CG - Cylinder Configuration Sampling Systems for Gases

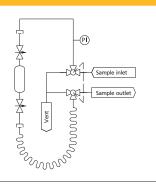
CGG1 - System Purge Type

Features

- Sampling from devices or process lines
- System purge
- Easy operation with a single handle by linkage valve

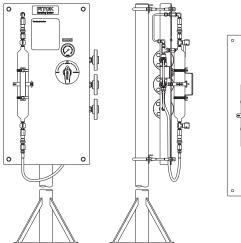
Basic Configuration

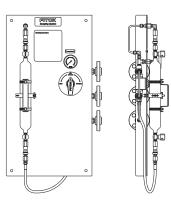
| Wetted Material | 316 SS |
|-------------------|--|
| | 500 ml cylinder |
| Cylinder Assembly | ND Series needle valves |
| | QC4 Series quick-connects |
| Sampling Valve | BF Series ball valves (gearbox linkage): PTFE seat and FKM O-ring Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C) Temperature range: 0°F to 450°F (-18°C to 232°C) |
| Other Accessories | PS Series metal hoses |
| | Pressure gauge |
| Connections | NPS 1/2 flange |



Note: Products of other specifications are available upon request.

Typical Installation Mode

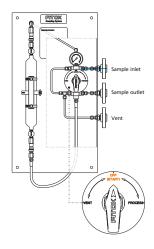




Operation

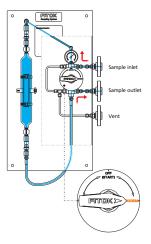
1 - Preparation

Install the sample cylinder and connect the hose to the bottom side of the cylinder. Open the needle valves at both ends of the cylinder.



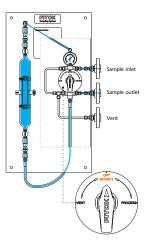
2 - Sampling

Turn the handle to the "PROCESS" position, allowing the sample to flow continuously into and fill the cylinder. Hold for a period of time to ensure representative sampling.



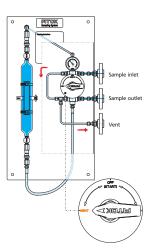
3 - Off

Turn the handle to the "OFF" position. Close the needle valves at both ends of the cylinder.



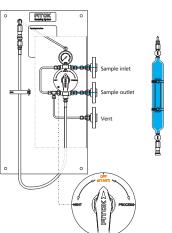
4 - Depressurization/vent

Turn the handle to the "VENT" position, connecting the sampling line with the vent line to depressurize and discharge the residual sample.



5 - Off

Turn the handle to the "OFF" position and disconnect the hose. Remove the cylinder and connect the hose to the top quick-connect to complete the sampling process.





CGG2 - Bypass and System Purge Type

Features

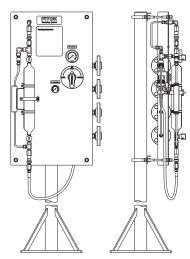
- Sampling from devices or process lines
- System purge
- Easy operation with a single handle by linkage valve

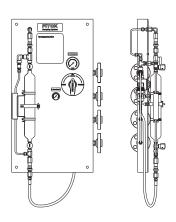
Basic Configuration

| Wetted Material | 316 SS | | |
|------------------------|---|---|--|
| Cylinder Assembly | 500 ml cylinder | | |
| | ND Series needle valves | | |
| | QC4 Series quick-connects | | |
| | CV Series check valves | Neut Neut | |
| Sampling Valve | BF Series 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) | Sample inlet Sample outlet | |
| Nitrogen Branch | Nitrogen regulator | | |
| | CV Series check valves | | |
| | Pressure gauge | Z N | |
| Other Accessories | PS Series metal hoses | Nowwen a series of the series | |
| | Pressure gauge | | |
| Connections | NPS 1/2 flange | | |

Note: Products of other specifications are available upon request.

Typical Installation Mode

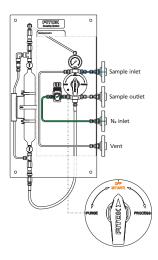




Operation

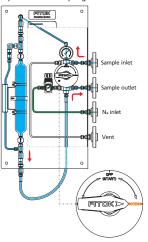
1 - Preparation

Install the sample cylinder and connect the hose to the bottom side of the cylinder. Open the needle valves at both ends of the cylinder.



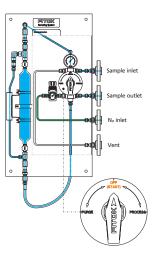
2 - Sampling

Turn the handle to the "PROCESS" position, allowing the sample to flow continuously into and fill the cylinder. Hold for a period of time to ensure representative sampling.



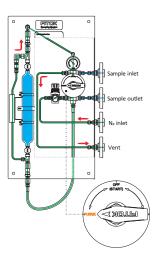
3 - Off

Turn the handle to the "OFF" position. Close the needle valves at both sides of the cylinder.



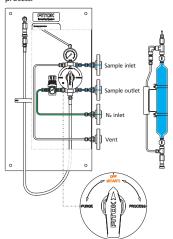
4 - Purge

Turn the handle to the "PURGE" position, allowing Nitrogen to flow through the quick-connects and bypass to force the residual sample out of the system.



