



WALLACE & TIERNAN® SFC BA CHLORINE ANALYSER

ECONOMICAL AND RELIABLE PERFORMANCE

Evoqua Water Technologies introduces the SFC BA Chlorine Analyser, the newest member in our broad Wallace & Tiernan® portfolio of process analysers and controllers. Designed with economics, simplicity and reliability in mind. Ideally suited for water chlorination applications, this analyser is the least expensive to own, operate and maintain yet is responsive and reliable enough to ensure compliance with regulations. Savings go right to your bottom line with features such as; no costly reagents or buffer solutions required, intelligent yet simple operation, dramatically reduced sensor maintenance and one fifth the sample water flow requirements of similar products.

FULL-FEATURED ANALYSER

During operation, this analyser could not be easier to use. The analyser accepts a temperature-compensated free or total chlorine sensor input and provides an isolated analogue output, which can be connected to an optional chemical dosing controller or used for remote indication. And with a T_{90} response time of less than 60 seconds, you can be assured that the chemical dosing matches the ever changing requirements to prevent under or over dosing – minimising risk and wasted chemical expense. The SFC BA includes two freely assignable relays. Each relay can be programmed on-site and assigned to one or more events to suit your control needs.

This analyser comes with many intelligent features ensuring accurate and reliable measurements such as; self-diagnostics, data security and an SD memory card slot for data logging. To prevent risk of being out of compliance due to improper maintenance, routine schedules and alarms are pre-programmed into the analyser.

BENEFITS

- Low total cost of ownership
- No costly reagents or buffer solutions required
- Reduced sample wastewater by 200,000 litres per year
- One point calibration
- Sensor maintenance is reduced to a simple six month event
- Improved control of chemical dosing with less waste and risk

FOR ADDED CONVENIENCE AND SECURITY

The SFC BA includes even more capabilities to meet your particular needs:

- Seven measurement ranges for higher resolution of residual readings
- Assignable input for alarm, output hold or alternate configuration

ROBUST DIGITAL SENSOR

There are two disinfectant specific sensors available for measuring either free or total chlorine. Utilising the widely accepted potentiostatic three electrode measurement technologies, these sensors incorporate a membrane for diffusion of the oxidant into the working electrode. An internal, buffered electrolyte reduces the effect of pH on the chlorine measurement. Therefore, external pH buffering or pH compensation is not required for samples with a varying pH. Temperature compensation of the chlorine residual reading is built into the sensor eliminating the need for a separate temperature sensor. For ease of diagnostics and routine calibration, sensor calibration data is stored in the sensor itself.

As with all membrane based sensors, a certain amount of routine maintenance is required. The robust sensor design of the SFC BA reduces routine maintenance and down time in comparison to similar sensors. Additionally, membrane sensors do not require costly reagents.

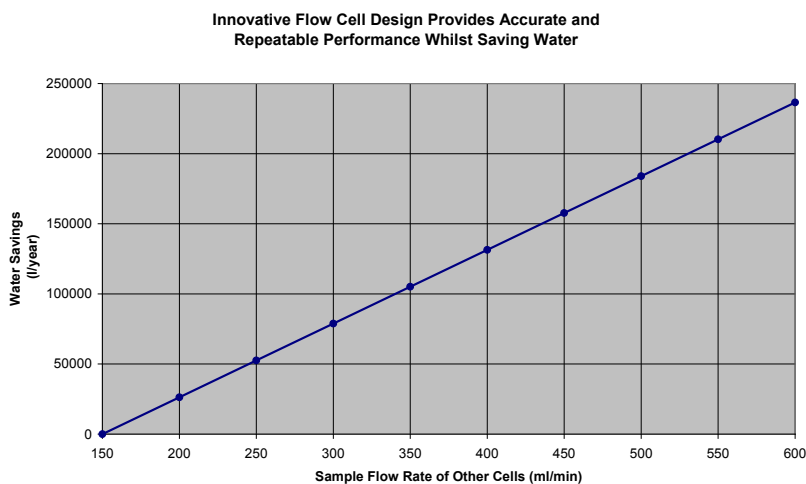


Robust Membrane Sensor

INNOVATIVE FLOW CELL

The innovative new flow cell design optimises sample water flow for use with the membrane sensors which results in a 200,000 litre per year water savings when compared to other flow cell designs. For measurement accuracy and stability, the flow cell incorporates a water jet that removes bubbles from the membrane surface.

SEE HOW MUCH WATER YOU CAN SAVE USING THE GRAPH BELOW.



Water Saving Flow Cell

ORDERING INFORMATION

Product	Option	Part Number
SFC BA Analyser	100-240 VAC	W3T166501
	24 VDC	W3T166502
Flow Cell		W3T170361
Sensors	Free Chlorine	W3T168596
	Total Chlorine	W3T168595

TECHNICAL DATA

SFC BA ANALYSER

Measurement ranges	0-100 µg/l, 0-200 µg/l, 0-500 µg/l 0-1.00 mg/l, 0-2.00 mg/l, 0-5.00 mg/l, 0-10.0 mg/l
Accuracy	+/- 0.02 ppm or 0.5% of F.S.
Display	Large 60 x 32 mm, 128 x 64 pixel LCD graphic and numeric
Power	100 - 240 VAC, 50/60 Hz, or 24 VDC, 10W
Measurement Inputs	(1) temperature-compensated free or total chlorine
Digital Inputs	(1) Selectable for alarm, output hold or alternate configuration
Relay Outputs	(2) freely assignable and fully programmable 5A, 250 VAC or 30 VDC
Analog Outputs	(1) Isolated 0-20 or 4-20 mA for recording or control
Memory Storage	SD card slot
Data Logging	Date, time and residual every minute stored to SD memory card
Operation Conditions	0 - 50 °C, <80% humidity - no direct sunlight
Enclosure	IP 66 polystyrol
Mounting	Wall mounting and DIN rail
Dimensions	W x H x D: 185 x 265 x 145 mm
Weight	2.5 kg
Certifications	CE, EMC - EN 61326, LVD-EN 61010

SENSOR

Measurement	Temperature-compensated free chlorine or total chlorine
Technology	Durable membrane covered, 3-electrode potentiostatic
Reference Electrode	Silver / silver halide / potassium halide solution
Electrolyte	Potassium halide solution
Wetted Materials	Stainless steel, PVC
Sensor Cable	1.5 metres supplied, max. 10 metres
Range	0.05 to 10 ppm
Temperature	5 to 45 °C operating
Sample Requirements	>10 µS/cm to 2,500 µS/cm Clear, potable quality
Response Time	90% in 60 seconds (free)
Zero Drift	< 0.01 ppm per month
Accuracy	+/- 0.02 ppm or 0.5% of F.S.
pH Sensitivity	pH 4 to 8: -2.5% per pH unit pH 8 to 9: -10% per pH unit pH 9 to 10: -20% per pH unit
Max. pressure	0.5 bar (suitable with pressurised flow cells)

FLOW CELL

Wetted Materials	PVC-U, PE-LD, EPDM, FPM, PP, POM
Sample Flow Rate	10-15 l/h
Sample Inlet	13 mm hose barb
Sample Drain	13 mm hose barb
Pressure range (inlet)	0.2 - 4.0 bar
Back pressure	None, open drain required



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