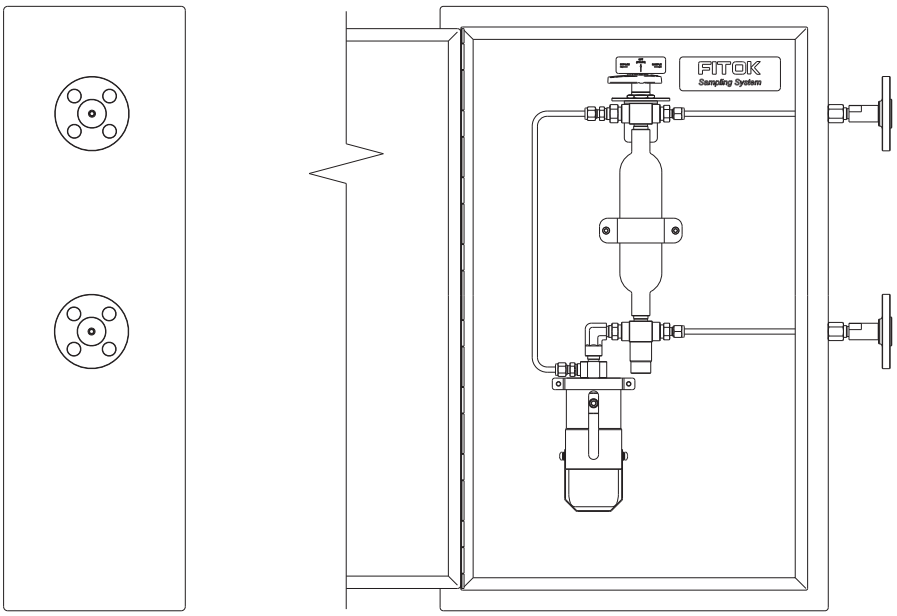
Basic Configuration

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	BF Series 3-way ball valves (rod linkage): PTFE seat and FKM O-ring Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C) Temperature range: 0°F to 450°F (-18°C to 232°C)
Connections	1/4" tube fitting
Others	Sample chamber (200 ml)



Note: Products of other specifications are available upon request.

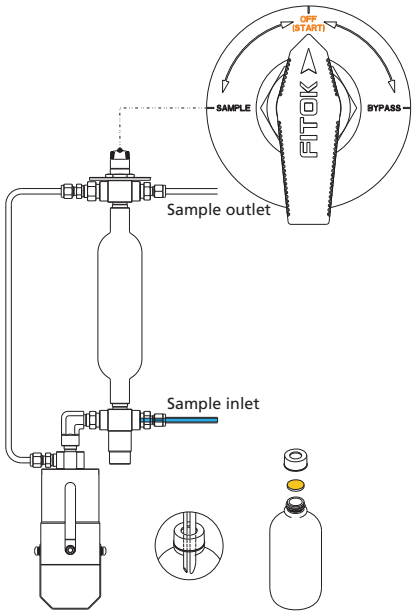
Typical Installation Mode



Operation

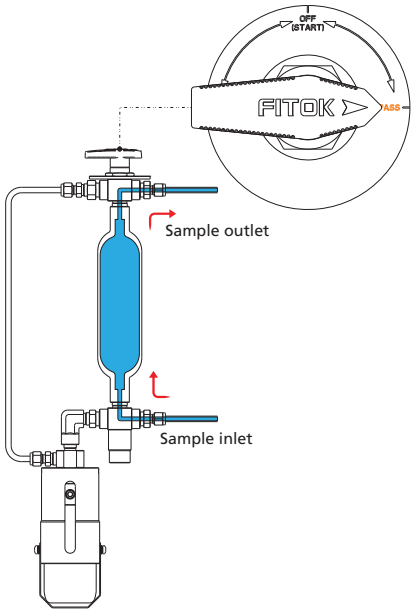
1 - Preparation

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.



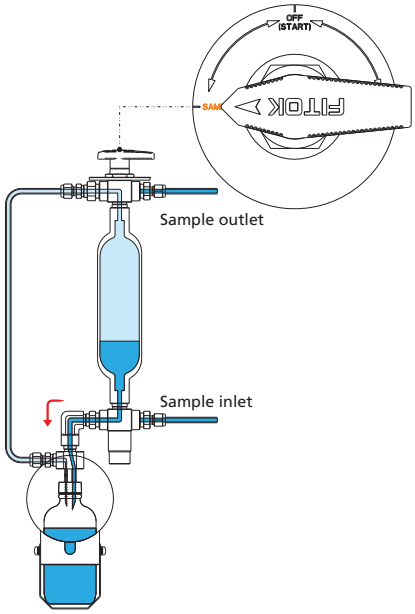
2 - System Purge

Turn the handle to the “BYPASS” position, allowing the sample to flow continuously through the sample chamber. Hold for a period of time to ensure representative sampling.



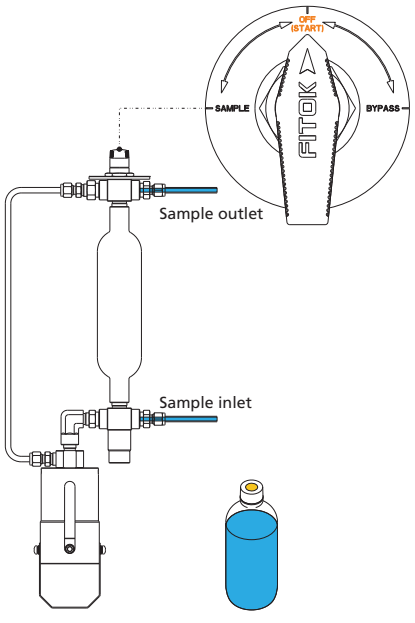
3 - Sampling

Turn the handle to the “SAMPLE” position, allowing the sample to flow into the bottle by gravity. Hold this position for a sufficient time. The amount of sample depends on the sample chamber volume.



4 - Off

Turn the handle to the “OFF” position to close the sampling system. Remove the bottle retaining clip and take out the bottle from the sleeve. The septum reseals automatically to complete the sampling process.



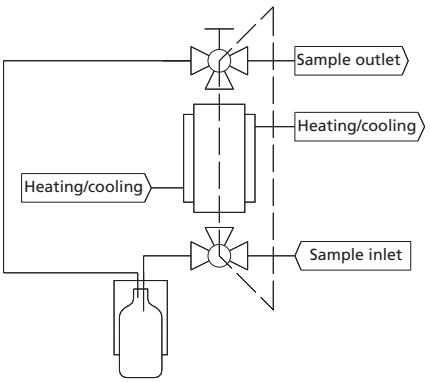
BLD5- Sampling by Gravity Type with Heating/Cooling Jacket

Features

- Sampling from medium or high pressure devices or process lines
- Fixed volume sampling
- System purge
- Sampling by gravity without Nitrogen purge
- Heating/cooling jacket to ensure sampling within a certain range of temperature
- Easy operation with a single handle by linkage valve

