Reagent-less monitoring of Fluoride

The ProMinent D1C Fluoride Monitoring System is designed for reagentless measurement of residual fluoride in potable and process waters. The DULCOMETER® D1C fluoride meter carries out potentiometric metering with the aid of an ion-selective electrode (ISE) and a reference electrode. This panel-mounted complete measuring station is adjusted to the special requirements in municipal and industrial applications. As a plug & play module, it can easily and quickly be installed and commissioned.

Applications

- Potable water treatment
- Bottled water

Features and benefits

- Reagentless measurement of fluoride
- Complete component system
- ProMinent D1C & Sensor Technology
- Output signal to chart recorder
- Fluoride sensor measurement range to 10 PPM
- Low pH dependency of fluoride measurement.
- Rapid response and short run-in time of fluoride electrode.
- No chemicals used for calibrating or conditioning the fluoride electrode.
Components of the Monitoring System.

**Single channel controller D1C**
- Electrical supply 230 V 50/60 Hz or 115 V 50/60 Hz
- Pause contact reserved for limit contact measuring water
- Analog output 4-20 mA for measured value
- Automatic temperature compensation
- Alarm relay and two limit relays

**Sensors, measurement transducers and in-line probe housings**
- Fluoride sensor type FLE 010 SE
- Reference electrode type REFP-SE
- Temperature sensor type Pt 100 SE for automatic temperature compensation
- Measurement transducer 4-20 mA FV1 for fluoride sensor
- In-line sensor housing DLG IV

**Technical Data**
- Measurement range: 0.05 to 10 ppm fluoride
- pH Operating Range: 5.5 to 8.5 pH
- Temperature Range: 34˚ to 95˚ F
- Max. Operating Pressure: 101.5 psi (Note: the maximum admissible operating pressure for the monitoring system is 14.5 psi, determined by the in-line sensor housing)
- Sample Water Flow Rate: 12-16 GPH

**Related Products.**

**Photometer**
Microprocessor-controlled Photometer DT1, DT2B, DT3 and DT4 serve to calibrate amperometric and fluoride measuring systems by comparison measurement. They are pre-assigned to defined verification procedures and include various measurement parameters. With little investment of time, accurate and reproducible results can be achieved.