

ISS INLINE SAMPLING SYSTEM



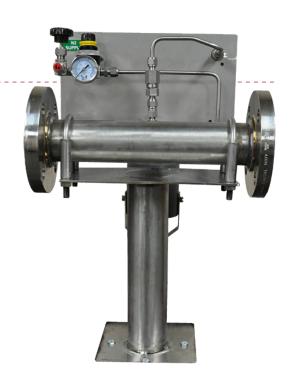
The SENSOR Inline Sampling System (ISS) fits into a piping system without the need to utilize, or create, a pressure differential to take a sample. It can be designed to fit into virtually any diameter piping system and any flange configuration. The ISS uses a special long-body needle valve, or ram valve, and can also be configured as a fixed volume sampler.

SENSOR welds a specially designed sample valve into a spool piece matching your piping specification. The valve body can be fully purged to eliminate dead volume and any potential plugging issues.

Typical applications for the SENSOR ISS include hot oil, refinery "bottoms", and resid oil. Our robust valve is fitted with graphoil packing for high temperature applications. We heat trace any exposed areas to maintain adequate process temperature to allow for a freely flowing sample. We enclose the valve and sample receptacle in a specially designed enclosure which can be fitted with an optional eductor to exhaust harmful vapors to a safe location.

Features and Benefits

- Can be provided in virtually any material to match the piping system in which it is installed
- · Available with fixed volume, model IFVSS
- · Available with ram valve, model RAM FBISS
- · Operation & Installation Manual included



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Materials of Construction

Spool Piece 316L Stainless Steel (SS) standard; flanged process connections

Sample Valve 316SSL; 1/2" flow port Process Needle 316SS; .083" - .148" OD

Vent Needle 316SS; .083" OD

O-Ring Material Viton standard; optional Kalrez

Seal Material Teflon

Bottle Shroud PVC; 2 oz. - 32 oz. standard (other sizes available)

Retaining Strap Stainless Steel Mounting Plate Stainless Steel

Operating Pressure 1440 psig max; 150 psig maximum recommended pressure when

sampling without fixed volume option

Operating Temperature 135°F maximum without cooler; 800°F maximum with cooler and

graphoil valve packing

Optional Equipment

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 filter media

Isolation Valves Isolation valves on sample inlet & outlet to allow for easy serviceability

Sample Coolers For use when process temperature exceeds 135°F Secondary Block Valve Complies with double-block safety requirements

Enclosures Enclosures, available insulated or uninsulated and with steam or electric

heater elements

Mounting 2" X 60" pipe stand; galvanized

Eductor Utilizes steam or plant air to create motive force to remove gases inside

bottle enclosure

Steam Tracing

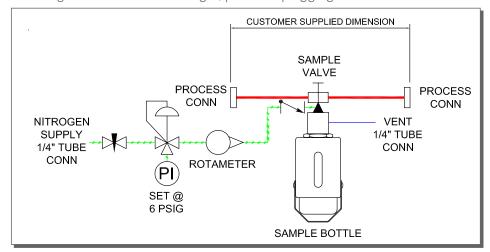
& Insulation

All components in contact with process are steam traced and insulated

Fixed Volume Chamber Repeatable sample volumes, helps prevent overfilling of bottle and isolate

bottle from process pressure

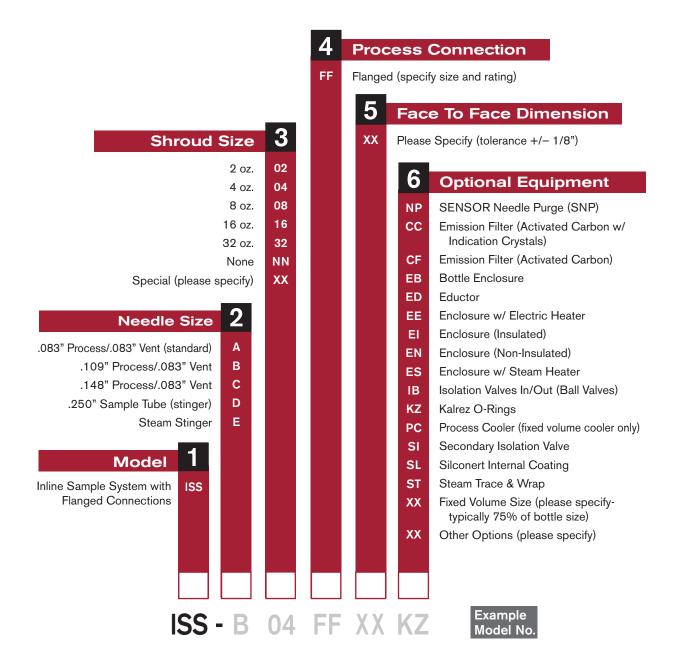
Steam Stinger Steam-traced stinger, prevents plugging