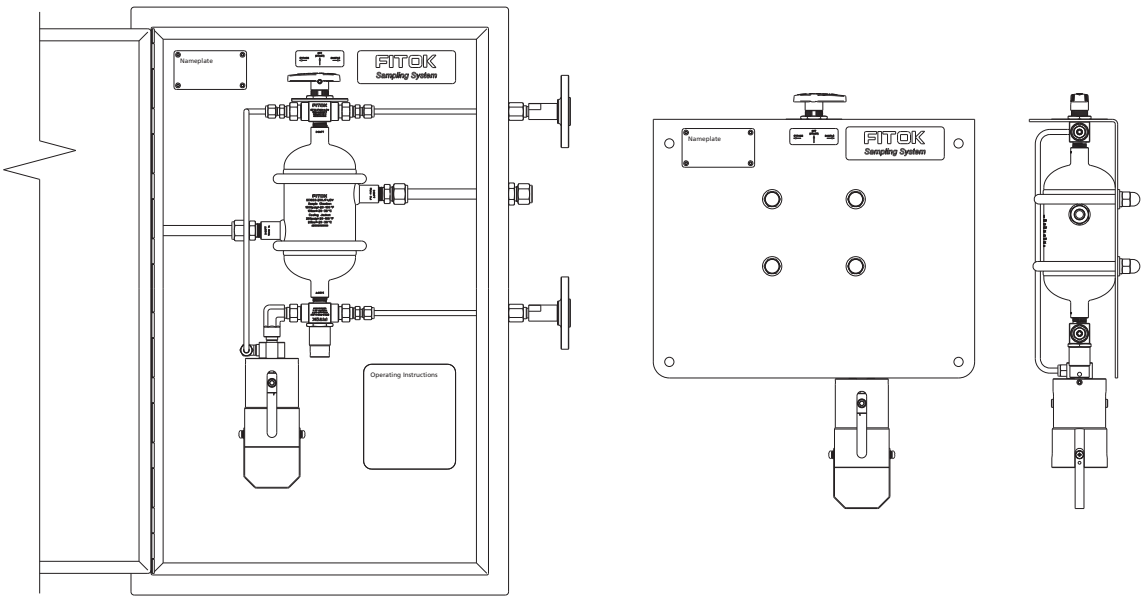
Basic Configuration

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	BF Series 3-way ball valves (rod linkage): PTFE seat and FKM O-ring Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C) Temperature range: 0°F to 450°F (-18°C to 232°C)
Connections	Process: 1/4" tube fitting
	Heating/cooling: 3/8" FNPT
Others	Heating/cooling jacket, sample chamber (200 ml)



Note: Products of other specifications are available upon request.

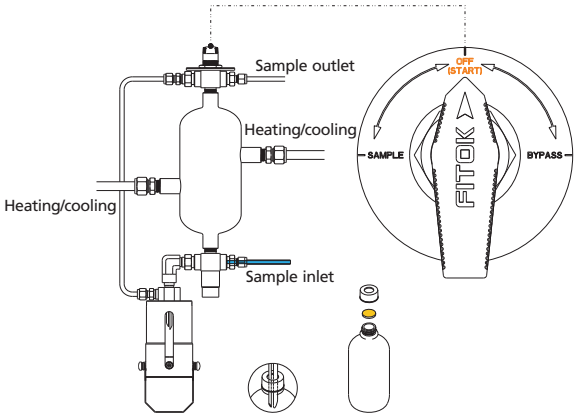
Typical Installation Mode



Operation

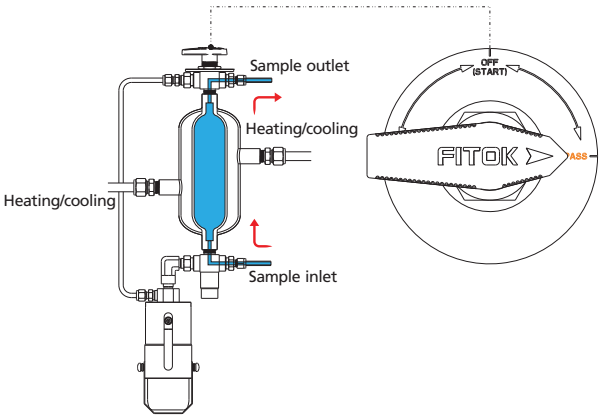
1 - Preparation

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.



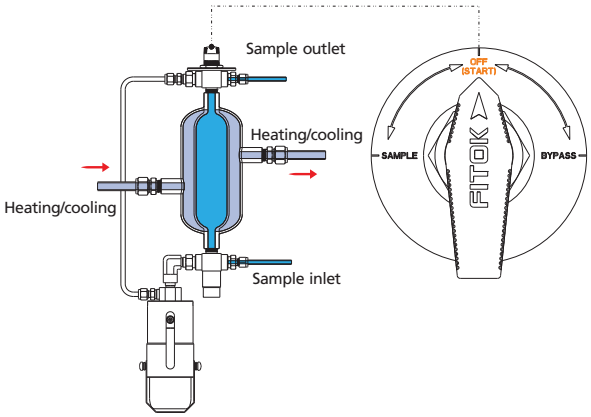
2 - System Purge

Turn the handle to the “BYPASS” position, allowing the sample to flow continuously through the sample chamber. Hold for a period of time to ensure representative sampling.



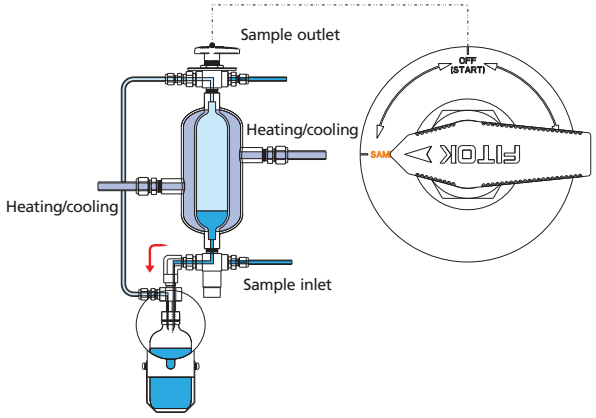
3 - Heating/cooling

Turn the handle to the “OFF” position, allowing the heating/cooling fluid to flow through the heating/cooling jacket. Hold for a sufficient time until the sample reaches the required temperature.



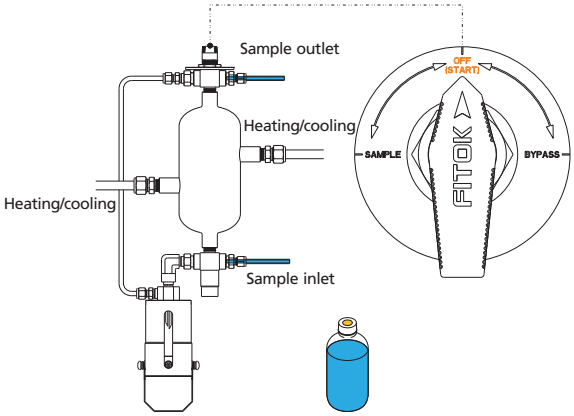
4 - Sampling

Turn the handle to the “SAMPLE” position, allowing the sample to flow into the bottle by gravity. Hold this position for a sufficient time. The amount of sample depends on the sample chamber volume.



5 - Off

Turn the handle to the “OFF” position to close the sampling system. Remove the bottle retaining clip and take out the bottle from the sleeve. The septum reseals automatically to complete the sampling process.



E Series

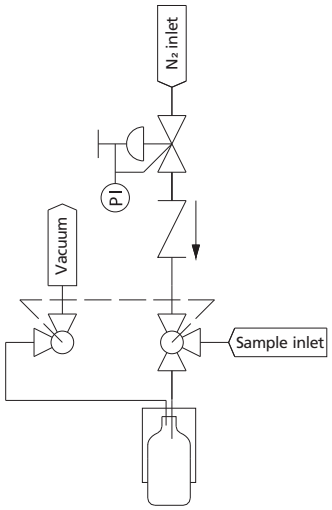
BLE1 - Back Purge Type with Vacuum Connection

Features

- Sampling from process lines at atmospheric pressure or vacuum condition
- Back purge
- Easy operation with a single handle by linkage valve

