# **CG - Cylinder Configuration Sampling Systems for Gases**

## **CGG1 - System Purge Type**

#### **Features**

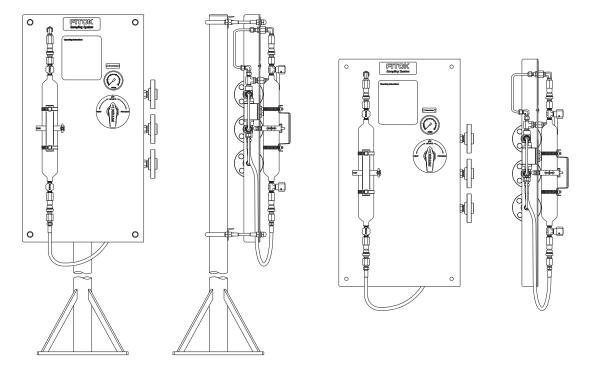
- Sampling from devices or process lines
- System purge
- © Easy operation with a single handle by linkage valve

#### **Basic Configuration**

Wetted Material 316 SS  500 ml cylinder  ND Series needle valves  QC4 Series quick-connects  Sample inlet			
Cylinder Assembly  ND Series needle valves  QC4 Series quick-connects	Wetted Material	316 SS	
Cylinder Assembly ND Series needle valves  QC4 Series quick-connects		500 ml cylinder	
	Cylinder Assembly	ND Series needle valves	(P)
Sample inlet		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)	Sampling Valve	PTFE seat and FKM O-ring Max. working pressure: 1500 psig @ 70°F (103 bar @ 20°C)	Sample outlet
Other Accessories  PS Series metal hoses	Other Accessories	PS Series metal hoses	
Pressure gauge		Pressure gauge	Syman S
Connections NPS 1/2 flange	Connections	NPS 1/2 flange	- 0000

Note: Products of other specifications are available upon request.

#### **Typical Installation Mode**

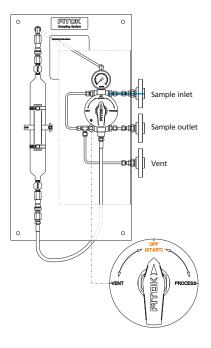




### **Operation**

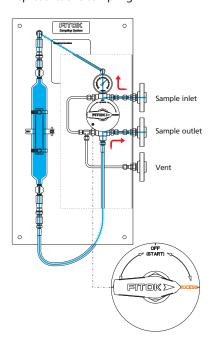
#### 1 - Preparation

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.



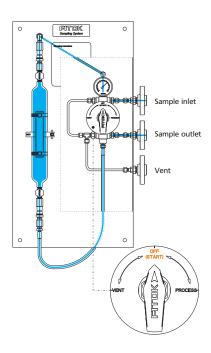
#### 2 - Sampling

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.



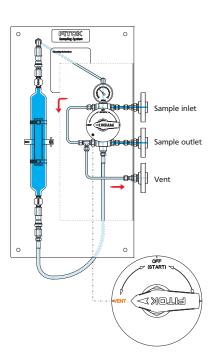
#### 3 - Off

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



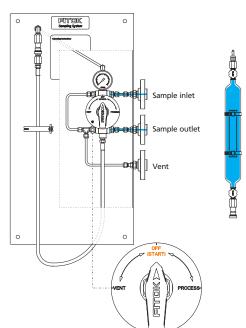
#### 4 - Depressurization/vent

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**

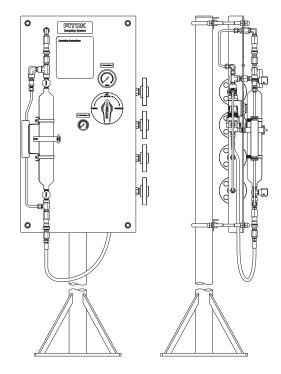
- O Sampling from devices or process lines
- System purge
- © Easy operation with a single handle by linkage valve

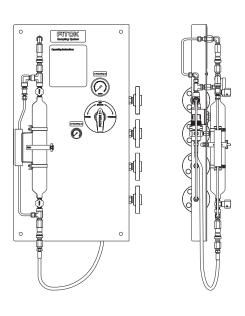
## **Basic Configuration**

Wetted Material	316 SS	
Cylinder Assembly	500 ml cylinder	
	ND Series needle valves	
	QC4 Series quick-connects	
	CV Series check valves	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
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	300
Other Accessories	PS Series metal hoses	Somme
	Pressure gauge	
Connections	NPS 1/2 flange	

Note: Products of other specifications are available upon request.

