

NXT Chlorinator

Westwater NXT Chlorinator features the reliable and proven Severn Trent Services equipment, ensuring reliable and repeatable operation. All of which are assembled on a heavy duty, corrosion resistant wall panel, providing uninterrupted service for all installations. The Chlorinator is factory tested, easy to install & offers 11 point valve calibration. Capacities range from 100g/hr to 60kg/hr, providing versatility for all applications. Integrally mounted vacuum switches are also available providing high and low alarms. Control input signals include flowmeter and/or chlorine residual analyser. The chlorinator connects to a Vacuum Regulator and Ejector to ensure complete automatic control.



Benefits of the NXT Chlorinator

- Safe, reliable all-vacuum operation
- Front access service
- Space-saving wall panel design
- Superior materials of construction
- Variable capacities up to 60kg/hr
- Sonic operation - no D/P regulator
- Microprocessor-based control
- Suitable for: Chlorine, Ammonia, Sulphur Dioxide and Carbon Dioxide
- 4-20mA gas flow rate output standard
- Optional High/Low Vacuum Switches



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Technical Data

Capacities:

100, 200 and 500 g/hr 1, 2, 4, 6, 10, 20, 40 and 60 kg/h of chlorine gas

Process Connections:

- 200 PPD Max; 3/8" or 1/2" tubing
- 500 PPD Max; 1/2" tubing
- 3000 PPD Max; 1" NPT

Power:

Voltage Requirements: 100-250 Vac; 47-66 Hz (Auto Ranging)

Quiescent power consumption: 12 VA maximum

Operating power consumption: 38.5 VA maximum

Environmental Limits:

Ambient Temperature: 4°C to 52°C

Shipping Temperature: -29°C to 52°C

Characteristics:

Inputs:

- Residual analyser and/or Flowmeter: 2 x 4-20mA or 1-5Vdc (field selectable) with dampening adjustable from 0-25.5 seconds (isolated)
- Remote set point (local/remote): 1 x 4-20 mA or 1-5Vdc (field selectable) (isolated)
- Vacuum switch alarm contact - Hi & Lo
- Remote standby switch contact, one (1)

Outputs:

- Relay contacts: 3 x 5A resistive at 240 Vac SPDT field configurable for NO/NC. Contacts field configurable for: fault alarm (malfunction or power failure), auto/manual state, local/remote set point, residual HI, residual LO, set point deviation HI, set point deviation LO, water low flow, valve position HI, valve position LO, valve stall, standby, vacuum HI/LO.
- Calibrated Gas Flow Transmission: 1 x 4-20mA, maximum load 1000 ohms.

Display:

- 2 x 16 characters, vacuum fluorescent display.
- Displays operational parameters as well as alarm conditions.
- Four pushbuttons for display and parameter setup.

Data Retention: Parameters & calibration profiling are stored in EEPROM

Total Weight: 14kg

Dimensions: 200g/hr - 10kg/hr (850L x 300W)
20, 40 & 60kg/hr (850L x 550W)

Technical Data

Control:

Auto/Manual:	Auto - run by control mode, Manual - use up/down pushbuttons.
Local/Remote:	Local – set point adjusted at controller, Remote – corresponds to input signal.
Control Modes:	Field selectable for flow proportional, residual, compound loop and feed forward.
Dosage Control:	Output: Input Ratio of 0.2:1 to 2.0:1.
Manual Override:	Manual Control Knob (multi-turn) provided to position valve plug when dosage control is in “off” position or if power fails.

Automatic Control

- The chlorinator is designed for automatic control when variable flow and residual demand conditions are present.
- The Chloromatic automatic valve will open and close in proportion to a signal received from the Internal microprocessor based control module.
- The controller receives electrical input signals from a flowmeter and/or residual analyser, along with a remote set-point signal causing the controller to automatically reposition the control valve to maintain the desired gas feed rate or chlorine residual.
- The Chloromatic control valve is field configurable for three chlorination and two de-chlorination control modes:

Flow: Proportioning valve position to flowrate.

Residual: Single, integral action, adjusting valve based on the difference between the process and the residual set point.

Compound Loop: Simultaneous proportioning valve position to a combination of flow proportioning and residual control. If one signal is lost, the controller automatically controls based on remaining signal.

Feed Forward: Valve position control directly proportional to flow signal multiplied by the residual signal.