



## Applications

- Wastewater
- Drinking Water
- Industrial Effluent

# NP6000sc Online Phosphate Analyzer



## We Have Your Lower Limits Covered - The new NP6000sc phosphate analyzer keeps you compliant.

The NP6000sc Phosphate Analyzer makes water analysis easier, safer, and more reliable - reducing maintenance to just once every 3 months while ensuring accurate results and regulatory compliance.

### Confidence in compliance through accurate data

Ensure your operations stay ahead of compliance requirements with the NP6000sc Phosphate Analyzer. It is designed for continuous monitoring and precise measurement across three ranges (0.015 - 75 mg/L  $\text{PO}_4\text{-P}$ ), offering lab-grade accuracy and SCADA integration. With real-time data and detailed flow and maintenance insights, the NP6000sc delivers the information needed to optimize processes and support technical decision-making you can trust.

### Grab Sampling: Consistency from Lab to Process

The NP6000sc Phosphate Analyzer eliminates the uncertainty caused by discrepancies between lab results and online analysers by aligning measurements for consistent and reliable data. Its grab sample feature ensures compliance with regulatory standards while maintaining precise process control. With trusted, accurate readings, you can confidently avoid penalties and keep operations running smoothly.

### Robust and lightweight filtration options



Benefit from light construction, improved air cleaning and innovative flow detection with the FX610 filtration system and rugged FX620. These features ensure reliable functionality and reduced operational touchpoints. Plus, you'll have confidence in your results with the ability to remotely check that your sample is consistently supplied to your analyzer.

## Technical Data\*

|                                       | Measuring Range 1 - LR  | Measuring Range 2 - MR   | Measuring Range 3 - HR  |
|---------------------------------------|---|--|---|
| <b>Part number</b>                    | <b>LXV462.99.1XXXX</b>  | <b>LXV462.99.2XXXX</b>   | <b>LXV462.99.3XXXX</b>  |
| <b>Range</b>                          | 0.015 - 5.0 mg/L PO <sub>4</sub> -P   | 0.05 - 15 mg/L PO <sub>4</sub> -P                                  | 1 - 75 mg/L PO <sub>4</sub> -P                                    |
| <b>Lower Limit of Detection (LOD)</b> | 0.015 mg/L PO <sub>4</sub> -P   | 0.05 mg/L PO <sub>4</sub> -P                                       | 1 mg/L PO <sub>4</sub> -P   |
| <b>Accuracy</b>                       | With Standard Solution:<br>2% of the measured value<br>+ 0.015 mg/L   | With Standard Solution:<br>2% of the measured value<br>+ 0.05 mg/L | With Standard Solution:<br>2% of the measured value<br>+ 1.0 mg/L |
| <b>Repeatability</b>                  | With Standard Solution:<br>0.7% of the measured value<br>+ 0.005 mg/L   | With Standard Solution:<br>2% of the measured value<br>+ 0.05 mg/L | With Standard Solution:<br>2% of the measured value<br>+ 1.0 mg/L |
| <b>Measuring Interval</b>             | 10, 15, 20 or 30 minutes<br>(user adjustable)   | 5, 10, 15, 20 or 30 minutes<br>(user adjustable)                   | 5, 10, 15, 20 or 30 minutes<br>(user adjustable)                  |
| <b>Measurement Method</b>             | Photometric<br>(Ortho-phosphate ions react with vanadate-molybdate reagent and form a yellow dye.)  |  |   |
| <b>pH Range</b>                       | 5 - 9 pH  |  |   |
| <b>Permissible Chloride Range</b>     | ≤ 1000 mg/L Cl <sup>-</sup>   |  |   |
| <b>Sample Quality</b>                 | Ultra filtrated or comparable   |  |   |
| <b>Sample Flow Rate</b>               | 0.5 - 20.0 L/h  |  |   |
| <b>Sample Pressure</b>                | 2.5 bar (0.25 mPa) maximum  |  |   |
| <b>Sample Temperature</b>             | 4 - 40 °C (39 - 104 °F)   |  |   |
| <b>Special Remarks</b>                | The liquid level in the basin must be below the bottom of the analyzer.   |  |   |
| <b>Operating Temperature Range</b>    | -20 - 45 °C (-4 - 113 °F); 95% relative humidity, non-condensing  |  |   |
| <b>Storage Conditions</b>             | -20 - 60 °C (-4 - 140 °F); 95% relative humidity, non-condensing  |  |   |
| <b>Number of Channels</b>             | 1 or 2  |  |   |
| <b>Power Supply</b>                   | Mains power supplied by SC Controller or LQV155 power box.<br>Analyzer and heated drain tubing: 115 VAC or 230 VAC  |  |   |
| <b>Cable Length</b>                   | Standard: 2 m (3.3 ft) cable fixed from the edge of the enclosure<br>Extension cables are available as an option (data cable up to 50 m (164 ft), power cable up to 5 m (16.4 inch)). |  |   |
| <b>Enclosure Rating</b>               | Rating: IP55, NEMA 3R UL50E<br>Material: PUR 66   |  |   |
| <b>Controller Compatibility</b>       | Digital SC Controller. Controllers are sold separately.   |  |   |
| <b>Dimensions (H x W x D)</b>         | 991 mm x 575 mm x 425 mm  |  |   |
| <b>Weight</b>                         | Approximately 45 kg (99.21 lb.) without chemicals   |  |   |

