

# AN-ISE sc: Combination Sensor for Ammonium and Nitrate (with RFID\* technology)

## Applications

- Wastewater



## Two-in-one low maintenance sensor measures both ammonium and nitrate at the same time.

### Combination Sensor for Ammonium and Nitrate

This combination sensor has the ability to measure Ammonium and Nitrate at the same time, eliminating the need for multiple sensors.

### No Reagents or Sample Preparation

This sensor utilizes ion selective electrode (ISE) technology. It is designed for immersion directly in aeration basins eliminating the need for reagents and sample preparation. The sensor can be easily installed outdoors without additional housings, so it is easy to relocate to various locations.

### Compensated for Significant Interferences

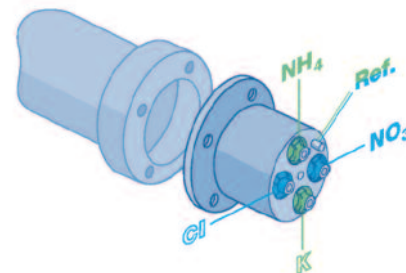
The sensor compensates for the most common interferences with integrated potassium and chloride electrodes within the cartridge. The compensation allows the sensor to provide accurate and reliable results.

### Easy to Maintain Sensor Cartridge

The CARTRICAL™ cartridge eliminates handling and adjustment of individual electrodes because it contains four electrodes that are factory calibrated to each other. Cartridge replacement is simple: unscrew the old cartridge, plug in the new one, and the sensor is ready for measurement. The factory calibration is automatically identified after replacing the cartridge by using RFID technology.

### Energy Cost Savings

The AN-ISE sc sensor can be used to optimize Nitrogen removal to facilitate reduced costs. Whether you are monitoring in a Sequencing Batch Reactor (SBR) or in a Nitrification/Denitrification process, the sensor provides visibility to real-time Ammonium and Nitrate levels, allowing you to run the blowers when needed and save energy costs.



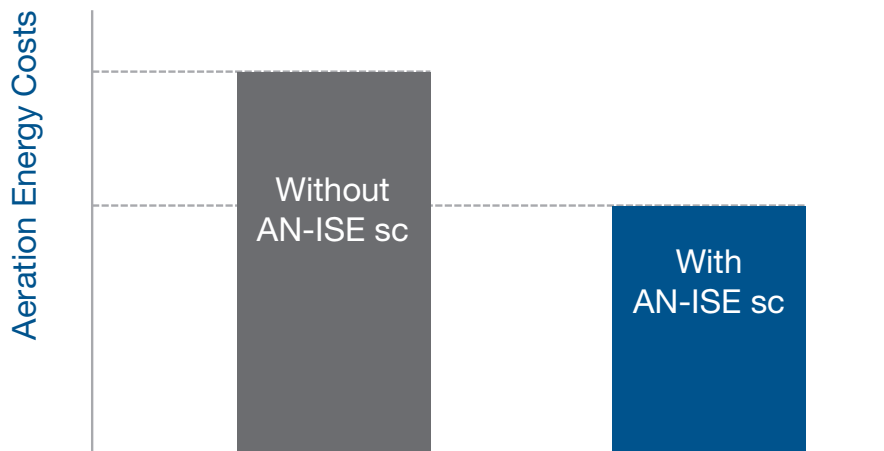
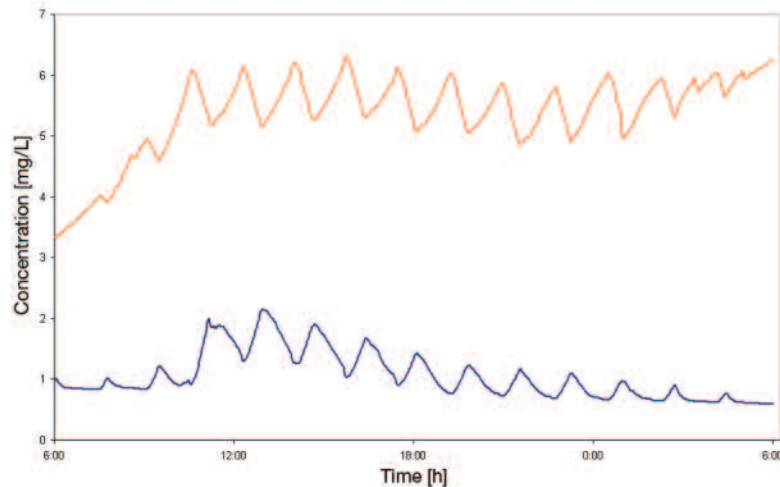
Cartrical plus cartridges for ammonium ( $\text{NH}_4$ ) and nitrate ( $\text{NO}_3$ ), with compensation of chloride (Cl) and potassium (K)

