

# NH4-N ISE

90S200000



The eCHEM ISE sensor enables ammonium measurements to be made directly in the process. Time consuming steps such as sampling and preparation are eliminated. To ensure stable measurements, the interference of potassium is simultaneously compensated.

## Benefits

- Direct measurement of ammonium without sample preparation
- Potassium measurement compensates cross-sensitivity and ensures reliable measuring results
- Direct installation on the edge of the pool, no separate building necessary

## Applications

- Wastewater treatment facilities
- Surface water
- Environmental monitoring

## Technical Specifications

### OPERATION AND SYSTEM CONFIGURATION

<b>Measurement principle</b>	Via ion-selective membranes
<b>Measuring method</b>	Potentiometric / ISE

### AUXILIARY POWER

<b>Electrical connection</b>	8-pin M12 plug
<b>Power supply</b>	12-24 V
<b>Power consumption</b>	3 W

### INPUT PARAMETERS

<b>Measuring ranges</b>	NH <sub>4</sub> <sup>+</sup> : 0-100 ppm, K <sup>+</sup> : 0-1000 ppm, T: 0-50 °C
<b>Cable specification</b>	black PUR (halogen free), shielded, M12 plug
<b>Temperature compensation</b>	Automatic through integrated PT100 temperature sensor

### OUTPUT SIZES

<b>Output signal</b>	RS-485, Modbus RTU
<b>Accuracy</b>	± 1 mg/L or ± 1 %
<b>Data interface</b>	RS-485, Modbus RTU

### PERFORMANCE CHARACTERISTICS

<b>Time between two measurements</b>	1 s
<b>Response time</b>	90 % of the value in less than 60 seconds
<b>Calibration interval</b>	On measuring device by means of analytical determination

### AMBIENT CONDITIONS

<b>Protection type</b>	IP68
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### PROCESS CONDITIONS

<b>Process temperature</b>	0...+50 °C
<b>Process pressure</b>	Max. 1 bar
<b>pH range</b>	pH 4...10

### STRUCTURAL DESIGN

<b>Dimensions</b>	334 mm x 76 mm
<b>Materials</b>	Stainless steel case, black PVC protection electrodes hous- ing and cover, NBR O-rings
<b>Thread</b>	1 "BSP

### CERTIFICATES AND APPROVALS

<b>CE Manufacturer's Declaration</b>	2014/30/EC EMC Directive (EN 61326-1:2013)
<b>Work certificates</b>	Yes

### SCOPE OF DELIVERY

<b>value only lead Manual</b>	Yes
<b>CE Manufacturer's Declaration</b>	Yes
<b>Test certificate</b>	Yes

### ACCESSORIES

<b>Cables</b>	Extension cables: 0.3 m, 2 m, 10 m, 25 m
<b>Measuring transducer</b>	TriBox3, HS100, TriBox Flex
<b>Validation/calibration</b>	Process calibration laboratory and field tests