

AQUACON F10/F20/F30

Process analyzers for Fluoride measurement

The AQUACON F10/F20/F30 process titrators can be used for the monitoring and control of the fluoride concentration in water. Measurement principle is the determination of dissolved fluoride with a special developed ion-sensitive electrode (ISE). Therefore, two reagents (TISAB and standard solution) are added to the water sample in the measurement chamber of the analyzer (standard addition method with titration). Main applications for the ion-sensitive analyzers are the monitoring of the fluoride concentration in process water and drinking water.

The analyzers consist of a control unit with touchscreen and an analysis unit with measuring chamber, valve, dosing pumps and all required tube connections. The control unit includes a microprocessor which controls the automatic measurement incl. sampling, rinsing, reagent dosing and surveillance of the ion-sensitive electrodes.

Your advantages:

- ⇒ Automatic measurement incl. self test and drift compensation
- ⇒ 3 different measurement ranges available
- ⇒ Easy operation via touchscreen
- ⇒ Adjustable limit value and alarm value
- ⇒ Programmable analog output (0/4-20 mA)
- ⇒ Adjustable break time between two analysis
- ⇒ External start/stop of an analysis possible
- ⇒ No external calibration required
- ⇒ External plug connections (IP65) for alarm relay, limit relay, analysis relays, external start/stop, analog output 0/4-20 mA
- ⇒ Multi range power supply (110–230 Volt, 50–60 Hz)
- ⇒ Including 2-part polycarbonate wall cabinet



Order informations:

AQUACON F10	(0,1 – 10,0 ppm)	Order No. 693 7104 01
AQUACON F20	(1 – 100 ppm)	Order No. 693 7105 01
AQUACON F30	(5 – 500 ppm)	Order No. 693 7106 01
Reagent TISAB 1-F	(500 ml)	Order No. 101 7105 01
Reagent STD.1F1000	(500 ml)	Order No. 101 7104 01
Reagent STD.1F5000	(500 ml)	Order No. 102 7105 01
Reagent STD.1F25000	(500 ml)	Order No. 101 7106 01

Technical Data

Current output	0/4 - 20 mA, max. load 500 ohm
Display	240 x 128 dots, touchscreen
Relays	1 x Alarm, potential-free 230 V/50 Hz, 3A 1 x Limit, potential-free 230 V/50 Hz, 3A 1 x Analysis state, potential-free 230 V/50 Hz, 3A
External Switching	potential-free contact, 18 V DC, ca. 4 mA
Power Supply	110 - 230 V -- 50/ 60 Hz
Power Consumption	approx. 16 VA
Dimensions	640 x 315 x 190 mm (H x W x D)
Protection	IP 65 (transmitter housing)
Connections	Plugs with circular connection 1,5 mm ²
Temperature	5° to 45°C, at consumption of reagents within 6 months

Since it is company policy to continuously improve its product range, we reserve the right to make changes in the product design without notification to its users.

Specifications

Parameter	Fluoride		
Description	Microprocessor-controlled analyzer for the determination of Fluoride in water		
Typical Applications	Monitoring and control of process water and drinking water		
Analysis Method:	Fluoride determination with ion-sensitive electrode		
Analyzer type	AQUACON F10	AQUACON F20	AQUACON F30
Measuring Range	0,1 – 10,0 ppm	1 – 100 ppm	5 – 500 ppm
Resolution	0,01 ppm	1 ppm	1 ppm
Accuracy	5 % of end value		
Reproducibility	3 % of end value		
Zero-point Stability	automatic adjustment		
Number of Samples	1		
Sample	Operating Pressure 0,1 - 10 bar Temperature 5 - 30 °C Sample Volume 100 ml per analysis (excluding rinsing) Sample Condition clear, with particles < 0.5 g/l ; < 50 µm Chemical Demands pH 4-8 Drain pressure free into open drain		
Reagents	Number 2 Storage Temp. 5 – 30°C Usage/analysis Standard: concentration dependend TISAB: appr. 2 ml/analysis Reagent volume 500 / 500 ml Suitable for appr. 250 analysis		
Analysis	Cycle (approx.) 15 min., incl. rinsing time Sample interval 1 – 99 min or external start/stop		