



# Phosphax sc Phosphate analyser, Indoor, 1 - 50 mg/L $\rm PO_4$ -P, 1 channel, 115-230 VAC

Contact Hach

Product #:

AED Price:

LXV422.99.23011 Hazardous



### The Phosphax sc online analyser provides reliable and accurate PO, measurements

High levels of nutrients in water can cause eutrophication, resulting in less oxygen for the plants and animals under water. The Phosphax sc, based on the proprietary SC platform, helps solve this environmental issue and ensure compliance. The measurement is made using a photometer with automatic zero-compensation that enables accuracy and stability in the measurement range (1 - 50 mg/L PO<sub>4</sub>-P). With the Phosphax sc online analyser you can make informed decisions about process management and meet strengthening regulations around Total Phosphorus discharge. The analyser comes in both indoor and outdoor version for versatile usage and is primarily suited for aeration basin applications. The instrument can also be used as a Hach RTC-P system to control the dosing to enable you to comply with the Total Phosphorus discharge limit at the outlet. If you were previously over-dosing or under-dosing due to low confidence in ortho-phosphate values, the Phosphax sc enables you better control your process to ensure compliance.

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.

#### Multiple measurement ranges for a variety of wastewater applications

With detection limits as low as 0.05 mg/L and as high as 50 mg/L, the Phosphax sc phosphate analyser can be used anywhere in the wastewater treatment process, from the influent or start of the phosphorous removal process where phosphate levels may be high to the effluent where phosphate levels are at their lowest.

#### Low cost of operation with proven yellow method

The Phosphax sc analyser determines ortho-phosphate concentration using the molybdovanadate yellow colorimetric method which optimizes reagent consumption and helps save on operating costs.

#### Generate actionable insights from measurement data

The Phosphax sc is Claros enabled so you can leverage the Hach Water Intelligence System to collect, manage and analyse data from your instrument.

#### Easy installation at the measurement point

Hach's Phosphax sc phosphate analyser is designed to be installed at the measurement point (indoor and outdoor options). The housing is weatherproof and lockable for installation at the basin, even in the toughest climates. Mounting options include: wall, rail, or standing. The unit comes complete and assembled; no separate housing is required.

#### Low maintenance

Several features make the Phosphax sc phosphate analyser easy to use and maintain:

1. Automatic cleaning at customized intervals.

2. Automatic zero-calibration at each measuring cycle.

3. Prognosys Predictive Diagnostics alerts you to upcoming instrument issues and guides you on whether the changes in your measurements are due to your instrument or your water.

# Specifications

Accuracy:	Using standard solutions: $2\% \pm 1.0$ mg/L
Cable length:	2 m fixed power cable at analyser
Channels:	1
Data types:	Current output, relays and BUS communication via SC controller
Detection limit:	1.0 mg/L PO <sub>4</sub> -P
Dimensions (H x W x D):	720 mm x 540 mm x 370 mm
Enclosure waterproof rating:	IP54
Filtersystem included:	No, use e.g. Filtrax
Flow:	1 - 20 L/h sample (free of suspended solids)
Fuse protection:	Via SC 1000 controller or power box maximum of 2 analysis instruments for each SC 1000 or power box
Housing type:	Indoor
Indoor/Outdoor:	Indoor
Material:	ASA/PC UV-resistant
Measurement method:	Photometric method using vanadate-molybdate.
Measuring interval:	5 - 120 min, adjustable per 5 min.
Measuring principle:	2-beam photometer, Vanadate-Molybdate-method (yellow method)
Measuring range:	1.0 - 50 mg/L PO <sub>4</sub> -P
Number of channels:	1
Operating temperature range:	5 - 40 °C
Output:	Current output, relays and bus communication via SC controller
Parameter:	ortho-Phosphate
Permissible Chloride range:	Max. Cl <sup>-</sup> concentration: 1000 mg/L
pH Range:	5 - 9 pH
Power requirements (Hz):	50/60 Hz
Power requirements (Voltage):	115 - 230 V AC, powered by Power Box or SC Controller
Power supply:	115-230 VAC
Pressure range:	-30 - 50 mbar with continuous sample preparation; at overflow vessel
Reagent consumption:	1000 mL/month
Reproducibility:	2% + 1.0 mg/L
Response time:	< 5 minutes
Sample level:	Level of liquid in basin with filtration probe must be below analyzer
Sample quality:	Ultra filtrated or comparable
Sample suction hose:	Indoor
Sample temperature:	4 - 40 °C
Sampling option:	1 channel continuous sample from filtration unit, e.g. FILTRAX
Storage conditions:	-20 °C - 60 °C
Warranty:	24 months
Weight:	Without sample preparation system and without chemicals: 29 kg

1 - 50 mg/L PO<sub>4</sub>-P, 230 VAC Phosphax sc Ortho-Phosphate Analyser, indoor version, 1 channel continous sample from filtration unit, 3 month supply of all necessary consumables at 5 minute cycle time, user manuals

## What's included?

1 - 50 mg/L PO<sub>4</sub>-P, 230 VAC Phosphax sc Ortho-Phosphate Analyser, indoor version, 1 channel continous sample from filtration unit, 3 month supply of all necessary consumables at 5 minute cycle time, user manuals

#### **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, 2 digital Sensors, 24 VDC, without plug (Item LXV525.99Z11551)