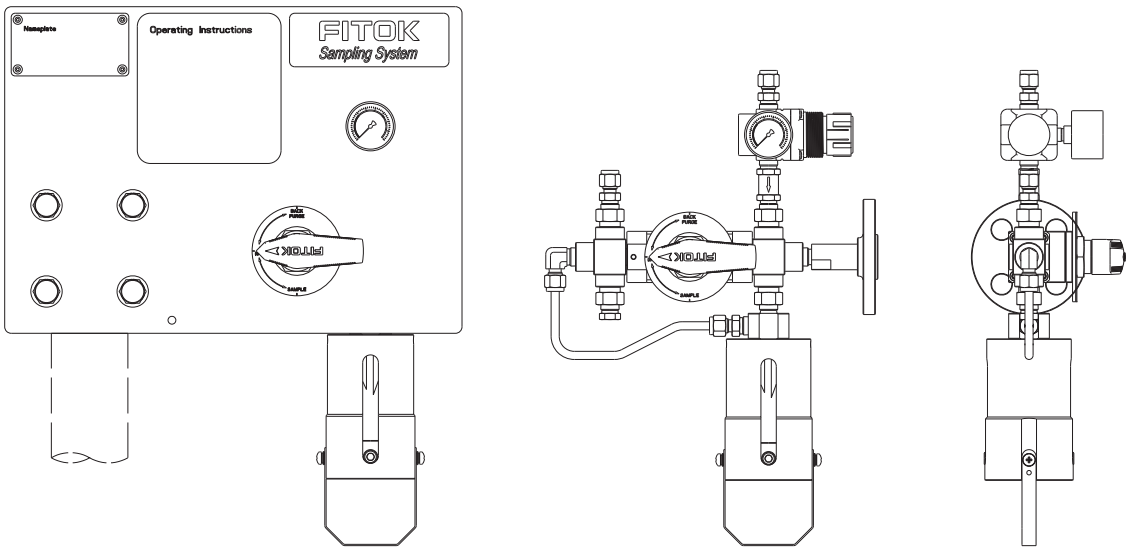
Basic Configuration

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	BF Series 3-way ball valves (gearbox linkage): PTFE seat and FKM O-ring Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C) Temperature range: 0°F to 450°F (-18°C to 232°C)
Nitrogen Branch	Nitrogen regulator
	CV Series check valves
	Pressure gauge
Connections	1/4" tube fitting



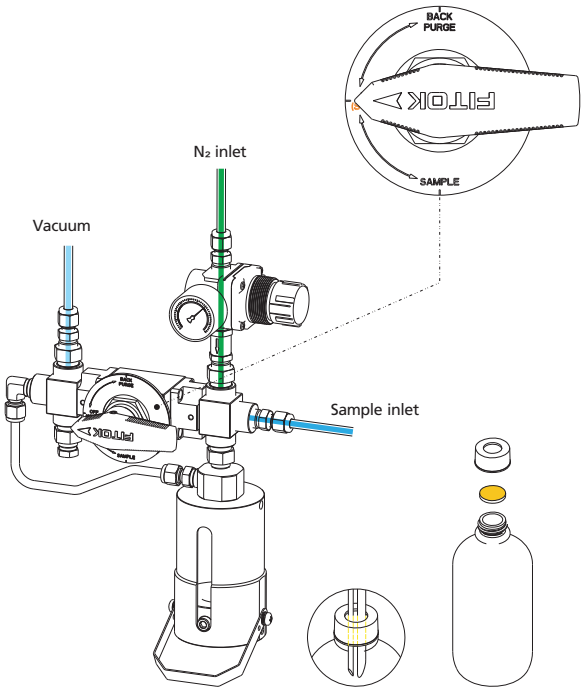
Note: Products of other specifications are available upon request.

Typical Installation Mode

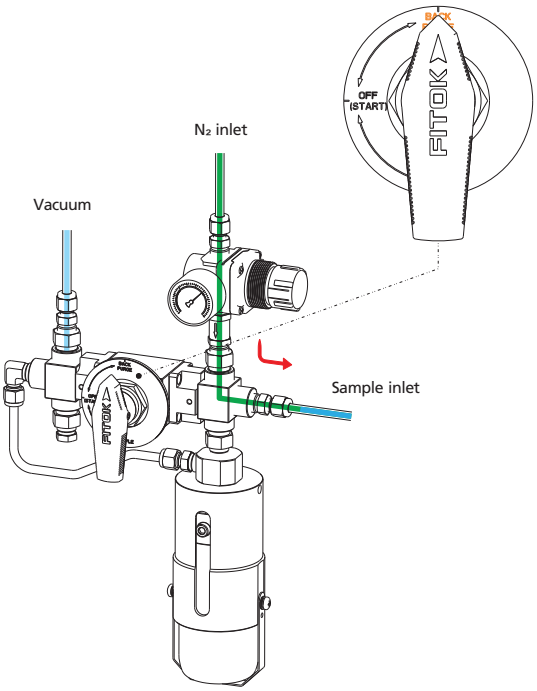


Operation

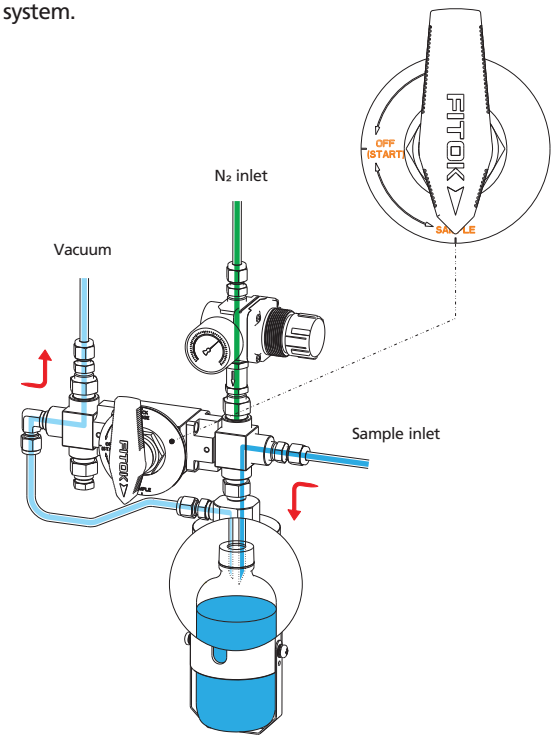
1 - Preparation
Place a new septum on the sample bottle. Insert the bottle with cap and septum into the sleeve until the septum is pierced by the needles. Swing down the bottle retaining clip.



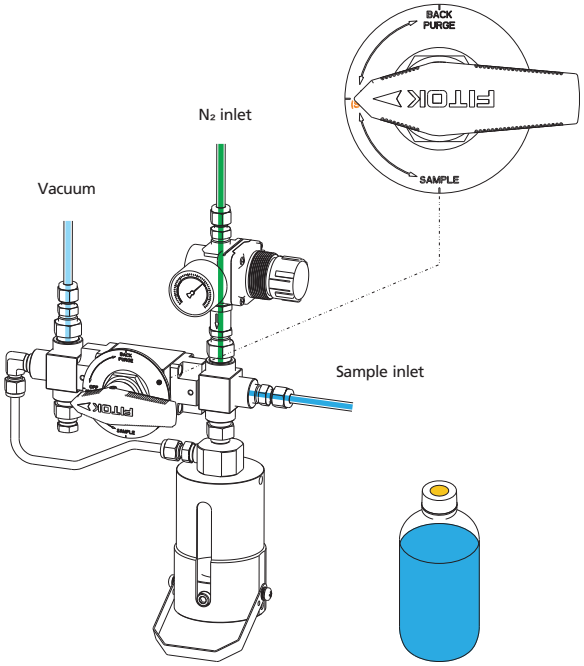
2 - Back Purge
Turn the handle to the “BACK PURGE” position, allowing Nitrogen to force the residual sample from the system into the process line to ensure representative sampling.



3 - Sampling
Turn the handle to the "SAMPLE" position, connecting the bottle with the vacuum connection to create a vacuum in the sample bottle. The sample flows into the bottle. When the required amount has been taken, turn the handle to the “OFF” position to close the sampling system.



4 - Off
Remove the bottle retaining clip and take out the bottle from the sleeve. The septum reseals automatically to complete the sampling process.



