# EZ3000 Series Fluoride Analysers

## Online ion-selective Fluoride measurements in industrial and environmental applications

### ISE technology for optimal analytical performance

With limited maintenance requirements and reduced reagent consumption, the EZ3000 Series are the ideal choice for a wide range of water monitoring applications where ion-selective electrodes are the preferred analytical technique. Outstanding precision and stability is guaranteed by the temperature-controlled measurement.

### Direct, discontinuous ISE method

The EZ3000 Series uses discontinuous ISE analysis which enhances control over conversion of ion activity to electric potential. It also eliminates risk of cross-contamination between cycles and reduces overall reagents consumption.

The EZ3007 Fluoride Analysers combine unique technology with a set of analysis, control and communication features in an industrial analyser mainframe with designed for the highest performance:
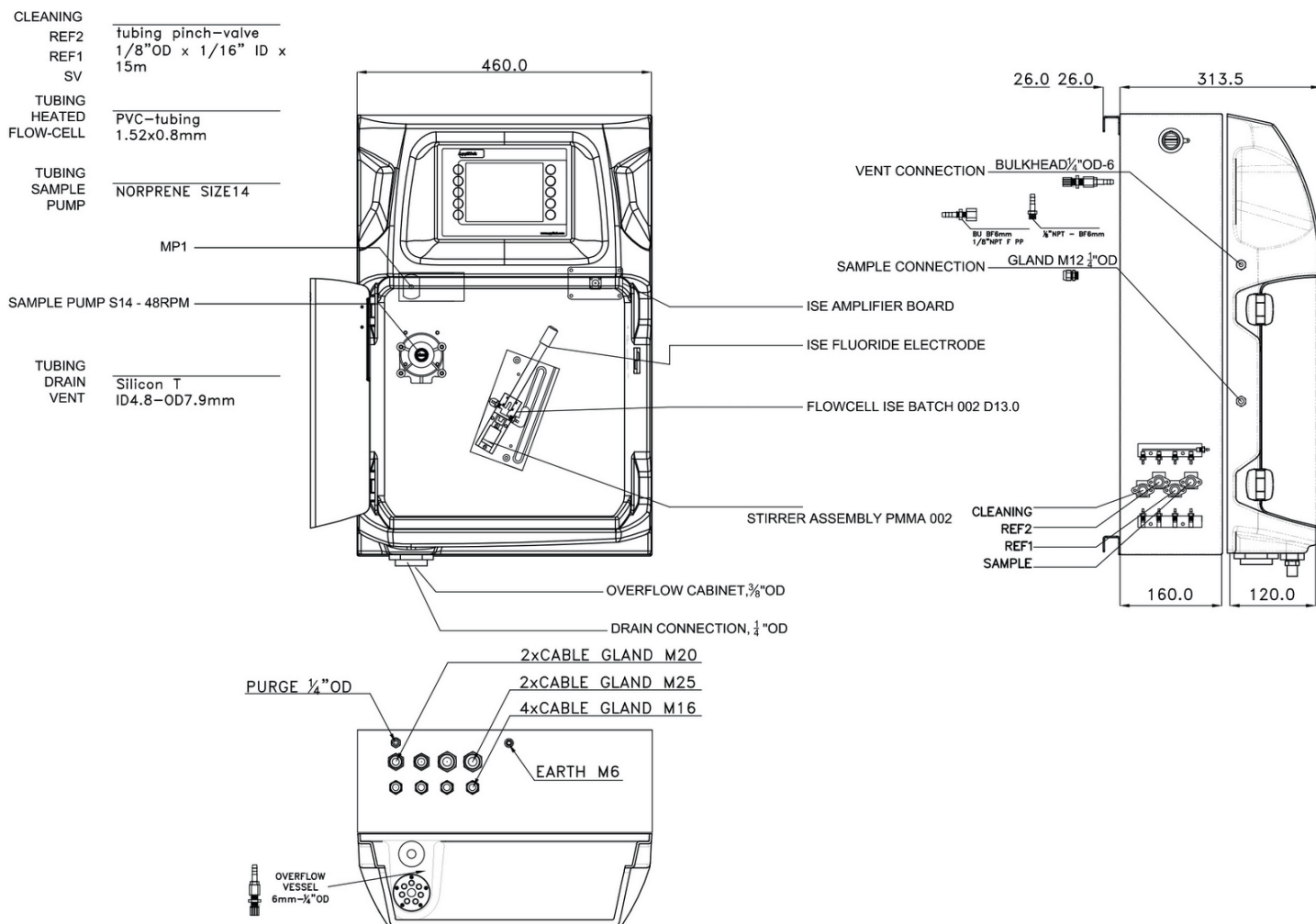
- Smart automatic features
- Control and communication via industrial panel PC
- Analogue and digital output options
- Multiple stream analysis (up to 8 streams)

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## Technical Data*

| Parameter | Fluoride |
|---|---|
| **Measurement method** | Discontinuous, direct measurement by combined ion-selective electrode, conform with standard methods EPA 9214 and ASTM D1179 |
| **Measuring range** | 1 - 10 mg/L F⁻ |
| **Precision** | Better than 2% full scale range for standard test solutions |
| **Detection limit** | ≤ 1 mg/L |
| **Interferences** | Metal ions like aluminium > 72 mg/L, calcium > 108 mg/L and iron > 150 mg/L. Fats, oil, proteins, surfactants and tar. |
| **Cycle time** | 5 minutes |
| **Automatic cleaning** | Yes |
| **Calibration** | Automatic, 2-point; frequency freely programmable |
| **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 |
| **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 mm² |
| **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

| Standard range, 1-10 mg/L F⁻ | EZ3007.99 | X | X | X | X | X | 2 |
|---|---|---|---|---|---|---|---|
| **Measurement range settings / Dilution options** | | | | | | | |
| 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 | |

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