



LGSS

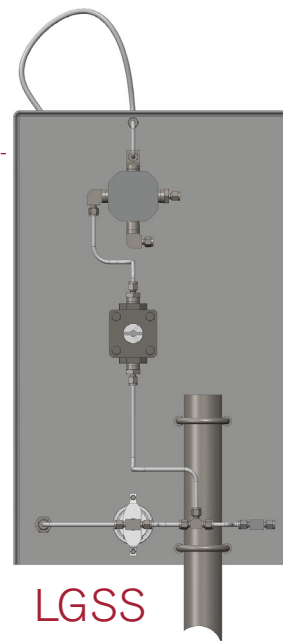
The SENSOR Liquefied Gas Sampling System (LGSS) and Vapor Sampling System (VSS) are designed for safe and reliable closed-loop “grab” sampling of high vapor pressure liquids and vapors, or for any liquid process for which the operator desires to collect the sample in a sample cylinder. The LGSS and VSS are designed to operate under continuous flow via a bypass or parallel line off the main process piping. For Liquefied Petroleum Gases (LPG’s), the inclusion of a sight flow indicator allows for direct visual indication of safe cylinder outage.



VSS

Features and Benefits

- Highly customizable based on process conditions and operator requirements
- Standard system is designed for operation to 1400 psig (96.5 bar); high pressure systems available
- Simple operation (single 4-way Sampling Valve) enhances ease of use and operator safety
- Proprietary SENSOR fitting ensures secure orientation of sample cylinder
- Standard mounting on 304 SST plate with non-metallic cylinder clamping to safely mount sample cylinders



LGSS

Standard Equipment

Mounting Plate	Stainless Steel
Sight Flow Level Indicator	600# ANSI with flow indicator
Quick Connect Fittings	Stainless Steel, double-ended shutoff
Cylinder Clamp	1 each, Stainless Steel
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
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
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

VSS Systems only

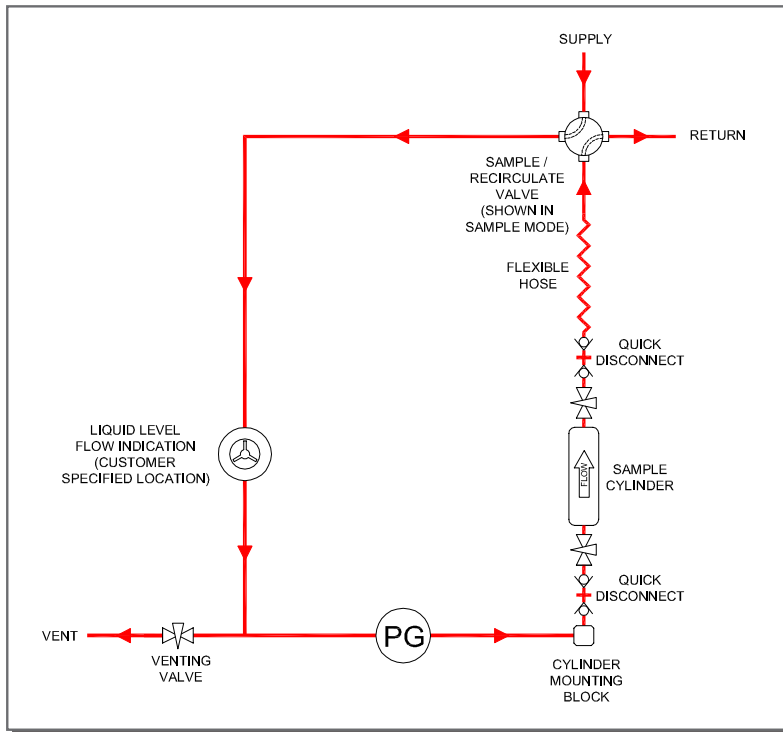
Emissions Filter	Canister with activated carbon for use when no vent to flare is available; also available with indication crystals which change color to indicate saturated absorbent media
Armored Rotameter	Sized for flow rate provided on Application Data Sheet

Below is the quick select model number tree that provides you with all the options to configure and order a sampling system for your application.

