

# AQUACON PA10/PA20

## Process analyzers for measurement of the Polyacrylate concentration

The AQUACON PA10 and PA20 process photometers can be used for the monitoring and control of the concentration of cooling water treatment products containing dissolved anionic polymers (e.g. polyacrylates). Measurement principle is the photometric detection of the turbidity formed after adding a cationic polymer (Hyamine) to a buffered water sample. Main applications for the photometers are the monitoring and control of cooling water and boiler 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 photodetection system.

### Your advantages:

- ⇒ Automatic measurement incl. self test and drift compensation
- ⇒ Easy operation via touchscreen
- ⇒ Adjustable limit value and alarm value
- ⇒ Programmable analog output (0/4-20 mA), optionally with USB port for easy data storage
- ⇒ 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 relay, external start/stop, analog output 0/4-20 mA
- ⇒ Multi range power supply (110–230 Volt, 50–60 Hz)
- ⇒ Including polycarbonate wall cabinet



### Order informations:

AQUACON PA10	(0,1 – 20 ppm, product specific)	Order No. 693 2814 01
AQUACON PA20	(10 – 150 ppm, product specific)	Order No. 693 2815 01
Reagent PA10-R1001	(500 ml)	Order No. 101 2814 01
Reagent PA10-R1002	(500 ml)	Order No. 102 2814 01
Reagent PA20-R1001	(500 ml)	Order No. 101 2815 01
Reagent PA20-R1002	(500 ml)	Order No. 102 2815 01

## Technical Data

<b>Current output</b>	0/4 - 20 mA, max. load 500 ohm
<b>Display</b>	240 x 128 dots, touchscreen
<b>Relays</b>	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
<b>External Switching</b>	potential-free contact, 18 V DC, ca. 4 mA
<b>Power Supply</b>	110 - 230 V -- 50/ 60 Hz
<b>Power Consumption</b>	approx. 16 VA
<b>Dimensions</b>	640 x 315 x 190 mm (H x W x D)
<b>Protection</b>	IP 65 (transmitter housing)
<b>Connections</b>	Plugs with circular connection 1,5 mm <sup>2</sup>
<b>Temperature</b>	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	Polyacrylates	
<b>Description</b>	Automatic microprocessor controlled analyzer for the photometric determination of dissolved polyacrylates	
<b>Typical Applications</b>	Analysis of cooling water and boiler water Control of cooling water dispersing agents	
<b>Analysis Method:</b>	Hyamine method	Hyamine method
<b>Analyzer type</b>	<b>AQUACON PA10</b>	<b>AQUACON PA20</b>
<b>Measuring Range</b>	0,1 – 20 ppm (product specific)	10 – 150 ppm (product specific)
<b>Resolution</b>	0,1 ppm	1 ppm
<b>Accuracy</b>	2 % of end value	
<b>Reproducibility</b>	1 % of end value	
<b>Zero-point Stability</b>	automatic adjustment	
<b>Number of Samples</b>	1	
<b>Sample</b>	Operating Pressure 0,1 - 10 bar Temperature 5 - 30 °C Sample Volume 25 ml per analysis (excluding rinsing) Sample Condition clear, filtrated Chemical Demands pH 4-9 Drain pressure free into open drain	
<b>Reagents</b>	Number 2 Storage Temp. 0 - 30°C Usage/analysis appr. 1,3 ml each reagent Reagent volume 500 ml each Suitable for appr. 400 analysis	
<b>Analysis</b>	Cycle (approx.) 7 - 10 min Sample interval 1 – 99 min or external start/stop	