



# EZ5003 Total Hardness + Free Alkalinity Analyser

**Produktnr:** SEK Pris: **EZ5003.XXXXXXXX** Kontakta oss

### **Online automatic titration of Total Hardness + Free Alkalinity in water**

EZ5000 Series Analysers are multi-parameter titrators that achieve excellent precision and accuracy. Depending on the parameter of interest, the measuring range and the water matrix the EZ5000 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 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.

#### Results you can rely on

Smart automatic features for validation, priming and cleaning are embedded in the controller software and contribute to analytical performance, maximised uptime and negligible operator invervention. Sample lines and analysis vessel are cleaned with demineralised water to eliminate cross contamination between samples. Electronic and wet-chemical part of the analyser are strictly separated. A transparent door allows for instant visual inspection of the wet part.

#### Flexibility that meets your needs

EZ Series Alkalinity and Hardness Analysers come in an attractive, ergonomic mainframe with a compact footprint. All hardware is controlled by the integrated industrial panel PC. The modular build allows for the analyser to match your application and operational needs.

- The standard measuring range can be narrowed by a different calibration range or extended via internal dilution options.
- Analogue and digital output options
- Multiple stream analysis for up to 8 sample streams

There are many additional options available. Please contact Hach for more details.

### Specifikationer

Analoga utgångar:	Active 4 - 20 mA max. 500 Ohm load, standard 1, max. 8 (option)
Antal provströmmar:	1, 2, 4 or 8
Certifieringar :	CE compliant / UL certified
Cykeltid:	20 - 30 minutes
	40 minutes (+ Total Hardness Ca)

Demineralised water:	For rinsing
Detektionsgräns:	$\leq 10 \text{ mg/L}$
Digital outputs:	Optional: Modbus (TCP/IP, RS485)
Dimension (H x B x D):	690 mm x 465 mm x 330 mm
Dränering:	Atmospheric pressure, vented, min. Ø 32 mm
Earth connection:	Dry and clean earth pole with low impedance (< 1 Ohm) using an earth cable of > $2.5 \text{ mm}^2$
Garanti :	24 månader
Instrument air:	Dry and oil free according to ISA-S7.0.01-1996 quality standard for instrument air
Kalibrering:	N.A.
Larm:	1 x malfunctioning, 4 x user-configurable, max. 24 VDC/0.5 A, potential free contacts
Material:	Hinged part: Thermoform ABS, door: PMMA
	Wall section: Galvanised steel, powder coated
Mätmetod:	Acid-base titration (alkalinity only); Calmagite EDTA titration with LED dipping probe (combined)
Matningsspänning:	100 - 240 VAC, 50/60 Hz
	Max. power consumption: 120 VA
Mätområde:	Total Hardness: 25 - 1000 mg/L CaCO <sub>3</sub>
	Alkalinity: 100 - 5000 mg/L CaCO <sub>3</sub>
	Optional:
	Total Hardness: 10 - 100 mg/L CaCO <sub>3</sub>
	Alkalinity: 10 - 500 mg/L CaCO <sub>3</sub>
	Total Hardness: 10 - 250 mg/L CaCO <sub>3</sub>
	Alkalinity: 25 - 1250 mg/L CaCO <sub>3</sub>
	Total Hardness: 25 - 500 mg/L CaCO <sub>3</sub>
	Alkalinity: 50 - 2500 mg/L CaCO <sub>3</sub>
Metodnamn:	Titrimetric
Omgivningstemperatur:	10 - 30 °C $\pm$ 4 °C deviation at 5 - 95% relative humidity (non-condensing)
Parameter:	Hardness, total; Alkalinity, free
Precision:	Better than 2% full scale range for standard test solutions
Prov: tryck:	By external overflow vessel
Provflödeshastighet:	100 - 300 mL/min
Provkvalitet:	Maximum particle size 100 μm, < 0.1 g/L; Turbidity < 50 NTU
Provtemperatur:	10 - 30 °C
Reagent Requirements:	Keep between 10 - 30 °C
Skyddsklass:	Protection class: Analyser cabinet: IP44 / Panel PC: IP65
Störningar:	Hardness: Some metal ions interfere by causing fading or indistinct end points or by stoichiometric consumption of EDTA. Suspended or colloidal organic matter also may interfere with the end point. Large amounts of colour and turbidity interferes. Fats, oil, proteins, surfactants and tar.

	Alkalinity: 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.
Vad ingår i leveransen:	EZ5003 Total Hardness and Free Alkalinity Analyser, Instruction Manual, 1 x Double Bit Door Key, 1 x pH Electrode, Routine S7 Connection, 1 x Photometer Probe, 1 x Mounting Brackets, 3 x empty 2.5L Reagent Containers with Fittings (Buffer, Acid & Colour Solution) and 2 x empty 10L Reagent Containers with Fittings (EDTA, HCl Solution)
Validation:	Automatic; frequency freely programmable
Vikt :	25 kg

## Vad finns i förpackningen

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