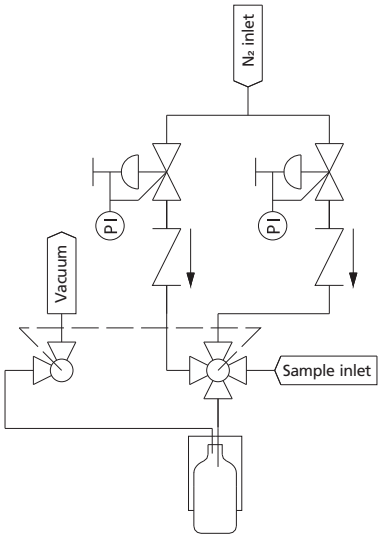
BLE2 - Back and Needle Purge Type with Vacuum Connection

Features

- Sampling from process lines at atmospheric pressure or vacuum condition
- Back purge and needle purge
- Easy operation with a single handle by linkage valve

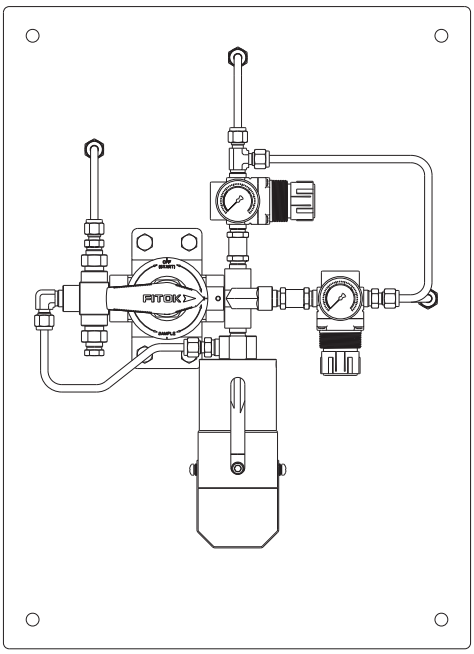
Basic Configuration

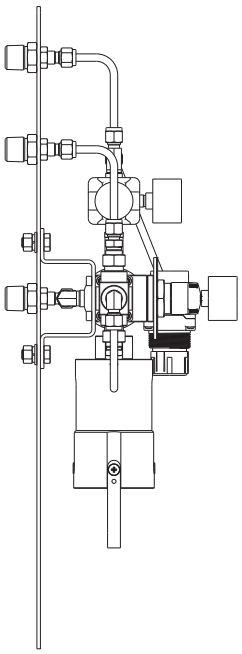
Wetted Material	316 SS
Sleeve Assembly	250 ml sleeve with bottle retaining clip
Needle Assembly	Process/vent needle ID: 1.4 mm (0.06")
Sampling Valve	BF Series 3-way ball valves and BO Series 4-way ball valves (gearbox linkage): PTFE seat Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C) Temperature range: 0°F to 300°F (-18°C to 148°C)
Nitrogen Branch	Nitrogen regulator
	CV Series check valves
	Pressure gauge
Connections	1/4" tube fitting



Note: Products of other specifications are available upon request.

Typical Installation Mode

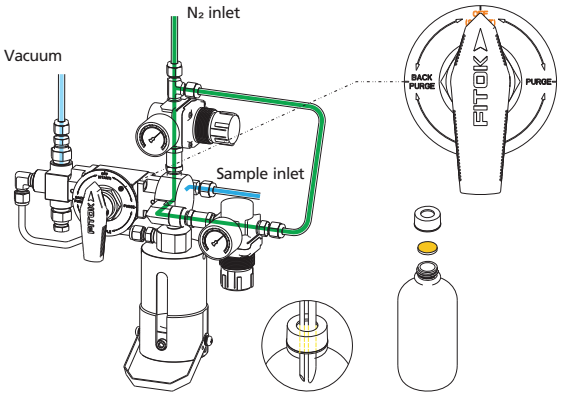




Operation

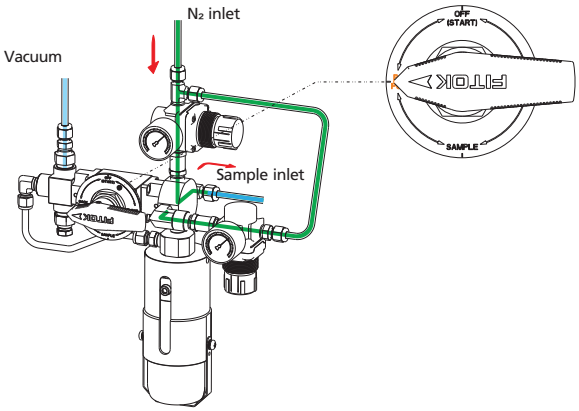
1 - Preparation

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.



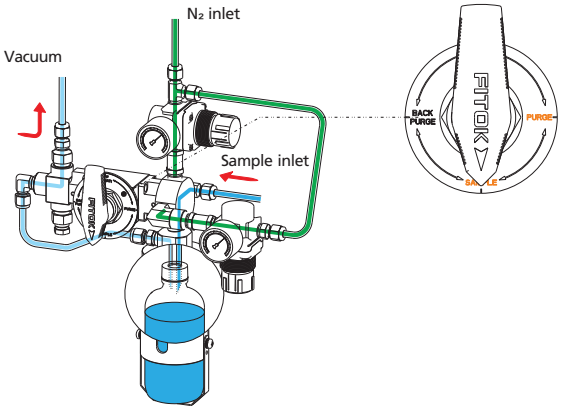
2 - Back Purge

Turn the handle to the “BACK PURGE” position, allowing Nitrogen to force the residual sample from the system into the process line to ensure representative sampling.



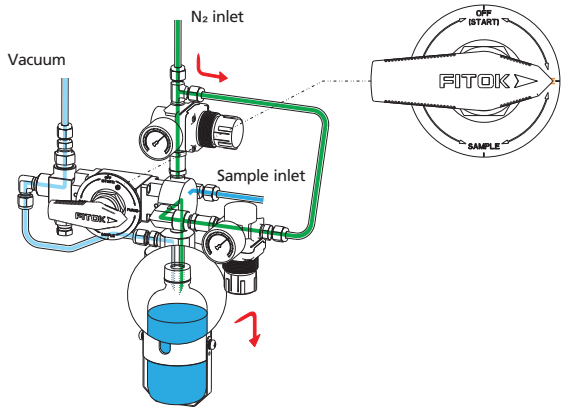
3 - Sampling

Turn the handle to the "SAMPLE" position, connecting the bottle with the vacuum connection to create a vacuum in the sample bottle. The sample flows into the bottle. When the required amount has been taken, turn the handle to the “PURGE” position.



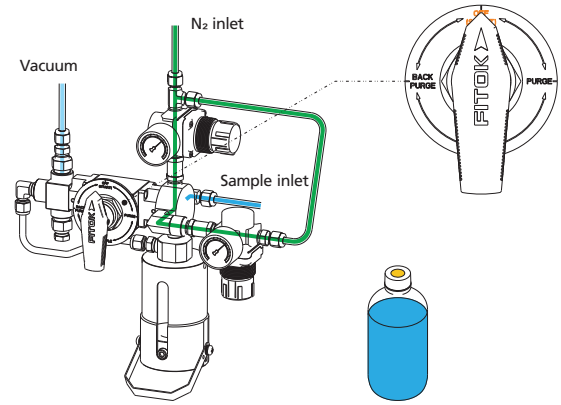
4 - Needle Purge

Allow Nitrogen to force the residual sample from the needle assembly into the bottle. Hold this position for a sufficient time.



5 - Off

Turn the handle to the “OFF” position to close the sampling system. Remove the bottle retaining clip and take out the bottle from the sleeve. The septum reseals automatically to complete the sampling process.



