



**LGSS**

The SENSOR Cylinder Sampling Systems allow collection of samples from gas and light liquid hydrocarbon applications in a manner that is safe to both the operator and the environment. The sampling process is emissions-free, with no spills and zero Volatile Organic Compounds (VOC) emissions, while keeping sample contamination levels to a minimum.

The Liquefied Gas Sampling System (LGSS) allows an operator to visually verify cylinder outage and maximum fill density through our innovative sight glass system, ensuring compliance with regulatory requirement U.S. CFR49.

The Vapor Sampling System (VSS) has many of the same benefits of the LGSS, but allows for the safe and representative sampling of non-liquid gaseous samples. On the VSS, the sight glass is eliminated and the flow is reversed to ensure no condensate is left in the cylinder while sampling.



**VSS**

## Features and Benefits

- Cylinder “saddles” to correctly position and secure sample cylinder
- Robust double-ended shutoff quick-connect fittings (QC's)
- Ability to depressurize QC's before removing cylinder from sample panel
- Single handle operation
- Flush entire system before taking new sample
- Panel mounted pressure gauge
- Operation & Installation Manual included



**LGSS**

## Standard Equipment

Mounting Plate	Stainless Steel (SS)
Sight Flow Indicator	600# ANSI with flow indicator
Quick Connect Fittings	Stainless Steel, double-ended shutoff
Cylinder Saddles	2 each, PVC
Tubing	1/4" Stainless Steel
Optional Sample Cylinder	Stainless Steel; includes cylinder valves
Operation/Instruction Tags	Included as standard on plate

**Operating Pressure** 1440 psig; 2000 psig max @ 70°F

**Operating Temperature** 350°F maximum

## Materials of Construction

Sample Loop	316SS
Sample Valve	316LSS
O-Ring Material	Viton standard; optional Kalrez
Seal Material	Teflon

## Optional Equipment

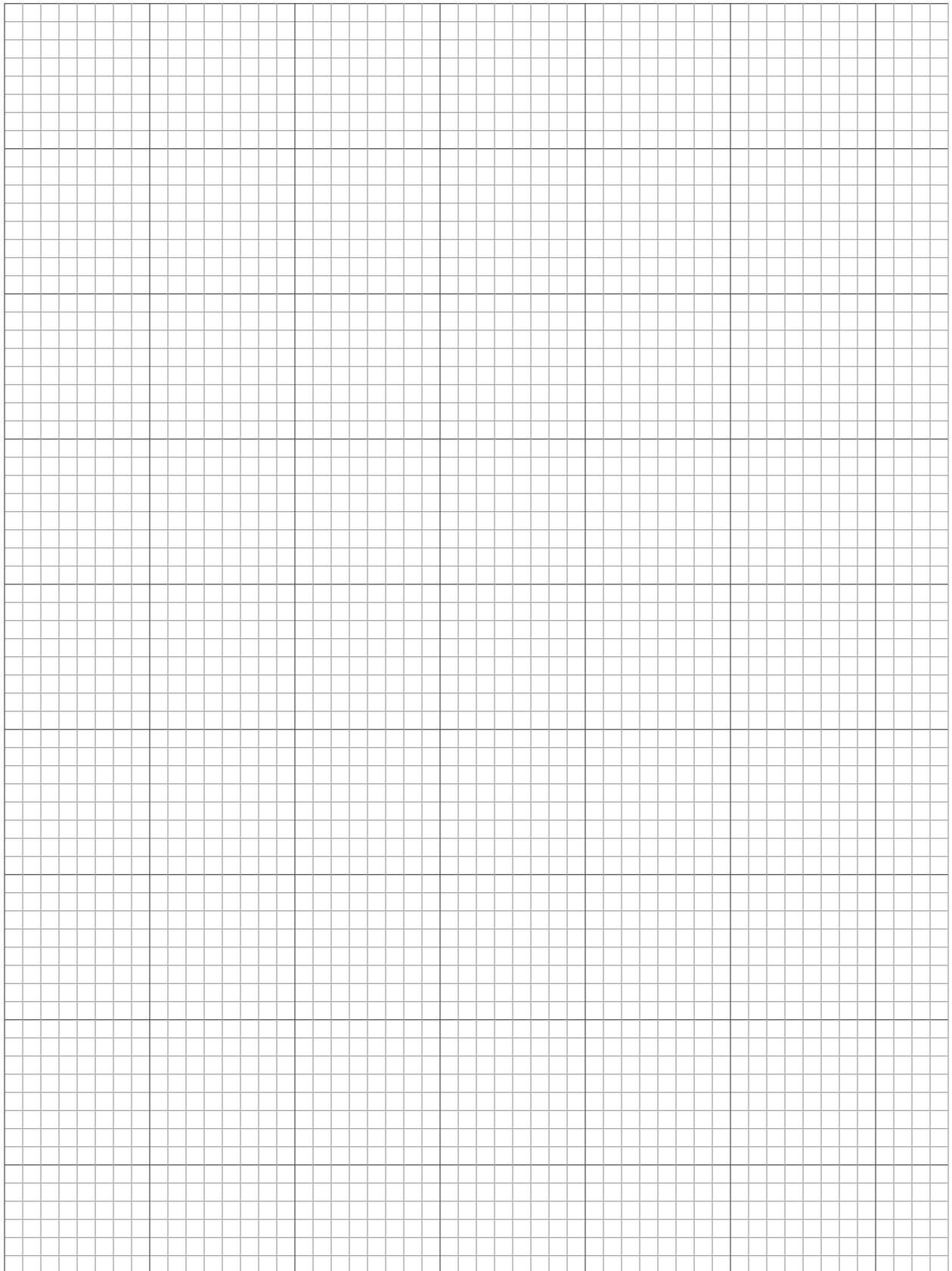
System Purge	Includes check valve, regulator, rotameter, pressure gauge, and block valve
Emissions Filter	Canister with activated carbon for use when no vent to flare is available; also available with indication crystals which change color to indicate saturated absorbent media
Isolation Valves	Isolation valves on sample inlet & outlet to allow for easy serviceability
Sample Coolers	For use when process temperature exceeds 135°F
Enclosures	Enclosures, available insulated and uninsulated and with steam or electric heater elements
Mounting	2" X 60" pipe stand; galvanized
Armored Rotameter	Sized for flow rate provided on Application Data Sheet
Sample Cylinder	Stainless Steel; includes cylinder valves and quick connect fittings
Sample Cylinder Accessories	Dip tubes; rupture discs, coatings
High Pressure System	Includes reflex sight glass and extended operator handle

