

Product Description

The Metallic Wafer Style Sampling Valve (SD IL 300) and PFA lined Wafer Style Sampling Valve (SD IL 400) are designed to take representative samples from a process pipeline. The wafer style design enables simple, yet robust operation. By using PFA for the wetted surfaces the valve is able to be used in very corrosive processes.

Applications

Inline Samplers are commonly used where chemicals are being introduced into the process or between process steps where it is difficult to obtain a sample from a vessel without creating hazards or additional contamination. Samples can be quickly and easily taken using in-line samplers to monitor the quality of incoming chemicals or manufactured product.

Features

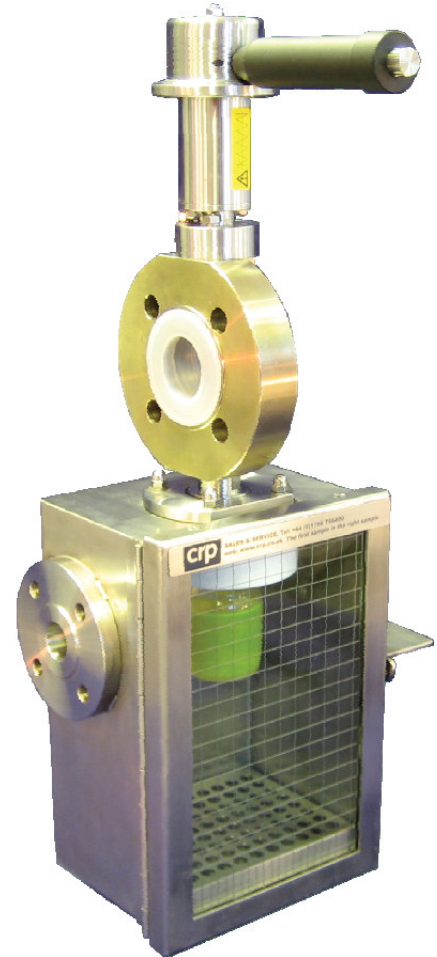
The valve is most commonly supplied with a spring return safety handle. The standard valve has a 316L stainless steel body & spindle (PFA-lined for SD IL 400 model). The spindle is sealed from the atmosphere using a PTFE / Chemraz fluoropolymer stem seal arrangement. The spindle has a PTFE tip seal housed in a tight fitting radial groove. This spindle tip seal arrangement seals into a tapered seat machined into the body. When the valve is operated the spindle lifts off and away from its seat allowing process media to flow. The stroke limit of the spindle is adjustable and should be set when the unit is commissioned to give the correct flow rate.

Specifications

- Sizes 1" - 6" nominal bore
- Valves designed for ASME/ANSI B16.5 Rating Class 150
- Operating Pressure from full vacuum to 240 psig/16 bar (150 psig/10 bar for lined valves)
- Operating Temperature from -20°F (-29°C) to +390°F (+200°C) (+350°F/+180°C for lined valves)
- Standard materials of construction are PFA lined stainless and 316L stainless steel

Options

- DIN flange executions
- ASME/ANSI B16.5 Rating Class 300 available
- Horizontal or vertical pipeline design
- Alternative valve operator methods including twin action pull out handle, handle with locking pin, handwheel, and pneumatic actuator.
- Alternate material of construction for metallic valve (Hastelloy, Monel, etc....)
- Safety cabinet for containment of spills and fumes.
- Variety of dispensing assemblies using our modular connection.
- Sample treatment (heating or cooling)



SDL IL 400 PFA-lined wafer style sampling valve with sample bottle dispenser in contained safety cabinet.

INLINE SAMPLER ADVANTAGES

- Takes a truly representative sample from a process pipeline in a safe controlled manner
- Fail safe handle offers ease of operation while preventing accidental operation
- Stem and tip seals can be maintained without removing valve body from the piping
- Can take samples from pipelines under vacuum or pressure

Typical dispensing options available from our standard product range include:

Hand Held Bottle Sampling

Offers a simple sample dispensing method being a straightforward PTFE or stainless steel dip tube. The operator simply offers up a hand-held sample bottle to the dip tube and operates the sample valve to acquire the sample. This option is intended for samples that are not toxic or dangerous to the operator. The bottle vents freely into the atmosphere around the dip tube.



Threaded Bottle Connector

The most common type of sample dispensing supplied is the PTFE threaded bottle connector. The operator screws the sample bottle up into the adaptor before taking the sample. The threads on the bottle adaptor are machined to suit the customer's own sample bottle. The bottle adaptor has an integral vent supplied with a PTFE compression fitting and a short length of PTFE tubing to carry fumes away from the operator. This can be piped into the site process vent system if required.



Septum Capped Bottle Assemblies

The sample bottle is fitted with an aperture cap and septum to seal the contents of the bottle from the atmosphere. The sample bottle is offered up to the sample valve and pushed on to the two non coring needles which puncture the septum - one for filling the other for venting. As the operator fills the sample bottle, the fumes from the sample media and bottle travel safely down the vent line away from the operator. When the bottle is pulled free from the needles, the septum seals the bottle preventing fumes or sample media from escaping from the sample bottle to the atmosphere or the atmosphere entering and contaminating the sample.



Syringe Samplers

Syringe samplers differ from the other types of sample dispensing methods as no sample bottle is used. Instead the sample is drawn directly from the process and contained within a borosilicate glass tube within the syringe assembly. The sample is automatically taken from the sample valve when the syringe is offered up to its mount using a pin and cam arrangement. When the syringe is released the sample valve and syringe automatically close preventing any release of fumes or product. The sample is contained within a borosilicate glass tube contained within a sturdy stainless steel carrier. The syringe can then be taken to the lab and safely dispensed using the syringe dispensing attachment.



For additional protection, sample bottles can be contained within a safety cabinet.

When samples are to be taken from hot process lines, we offer a range of heat exchangers to cool the sample to a safe temperature before being dispensed.

