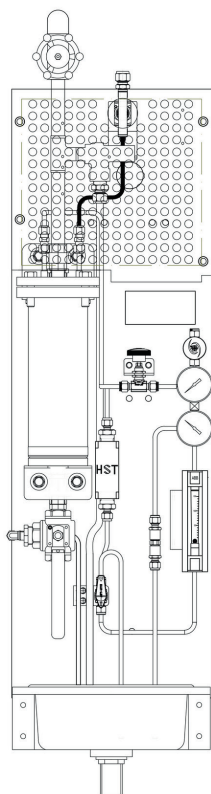


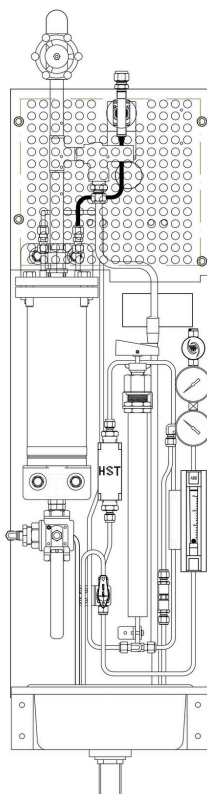
# Standard Single Analyser SWAS Panel

## Applications

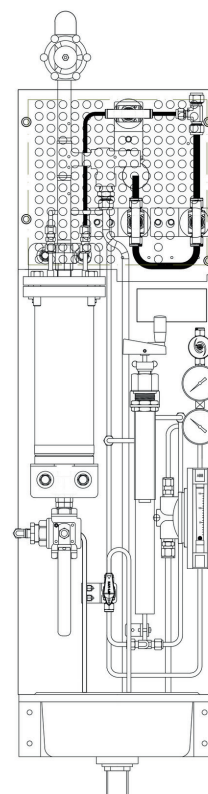
- Power
- Steam systems
- Cogeneration



Application <70 bar / 380 °C max.



Application <207 bar / 540 °C max.



Application <303 bar / 540 °C max.

## Simple to install. Safe to operate.

Hach®'s Steam and Water Analysis System (SWAS) for a single analyser allows any analyser to be easily connected to a hot and pressurised sample. It helps to protect and respect all safety and sample requirements.

The standard sample preparation panels include all necessary components for temperatures up to 540 °C and are available in three different pressure versions: <70 bar, <207 bar or <303 bar.

### Complete Solution

Everything from one single source: pre-configured panel, service, digital learning modules, and quality control. The single standardised platform minimises time required to teach and learn product operations, getting new systems in use faster.

### Easy and Safe Operation

The SWAS panel system is easy to install and requires only low annual maintenance time. Safe operation through shut-off valves for hot samples, safety valves for cooling water, protection screen for hot parts, and certified pressure tests.

### Robust and Industrial Design

The efficient cooler design ensures the need of less cooling water and a wide sample pressure and temperature range. Key parts are in stainless steel. The design allows for easy connection to any single independent analyser or for integration in any complete skid of analysers.

## Technical Data\*

### Sample conditions

<b>Sample pressure</b>	<70 bar	<207 bar	<303 bar
<b>Sample temperature</b>	380 °C maximum	540 °C maximum	540 °C maximum
<b>Flow rate</b>	200 mL/min for conductivity 150 mL/min for SiO <sub>2</sub> and PO <sub>4</sub> 100 mL/min for pH, O <sub>2</sub> , Na Plus 350 mL/min for grab sample  Maximum in total sample flow for the cooler is <1800 mL/min hot water or 1000 mL/min steam. Up to 3 analysers can be connected to one sampling panel.		

### Cooling water conditions

Water after treatment quality needed: at least decarbonised water of after filter quality

<b>Pressure range</b>	3 - 6 bar
<b>Temperature</b>	Up to 40 °C (pressure drop downstream of cooler: 0.3 - 0.7 bar)
<b>Turbidity</b>	<50 NTU
<b>pH range</b>	7 - 12 pH
<b>Conductivity</b>	<100 µS/cm
<b>Defined chloride range</b>	<250 mg/L for sample temperature 25 - 180 °C <100 mg/L for sample temperature 180 - 290 °C <25 mg/L for sample temperature 290 - 550 °C

For any extra range of the parameters please contact Hach Technical Support.

## Order Information

Part number	LYP105.99.01003	LYP105.99.01004	LYP105.99.01005
<b>Description</b>	SWAS Panel (1), <70 bar, 380 °C  Includes: mounting plate, sample inlet valve, cooler with 3 cooling water valves, pressure reduction valve, flow meter, check valve grab sample, thermal shut off valve, cold blowdown, manometer, thermometer, sink (depending on wall/rack mount), mesh: protection from the hot parts with safety tags	SWAS Panel (2), <207 bar, 540 °C  Includes: same features as panel 1 plus pressure reduction done with high performance pressure reducing valve (adjustable and cleaning in place)	SWAS Panel (3), <303 bar, 540 °C  Includes: same features as panel 2 plus high performance thermal shut off valve, high performance back pressure valve for analyser protection and grab sample, and hot blow down with 2 shut off valves according VGB recommendation >110 bar
<b>Application</b>	Make up, feed and boiler water, steam for low pressure boilers, return condensate in power & industry	Feed water & steam in medium pressure boilers in power & industry	Steam, high pressure boilers in big power stations

\*Subject to change without notice.



With Hach Service, you have a global partner who understands your needs and cares about delivering timely, high-quality service you can trust. Our Service Team brings unique expertise to help you maximise instrument uptime, ensure data integrity, maintain operational stability, and reduce compliance risk.