

Specifications Sheet – CO series Controllers

Our range of CO controllers work with Aquarius Technologies peristaltic pumps or other brands via supply of power to the designated output which is labelled in the control box. Weather proof GPO sockets can also be used. This unit is also designed to be used with erosion feeders for BCDMH type products, using ORP to control various sizes solenoid outputs to suit the flow requirements.

The CO10000 controller may also be used to build a customised dosing package.

Please see the chart of available solenoid kits containing various sizes.

Note: For solenoid sizes over 20mm a separate take off may be required and designated to the erosion feeder to ensure adequate flow.



Models where Oxidising BCD Tablet Feeders are used with optional pH control				
Detail Specification	CO10000	CO11000	CO11300	CO11310
Dose – Inhibitor	Optional	1.0 ltr/hr	1.0 ltr/hr	1.0 ltr/hr
Dose – pH	Optional	Optional	Optional	Optional
Dose – BCDMH	Optional	Optional	Optional	Optional
Dose – Sec. Biocide	Optional	-	3.0 ltr/hr	3.0 ltr/hr
Dose – Dispersant	Optional	Optional	Optional	1.0 ltr/hr
Dose – Sodium Hypo	Optional	See CH	See CH	See CH
Dose – LBR	Optional	See CL	See CL	See CL
Sensors Fitted	Flow/Conductivity/Temperature & pH/ORP/Ground Reference Probes			
Shipping Dim. & Weight	52cm x 62cm x 23cm and cubic weight is 18kgs			
Communications Port	Interfaced to any RS232 device via the DB9 plug on the circuit board located internally			
Electrical Supply	220 – 250Vac 50 or 60 Hz, 10Amp continuously powered “clean” mains supply – 7Amp output relays			
Alarms - User Defined	All defined set points are able to be associated with alarm outputs as +, -, or +/- ranges. The alarm signals may be directed to various output destinations.			
Alarms - No-volt Contact	A standard common no-volt alarm is incorporated in all controllers for DDC operation.			
Data Logging	Data logging of analogue readings and the relay ON times is standard – Log can be set from 1 min to 240 min intervals. At 30 min intervals, the log can contain more than 30 days of data, downloaded either locally to a laptop or remotely via a GSM modem.			
Manifold Ratings Press. & Temp. rating Flow rate required Plumbing	Manifolds are designed from uPVC and rated to 700 kPa at 50 °C. A minimum flow rate of 12 ltr/min is required to activate the flow sensor Plumbing inlet & outlets are 20mm BSP fem. Threads or can be fitted with 19mm hosetails			
Non-Oxidising & Oxidising: Bio. Programs & Timer Control	ORP (when selected) & Bio B – are controlled by two independent timers, microprocessor controlled to operate on an individual day, or Mon to Fri, Mon + Wed + Fri, or everyday basis. Pre-bleed & bleed lockout facilities can be programmed for each timer to operate in conjunction with biocide dosing. Activation is to 12.5% of conductivity set-point - below for pre-bleed & above for bleed lockout Timer on ORP models can be used to control ORP output in TMR mode.			
Inhibitor Dosing	Inhibitor can be dosed according to impulse from water metering. Water Meter is an add-on based on the size required. Other modes include Bleed, Continuous or against Flow.			

Pumps Models	
Peristaltic	Available in 1 & 3 ltr/hr @ 350kPa. These pumps are specially designed to be used with APL control and recommended to be used at 50% duty cycle
Peristaltic - Variable	Available in 1 & 3 ltr/hr @ 350kPa. These pumps are specially designed to be used with APL control and recommended to be used at 50% duty cycle
High Pressure Pumps	Available in 1, 2, 5, 10 & 20 ltr/hr with variable control.

Module Designation	pH - values	ORP - mV	Conductivity – mS/cm	Temperature °C
Operating Range	0 – 14 pH	0 – 999 mV	0 – 9.99 mS/cm	0 – 100 °C
Resolution	0.01 pH	1 mV	0.01 mS/cm	0.1 °C
Accuracy	+/- 0.02 pH	+/- 1 mV	+/- 0.02 mS/cm	+/- 0.2 °C
Repeatability	+/- 0.02 pH	+/- 2 mV	+/- 0.01 mS/cm	+/- 0.2 °C
Alarm Range	+/- 0 – 3.5pH	+/- 0 – 400mV	+/- 0 – 2.0 mS/cm	N/A
Dead Band	N/A	N/A	0.05 mS/cm	N/A
Control Type	APL	APL	On/Off	N/A
Sensor Press. Rating	700 kPa	700 kPa	700 kPa	700 kPa
Sensor Temp. Rating	50 °C	50 °C	50 °C	50 °C

Accessories to Complete and Maintain the System	
Bleed Solenoid	Standard Bleed Solenoid 15mm comes standard with controller. Options of 20mm, 25mm, 40mm & 50mm are available
BCD Solenoid Kits	Options of 15mm, 20mm or 25mm with non-return valve are offered to suit your BCD size
BCD Feeders	BCD Feeders are available in 13kgs, 33kgs and 100kgs models
Weatherproof Socket	10 Amp weatherproof power sockets with relay activation
Extended Solenoid Cable	240 Vac extension cable of 5m or longer for remote bleed solenoids
Water Meter	An impulse water meter that provides pulses proportional to flow. This is to allow Inhibitor dosage in proportion to system make-up rate
Water Usage Metering (WUM)	By adding a WUM card, water usage readings will be reflected on the controller and can also be data logged. Readings will show month-to-date and year-to-date figures of make-up, bleed and backwash
Tank Alarm	To provide warning when chemical tank is near empty. Alarm can also be sent via SMS when Communications Bundle is installed

Optional Communications Package to Enhance the System	
Communications Bundle	GSM modem with AquaGuard 2 software can be added to enable remote access and downloading of data from the controller. User will also be able to receive controller alarm via SMS
AquaGuard 2	AquaGuard 2 software for local access/downloading of data from controller into computer spreadsheet and graph format
4-20mA Analogue Input	Accepts a 4-20mA signal from a stand-alone meter. Data are displayed on the Aquarius Controller and data logged. Alarm can also be activated via SMS.
BMS Card	A plug-on card that provides 4 analogue signals as 4 - 20 mA + 4 events as contact only signals – means of data transfer to BMS system
Modbus	Modbus 485 card to enhance digital data communications (2 way) between BCMS and controller

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