**PRODUCT INFORMATION** PROCESS ANALYSIS ION-SELECTIVE ELECTRODE NH4D SC



## **Cost effective: NH4D sc ISE probe for ammonium measurements**

- → Calibration-free with CARTRICAL technology
- Accurate readings with automatic potassium compensation
- → Exceptionally drift free thanks to pHD reference element
- → Minimum maintenance
- Low investment and operating costs

## ISE probe: calibration-free with CARTRICAL technology

There are lots of ion-selective electrodes, but only NH4D sc from HACH LANGE has CARTRICAL. The combined sensors are all integrated and optimised in the precalibrated cartridge. CARTRICAL is better value than individual electrodes and is designed for error free operation. Changing the cartridge is simple, just remove the old one, plug in a new one and enter the code – ready for use!

## Cost effective solution for waste water measurements

Ammonium is an important parameter in waste water treatment. NH4D sc continually measures directly in the process using the ion-selective electrode. No sample preparation is needed and interference by potassium is automatically compensated for. The readings are especially stable thanks to the integrated pHD reference technology. The low purchase price makes NH4D sc the perfect choice, even for small plants.



# **Reliable readings with the latest technology**

### Reliable, stable and calibrationfree sensor

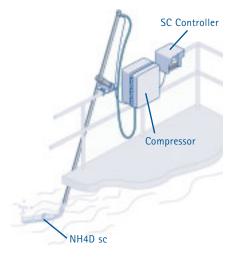
CARTRICAL is a compact sensor cartridge with three electrodes, which are perfectly calibrated to each other. Cross sensitivities between ammonium and potassium are automatically eliminated. Solids do not interfere with the measurement. NH4D sc is calibrationfree. A matrix correction can be carried out quickly and easily at any time.

The ISE probe is controlled by an SC Controller. Depending on the model, up to eight different sensors can be connected to one controller.

#### **Simple operation**

A compressed-air cleaning head is also available for NH4D sc. Each sensor is individually cleaned. The streamlined body of the cleaning head remains practically free of debris due to its smooth surface and the internal tube guides.

HACH LANGE offers a compact compressor module to go with the compressed air cleaning head. The weatherproof plastic housing is suitable for tank-side installation without any additional structural requirement.



NH4D sc as complete system with SC Controller, compressed-air cleaning head and (optional) compressor

#### **Technical data**

Measurement	Ion-selective electrode for ammonium and
method	potassium, pHD reference
Measuring range	0.2-1000 mg/l NH <sub>4</sub> -N
	1-1000 mg/l K+
Accuracy	5% of reading
	±0.2 mg/l (with standard solutions)
Response time	< 2 min.
Calibration	Sensor code (calibrated sensor head)
(optional)	1- or 2-point inline matrix correction
Temperature	Air -20 to +45 °C
	Water +1 to +40 °C
рН	5-9
Flow	< 4 m/s
Immersion depth	0.3-3.0 m
Material	Stainless steel, PVDF (Ryton®)
Dimensions	350 x 44 mm (L x ID) without compressed-air
	cleaning
Weight	Approx. 1 kg
Subject to change.	

#### **Ordering information**

NAME	ARTNO.	
NH4D sc* probe	LXV437.99.00001	
Incl. CARTRICAL sensor cartridge		
Sensor cartridge with CARTRICAL technology,	6188400	
calibrated, typical lifetime 12 months; fast and		
easy to change		
Compressed-air cleaning head	LZY331	
SC 100 Controller for up to 2 sensors; parameters	LXV401	
freely combinable		
SC 1000 Controller for up to eight sensors;	LXV400 + LXV402	
extremely versatile, e.g. as SC 1000 network or		
with wireless communication		
Compressor, in housing		
Pressure 2.75 bar, dimensions 432 x 395 x 215 mm		
$(H \times W \times D)$ , weight 11.2 kg		
Power requirement 230 V	6174203	
Power requirement 115 V	6174103	
* Corresponds to AMMON eco sc in the HACH LANGE 2006/2007		
Catalogue.		

#### HACH LANGE GMBH

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