Ammonia/Nitrate Electrode

innoSens 550/560

The innoSens 550 ammonia nitrogen electrode uses the ion-selective electrode method to measure the concentration of ammonia nitrogen in water. The ammonia ion-selective electrode is used to directly detect ammonium ions in the water environment to determine the concentration of ammonia nitrogen. The ammonia nitrogen sensor uses a pH electrode as a reference electrode, resulting in better stability. The sensor is also susceptible to interference from potassium ions, so when the potassium ion concentration in water is high, an optional potassium ion electrode is available for automatic compensation.
The innoSens 550 ammonia sensor consists of an ammonium ion electrode, a potassium ion electrode (optional), a pH electrode and a temperature electrode in a single sensor, which can be used to correct for each other and for multiple parameters at the same time.

Measurement parameters

NH4 -N: 0.1-1000 mg/L
pH: 5-10 pH
Temperature: 0-40℃
Accuracy:
NH4-N: ±5% of measured value
pH: ±0.1 pH
Temperature: ±0.2℃
Repeatability: ±3% of measured value
Response time: <2min
Lifetime: 6 months for diaphragm, 3 months for electrolyte
Operating temperature: 2-40℃
Protection class: IP68
Dimensions: ϕ62mm x 353mm

The innoSens 560 nitrate and nitrogen electrode uses an ion-selective electrode method to measure nitrate and nitrogen concentrations in water, directly detecting nitrate concentrations in the aqueous environment with a nitrate ion-selective electrode. The nitrate sensor uses a pH electrode as a reference electrode to achieve better stability. The sensor is also susceptible to interference from chloride ions, so an optional chloride ion electrode is available for automatic compensation when the chloride concentration in the water is high.
The innoSens 560 nitrate and nitrogen sensor consists of a nitrate ion electrode, a chloride ion electrode (optional), a pH electrode and a temperature electrode in a single sensor, which can be corrected for each other and for multiple parameters.

Measurement parameters

NO3 -N: 0.1-3000 mg/L
PH: 3-10 pH
Temperature: 0-40℃
Accuracy:
NO3-N: ±5% of measured value
pH: ±0.1 pH
Temperature: ±0.2℃
Repeatability: ±3% of measured value
Response time: <2min
Lifetime: 6 months for diaphragm, 3 months for electrolyte
Operating temperature: 2-40℃
Protection class: IP68
Dimensions: ϕ62mm x 353mm

Sensor installation

Upon receipt of the sensor the user should first check the sensor for external damage and consult a jensprima technical engineer if you have any corresponding queries.

Note: To ensure that the electrodes are not affected by logistics, the electrodes and sensors are packed separately unless otherwise specified by the user. In this case the user must install the sensor according to the following procedure.

Installation steps:

1. Unscrew the electrode protection cover and the fixing cover.
2. Remove the electrode holder from the sensor casing.
3. Screw the electrodes into the corresponding threaded holes with a spanner and tighten to prevent leakage.
4. Write down the corresponding numbers of the different electrodes (the sensors are set at the factory according to 1 → ammonia nitrogen and 2 → pH).
5. Put the electrode holder back into the sensor casing and tighten the fixing cover and the electrode protection cover.
6. Place the electrode holder back into the sensor casing and tighten the fixing cover and electrode protection cover.
7、The user can set it via the controller.

When the sensor is used for the first time, or if it has been out of the water for more than 30 minutes, leave the sensor in the water sample for more than 60 minutes and take a reading when the value has stabilised.

Order Guide

Order No.	Description
35-0550-00	innoSens 550 Ammonia Electrode，Cable 10m
35-0560-00	innoSens 560 Nitrate Electrode，Cable 10m
35-0550-10	innoSens 550 Ammonia/Potassium Ion Electrode，Cable 10m
35-0560-10	innoSens 560Nitrogen/Chloride Electrode，Cable 10m
35-0570-00	Ammonia/ Nitrate Electrode，Cable 10m