EZ4000 Series Online Titrimetric Alkalinity Analyser

Applications

- Wastewater
- Drinking water
- Power
- Surface water

Online, automatic titration of chemical parameters in various water monitoring applications

Online, automatic titration of chemical parameters in various water monitoring applicationsThe EZ4000 Series are state of the art titrators built on an industrial analytical platform run by AppliTek's proprietary controller-database software. From the high precision dispenser for addition, robust peristaltic pumps for sampling and drain, and carefully designed liquid pathways all add up to the highest performance for industrial and environmental analysis needs.

Each and every application starts with the basics: the right titrimetric technique in function of the parameter(s) of interest, the measuring range and the water matrix. The EZ4000 Series may use either potentiometry i.e. acid-base, redox or precipitation titration, where the endpoint is determined by a change in a specific variable, or photocolorimetry, where colour change is used to determine the endpoint of the titration.

The single-parameter EZ4000 Series combines an unparalleled expertise in online titration with a set of unique analysis, control and communication features in a compact footprint:

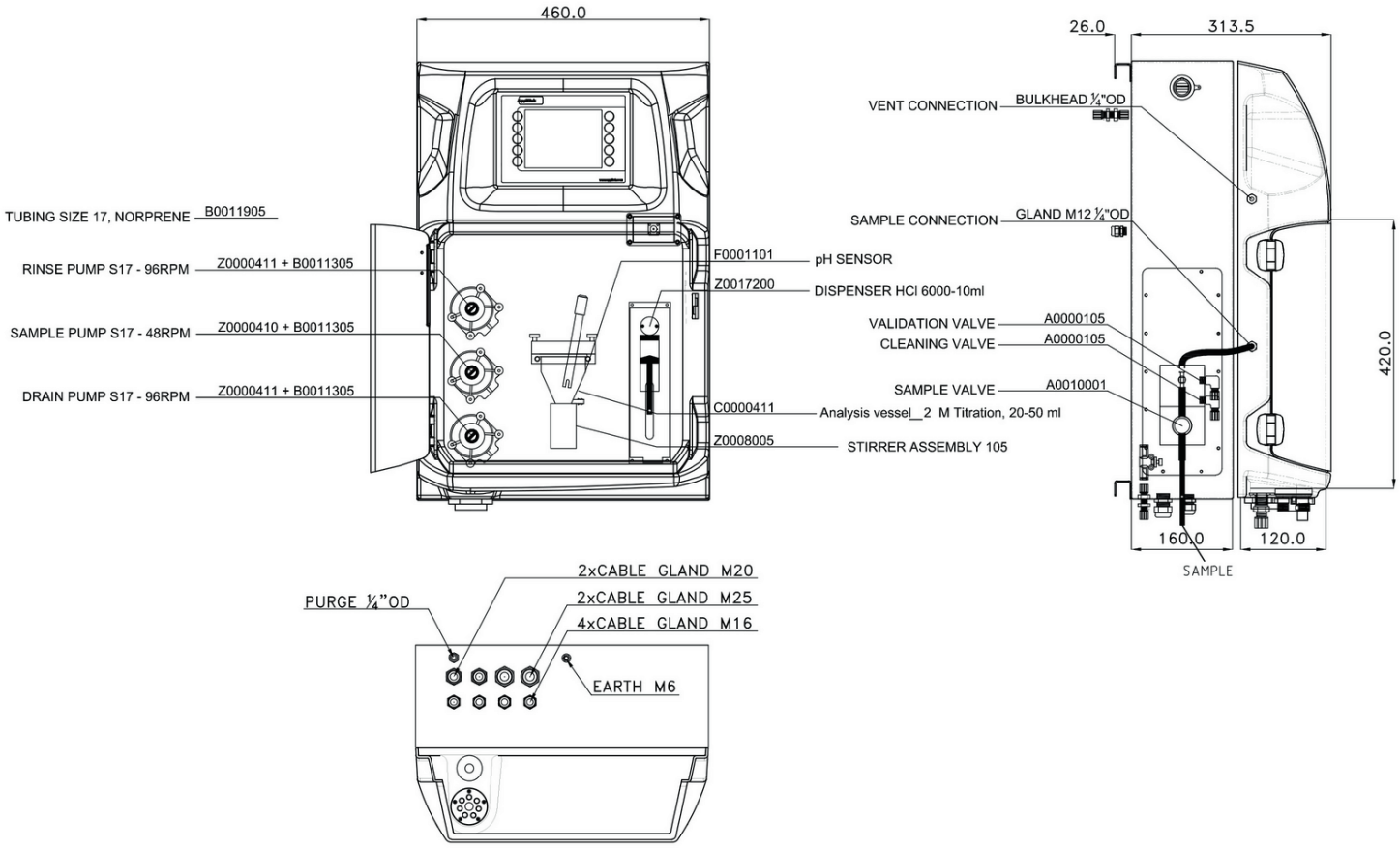
- Unique flexibility in titration methods
- Smart automatic features
- Control and communication via industrial panel PC
- Standard 4 - 20 mA signal output with alarm processing
- Communication supporting Ethernet connectivity to Modbus TCP/IP
- Multiple stream analysis

