



CA610 Fluoride Analyser with Reagents

Product #: 5740001
ZAR Price: Contact Hach
Ships within 2 weeks

Ion-selective electrode with innovative, replaceable tip. Automatic calibration. Temperature-controlled wall-jet flow cell. Rugged, lightweight enclosure. Ultra-low reagent consumption. Virtually immune to interferences.

Reliable, Full-time Fluoride Monitoring

The CA610 Fluoride Analyser uses advanced ion-selective electrode (ISE) technology for continuous monitoring of fluoride concentration in drinking water effluent. Accuracy is ensured with precise control of temperature, ionic strength, and pH. Interferences that can bias measurements are virtually eliminated with this electrode.

Innovative Electrode Design with Replaceable Tip

The proven ISE technology of the electrode is enhanced by an innovative design and manufacturing process. The lanthanum crystal at the tip of the probe is molded into a one-piece, monolithic tip that is threaded for easy removal. This prevents errors and premature failures. Electrodes are equipped with BNC connectors so that they can be independently checked with laboratory electrochemical meters.

Cost Effective Operation

The electrode of the CA610 analyser is made with a molded fluoride crystal tip. The working life of the electrode is approximately one year. The specially designed tip of the electrode should be replaced every six months. Reagent consumption is very low and maintenance is simple.

Method of Analysis

The ISE system of the CA610 analyser includes a reference pH electrode and a working electrode. Three reagents are used: Total Ionic Strength Adjustment Buffer (TISAB) solution and two fluoride standards. The TISAB is used for the following purposes. The Ionic strength adjustment lets the electrode respond to concentration instead of activity. The pH control ensures fluoride is present in its ionic state. The Weak complexes formed by certain metals (for example, aluminum) are broken up by TISAB and chelates potential interferents for accurate fluoride measurement.

Automatic Calibration

Two calibration standards are fully enclosed in the CA610 analyser's case. The instrument performs a 2-point calibration at 0.5 and 5.0 mg/L fluoride at user-selected time intervals. Automatic calibration intervals can be set for 1 day to 1 month. Readings and calculations of the most recent calibration is stored in the instrument.

Specifications

Accuracy:	± 10 % or ±0.10 mg/L whichever is greater
Air purge:	0.1 cfm at 20 psig
Alarm:	Two alarms, selectable for sample concentration, system warning or system shutdown. Each alarm equipped with an SPDT relay with contacts rated for 5 A resistive load at 230 Vac.
Cycle Time:	4.2 min
Dimensions (H x W x D):	34.3 mm x 41.9 mm x 19.1 mm
Display:	LCD, 3 to 1/2 -digit measurement readout and six-character alphanumeric scrolling

	text line
Inlet Pressure:	1 to 10 psig (use sample restriction device to reduce higher pressure samples)
Lower Limit of Detection (LOD):	0.10 mg/L 0.10 ppm
Mounting:	Wall mount
Operating Humidity:	90 % at 40 °C
Operating temperature range:	5 - 40 °C
Power requirements (Amps):	2.5 A
Power requirements (Hz):	50/60 Hz
Power requirements (Voltage):	100 - 115/230 V AC
Range:	0.1 - 10.0 mg/L Fluoride
Recorder Outputs:	An isolated output of the recorder, from 4 to 20 mA (can be set from 0 to 20 mA)
Sample Flow Rate:	200
Sample Temperature:	5 - 40°C (41 - 104°F)
Storage conditions:	-40 to 60 °C
Warranty:	12 months
What's included?:	CA610 Fluoride analyzer, one-month supply of reagents, installation kit, annual maintenance kit, Hach user manual

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