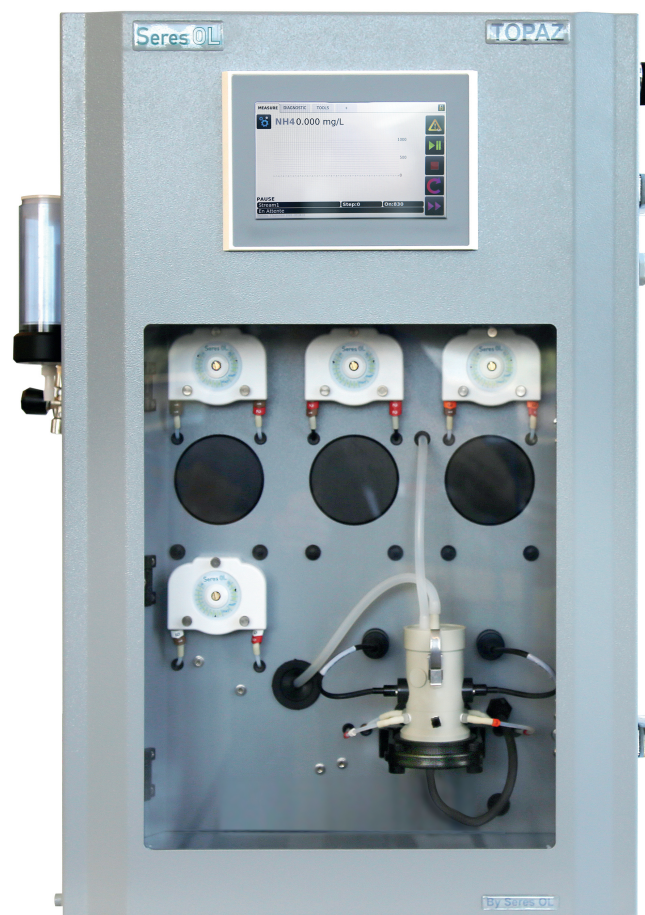


Complete monitoring system for the automatic, continuous measurement of Manganese Mn (II) in potable water, surface water, wastewater and effluents.

Analyzer Topaz Manganese Mn (II)

- For the continuous, colorimetric online determination of Manganese Mn (II).
- Available in separate measuring range configurations:
Topaz Manganese LR: 0-100 ppb or 0-200 ppb
Topaz Manganese HR: 0-1 ppm or 0-2 ppm
- Complete system including measurement and control electronics, measuring unit, flow indicator, reaction chamber and reagent dosing system.
- Robust, high quality analyzer cabinet painted stainless steel, 316L.
- Automatic, electrical zero measurement prior to each measurement cycle.
- Automatic cell cleaning.
- 6 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

По вопросам продаж и поддержки обращайтесь:

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Тула (4872)74-02-29
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Киргизия (996)312-96-26-47

Казахстан (772)734-952-31

Таджикистан (992)427-82-92-69

Analyzer Topaz Manganese Mn (II)

Datasheet No. DenSOL55331x00

Seres 

Manganese Measurement

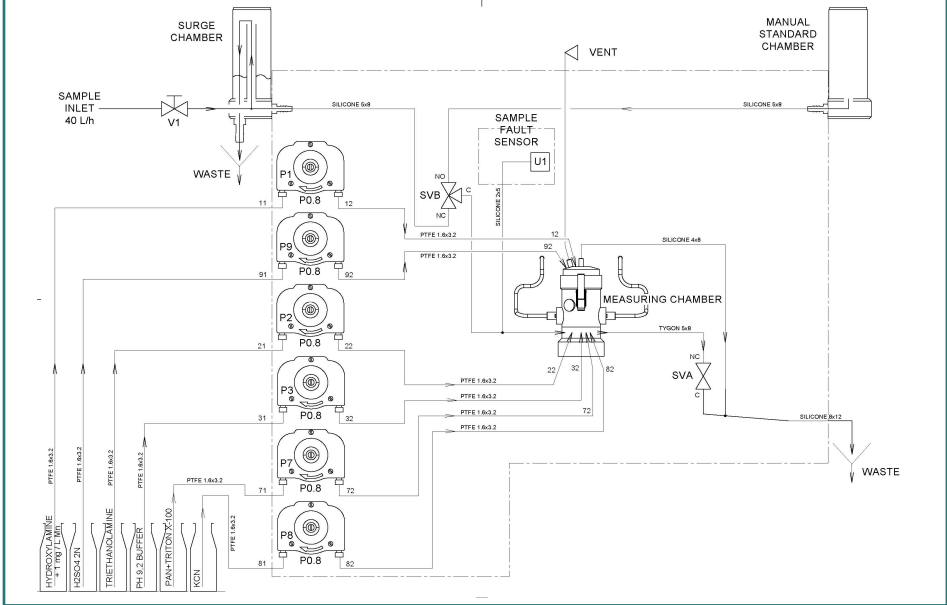
Colorimetric method;
Formation of a PAN-Manganese complex and dissolution of this complex with the Triton solution.
Reaction time 8-10 min.

Sensors/Measurement Equipment
Detection wavelength 565 nm
Temperature controlled measuring chamber

Analyzer	Measuring range
Topaz Manganese LR	0-100 or 0-200 ppb
Limit of Detection	11 ppb
Repeatability	< ± 2 % FS
Precision	< ± 3 % FS
Topaz Manganese HR	0-1 or 0-2 ppm
Repeatability	< ± 2 % FS
Precision	< ± 3 % FS

Automatic baseline adjustment.
Sample flow surveillance.

Topaz Manganese Measurement Scheme



Specifications and Functionality

Pump type peristaltic
Pump quantity 6
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.

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.

Reagent specifications Analyzer Manganese LR

Type	Code
Hydroxylamine Chlorhydrate 100g/L + 1.0mg/l Mn	RXX221MN
Reagent Consumption	3.2l/month
Triethanolamine 20%	RXX222
Buffer Ammonicacal pH 9.2	RXX223
H ₂ SO ₄ 2N	RXX159
Potassium cyanide	RXX224
Reagent Consumption (each)	3.2l/month
Pan + Triton X-100	RXX265
Reagent Consumption LR	1l/month

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: soft tubing D INT 19
Wall cabinet
Dimensions: 780 x 570 x 370 mm
Material: Stainless Steel 316L
Total weight: 35 kg
Protection degree: IP 55

Reagent specifications Analyzer Manganese HR

Type	Code
Hydroxylamine Chlorhydrate 100g/L	RXX221
Reagent Consumption	3.2l/month
Triethanolamine 20%	RXX222
Buffer Ammonicacal pH 9.2	RXX223
H ₂ SO ₄ 2N	RXX159
Potassium cyanide	RXX224
Reagent Consumption (each)	3.2l/month
Pan + Triton X-100	RXX265
Reagent Consumption HR	3.2l/month