Technical Data*

Parameter	Total Alkalinity, Free Alkalinity
Measurement method	Acid-base titration with hydrochloric acid
Measuring range	10 - 5000 mg/L $CaCO_3$
Precision	Better than 2% full scale range for standard test solutions
Detection limit	≤ 10 mg/L
Interferences	Soaps, oily matter, suspended solids or precipitates may coat the glass electrode and cause a sluggish response. Allow additional time between titrant additions to let the electrode come to equilibrium or clean the electrodes occasionally.
Cycle time	10 - 15 minutes
Automatic cleaning	Yes
Calibration	N.A.
Validation	Automatic; frequency freely programmable
Ambient temperature	10 - 30 °C ± 4 °C deviation at 5 - 95% relative humidity (non-condensing)
Reagent Requirements	Keep between 10 - 30 °C
Sample pressure	By external overflow vessel
Flow rate	100 - 300 mL/min
Sample temperature	10 - 30 °C
Sample quality	Maximum particle size 100 µm, < 0.1 g/L; Turbidity < 50 NTU
Power	110 - 240 VAC, 4 A, 50/60 Hz Max. power consumption: 150 VA
Instrument air	Dry and oil free according to ISA-S7.0.01-1996 quality standard for instrument air
Demineralised water	For rinsing purposes
Drain	Atmospheric pressure, vented, min. Ø 64 mm
Earth connection	Dry and clean earth pole with low impedance (< 1 Ohm) using an earth cable of > 2.5 mm^2
Analogue outputs	Active 4 - 20 mA max. 500 Ohm load, standard 1, max. 8 (option)
Digital outputs	Optional: RS232, Modbus (TCP/IP, RS485)
Alarm	1 x malfunctioning, 4 x user-configurable, max. 24 VDC/0.5 A, potential free contacts
Protection class	Analyser cabinet: IP55 / Panel PC: IP65
Material	Hinged part: Thermoform ABS, door: plexiglass Wall section: Galvanised steel, powder coated
Dimensions (H x W x D)	690 mm x 465 mm x 330 mm
Weight	25 kg
Certifications	CE compliant / UL certified

**Subject to change without notice.*

Dimensions



Be confident with Hach Service

Start-Up/Commissioning: Our service technicians visit your site and setup instrumentation, provide basic end-user training on operations and maintenance, and validate settings and performance to get you started.

Service Agreement: Hach provides on-site and in-factory repair, preventive maintenance, and calibration programs for your instruments to ensure reliability and instrument up-time. We have services to fit your specific needs.

Order Information - Part Number Configurator

Free Alkalinity, 0-5000 mg/L $CaCO_3$ Total Alkalinity, 0-5000 mg/L $CaCO_3$	EZ4003.99 EZ4004.99	X	X	X	X	X	2
Measurement range settings							
10% of standard range		A					
25% of standard range		B					
50% of standard range		C					
Standard range		0					
Customised		Z					
Power supply							
Standard 110 - 240 VAC; 50/60 Hz			0				
Customised			Z				
Number of sample streams							
1 stream				1			
2 streams				2			
3 streams				3			
4 streams				4			
5 streams				5			
6 streams				6			
7 streams				7			
8 streams				8			
Outputs							
1x mA					1		
2x mA					2		
3x mA					3		
4x mA					4		
5x mA					5		
6x mA					6		
7x mA					7		
8x mA					8		
RS232					A		
Modbus TCP/IP					B		
Modbus RS485					C		
1x mA + Modbus RS485					E		
2x mA + Modbus RS485					F		
3x mA + Modbus RS485					G		
4x mA + Modbus RS485					H		
1x mA + Modbus TCP/IP					I		
2x mA + Modbus TCP/IP					J		
3x mA + Modbus TCP/IP					K		
4x mA + Modbus TCP/IP					L		
Customised / combined					Z		
Specials							
No adaption, standard version						0	
Customer specific adaptions required, to specify						S	

DOC053.52.35175.Jun18