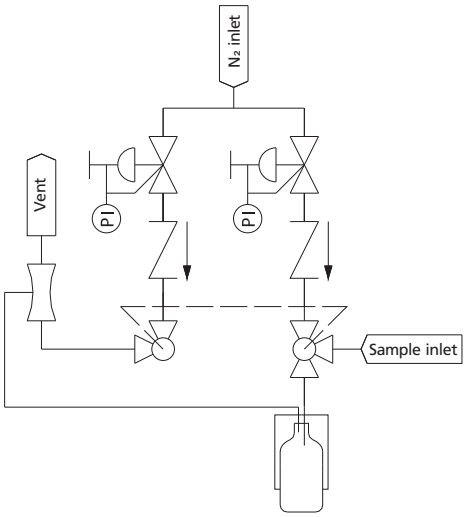
BLE3 - Back Purge Type with Venturi Unit

Features

- Sampling from process lines at atmospheric pressure or vacuum condition
- Back purge
- Easy operation with a single handle by linkage valve

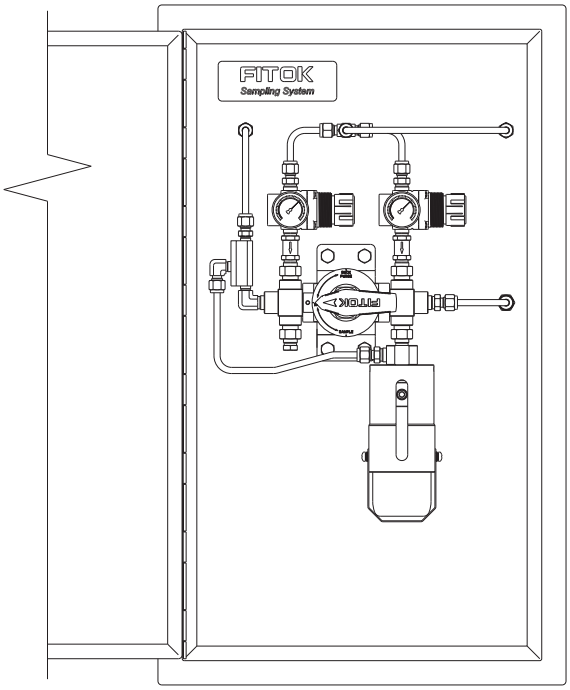
Basic Configuration

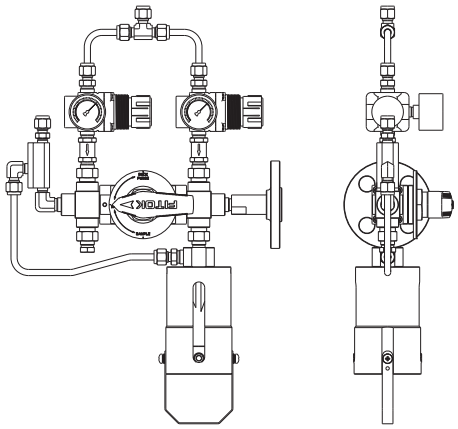
Wetted Material	316 SS
Sleeve Assembly	250 ml sleeve with bottle retaining clip
Needle Assembly	Process/vent needle ID: 1.4 mm (0.06")
Sampling Valve	BF Series 3-way ball valves (gearbox linkage): PTFE seat and FKM O-ring Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C) Temperature range: 0°F to 450°F (-18°C to 232°C)
Nitrogen Branch	Nitrogen regulator
	CV Series check valves
	Pressure gauge
Venturi Unit	Creating a vacuum in the sample bottle; sampling at atmospheric pressure or vacuum condition
Connections	1/4" tube fitting



Note: Products of other specifications are available upon request.

Typical Installation Mode

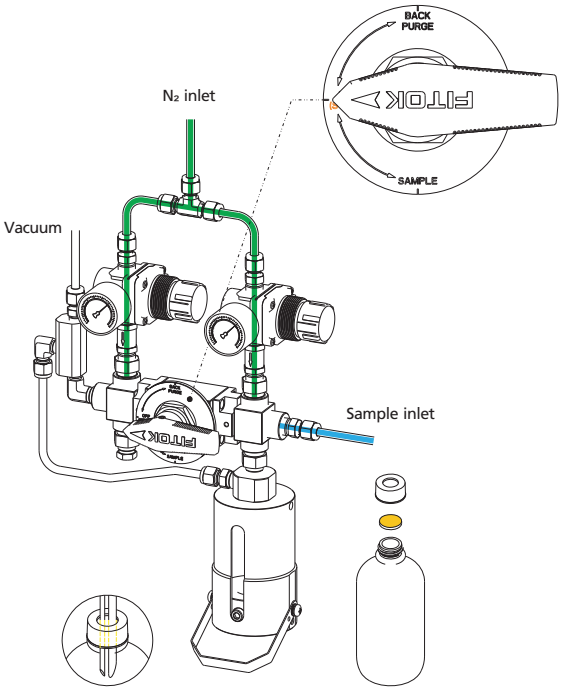




Operation

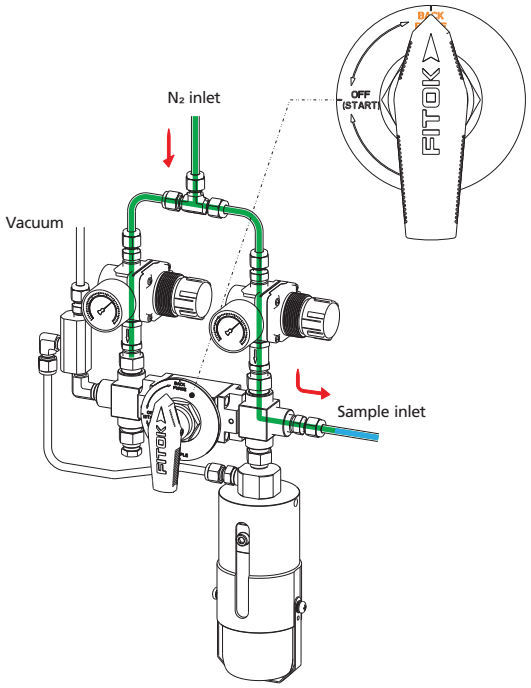
1 - Preparation

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.



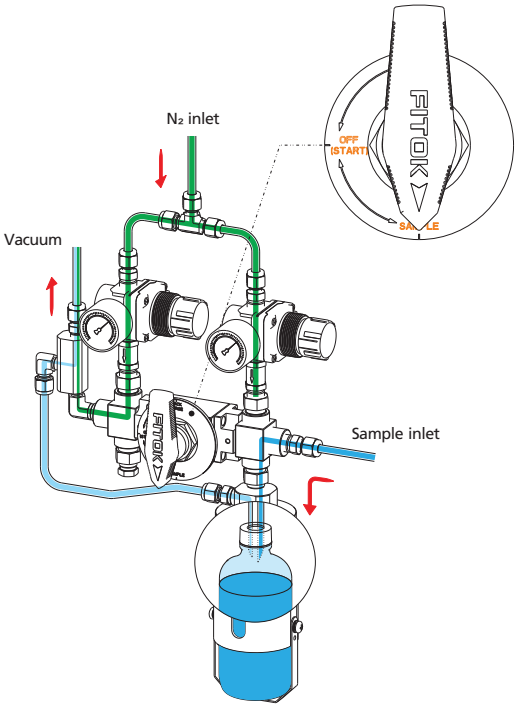
2 - Back Purge

Turn the handle to the “BACK PURGE” position, allowing Nitrogen to force the residual sample from the system into the process line to ensure representative sampling.



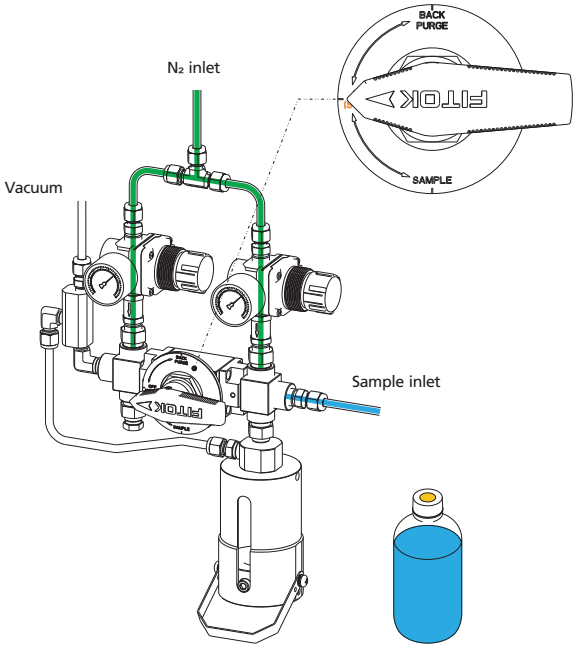
3 - Sampling

Turn the handle to the “SAMPLE” position, allowing the sample to flow into the bottle vacuumized by the venturi unit. When the required amount has been taken, turn the handle to the “OFF” position.



4 - Off

Remove the bottle retaining clip and take out the bottle from the sleeve. The septum reseals automatically to complete the sampling process.