### **Typical Installation Mode**



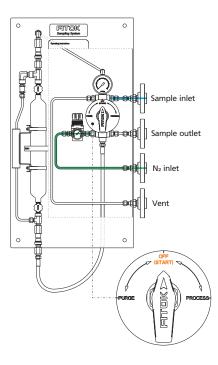




### **Operation**

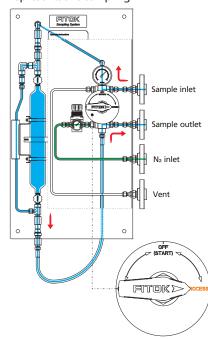
#### 1 - Preparation

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.



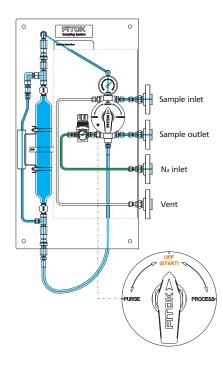
#### 2 - Sampling

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.



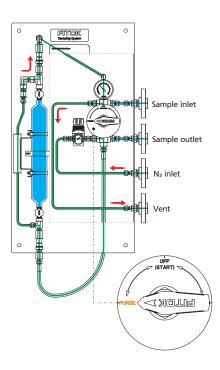
#### 3 - Off

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



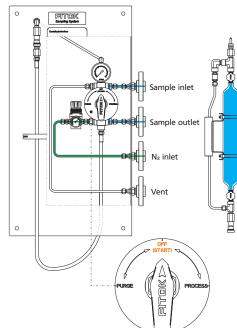
#### 4 - Purge

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**

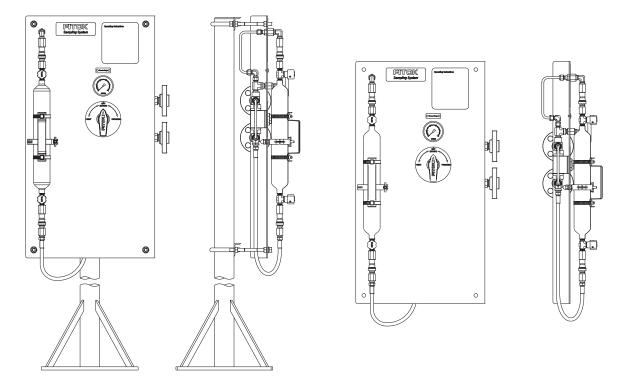
- Sampling from devices or process lines
- O System purge to flare (no circulation loop)
- © Easy operation with a single handle by linkage valve

## **Basic Configuration**

Wetted Material	316 SS	
	500 ml cylinder	PD
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)	Sample inlet  Flare
Other Accessories	PS Series metal hoses	
Connections	Pressure gauge	Sums
Connections	NPS 1/2 flange	

Note: Products of other specifications are available upon request.

## **Typical Installation Mode**

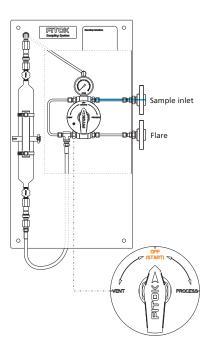




### **Operation**

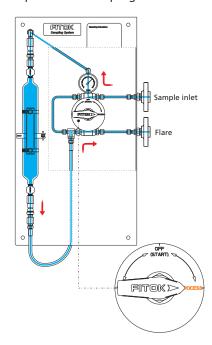
#### 1 - Preparation

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.



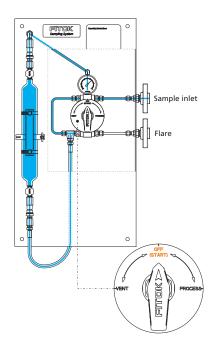
#### 2 - Sampling

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.



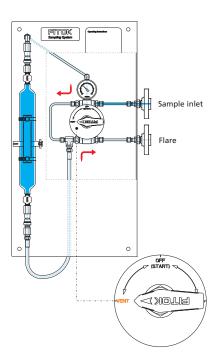
#### 3 - Off

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.

