

# AQUACON Ni10

## Process analyzers for the determination of dissolved nickel

The AQUACON Ni10 process photometer can be used for the monitoring and control of the dissolved nickel concentration in water. Measurement principle is the photometric determination of nickel by forming a red complex after the reaction with Dimethylglyoxim.

Main application for the photometer is the monitoring of the nickel concentration in process 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:

- ⇒ 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



Example: AQUACON analyzer

### Order informations:

AQUACON Ni10	(0,02 – 1,00 ppm)	Order No. 693 2790 01
Reagent Ni10-R1001	(250 ml)	Order No. 101 2790 01
Reagent Ni10-R1002	(500 ml)	Order No. 102 2790 01
Reagent Ni10-R1003	(500 ml)	Order No. 103 2790 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	Nickel (dissolved)
<b>Description</b>	Automatic microprocessor controlled analyzer for the photometric determination of dissolved nickel
<b>Typical Applications</b>	Control of the nickel concentration in process water
<b>Analysis Method:</b>	Photometric determination of dissolved nickel by the Dimethylglyoxim method
<b>Analyzer type</b>	<b>AQUACON Ni10</b>
<b>Measuring Range</b>	0,02 – 1,00 ppm
<b>Resolution</b>	0,01 ppm
<b>Accuracy</b>	3 % of end value
<b>Reproducibility</b>	2 % 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, Fe <sup>2+</sup> < 0,01 mg/l, Cu <sup>2+</sup> < 0,01 mg/l Drain pressure free into open drain
<b>Reagents</b>	Number 3 Storage Temp. 5 – 20 °C Usage/analysis appr. 0,27 ml / 0,54 ml / 0,54 ml Reagent volume 250 ml / 500 ml / 500 ml Suitable for appr. 925 analysis
<b>Analysis</b>	Cycle (approx.) 7 min (incl. rinsing time) Sample interval 1 – 99 min or external start/stop