



AN-ISE sc Low cost ISE combination Ammonium and Nitrate probe (immersion) with RFID, 10 m cable

Product #: AED Price: LXV440.99.00001 Contact Hach

AN-ISE sc: Combination sensor for ammonium and nitrate

Carries out continuously direct measurements using an ion-selective electrode. No need for reagents or sample preparation. Compensated interference by potassium and chloride.

The special feature of the probe is the Cartrical technology. This provides reliable measured values and considerably reduced maintenance time and costs in comparison with conventional ISE probes.

The complete system - SC controller has to be ordered separately - comes from a single supplier. The probe is installed on the side of the tank. The measuring system can be extended to include an automatic cleaning unit with a compressor.

Prognosys is a predictive diagnostic system that allows you to be proactive in your maintenance, by alerting you to upcoming instrument issues. Know with confidence whether changes in your measurements are due to changes in your instrument or your water.

This instrument connects to Claros, Hach's innovative Water Intelligence System, enabling you to seamlessly connect and manage instruments, data, and process – anywhere, anytime. The result is greater confidence in your data and improved efficiency in your operations. To unlock the full potential of Claros, insist on Claros Enabled instruments.

Reliable results for ammonium and nitrate

Looking for new ways to stretch your budget and reduce consumable costs? We have the perfect solution for you! Our new combination sensor with ion-selective electrode (ISE) technology was developed to measure both NH₄ and NO₃ at the same spot. What is unique? The most significant interferences of K and Cl are simultaneously compensated by integrated ISE electrodes, ensuring accurate results 24h/7days.

Easy handling with Cartrical plus

The Cartrical plus cartridge contains four electrodes which are calibrated to each other before leaving the factory. Based on RFID* technology, the factory calibration is now automatically identified during replacement of the cartridge. The unique Cartrical plus design does away with tiresome handling and adjustment of individual electrodes: just unscrew the old cartridge, plug in the new one, and the sensor is immediately ready to measure.

Simple and intuitive operation

With a menu-guided operation and step-by-step guide with clear text, the combination AN-ISE sc sensor is very easy to use. It works directly with every SC controller without complicated wiring or set up procedures: just plug and play. The common SC controller platform allows intuitive usage not only for ammonium and nitrate but also for other parameters like pH, DO, etc.

Always under control

In combination with SC1000 controller, alert messages from AN-ISE sc sensor can be transmitted to the control room or by SMS / e-mail to a mobile phone. You are always informed about the status of your processes, early enough to react quickly.

Rely on Hach's application know how

You can trust our ISE experience gathered in many waste water applications around the world. Based on this we have developed the next ISE generation to fulfil your requirements even better. Our application team is always close by.

Specifications

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Accuracy:	5% of measured value +0.2 mg/L (with standard solutions) $\rm NH_4-N$ and $\rm NO_3-N$
Cable length:	10 m fixed cable at sensor, available up to 100 m
Calibration method:	With Cartrical plus technology: automatic import of factory calibration data from cartridge to probe by RFID*; 1 and 2 point matrix correction
Controller compatibility:	SC200, SC1000, SC4500. All controllers sold separately
Data types:	Current output, relays and bus communication via SC controller
Detection limit:	0.2 mg/L NH ₄ - N and NO ₃ -N
Flow:	< 4 m/s max. velocity
Immersion depth:	0.3 - 3.0 m
	max. 0.3 bar pressure
Includes:	Ammonium & Nitrate probe, sensor cartridge, user manual
Installation:	45 ° \pm 15 ° (vertical in flow direction)
Length:	320 mm
Material:	Cartridge: stainless steel (1.4571), PVC, POM, ABS, NBR
	Cleaning unit: TPE, PUR, stainless steel (1.4571)
	Sensor: stainless steel (1.4571), ASA + PC, silicon, PVC and PU
Measurement method:	Potentiometric ion-selective electrodes for ammonium, potassium, nitrate and chloride, reference system and temperature sensor
Measuring interval:	Continuous
Measuring principle:	Ion-selective electrodes for ammonium and potassium, pHD reference electrode and temperature sensor
Measuring range:	0 - 1000 mg/L NH ₄ -N
	0 - 1000 mg/L NO ₃ -N
	0 - 1000 mg/L K ⁺
	0 - 1000 mg/L Cl ⁻
Measuring uncertainty:	\pm 5 % + 0.2 mg/L (with standard solution) NH ₄ -N and NO ₃ -N
Operating temperature range:	Air: -20 - 45 °C
Parameter:	NH ₄ -N and NO ₃ -N
pH Range:	5 - 9 pH
Process connection:	1 inch thread
Protection class:	IP 68
Repeatability:	\pm 5 % of the measured value (with standard solution)+ 0.2 mg/L NH ₄ -N and NO ₃ -N
Response time:	< 3 min
Sample pressure:	0.3 bar max.
Sample temperature:	2 - 40 °C
Sensor cartridge:	With Cartrical plus technology: compact housing containing calibrated electrodes for ammonium, potassium, nitrate and chloride, reference system and temperature sensor, all calibrated to each other; typical lifetime 12 months
Storage conditions:	5 - 40 °C sensor cartridge

What's included?

Ammonium & Nitrate probe, sensor cartridge, user manual

Required Accessories

- SC1000 Probe Module, 4 Sensor Connectors, 4 mA Output, 4 Relays, 100-240 VAC, with EU plug (Item LXV400.99.2R121)
- SC1000 Display Module (Item LXV402.99.00001)
- SC4500 Controller, Prognosys, 5x mA Output, 2 digital Sensors, 100-240 VAC, without power cord (Item LXV525.99A11551)
- SC4500 Controller, Prognosys, 5x mA Output, 1 digital Sensor, 100-240 VAC, without power cord (Item LXV525.99A11501)
- SC4500 Controller, Prognosys, 5x mA Output, 1 digital Sensor, 100-240 VAC, EU plug (Item LXV525.99C11501)
- SC4500 Controller, Prognosys, 5x mA Output, 2 digital Sensors, 24 VDC, without plug (Item LXV525.99Z11551)