

# **AQUACON N2H4**

### Process analyzer for the determination of dissolved hydrazine

The AQUACON N2H4 process photometer can be used for the monitoring and control of the hydrazine concentration in water. Measurement principle is the photometric determination of hydrazine by forming of an Azine compound by reaction with 4-(Dimethylamine)-benzaldehyde.

Main application for the photometer is the monitoring of the hydrazine concentration losed water circuits (e.g. boiler water).

The analyzer consists 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:

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



Example for AQUACON analyzer

## **Order informations:**

AQUACON N2H4	(0,05 – 1,00 ppm)	Order No. 693 2795 01
Reagent N2H4-R1001	(500 ml)	Order No. 101 2795 01

**ELEKTROGERATEBAU GMBH** E-mail : <u>info@iotronic.de</u> <u>info@iotronic.de</u>



#### **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 <sup>2</sup>
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	Hydrazine	
Description	Automatic microprocessor controlled analyzer for the	
	photometric determination of total dissolved hydrazine	
Typical Applications	Control of hydrazin in makeup water for boilers and	
	in closed circuit water for heating systems	
Analysis Method:	Photometric determination of dissolved hydrazine by	
	reaction with 4-(Dimethylamine)-benzaldehyde	
Analyzer type	AQUACON N2H4	
Measuring Range	0,05 – 1,00 ppm	
Resolution	0,01 ppm	
Accuracy	2 % of end value	
Reproducibility	1 % of end value	
Zero-point Stability	automatic adjustment	
Number of Samples	1	
Sample		
Operating Pressure		
Temperature	5 - 30 °C	
Sample Volume	25 ml per analysis (excluding rinsing)	
Sample Condition	clear, filtrated	
Chemical Demands	pH 4 - 8	
Drain	pressure free into open drain	
Reagents		
Number	1	
Storage Temp.	0 – 30°C	
Usage/analysis	appr. 4 ml	
Reagent volume	500 ml	
Suitable for	appr. 125 analysis	
Analysis		
Cycle (approx.)	4 min	
Sample interval	1 – 99 min or external start/stop	