5 - Off

Turn the handle to the "OFF" position and disconnect the hose. Remove the cylinder and connect the hose to the top quick-connect to complete the sampling process.



CGG3 - Vent to Flare Type

Features

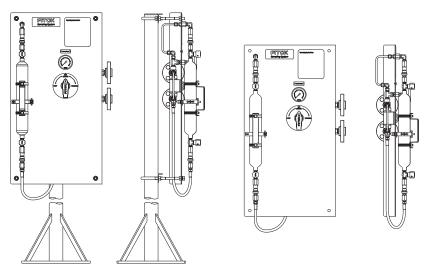
- Sampling from devices or process lines
- O System purge to flare (no circulation loop)
- © Easy operation with a single handle by linkage valve

Basic Configuration

| Wetted Material | 316 SS | | |
|-------------------|--|---------|--|
| Cylinder Assembly | 500 ml cylinder | | |
| | ND Series needle valves | | |
| | QC4 Series quick-connects |] | |
| Sampling Valve | BF Series 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) | Flare | |
| Other Accessories | PS Series metal hoses |] & & | |
| | Pressure gauge | Synance | |
| Connections | NPS 1/2 flange | | |

Note: Products of other specifications are available upon request.

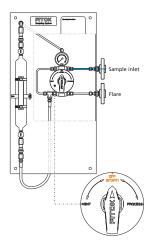
Typical Installation Mode



Operation

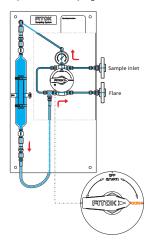
1 - Preparation

Install the sample cylinder and connect the hose to the bottom side of the cylinder. Open the needle valves at both ends of the cylinder.



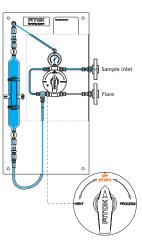
2 - Sampling

Turn the handle to the "PROCESS" position, allowing the sample to flow continuously into and fill the cylinder. Hold for a period of time to ensure representative sampling.



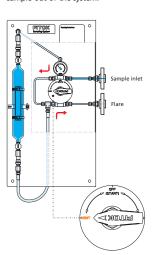
3 - Off

Turn the handle to the "OFF" position. Close the needle valves at both sides of the cylinder.



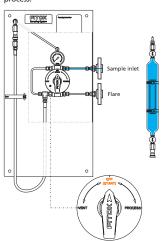
4 - Depressurization/vent

Turn the handle to the "VENT" position, connecting the sampling line to the flare to depressurize and discharge the residual sample out of the system.



5 - Off

Turn the handle to the "OFF" position and disconnect the hose. Remove the cylinder and connect the hose to the top quick-connect to complete the sampling process.



SR - Sample Handling Systems

SRB - Sample Recovery System for Bottle

Features

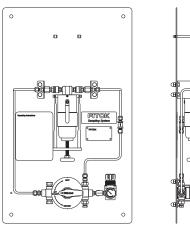
- Recover the sample from the sample bottle and purge the bottle
- Closed recovery without spillage
- Easy operation with a single handle by linkage valve

Basic Configuration

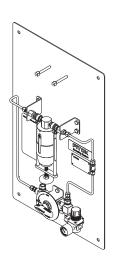
| Wetted Material | 316 SS | <u></u> |
|-----------------|---|--------------------------|
| Needle Assembly | Process/vent needle ID: 3.0 mm (0.12") | |
| Analysis Valve | BF Series 3-way ball valves (gearbox linkage): PTFE seat and FKM O-ring Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C) Temperature range: 0°F to 450°F (-18°C to 232°C) | |
| Nitrogen Branch | Nitrogen regulator CV Series check valves Pressure gauge | (P) N ₂ inlet |
| Connections | 1/4" FNPT | Recovery |

Note: Products of other specifications are available upon request.

Typical Installation Mode



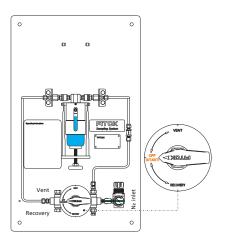




Operation

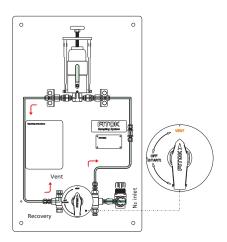
1 - Preparation

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. Turn the screw till the bottle is fixed in the sleeve.



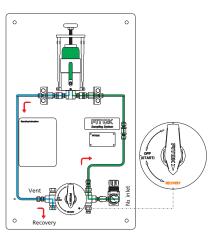
3 - Depressurization

Turn the handle to the "VENT" position to allow the bottle to depressurize.



2 - Recovery

Turn the sleeve upside down and fix it by the retaining clips. Turn the handle to the "RECOVERY" position, allowing Nitrogen to drive liquids out of the bottle to the recovery connection. This position can be held for any required time.



4 - Off

Turn the handle to the "OFF" position and turn the sleeve back to the initial position. Unfix the screw and remove the bottle. The septum reseals automatically to complete sample recovery.