\*Subject to change without notice.

## Technical Data Filtration Systems\*

|                                     |   |  |
|-------------------------------------|---|--|
|                                     |                            |   |
|                                     | <b>Integrated - FX610 and FX620<sup>1)</sup></b>  | <b>External - Filtrax</b>  |
| <b>Dimensions<br/>(H x W x D)</b>   | FX610:<br>348 x 287 x 81 mm (13.7 x 11.3 x 3.19 in.)<br>FX620:<br>424 x 408 x 86 mm (16.6 x 16.1 x 3.4 in.) | Control unit:<br>530 x 430 x 220 mm (21 x 17 x 9 in.)<br>Module carrier:<br>500 x 340 x 92 mm (20 x 4 x 13 in.)  |
| <b>Weight</b>                       | FX610:<br>2.2 kg (4.9 lb) with filter module<br>FX620:<br>3.5 kg (7.7 lb) with filter module                | Control unit: approx. 22 kg (49 lb)<br>Module carrier with 5 m suction tube:<br>approx. 9 kg (20 lb)<br>Sample tube 10 m: approx. 5 kg (11 lb)<br>Sample tube 20 m: approx. 10 kg (22 lb)<br>Mounting pipe 2 m: approx. 5 kg (11 lb) |
| <b>Sample Volume</b>                | Delivers a sample volume of ~1 L/h  | Approximately 900 mL/h suitable<br>for up to 3 process instruments   |
| <b>Hose Length</b>                  | 5 m or 10 m heated sample hose  | Suction hose:<br>5 m heated<br>Sample hose:<br>2 m unheated or 10 m, 20 m, 30 m heated   |
| <b>Maintenance<br/>Requirements</b> | Approximately 30 minutes/3 months in standard<br>municipal wastewater aeration basin applications           | Approximately 1 hour/month in typical applications   |
| <b>Sample Temperature</b>           | 4 - 40 °C (39.2 - 104 °F) in basin  | 5 - 40 °C (41 - 104 °F)  |
| <b>Ambient Temperature</b>          | -20 - 45 °C (-4 - 113 °F)   | -20 - 40 °C (-4 - 104 °F)  |
| <b>pH Range</b>                     | 5 - 9 pH  | 5 - 9 pH   |
| <b>Power Requirements</b>           | 115 - 230 VAC; 50/60 Hz, supplied by analyzer   | 115 - 230 VAC; 50/60 Hz  |
| <b>Certifications</b>               | CE, UKCA, CMIM, FCC, ISSED,<br>certified to UL and CSA safety standards by TÜV                              | CE, UL, CSA  |

