

NP6000sc Online Phosphate Analyser

Applications

- Wastewater
- Drinking Water
- Industrial effluent



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

The NP6000sc Phosphate Analyser makes water analysis easier, safer, and more reliable – reducing maintenance to just once every 6 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 Analyser. It is designed for continuous monitoring and precise measurement across three ranges (0.015 - 75 mg/L PO₄-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 optimise processes and support technical decision-making you can trust.

Grab Sampling: Consistency from Lab to Process

The NP6000sc Phosphate Analyser 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 analyser.

Technical Data*

	Measuring Range 1 - LR	Measuring Range 2 - MR	Measuring Range 3 - HR
Part number	LXV462.99.1XXXX	LXV462.99.2XXXX	LXV462.99.3XXXX
Measuring range	0.015 - 5.0 mg/L PO ₄ -P	0.05 - 15 mg/L PO ₄ -P	1 - 75 mg/L PO ₄ -P
Detection limit	0.015 mg/L PO ₄ -P	0.05 mg/L PO ₄ -P	1 mg/L PO ₄ -P
Accuracy	With Standard Solution: 2% of the measured value + 0.015 mg/L	With Standard Solution: 2% of the measured value + 0.05 mg/L	With Standard Solution: 2% of the measured value + 1.0 mg/L
Repeatability	With Standard Solution: 0.7% of the measured value + 0.005 mg/L	With Standard Solution: 2% of the measured value + 0.05 mg/L	With Standard Solution: 2% of the measured value + 1.0 mg/L
Measuring interval	10, 15, 20 or 30 minutes (user adjustable)	5, 10, 15, 20 or 30 minutes (user adjustable)	5, 10, 15, 20 or 30 minutes (user adjustable)
Measurement method	Photometric (Ortho-phosphate ions react with vanadate-molybdate reagent and form a yellow dye.)		
pH range	5 - 9 pH		
Permissible Chloride range	≤ 1000 mg/L Cl ⁻		
Sample quality	Ultra filtrated or comparable		
Flow rate	0.5 - 20.0 L/h		
Sample pressure	2.5 bar (0.25 mPa) maximum		
Sample temperature	4 - 40 °C		
Special remarks	The liquid level in the basin must be below the bottom of the analyser.		
Operating temperature range	-20 - 45 °C; 95% relative humidity, non-condensing		
Storage conditions	-20 - 60 °C; 95% relative humidity, non-condensing		
Number of channels	1 or 2		
Power supply	Mains power supplied by SC Controller or LQV155 power box. Analyser and heated drain tubing: 115 VAC or 230 VAC		
Cable length	Standard: 2 m cable fixed from the edge of the enclosure Extension cables are available as an option (data cable up to 50 m, power cable up to 5 m).		
Enclosure waterproof rating	Rating: IP55, NEMA 3R UL50E Material: PUR 66		
Controller compatibility	Digital SC Controller. Controllers are sold separately.		
Dimensions (H x W x D)	991 mm x 575 mm x 425 mm		
Weight	Approximately 45 kg without chemicals		

*Subject to change without notice.

Technical Data Filtration Systems*

			
	Integrated - FX610 and FX620 ¹⁾	External - Filtrax	External - TMS-C
Dimensions (H x W x D)	FX610: 348 mm x 287 mm x 81 mm FX620: 424 mm x 408 mm x 86 mm	Control unit: 530 x 430 mm x 220 mm Module carrier: 500 mm x 340 mm x 92 mm	600 mm x 600 mm x 200 mm
Weight	FX610: 2.2 kg with filter module FX620: 3.5 kg with filter module	Control unit: approx. 22 kg Module carrier with 5 m suction tube: approx. 9 kg Sample tube 10 m: approx. 5 kg Sample tube 20 m: approx. 10 kg Sample tube 30 m: approx. 15 kg Mounting pipe 2 m: approx. 5 kg	Filter system control unit without hoses: 30.5 kg (cabinet only)
Sample volume	Delivers a sample volume of ~1 L/h	Approximately 900 mL/h suitable for up to 3 process instruments	200 - 500 mL/h , depending on pollution level of the TMS-C membrane and length of the suction hose
Hose length	5 m or 10 m heated sample hose	Suction hose: 5 m heated Sample hose: 2 m unheated or 10 m, 20 m, 30 m heated	Suction hose: 5 m heated Sample hose: 2 m unheated or 10 m, 20 m, 30 m heated
Maintenance requirements	Approximately 30 minutes/3 months in standard municipal wastewater aeration basin applications	Approximately 1 hour/month in typical applications	Manual cleaning of the filter system membrane: 1/week
Sample temperature	4 - 40 °C in basin	5 - 40 °C	4 - 40 °C
Ambient temperature	-20 - 45 °C	-20 - 40 °C	-20 - 45 °C
pH range	5 - 9 pH	5 - 9 pH	2 - 10 pH
Power Requirements	115 - 230 VAC; 50/60 Hz, supplied by analyser	115 - 230 VAC; 50/60 Hz	230 VAC; 50 Hz
Certifications	CE, UKCA, CMIM, FCC, ISED, certified to UL and CSA safety standards by TÜV	CE, UL, CSA	CE