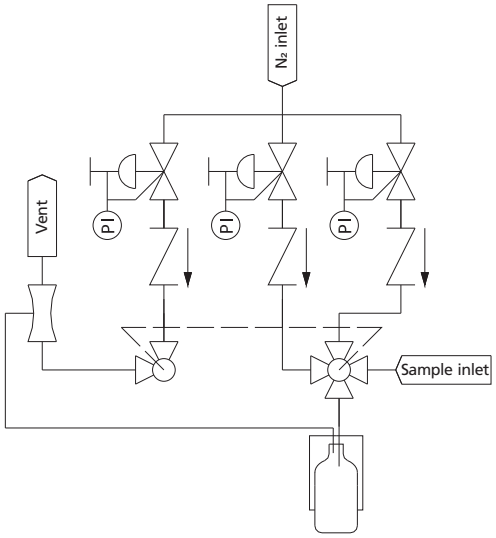
BLE4 - Back and Needle Purge Type with Venturi Unit

Features

- Sampling from process lines at atmospheric pressure or vacuum condition
- Back purge and needle purge
- Easy operation with a single handle by linkage valve

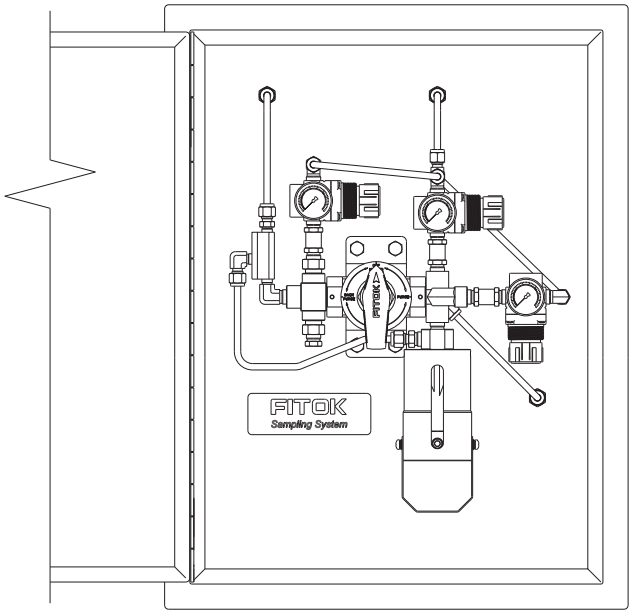
Basic Configuration

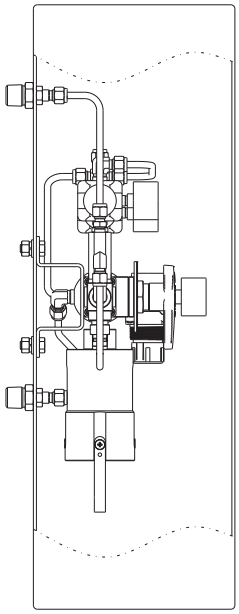
Wetted Material	316 SS
Sleeve Assembly	250 ml sleeve with bottle retaining clip
Needle Assembly	Process/vent needle ID: 1.4 mm (0.06")
Sampling Valve	BF Series 3-way ball valves and BO Series 4-way ball valves (gearbox linkage): PTFE seat Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C) Temperature range: 0°F to 300°F (-18°C to 148°C)
Nitrogen Branch	Nitrogen regulator
	CV Series check valves
	Pressure gauge
Venturi Unit	Creating a vacuum in the sample bottle, sampling at atmospheric pressure or vacuum condition
Connections	1/4" tube fitting



Note: Products of other specifications are available upon request.

Typical Installation Mode

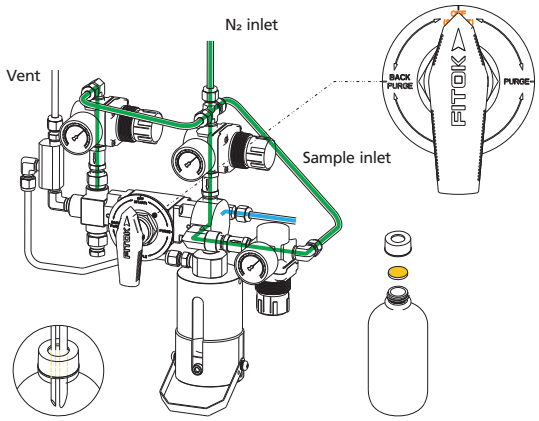




Operation

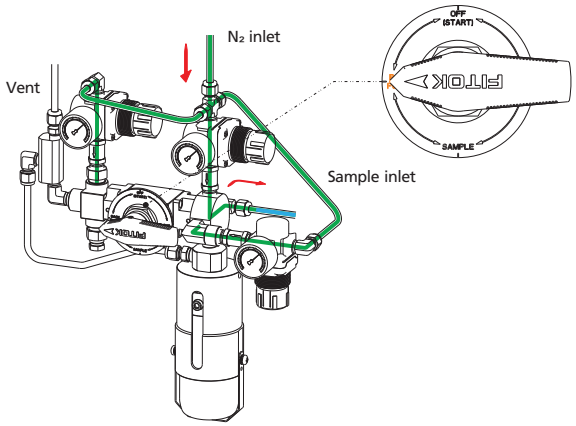
1 - Preparation

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.



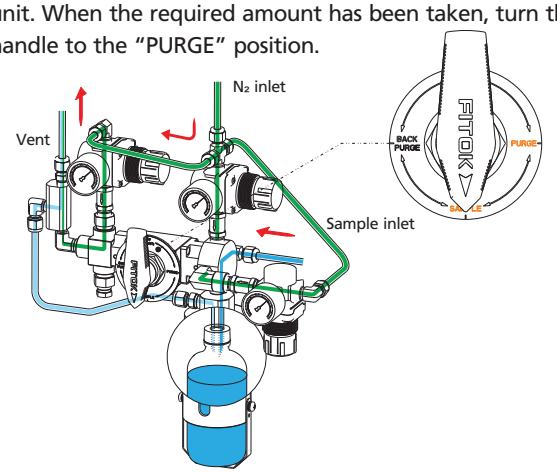
2 - Back Purge

Turn the handle to the “BACK PURGE” position, allowing Nitrogen to force the residual sample from the system into the process line to ensure representative sampling.



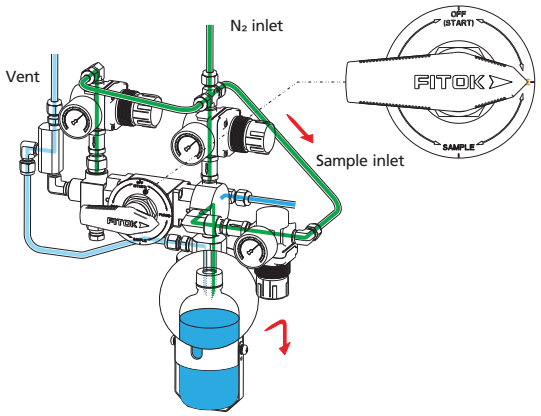
3 - Sampling

Turn the handle to the “SAMPLE” position, allowing the sample to flow into the bottle vacuumized by the venturi unit. When the required amount has been taken, turn the handle to the “PURGE” position.



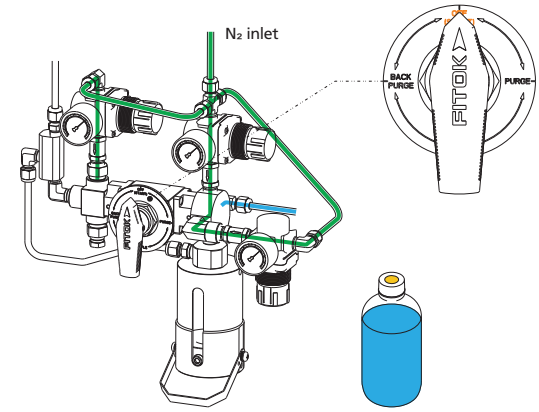
4 - Needle Purge

Allow Nitrogen to force the residual sample from the needle assembly into the bottle. Hold this position for a sufficient time.



