

# SENTRY MIL SAMPLER Low Emission Samplers

### MANUAL SAMPLING

The Sentry<sup>®</sup> MIL manual low emission sampler is ideal for sampling liquids in-line in refining, chemical, petrochemical and nuclear applications without exposure to the operator. The sampler's unique features include a close-coupled ball valve specifically designed to provide low dead volume in the sample flow area, ensuring representative samples from flowing process lines at pressures up to 2200 psig (150 barg). Additionally, the pressure drop of the flowing fluid through the sampler is low, and no valve stems or other components pass through the sampling stream.

For nuclear applications, the Sentry MIL sampler normally is used to collect primary side (RCS) samples for laboratory analysis. However, it also can be used to collect samples on secondary side (PWR) or turbine building side (BWR).

#### MODEL

MIL

#### **BENEFITS**

In-line sampling techniques are most applicable where speed loops or other pressure reduction techniques are not viable.

The Sentry MIL sampler features a patented side-discharge dual needle assembly that ensures septum integrity and full venting of process vapors. This non-coring needle punctures the septum without coring it, allowing for full resealing of the septum when the sample bottle is removed. The tapered bottle shroud enables proper septum and needle alignment, preventing accidental spillage or needle breakage.

A variety of needle arrangements and sample bottle sizes are available to meet most sampling requirements. Additionally, a tube stub option is available for high viscosity fluids or slurries that contain particulates.

Since operator safety is of the highest concern, the sampling valve interface features an adjustable throttle stop and spring-loaded (dead man's) shut-off handle. This provides proper sample control and quick closure upon release of the sampling valve.

A sample purge connection is an optional feature that allows the user to clear any remaining sample from the unit after sampling. The purge process can be as simple as a check valve and air puff bulb or regulated compressed air/nitrogen.

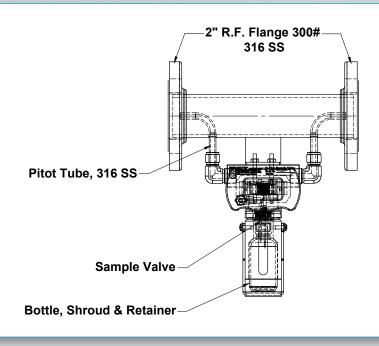
#### **FEATURES**

- Close-coupled sampling valve for high-pressure, low dead volume in-line sampling
- Needle or tube stub configurations offered in a variety of sizes
- Spring-loaded dead man's valve
- Variety of end connections and bottle options available to meet various application needs
- Optional enclosure for complete containment
- Pitot tube design for line sizes
  1.5 inches and larger





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#### NOTE:

Pitot tube design shown above. Pitot tubes are provided for line sizes 1.5 inches and above.

SPECIFICATIONS					
wetted materials	body: 316 stainless steel O-rings: Viton® or Kalrez® ball valve seats: PTFE-Teflon® for non-nuclear use only; PEEK (polyetheretherketone) for nuclear use				
bottle shroud	nylon				
standard pressure ratings	2200 psi max at 100°F (150 bar at 38°C); 450°F max at 100 psi (232°C at 7 bar) flange end connections have lower ratings; contact us				
sample valve	close coupled ball valve with spring return handle and adjustable throttling stop				
purge connection	1/8 in compression (shipped with cap)				
sampler size	size	connection type			
	1/4 in (6 mm) 3/8 in (10 mm) 1/2 in (15 mm) 3/4 in (20 mm) 1 in (25 mm) 1-1/2 in (38 mm)	comp comp NPT, flange, or comp flange or comp flange or comp flange			
sampler interface	needle assembly (OD)*		bottle size and type	Boston round	Schott
	process 0.188 in	vent 0.065 in 0.083 in 0.083 in 0.083 in 0.110 in ssembly (OD) vent 0.140 in e arrangements available		2 oz (60 ml) 4 oz (125 ml) 8 oz (250 ml) 16 oz (500 ml) 32 oz (1000 ml) Boston Round bottle cap/t finish standards. Schott/Du interfaces per ISO 4796. Standard septum material Other bottle or septum arr	iran bottle cap/thread is Teflon-coated silicone.

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