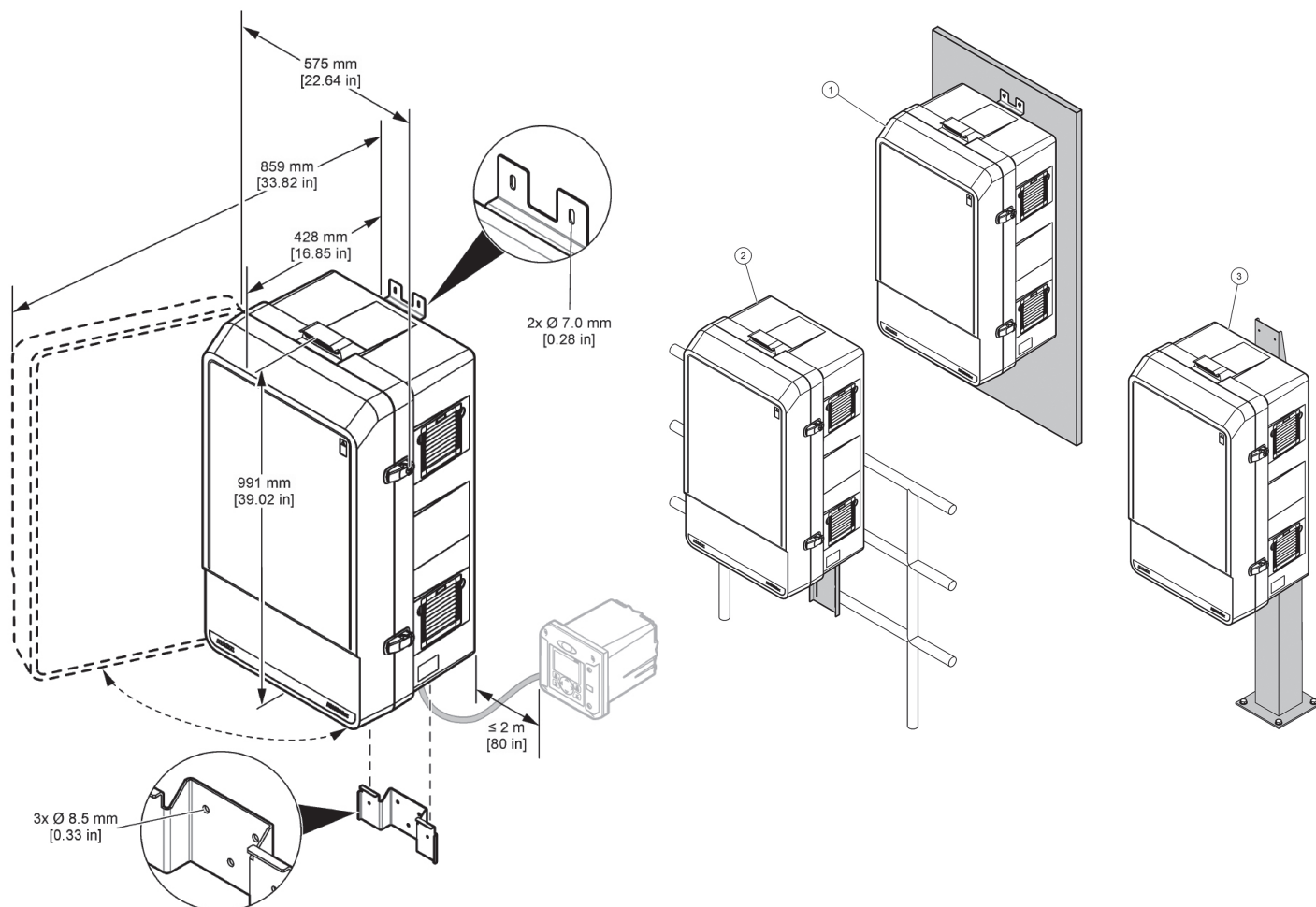
*Subject to change without notice.