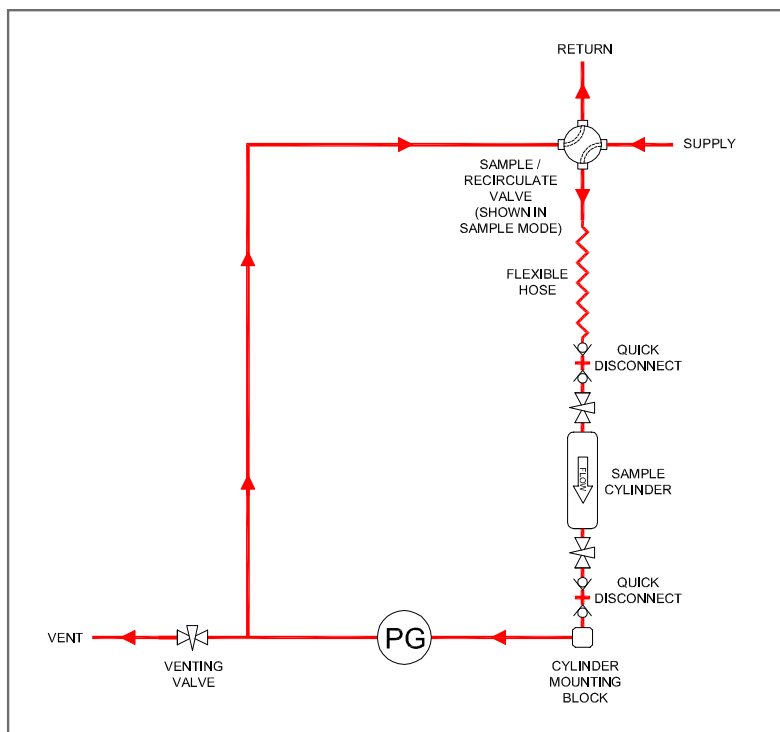
- You must select a designator for each component
- You must supply a completed application data sheet

1 Model		2 Cylinder Size		3 Process Connection		4 Optional Equipment	
Liquefied Gas Sampling System	LGSS	Cylinders supplied with system as option		1/4" Tubing (standard)	25	AR	Armored Rotameter
Vapor (Gas) Sampling System	VSS	300cc (standard)	30	3/8" Tubing	37	CC	Emission Filter (Activated Carbon w/ Indication Crystals)
		150cc	15	3/4" Tubing	75	CF	Emission Filter (Activated Carbon)
		1000cc	1K	Flanged (specify size and rating)	FF	CY	Sample Cylinder (Size to match Cylinder Size in Model Number)
		Special (please specify)	XX			DT	Cylinder Dip Tube (available on LGSS only)
						EE	Enclosure w/ Electric Heater
						EI	Enclosure (Insulated)
						EN	Enclosure (Non-Insulated)
						ES	Enclosure w/ Steam Heater
						HP	High Pressure System (>1400 psig)
						IB	Isolation valves In/out (Ball Valves)
						KZ	Kalrez O-Rings
						PC	Process Cooler
						PS	2" X 60" Pipe Stand w/ Base
						RD	Rupture Discs
						SL	Silconert Internal Coating
						SP	System Purge
						XX	Other Options (please specify)

LGSS - 30 - 75 - IB/KZ	Example Model No.
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LGSS Liquefied Gas Sampling System



VSS Vapor Gas Sampling System

Cylinder System Application Data Sheet



Date	
Name	Phone
Company	Email

GENERAL

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

MATERIALS

*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)

