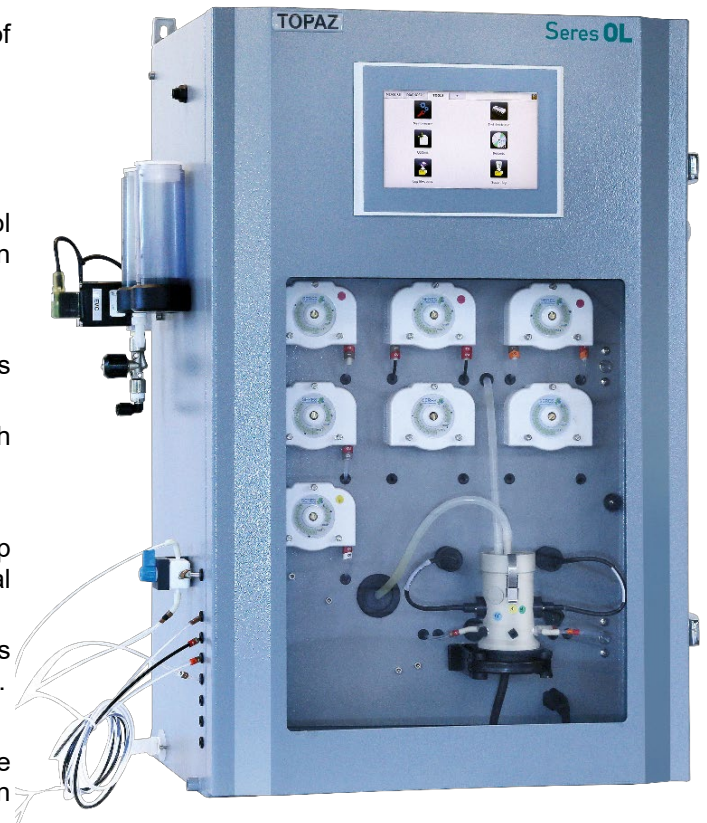


Complete monitoring system for the automatic, continuous measurement of phenol C₆H₅OH in process water, wastewater and effluents.

Analyzer Topaz Phenol

- For the continuous, colorimetric online determination of phenol per AFNOR T90-109.
- Available in separate measuring ranges :
 - Analyzer Topaz Phenol LR:** 0 to 5 ppm
 - Analyzer Topaz Phenol HR:** 0 to 20 ppm
- Complete system including measurement and control electronics, measuring unit, flow indicator, reaction chamber and reagent dosing system.
- With sample dilution for Topaz Phenol HR.
- Robust, high quality analyzer cabinet painted stainless steel, 316L.
- Automatic, electrical zero measurement prior to each measurement cycle.
- Automatic cell cleaning.
- 4 (LR) or 5 (HR) easily accessible peristaltic pump modules for accurate, automatic dosing of chemical reagents.
- 2 analog and 7 digital outputs for alarms for process values and diagnostic alarms for each sample stream.
- RS485 Modbus/JBUS RTU interface.
- Large back-lit touchscreen color LCD display for the reading of all measured values and status information simultaneously.
- Easy menu-guided operation in English or French.



Topaz Series Showcase

Analyzer	Topaz Phenol LR	(0-5 ppm)	SOL-55.341.000
Analyzer	Topaz Phenol HR	(0-20 ppm)	SOL-55.341.100
Configuration	2-Channel Setup	(LR only, similar range)	SOL-83.590.020
Configuration	4-Channel Setup	(LR only, similar range)	SOL-83.590.040
Configuration	6-Channel Setup	(LR only, similar range)	SOL-83.590.060
Configuration	Ethernet Interface (TCP/IP)		SOL-81.410.020
Option	1-Year Spare Part Package "Basis" (Analyzer + 1 st channel)		SOL-84.110.110
Option	1-Year Spare Part Package "Multi-Channel" (add once if multi-channel config. was selected)		SOL-84.110.150
Option	Reagent Shelf in SS316L		SOL-89.610.010

Phenol Measurement

Colorimetric method: determination of phenol after chemical reaction in an alkaline environment.

Reaction time 9-10 min.

Sensors/Measurement Equipment

Detection wavelength 555 nm

Temperature controlled measuring chamber.

Sample dilution for Topaz Phenol HR.

