

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 relais, 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 AQUACON F20 AQUACON F30	(0,1 – 10,0 ppm) (1 – 100 ppm) (5 – 500 ppm)	Order No. 693 7104 01 Order No. 693 7105 01 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-cor	ntrolled analyzer for t	he 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			