CONNECTION AND MOUNTING

*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

CONTAINER

*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

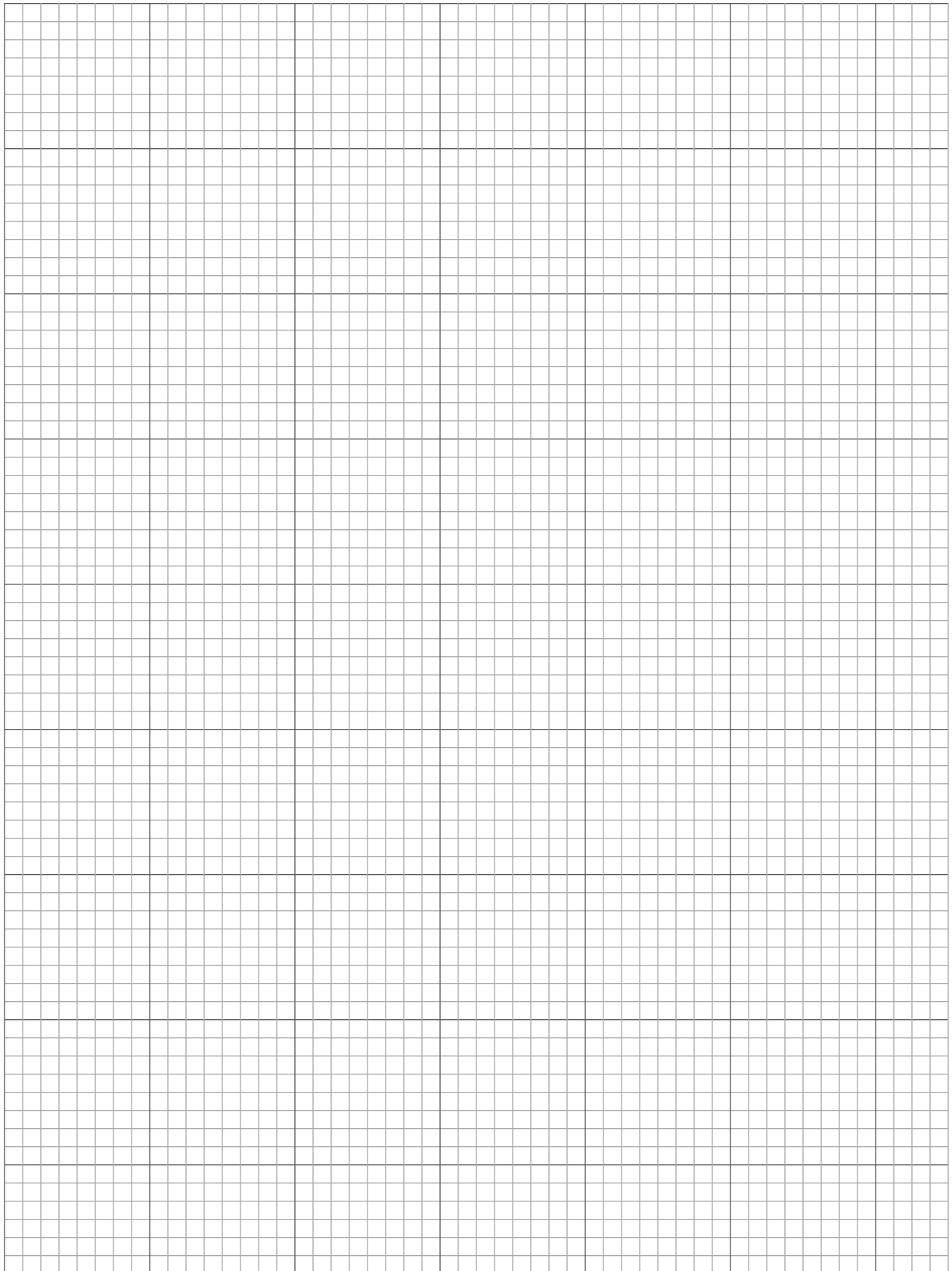
OPTIONS

<input type="radio"/> PipeStand for Mounting System
<input type="radio"/> System Purge
<input type="radio"/> Sample Cooler Heat transfer document needed.
<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 (contact your local representative for information): Detector Tube System, Lab Docking Station, Special Coatings (Siliconert)

Use page two for any comments/include sketch if available.

*Required information

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



Sampling Systems at **SENSOReng.com**

BBSS

Basic Bottle Sampling System

- Simple, flow-thru valve design
- Zero dead volume
- Replaceable process and vent needles
- Available with SENSOR Needle Evacuation System (NES)



LGSS & VSS

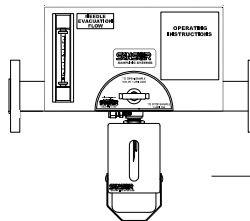
Liquefied & Vapor Gas Sampling Systems

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

PIBSS

Pressure Isolating Bottle Sampling System

- Guarantees repeatable sample volume
- Zero dead volume
- Replaceable process and vent needles
- Suitable for high process pressures
- SENSOR Needle Evacuation System (NES) standard



ISS

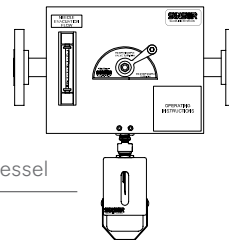
Inline Sampling System

- 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

RSS

RAM 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
- Can be provided with a variety of connections to mate up to existing piping or vessel



SENSOReng.com

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

REGIONAL OFFICES

China

SOR China | Beijing, China | 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 | +971 4 278 9632 | Fax + 1 913 312 3596