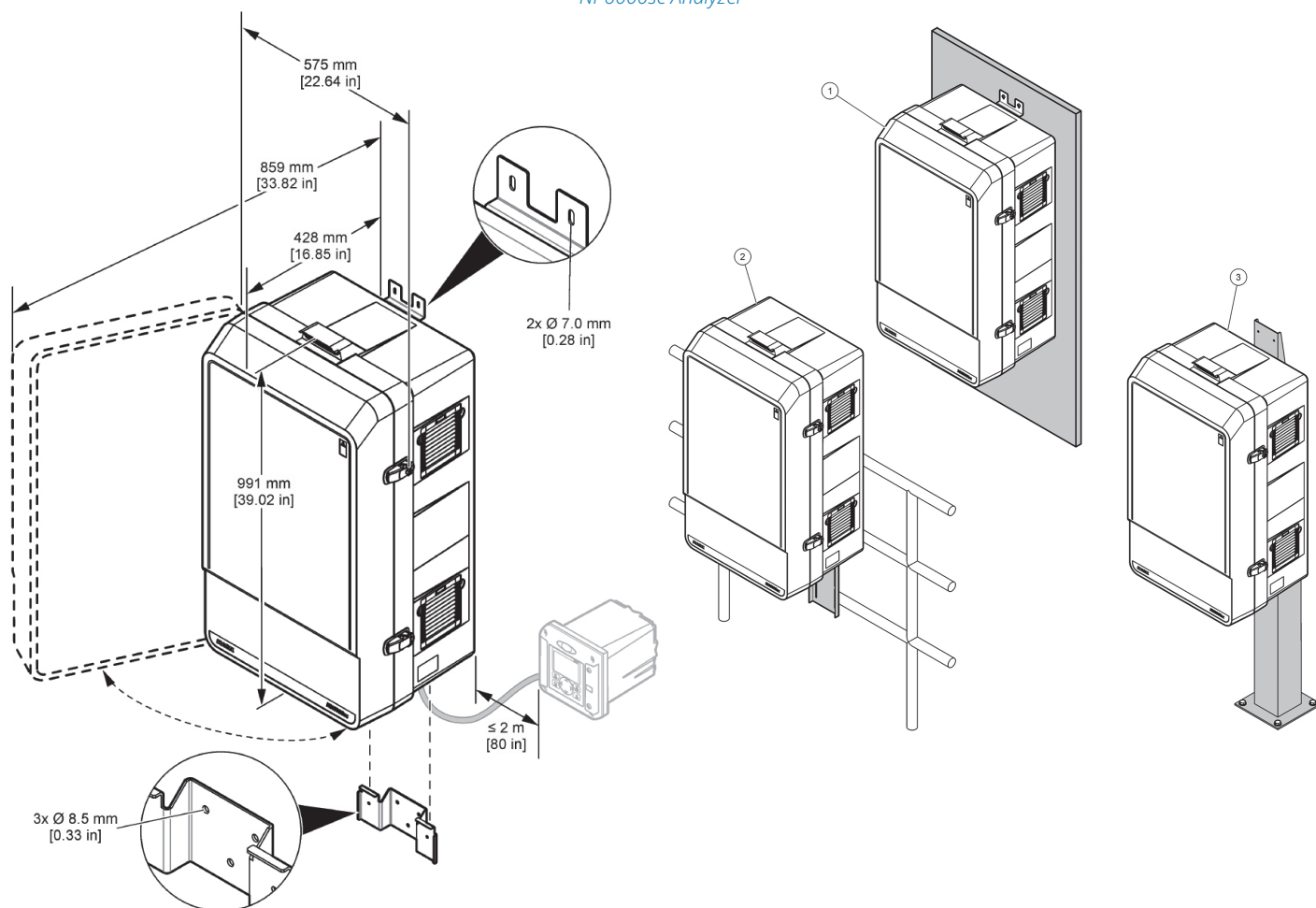
\*Subject to change without notice.

<sup>1)</sup> The NP6000sc can be retrofit with the integrated FX610 or FX620 filtration systems. Contact Hach for more information.

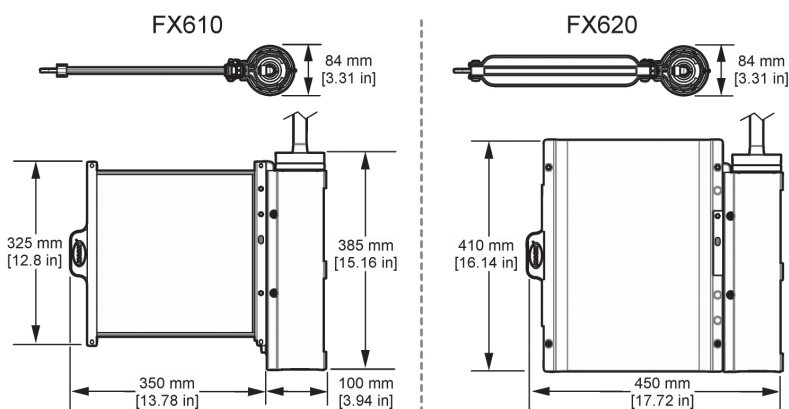
## Dimensions

The NP6000sc phosphate analyzer is designed for wall mounting (1), outdoor or indoor. Rail mounting (2) and stand mounting (3) options are available.

NP6000sc Analyzer



FX610 and FX620 Filtration Units



## Order Information

### Analyzers

- LXV462.99.12321** NP6000sc Phosphate Analyzer, LR, 1 channel, with sample supply pump for FX620, flow detection, automatic grab sample, 115 VAC
- LXV462.99.22321** NP6000sc Phosphate Analyzer, MR, 1 channel, with sample supply pump for FX620, flow detection, automatic grab sample, 115 VAC
- LXV462.99.30321** NP6000sc Phosphate Analyzer, HR, 1 channel, for use with 1 external filtration system, flow detection, automatic grab sample, 115 VAC

*Please note: These are the most common product configurations, but others are available.*