Analyzer	Measuring range
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Topaz Phenol LR	0-5 ppm
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Limit of Detection	29 ppb
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Repeatability	± 2 % FS or ± 0.03 ppm whichever is greater
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Precision	± 3 % FS or ± 0.03 ppm whichever is greater
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Topaz Phenol HR	0-20 ppm
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Limit of Detection	0.2 ppm
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Repeatability	± 2 % FS or ± 0.1 ppm whichever is greater
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Precision	± 3 % FS or ± 0.1 ppm whichever is greater
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Automatic baseline adjustment.

Sample flow surveillance.

Specifications and Functionality

Pump type: peristaltic

Pump quantity Topaz Phenol LR: 4

Pump quantity Topaz Phenol HR: 5

Power supply

Voltage: 110 - 240 VAC

Frequency: 50 /60 Hz

Power consumption: Typical 150 VA, 300 max.

Operation

Display: Color LCD, 7", touch-screen

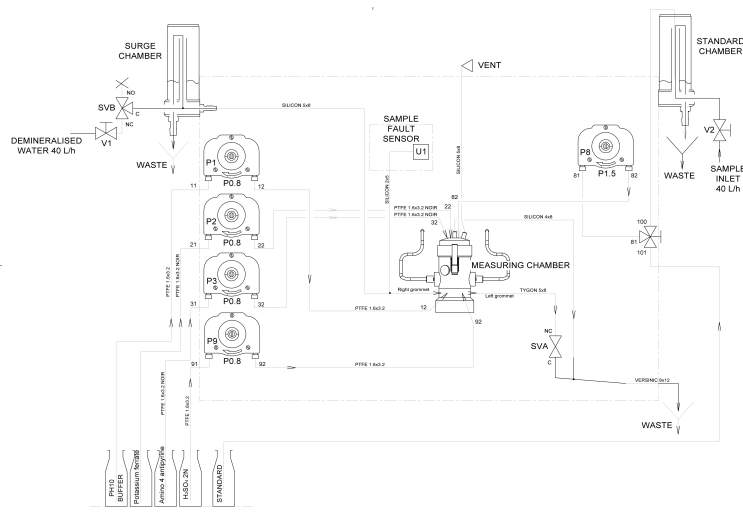
Display of process value, alarm status and time during operation.

Smart and intuitive interface based on separate menu sections: "Measurement", "Diagnostic" and "Tools".

User menus in English and French.

Password protection and storage of data records. Storage and graphical display of measurement history.

Topaz Phenol Measurement Scheme (HR with dilution)



Alarm Relays

1 summary alarm for "analyzer failure"

Maximum load: 1A / 24 V

Relay Outputs

2 potential-free contacts for each channel programmable as limit switches for measuring values (high/low thresholds)

1 sample flow alarm for each channel

1 output for indication of the active sample stream for each channel.

1 output for maintenance indication.

Rated load: 1A / 24 V

Signal outputs

2 programmable signal outputs for measured values (freely scalable, linear).

Current loop: 4 - 20 mA

Communication interface

RS485 interface (galvanically separated) with Modbus/JBUS RTU protocol included in standard.

Ethernet interface (TCP/IP) optional.

Analyzer Data

Sample conditions

Flow rate: min 30 l/h
optimum 40 l/h

Temperature: 5 to 40 °C

Inlet pressure_{Abs.} (25 °C): 0.1 up to 2.0 bar

Outlet pressure: pressure-free

Particle size: < 20 µm

Ambient Conditions

Temperature: 5 to 40 °C

Humidity: 10 to 80% rel.

Sample connections

Sample inlet: 1/4" BSP F

Sample outlet: soft tubing D INT 9

Sample outlet waste: soft tubing D INT 12

Sample outlet multi-channel (LR only):
soft tubing D INT 18

Wall cabinet

Dimensions: 780 x 570 x 370 mm

Material: Stainless Steel 316L

Total weight: 35 kg

Protection degree: IP 55

Reagent specifications

Type	Code
pH Buffer Solution (pH10)	RXX143
Reagent Consumption	2.5 l/month

Potassium Hexacyanoferrate	RXX161
Reagent Consumption	3.0 l/month

Amino 4 Antipyrine	RXX160
Reagent Consumption	1.5 l/month

Sulfuric Acid 2N	RXX159
Reagent Consumption	2.0 l/month

Deionized Water (Dilution - for Phenol HR only)	
Reagent Consumption	~4000l/month