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 shown on pages 4 and 5

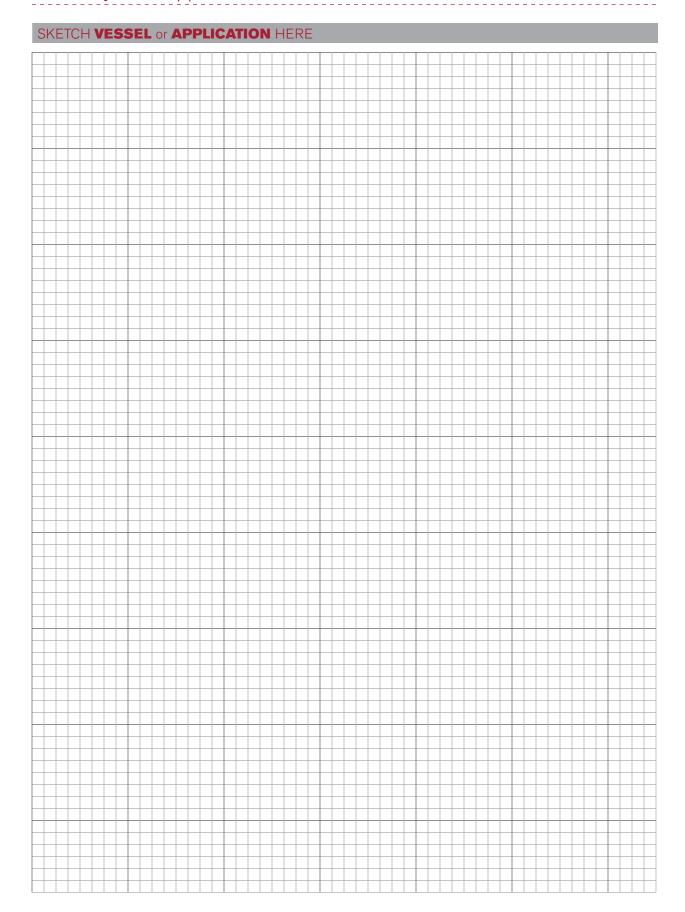




Da	te				
Name		Phone			
Company/Location		Email			
PROCESS DATA					
	Media	Tag Numbers			
	*Pressure Inlet	Pressures over 150 PSI, Fixed Volume	e System is recommended		
	*Fast Loop Outlet Pressure				
	*Vapor Pressure	Vapor Pressures > 19 psiA recommended sampled in Sample Cylinder			
	*Viscosity (CP) at Sampling Temperature				
	*Temperature Temperatures over 135 ° F, Process Cooling is recommend				
	Particles in Sample O Yes O No	Micron Size/ (%) if >	00 micron y-strainer recommended		
MATERIALS OF CONSTRUCTION					
	*Wetted Parts O 316SS (std.) O Monel 400	O Hastelloy C276 O Othe	er*specify		
	*O-Ring Material (Elastomer) O Viton (std.)	O Kalrez O Othe	r*specify		
	*Valve Packing Material O Teflon (std.)	O 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 Vent to Flare Vent to Carbon Absorber Tell Tale Crystals				
SAMPLE CONTAINER					
	Size Container				
		Safety Coated Glass O Oth			
	*Method of Sampling O Septum Bottle (closed loop, captured vent) O Open Top Bottle				
	*Type of Container O Boston Round O Customer (provide sample for manufacturing)				
OPTIONS (please check if needed)					
	O Sample Cooler Additional Data Needed, Please complete heat transfer document				
	O PipeStand for Mounting System				
	O SENSOR Needle Purge				
	O Secondary Sample Isolation Valve O Enclosure Type Insulated O Yes O No				
	Heated O Yes O No if yes, O Steam or O Electric if electric, Volts				
	O Process Block Valve O Sample Inlet O Sample Outlet O Both				
	O Check Valve on Vent				
	O Non-standard Process Needle (.083std) O .1	09 O .148 O 1/4" Stinger			
	O Steam Stinger				
	O Fixed Volume Size O oz. O mL (if	applicable)			

^{*}Required information





Bottle System Application Data Sheet



COMMENTS	

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

SENSOR

- Zero dead volume
- Replaceable process and vent needles
- Available with SENSOR Needle Purge





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

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

FVBSS

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

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 4 363 3637 Fax + 1 913 312 3596