

# SENTRY AUTOVREL FLOW CONTROLLER

## Sample Conditioning Automation

### SAMPLE CONDITIONING

The Sentry® AutoVREL Flow Controller allows users to automate new or existing sample panels through a well-appointed device that controls sample panel flow based on feedback from a non-contact flow meter. With the AutoVREL “smart” function, the operator only needs to set the desired sample flow and the system automatically adjusts to changes in the sample pressure.

### MODEL

AV-101

### BENEFITS

Power plants that frequently cycle or have sliding pressures require technicians to manually adjust the variable pressure-reducing element (VREL) in their sample panels to maintain flow and EPRI-recommended sample velocity. With reduced staff resources, there is increased interest in automating these tasks.

The Sentry AutoVREL flow controller has been developed to meet this need as an entry-level flow controller that can be used in new or retrofit installations.

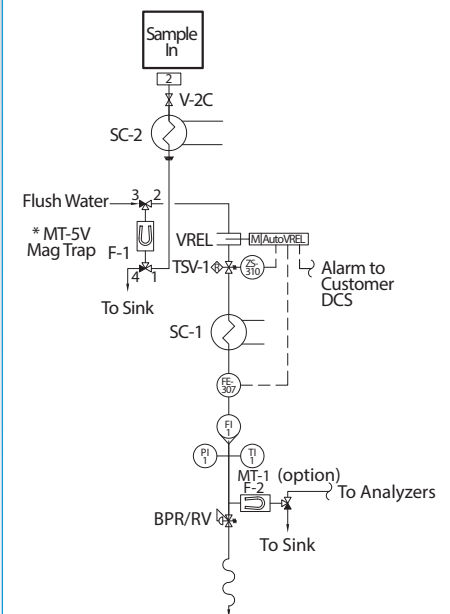
The Sentry AutoVREL flow controller is a sister product to the full-featured Sentry Sample Sentry® II which offers advanced control and monitoring features.

### FEATURES

- Provides quick response time during system startup
- Can be field installed on existing sample panels
- Simple to set and maintain desired flow
- Displays current valve position
- Provides feedback to plant DCS via relay
- Can be set to display actual flow or set flow
- Responds to feedback from a Sentry TSV (Thermal Shutoff Valve) relay for increased operator safety
- Allows for manual operation through simple override
- Offers easy access to the Sentry VREL for maintenance and cleaning



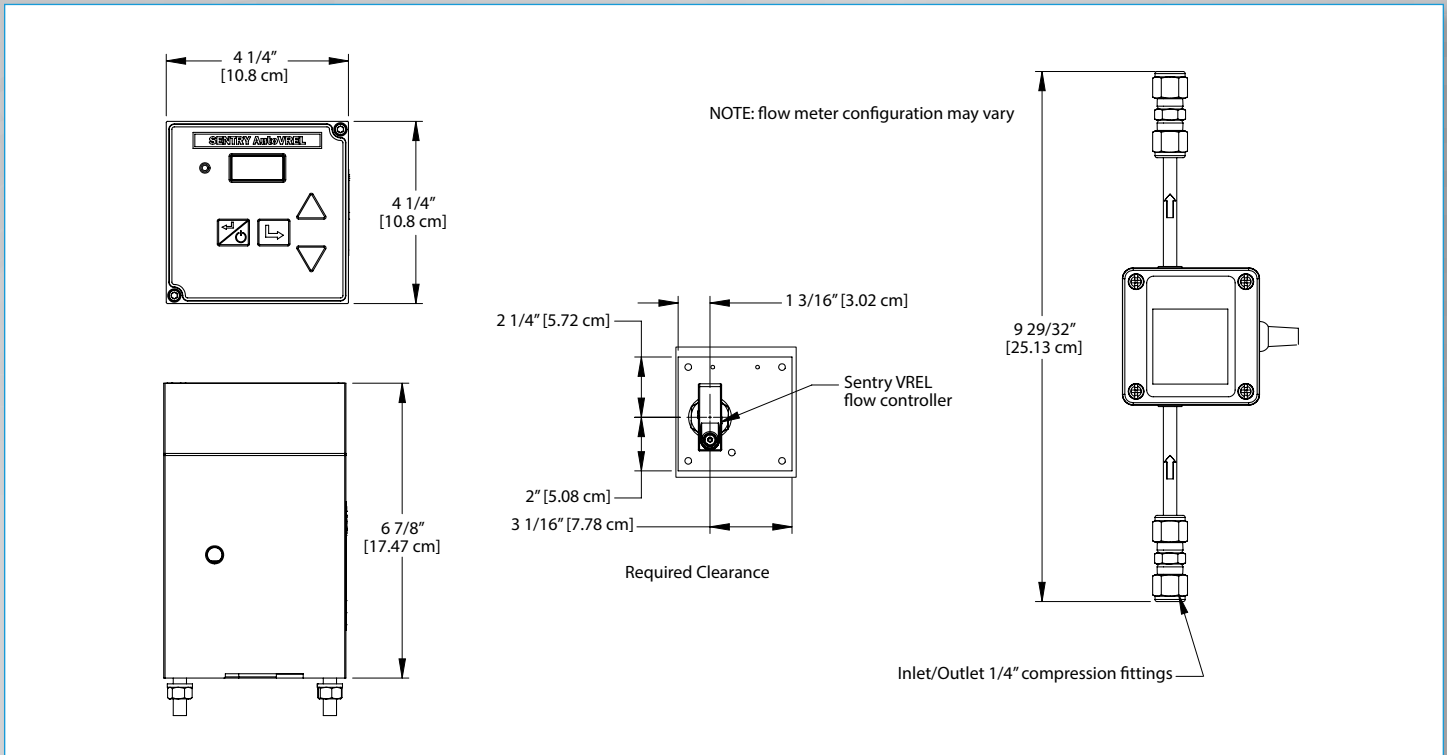
### Example P&ID



\* MT-5V recommended in applications with high magnetite loading



Sample. Monitor. Measure.  
**SENTRY**  
 Any Application. Anywhere.



## SPECIFICATIONS

<b>installation</b>	With basic hand tools by plant personnel; optional installation kit available
<b>mounting</b>	Front side – panel only
<b>dimensions</b>	4.25 in w x 4.25 in h x 6.875 in d
<b>sample temperature</b>	60°F to 95°F (15°C to 35°C)*
<b>ambient temperature</b>	-4°F to 140°F (-20°C to 60°C)
<b>flow range</b>	200-1500 cc/min ± 100 cc/min (default flow meter range)
<b>wetted materials</b>	316 SS
<b>input power</b>	24V DC; separate power supply required
<b>enclosure rating</b>	Ip 65
<b>inputs</b>	Flow, Sentry TSV trip
<b>outputs</b>	Visual indication of flow and setpoint; status indication relay for feedback to plant control room
<b>user interface</b>	Four keys: Up, Down, Enter/Display, Escape/On; backlit LCD display; LED operation indicator
<b>manual override</b>	Yes: See manual

\*The AutoVREL flow controller is designed for optimum performance at EPRI-recommended value of 25°C (77°F). If normal sample temperatures fall outside of the sample temperature range, please contact your Sentry representative to discuss options.

[sentry-equip.com](http://sentry-equip.com)

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