5 - Off

Turn the handle to the “OFF” position to close the sampling system. Remove the bottle retaining clip and take out the bottle from the sleeve. The septum reseals automatically to complete the sampling process.



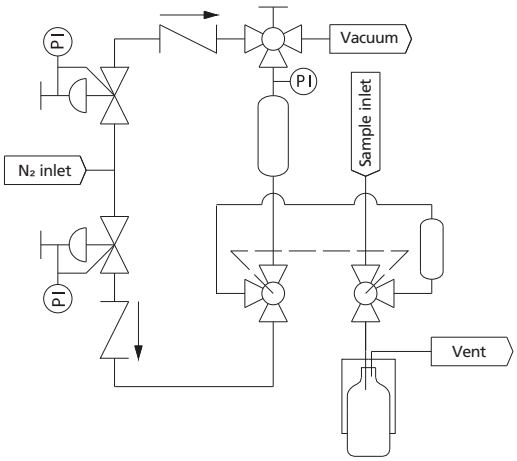
BLE5 - Overflow Type with Vacuum Connection

Features

- Sampling from process lines at atmospheric pressure or vacuum condition
- Fixed volume sampling
- Overflow sampling and back purge
- Easy operation with a single handle by linkage valve

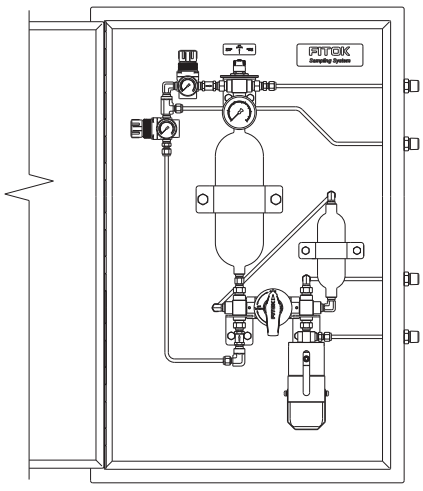
Basic Configuration

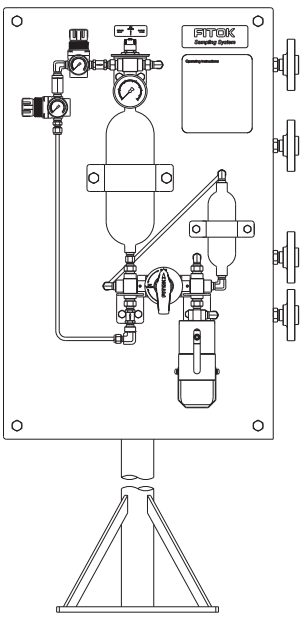
Wetted Material	316 SS
Sleeve Assembly	250 ml sleeve with bottle retaining clip
Needle Assembly	Process/vent needle ID: 1.4 mm (0.06")
Sampling Valve	BF Series 3-way ball valves (gearbox linkage): PTFE seat and FKM O-ring Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C) Temperature range: 0°F to 450°F (-18°C to 232°C)
Nitrogen Branch	Nitrogen regulator
	CV Series check valves
	Pressure gauge
Connections	1/4" tube fitting
Others	Overflow cylinder, sample chamber (200 ml), ball valve



Note: Products of other specifications are available upon request.

Typical Installation Mode

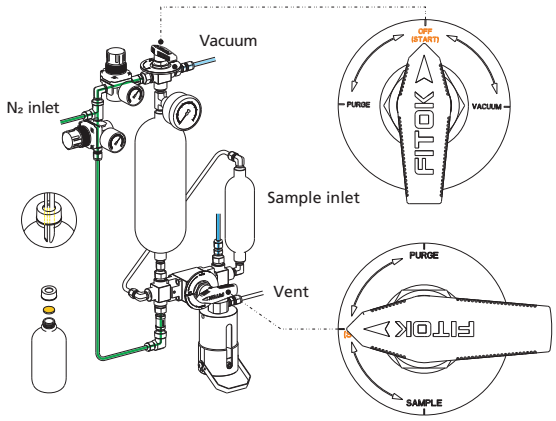




Operation

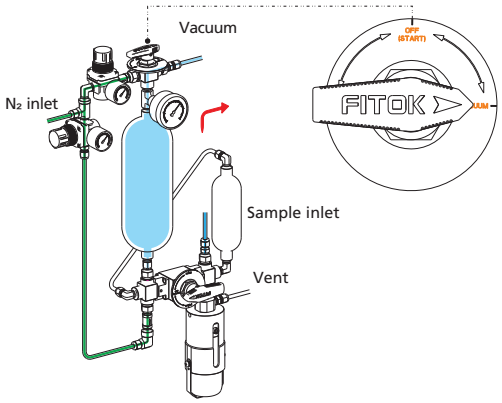
1 - Preparation

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.



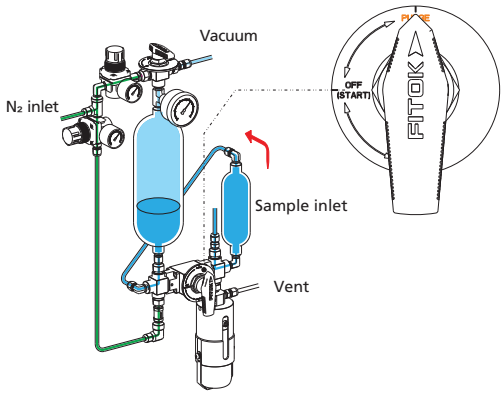
2 - Vacuum

Turn the handle on the top of the overflow cylinder to the "VACUUM" position to vacuumize the overflow cylinder. Turn the handle to the "OFF" position.



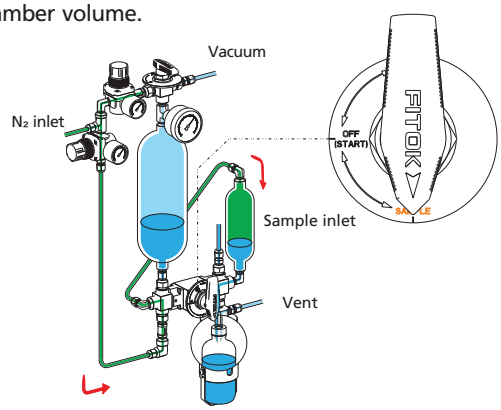
3 - System Purge

Turn the main handle to the "PURGE" position, allowing the sample to flow from the process line into the vacuumized overflow cylinder through the sample chamber to ensure representative sampling.



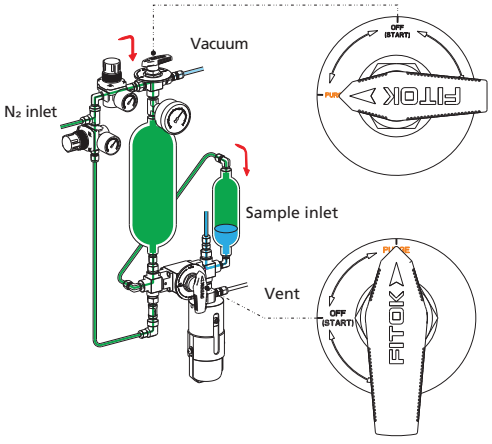
4 - Sampling

Turn the main handle to the "SAMPLE" position, allowing Nitrogen to force the sample from the sample chamber into the bottle and purge the sample chamber and needle assembly. The amount of sample depends on the sample chamber volume.



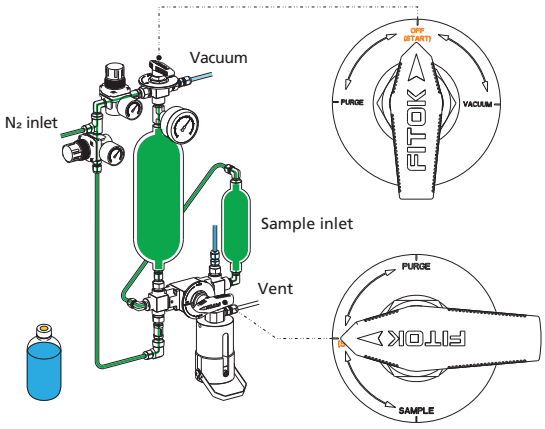
5 - Back Purge

Turn the main handle and the handle on the top of the overflow cylinder to the "PURGE" position, allowing Nitrogen to force the residual sample from the system into the process line.



