

# General Specifications

Model YARS100  
Advanced Reflux Sampler

GS 11A00V01-01E-A

The Advanced Reflux Sampler is a self contained two stage system designed to provide simple, fast and highly accurate sample conditioning analysis for severe process applications.

Filtration of particulate and passive cooling are accomplished in the first stage of the sampler and as the sample reaches the second stage, it is directed through a transition piece which channels the gas evenly across two active cooling elements. These cooling elements provide 360° contact between sample and coolant. As the cooling takes place, condensate and Heavy Hydrocarbons are removed from the sample and gravity fed back through the reflux section, washing the sample inlet of particulate and other fouling compounds.

Temperature is tightly controlled with a single point temperature measurement fed to a controller which cycles the two active cooling elements resulting in higher analysis accuracy.

## Features:

- Self Actuating or Electronic Version available
- Tight temperature Control for Higher Accuracy
- Larger Cooling Capacity Reduces Utility Costs
- Higher Sample Flow for Faster Analysis
- Reduced Maintenance – All Components Field Serviceable

## Typical Applications:

- Ethylene Furnace Cracked Gas TLE
- Ethylene Furnace De-Coke Header



## SPECIFICATIONS

<b>Mounting</b>	Vertical
<b>Controller</b>	Self Acting (Fixed or Adjustable) or Electronic (integral PID or plant DCS)
<b>Wetted Material</b>	316SS, Titanium, Hastelloy, Carpenter 20 (other materials available)
<b>Inlet Connection</b>	Flanged (typical 1", 2" OR 3" 150# OR 300# RF ANSI)
<b>Sample Temperature</b>	50°-1500° F
<b>Inlet Pressure</b>	<b>2 - 600 PSIG</b>
<b>Sample Outlet Temperature</b>	<b>40° - 200° F</b>
<b>Sample Flow</b>	1-5 LPM
<b>Area Classification</b>	Zone/Div 1/2 available
<b>Coolant</b>	8 SCFM @ 90 PSIG typical (other cooling media such as propylene possible) CUSTOM DESIGNS AVAILABLE TO SUIT MANY APPLICATIONS

Technical specification are subject to change without notice.

## MODEL AND SUFFIX CODES

### YARS100 Matrix and Advance Reflux Sampler

Base Model	Suffix Codes	Description
<b>YARS100</b>		Advanced Reflux Sampler
<b>Heat Exchanger Assembly</b>	-SAA -REC	Self Acting Adjustable Remote Electronic Control
<b>Process Connection</b>	-21	2" 150# ANSI RF Flange
	-23	2" 300# ANSI RF Flange
	-31	3" 150# ANSI RF Flange
	-33	3" 300# ANSI RF Flange
----	-N	Always -N
<b>Options</b>	/12	Thermo Over Temp Valve 120F
	/15	Thermo Over Temp Valve 150F
	/S2	Liquid Cooling Media

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