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

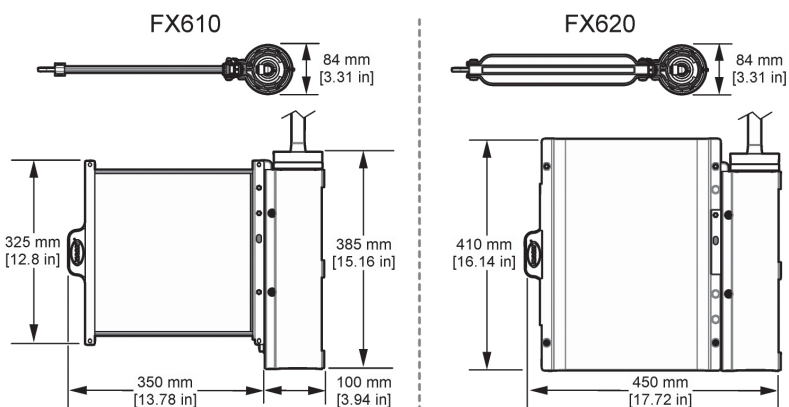
Dimensions

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

NP6000sc Analyser



FX610 and FX620 Filtration Units



Order Information

Analysers

- LXV462.99.12311** NP6000sc Phosphate Analyser, LR, 1 channel, with sample supply pump for FX620, flow detection, automatic grab sample, 230 VAC
- LXV462.99.22311** NP6000sc Phosphate Analyser, MR, 1 channel, with sample supply pump for FX620, flow detection, automatic grab sample, 230 VAC
- LXV462.99.30311** NP6000sc Phosphate Analyser, HR, 1 channel, for use with 1 ext. filtration system, flow detection, automatic grab sample, 230 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, FX6x0, or TMS-C) 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 analyser with SC controller
- LZY316** Rail mounting kit for SC analyser without SC controller
- LZY287** Stand mounting kit for SC analyser 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
- LXZ461.99.00011** Heated drain hose, 5 m, 230 V
- LXZ461.99.00003** Sample and connection tube for multiple analysers
- LQV155.99.00001** Power connection box for SC analysers, without power cord
- LQV155.99.00011** Power connection box for SC analysers, with power cord

Reagents

- LCW1010** NP6000sc Reagent Set for Measuring Range 1 (0.015-5 mg/L PO₄-P)
- LCW1020** NP6000sc Reagent Set for Measuring Range 2 (0.05-15 mg/L PO₄-P)
- LCW1030** NP6000sc Reagent Set for Measuring Range 3 (1-75 mg/L PO₄-P)
- LCW1011** NP6000sc Reagent for Measuring Range 1 (0.015-5 mg/L PO₄-P)
- LCW1012** NP6000sc Acid for Measuring Range 1 (0.015-5 mg/L PO₄-P)
- LCW1013** NP6000sc Standard for Measuring Range 1 (0.015-5 mg/L PO₄-P)
- LCW1021** NP6000sc Reagent for Measuring Range 2 (0.05-15 mg/L PO₄-P)
- LCW1031** NP6000sc Reagent for Measuring Range 3 (1-75 mg/L PO₄-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 analyser. 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.

- LXV464.98.11011** FX610 Sample Filtration System, 5 m heated hose, 230 VAC
- LXV464.98.12011** FX610 Sample Filtration System, 10 m heated hose, 230 VAC
- LXV464.98.21011** FX620 Sample Filtration System, rough samples, 5 m heated hose, 230 VAC
- LXV464.98.22011** FX620 Sample Filtration System, rough samples, 10 m heated hose, 230 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.

- LXV294.99.01000** Filtrax Sample Filtration System, 2 m unheated pressure hose, 230 VAC
- LXV294.99.05000** Filtrax Sample Filtration System, 2 m heated pressure hose, 230 VAC
- LXV294.99.02000** Filtrax Sample Filtration System, 10 m heated pressure hose, 230 VAC
- LXV294.99.03000** Filtrax Sample Filtration System, 20 m heated pressure hose, 230 VAC
- LXV294.99.04000** Filtrax Sample Filtration System, 30 m heated pressure hose, 230 VAC

External - TMS-C

Suitable for difficult applications such as inlet of a municipal wastewater treatment plant and industrial wastewater. The system can be combined with the process analyser in a bypass solution. The outdoor versions include a built-in heater and cooler, so the unit can be installed at the basin without any additional modifications. The sample hoses of the outdoor versions are heated to prevent freezing.

- LZH418.82.00101** TMS-C Filtration System, Indoor, 5 m unheated sample hose, 230 VAC
- LZH418.82.01101** TMS-C Filtration System, Outdoor, 5 m heated sample hose, 230 VAC
- LZH419.82.00201** TMS-C Filtration System, Indoor, 8 m unheated sample hose, 230 VAC
- LZH419.82.01201** TMS-C Filtration System, Outdoor, 8 m heated sample hose, 230 VAC

Part numbers may vary by country.

**For more details and technical specifications please visit uk.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 maximise instrument uptime, ensure data integrity, maintain operational stability, and reduce compliance risk.