6 - OFF

Turn the two handles to the “OFF” position to close the sampling system. Remove the bottle retaining clip and take out the bottle from the sleeve. The septum reseals automatically to complete the sampling process.



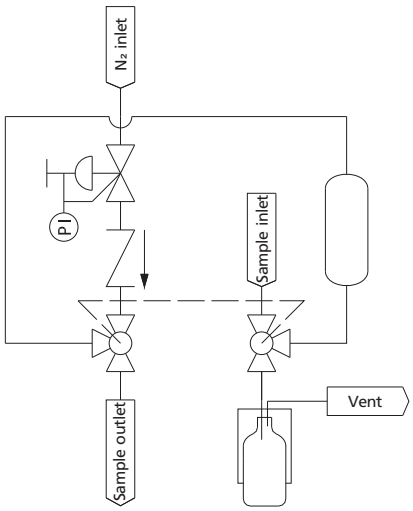
BLE6 - Fixed Volume Type

Features

- Sampling from medium or high pressure devices or process lines
- Fixed volume sampling
- System purge and needle purge
- Easy operation with a single handle by linkage valve

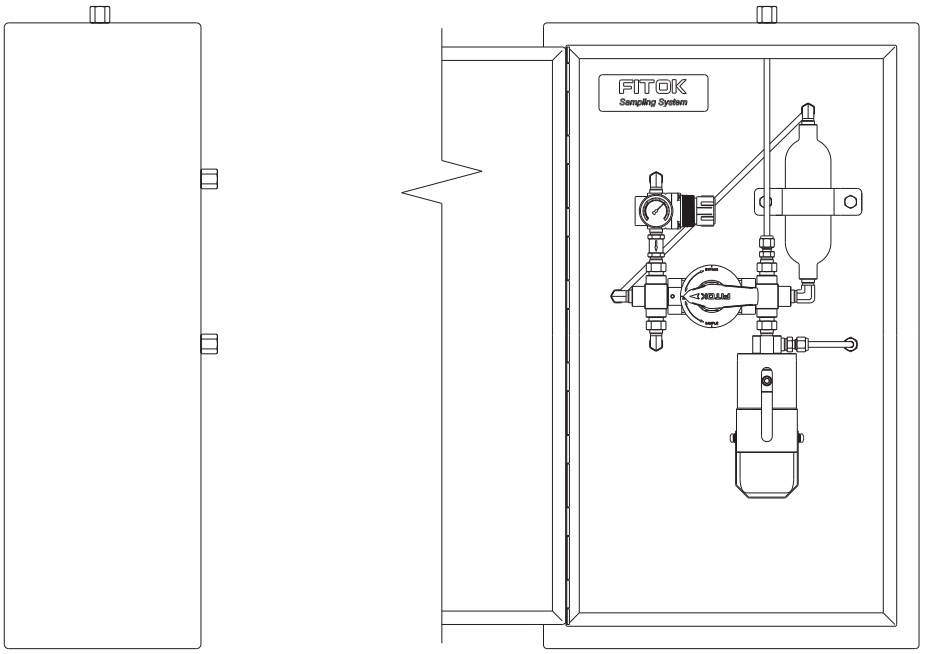
Basic Configuration

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	BF Series 3-way ball valves (gearbox linkage): PTFE seat and FKM O-ring Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C) Temperature range: 0°F to 450°F (-18°C to 232°C)
Nitrogen Branch	Nitrogen regulator
	CV Series check valves
	Pressure gauge
Connections	1/4" tube fitting
Others	Sample chamber (200 ml)



Note: Products of other specifications are available upon request.

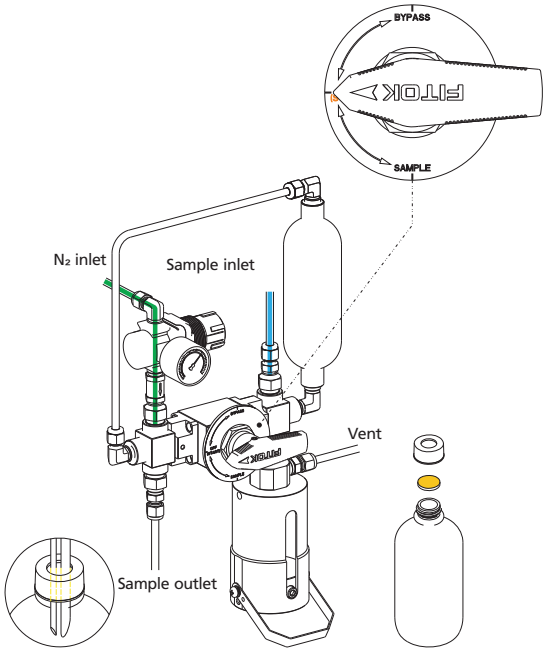
Typical Installation Mode



Operation

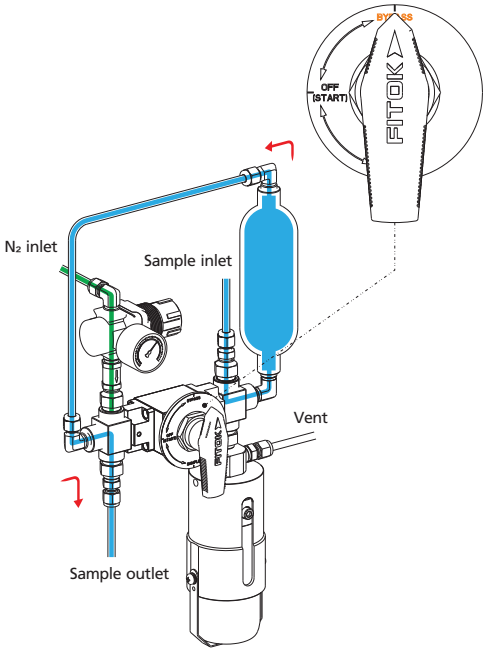
1 - Preparation

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.



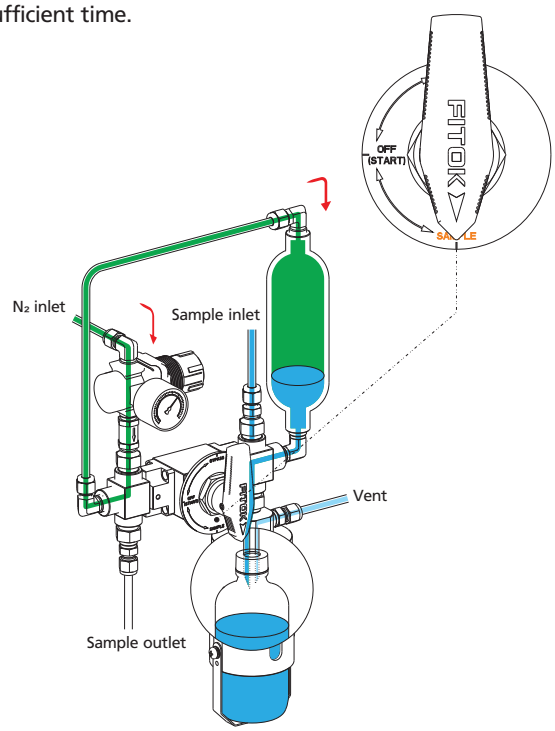
2 - System Purge

Turn the handle to the “BYPASS” position, allowing the sample to flow continuously through the sample chamber. Hold for a period of time to ensure representative sampling.



3 - Sampling

Turn the handle to the “SAMPLE” position, allowing Nitrogen to force the sample from the sample chamber into the bottle and purge the sample chamber and needle assembly. This position can be held for a sufficient time.



4 - Off

Turn the handle to the “OFF” position to close the sampling system. Remove the bottle retaining clip and take out the bottle from the sleeve. The septum reseals automatically to complete the sampling process.