\*Radio-Frequency Identification

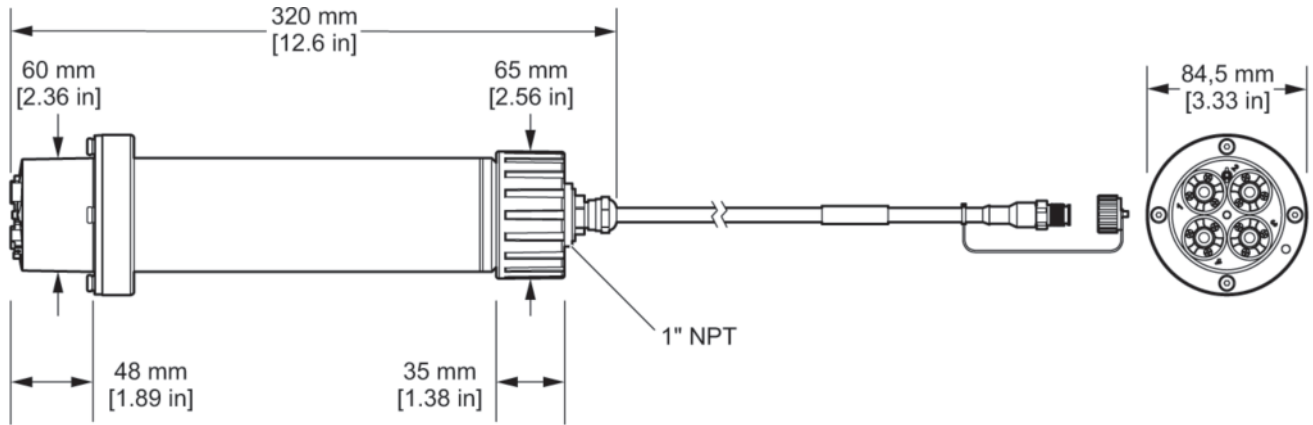
## Specifications\*

<b>Measurement Method</b>	Potentiometric ion-selective electrodes for ammonium, potassium, nitrate and chloride, reference system and temperature sensor	<b>Flow</b>	< 4 m/s
<b>Measuring Ranges</b>	0 to 1,000 mg/L NH <sub>4</sub> -N 0 to 1,000 mg/L NO <sub>3</sub> -N	<b>Material Cartridge</b>	Stainless steel (1.4571), PVC, POM, ABS, NBR
<b>pH Range</b>	5 to 9	<b>Material Cleaning Unit</b>	TPE, PUR, stainless steel (1.4571)
<b>Power Consumption</b>	1 W	<b>Material Sensor</b>	Stainless steel (1.4571), ASA + PC, silicon, PVC and PU
<b>Response Time</b>	< 3 min	<b>Dimensions (D x L)</b>	3.33 in x 12.6 in
<b>Calibration Method</b>	Factory calibrated sensor cartridge (CARTRICAL), 1 and 2 point matrix correction	<b>Cable Length Sensor</b>	33 in
<b>Sample Temperature</b>	35 to 104 °F	<b>Controller Compatibility</b>	sc100, sc200, sc1000
<b>Operating Temperature</b>	-4 to 113 °F	<b>Process Connection</b>	1 inch thread
<b>Sensor Cartridge</b>	Automatic import of factory calibration data, typical lifetime 12 months	<b>Protection Class</b>	IP 68
		<b>Sample Pressure</b>	4.35 psi
		<b>Weight</b>	5.3 lbs