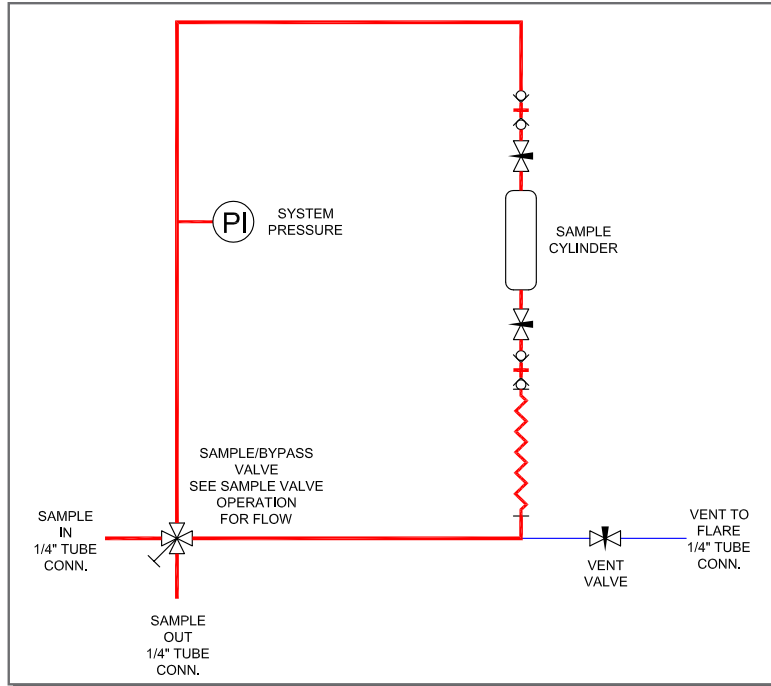


Date	
Name	Phone
Company/Location	Email
<b>PROCESS DATA</b>	
Media	<input type="radio"/> Gas <input type="radio"/> Liquid Vapor Pressure (at sampling temp)
Tag Numbers	
*Pressure Inlet	
*Fast Loop Outlet Pressure	<input type="radio"/> With Process Return <input type="radio"/> Without Process Return
*Viscosity (CP) at Sampling Temperature	
*Temperature	Temperatures over 135 ° F, Process Cooling is recommended
Particles in Sample	<input type="radio"/> Yes <input type="radio"/> No Micron Size ____ / ____ (%) if >100 micron y-strainer recommended
<b>MATERIALS OF CONSTRUCTION</b>	
*Wetted Parts	<input type="radio"/> 316SS (std.) <input type="radio"/> Monel 400 <input type="radio"/> Hastelloy C276 <input type="radio"/> Other _____ *specify
*O-Ring Material (Elastomer)	<input type="radio"/> Viton (std.) <input type="radio"/> Kalrez (recommended in H2S service) <input type="radio"/> Other _____ *specify
*Valve Packing Material	<input type="radio"/> Teflon (std.) <input type="radio"/> Graphoil (Hi. Temp)
<b>CONNECTION AND MOUNTING</b>	
*Sample Inlet/Outlet Connection Size (1/4" Tube Standard)	
*Sample Inlet/Outlet Connection Type (specify Tube, NPT, Flange)	
*Flare Vent Pressure	Type <input type="radio"/> Flare <input type="radio"/> Carbon Canister <input type="radio"/> Other _____ *specify
<b>SAMPLE CONTAINER</b>	
*Size Sample Container	<input type="radio"/> 300cc <input type="radio"/> 500cc <input type="radio"/> Other _____ *specify
*Cylinder Quick Connect Part Number Brand/PN#	
*Cylinder Accessories	<input type="radio"/> Dip Tube <input type="radio"/> Rupture Disc <input type="radio"/> Spring Relief
*Cylinder	<input type="radio"/> Supplied <input type="radio"/> Customer supplied
<b>OPTIONS (please check if needed)</b>	
<input type="radio"/> Sample Cooler	Additional Data Needed, Please complete heat transfer document
<input type="radio"/> PipeStand for Mounting System	
<input type="radio"/> Process Purge	
<input type="radio"/> Enclosure Type	Insulated <input type="radio"/> Yes <input type="radio"/> No Heated <input type="radio"/> Yes <input type="radio"/> No if yes, <input type="radio"/> Steam or <input type="radio"/> Electric if electric, Volts _____
<input type="radio"/> Process Block Valve	<input type="radio"/> Sample Inlet <input type="radio"/> Sample Outlet <input type="radio"/> Both
<input type="radio"/> Check Valve on Vent	
Special Configurations available (please contact your local representative for information). Detector Tube System, Lab Docking Station, Special Coatings (Siliconert)	

