

# 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





The Yokogawa Advanced Reflux Sampler is designed to provide conditioning for severe service analysis needs using a simple self contained two stage system. The first stage is designed to provide filtration of particulate and passive cooling. As the sample reaches the second stage, it is directed through a transition piece which channels the gas evenly across two active cooling elements. The cooling elements provide 360 degree contact between sample and coolant. As the cooling takes place, condensate and Heavy Hydrocarbons removed from the sample are 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.

## 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.

<p><b>YOKOGAWA HEADQUARTERS</b> 9-32, Nakacho 2-chome, Musashinoshi Tokyo 180 Japan Tel. (81)-422-52-5535 Fax (81)-422-55-1202 E-mail: <a href="mailto:webinfo@mls.yokogawa.co.jp">webinfo@mls.yokogawa.co.jp</a> <a href="http://www.yokogawa.com.jp">www.yokogawa.com.jp</a></p> <p><b>YOKOGAWA EUROPE B.V.</b> Euroweg 2 3825 HD Amersfoort The Netherlands Tel. +31 (0)88-4641000 Fax +31 (0)88-4641111 E-mail: <a href="mailto:info@nl.yokogawa.com">info@nl.yokogawa.com</a> <a href="http://www.yokogawa.com/eu">www.yokogawa.com/eu</a></p>	<p><b>YOKOGAWA CORPORATION OF AMERICA</b> 2 Dart Road Newnan GA 30265 United States Tel. (1)-770-253-7000 Fax (1)-770-251-2088 E-mail: <a href="mailto:info@yca.com">info@yca.com</a> <a href="http://www.yokogawa.com/us">www.yokogawa.com/us</a></p> <p><b>YOKOGAWA ELECTRIC ASIA Pte. Ltd.</b> 5 Bedok South Road Singapore 469270 Singapore Tel. (65)-241-9933 Fax (65)-241-2606 E-mail: <a href="mailto:webinfo@yas.com.sg">webinfo@yas.com.sg</a> <a href="http://www.yokogawa.com.sg">www.yokogawa.com.sg</a></p>	<p>Yokogawa has an extensive sales and distribution network. Please refer to the website (<a href="http://www.yokogawa.com/an/index.htm">www.yokogawa.com/an/index.htm</a>) to contact your nearest representative.</p> <div style="text-align: right;">   </div>
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