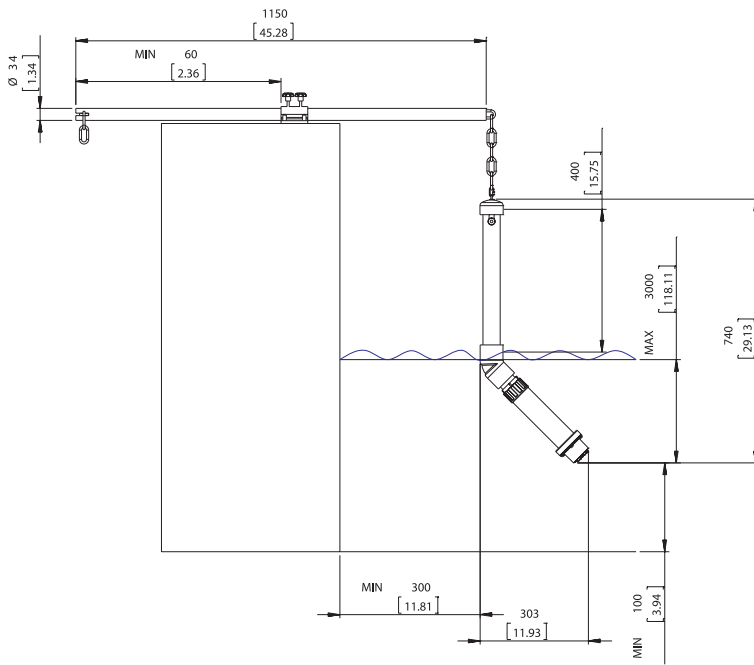
\*Subject to changes without notice.



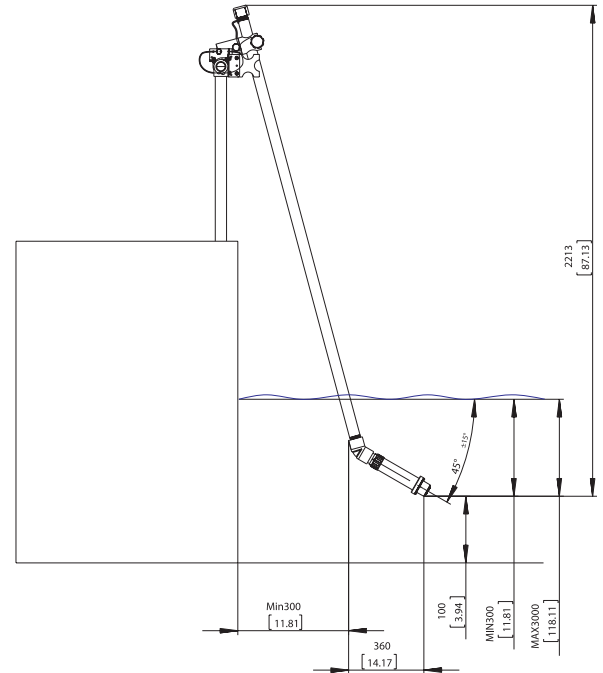
**Dimensions**



**Installation / Mounting**



Chain Mount Kit (PVC)



Rail Mount Kit (PVC)

## Ordering Information

### Probe

- LXV440.99.00002** AN-ISE sc: Combination Sensor for Ammonium and Nitrate (with RFID\* technology)
- LXV440.99.00012** AN-ISE sc Combination Sensor for Ammonium and Nitrate (without RFID\* technology)

### Mounting Hardware

- 6184900** Rail Mount Kit (PVC) for ISE sensors
- LZX914.99.12400** Chain mounting for ISE sensors (PVC)
- LZX414.99.80000** Wall mount kit (stainless steel) for ISE sensors

### Cartridge

- LZY694** Cartrical sensor cartridge for AN-ISE

### Air Cleaning Systems (Optional)

- LZY706** Cleaning unit for AN-ISE sensor
- 6860000** High Output Air Blast Cleaning Compressor, 115 Vac
- 6860100** High Output Airblast Cleaning system for air cleaning, 230 Vac

### Controller

- LXV404.99.00552** sc200 controller for Hach digital process sensors
- LXV400.99.10082** sc1000 Probe Module, 6 Sensors, 100-240 Vac
- LXV402.99.00002** sc1000 Display Module

\*RFID = Radio- Frequency Identification

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