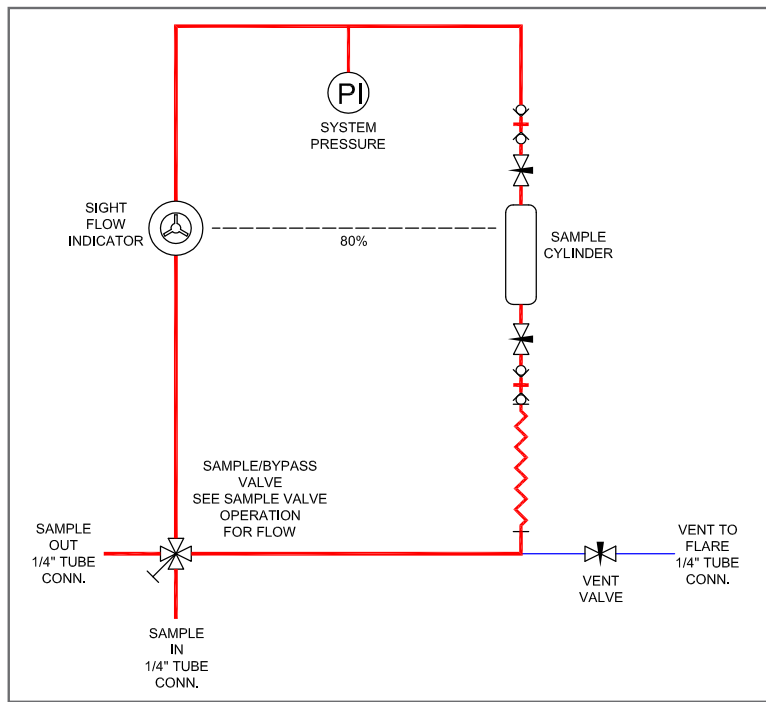
\*Required information

SKETCH **VESSEL** or **APPLICATION** HERE





VSS Vapor Gas Sampling System



LGSS Liquefied Gas Sampling System

# See our full line of Sampling Systems at **SENSOReng.com**

SENSOR sampling systems provide a representative sample that is safe to both the operator and the environment. Our systems are designed to meet Leak Detection Repair (LDAR), Maximum Achievable Control Standards (MACT) and Volatile Organic Compounds (VOC) emission standards. Since no two sampling systems are exactly alike, each of our products is engineered to order.

## Basic Bottle Sampling System

- Simple, flow-thru valve design
- Zero dead volume
- Replaceable process and vent needles
- Available with SENSOR Needle Purge



**BBSS**



**ISS**

## Fixed Volume Bottle Sampling System

- Guarantees repeatable sample volume
- Zero dead volume
- Replaceable process and vent needles
- Suitable for high process pressures
- SENSOR needle purge standard



**FVBSS**

## Inline Sampling System

- Available in wide variety of piping materials and end connections
- Suitable for high temperature, high viscosity service
- Available with open tube "stinger" or process needle

## Liquefied & Vapor Gas Sampling Systems

- Safe, simple methodology for sampling high pressure liquefied gasses and process gasses
- Single handle operation
- Panel mounted pressure gauge
- Sight glass ensures safe cylinder outage on LGSS
- Ability to depressurize quick connects before removing cylinder

**LGSS & VSS**





[SENSOReng.com](http://SENSOReng.com)

Sampling Systems | Houston, TX | 281-902-3924

**REGIONAL OFFICES**

---

**China**

SOR China | Beijing, China | [china@SORInc.com](mailto:china@SORInc.com)  
+86 (10) 5820 8767 | Fax +86 (10) 58 20 8770

**Middle East**

SOR Measurement & Control Equipment Trading DMCC | Dubai, UAE  
[middleeast@SORInc.com](mailto:middleeast@SORInc.com) | +971 4 363 3637 | Fax + 1 913 312 3596