*Please contact your Hach representative for additional information.*

*A sample filtration system (Filtrax or FX6x0) and a digital Hach SC controller are required for operation of the NP6000sc. Sample filtration system and controller are sold separately.*

### Mounting Hardware and Accessories

- LZY286** Stand mounting kit for SC analyzer with SC controller
- LZY316** Rail mounting kit for SC analyzer without SC controller
- LZY287** Stand mounting kit for SC analyzer without SC controller
- LXZ461.99.00007** Controller mounting kit
- LZY714.99.42050** FX610/FX620/Filtrax Pole mounting hardware, 24 cm bracket, SS pole with opening, 2 m
- LZX414.99.62050** Rail mounting hardware FX6x0
- LXZ464.99.00018** Filter Membrane for FX610/FX620
- LXZ461.99.00010** Heated drain hose, 5 m, 115 V
- LXZ461.99.00003** Sample and connection tube for multiple analyzers
- LQV155.99.00002** Power box without power connection cable
- LQV155.99.00012** Power box with power connection cable

### Reagents

- LCW1010** NP6000sc Reagent Set for Measuring Range 1 (0.015-5 mg/L PO<sub>4</sub>-P)
- LCW1020** NP6000sc Reagent Set for Measuring Range 2 (0.05-15 mg/L PO<sub>4</sub>-P)
- LCW1030** NP6000sc Reagent Set for Measuring Range 3 (1-75 mg/L PO<sub>4</sub>-P)
- LCW1011** NP6000sc Reagent for Measuring Range 1 (0.015-5 mg/L PO<sub>4</sub>-P)
- LCW1012** NP6000sc Acid for Measuring Range 1 (0.015-5 mg/L PO<sub>4</sub>-P)
- LCW1013** NP6000sc Standard for Measuring Range 1 (0.015-5 mg/L PO<sub>4</sub>-P)
- LCW1021** NP6000sc Reagent for Measuring Range 2 (0.05-15 mg/L PO<sub>4</sub>-P)
- LCW1031** NP6000sc Reagent for Measuring Range 3 (1-75 mg/L PO<sub>4</sub>-P)
- LCW1065** NP6000sc Cleaning Solution 1
- LCW1066** NP6000sc Cleaning Solution 2

## Order Information

### Sample Filtration Systems

#### Integrated - FX610 and FX620

The FX610 and FX620 are lightweight, sample filtration systems for the NH6000sc and the NP6000sc with a sample pump and compressor directly integrated into the analyzer. The filter system collects a sample from the basin and the integrated sample pump moves the sample to the measuring chamber.

The FX610 and FX620 offer lower user maintenance, each with one membrane that requires cleaning only every 3 months and a large diameter air supply tube. The FX620 has an air bubble cleaning module below the filter system for highly improved automatic solids cleaning for the filter membrane.

**LXV464.97.11021** FX610 Sample Filtration System, 5 m heated hose, 115 VAC

**LXV464.97.12021** FX610 Sample Filtration System, 10 m heated hose, 115 VAC

**LXV464.97.21021** FX620 Sample Filtration System, rough samples, 5 m heated hose, 115 VAC

**LXV464.97.22021** FX620 Sample Filtration System, rough samples, 10 m heated hose, 115 VAC

#### External - Filtrax

The Filtrax sample filtration system continually extracts samples directly from process effluent and pull the water through ultra-filtration membranes (0.15 µm) that are immersed in the aeration basin or primary settling tank. The control unit of the Filtrax can be placed outdoor in any climate and is virtually maintenance free, all tubing is completely accessible and easy to replace. A programmable alarm relay alerts operators to inspect the system when flow decreases, and a second relay can shut the unit down if flow decreases further.

**5738900** Filtrax sample filtration system, 2 m unheated hose, 115 VAC

**5739200** Filtrax sample filtration system, 2 m heated hose, 115 VAC

**5739000** Filtrax sample filtration system, 10 m heated hose, 115 VAC

**5739100** Filtrax sample filtration system, 20 m heated hose, 115 VAC

*Part numbers may vary by country.*

*\*For more details and technical specifications please visit [hach.com](http://hach.com).*

### Enable the Benefits of Smart Monitoring

This instrument connects to Claros, Hach's innovative Water Intelligence System. Claros allows you to seamlessly connect and manage instruments, data, and process – anywhere, anytime. The result is greater confidence in your data and improved efficiencies in your operations. To unlock the full potential of Claros, insist on Claros Enabled instruments.

### Hach Service Protects Your Investment

With Hach Service, you have a global partner who understands your needs and cares about delivering timely, high-quality service you can trust. Our Service Team brings unique expertise to help you maximize instrument uptime, ensure data integrity, maintain operational stability, and reduce compliance risk.



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