



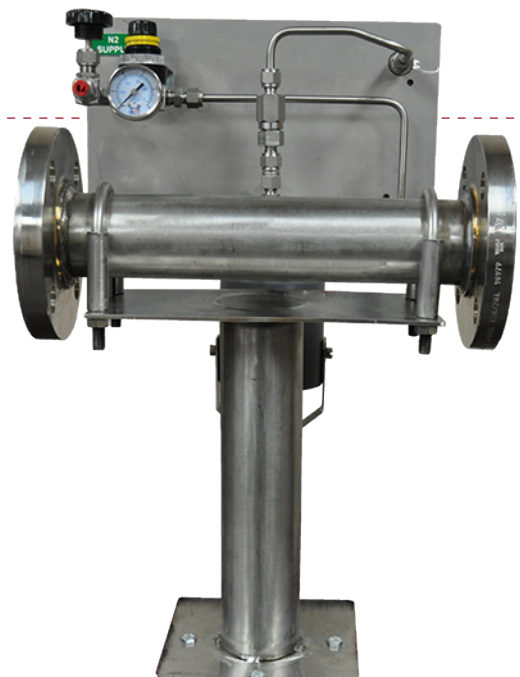
The SENSOR In-line Sampling System (ISS) fits into a piping system without the need to utilize, or create, a pressure differential to take a sample. It can be designed to fit into virtually any diameter piping system and any flange configuration. The ISS uses a special long-body needle valve, or ram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



Materials of Construction

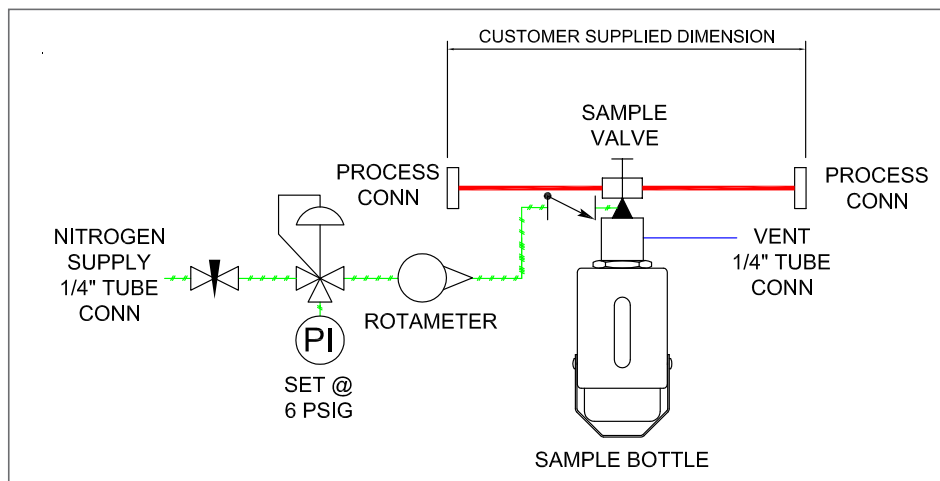
Spool Piece	316L Stainless Steel (SS) standard; flanged process connections
Sample Valve	316SS; 1/2" flow port
Process Needle	316SS; .083" - .148" OD
Vent Needle	316SS; .083" OD
O-Ring Material	Viton standard; optional Kalrez
Seal Material	Teflon
Bottle Shroud	PVC; 2 oz. - 32 oz. standard (other sizes 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

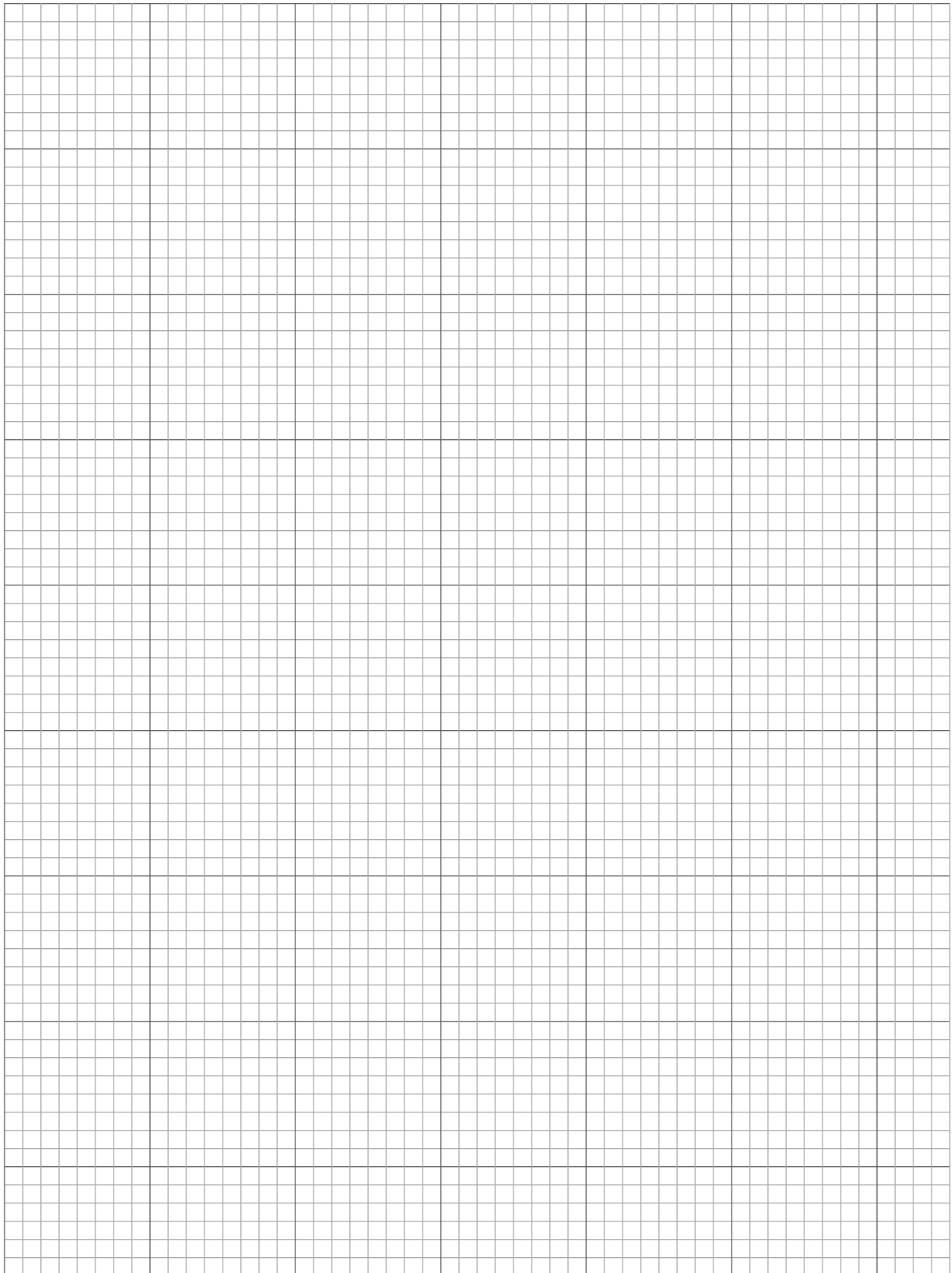
Operating Temperature 135°F maximum without cooler; 800°F maximum with cooler and graphoil valve packing

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



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



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

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

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



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





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