Bühler 4411 Stationary self-emptying water sampler

Product #: **BU4411.XX.XXXXX**

AED Price: Contact Hach

Stationary sampler using pressure-vacuum technology. Representative samples are taken continuously, bottles are automatically emptied and rinsed before they are refilled.

The different dosage vessels make the instrument extremely flexible in standard and individual applications. The temperature-controlled weatherproof V2A housing is optional and available in V4A and plastic-coated

stainless steel. The strict separation of the control and sample sections ensures that the instrument has a long life.

The pressure-vacuum sampler is ISO 5667 compliant and therefore satisfies the requirements for subsequent reproducible analysis. Until then the sample is refrigerated to prevent biological and chemical changes from occuring. To avoid cross-contamination, the systems are always rinsed before and after sampling.

Ideal for carrying out self-checks in municipal wastewater treatment plants, in industrial facilities and for use in public sector monitoring concepts (e.g. monitoring river water).

Pressure-vacuum principle: Highly accurate sample volume

Wide variety of multiple bottle options

Stainless steel housing (optional: plastic-coated stainless steel)

Backlit liquid crystal display

Specifications

Ambient temperature:	-20 - 43 °C
Automatic bottle rinsing/discharge:	Sampler equipped with rinsing head for bottle cleaning (rinsing water connection ¾”, max. 2 bar); automatic discharge of bottle (drain connection DN25). Bottles are emptied, rinsed and filled for permanent monitoring reasons. Samples locked (no discharge) in case of external event indication.
Certifications:	CE, Sampling according to ISO 5667-2/3-10
Communication:	Optional: Modbus, connection via DP Profibus, PC via Software Further communication options on request.
Controller:	Microprocessor control, Sleep-Mode (<5 mA), power supply 8-16 V, foil keyboard (with keys 0 - 9, ESC, ENT, cursor), graphical display (128 x 64 Pixel), backlit
Cooling system:	Self-contained, controlled cooling / heating with 4 settings, no-frost. independent of the programmable controller, temperature in sample compartment: 4 °C (adjustable from 0.0 - 9.9 °C)

Data storage:	3000 entries, non-volatile data memory; storage of sampling and malfunction data like sample extractions, bottle changes, messages, external signals
Dimensions:	Standard: 1290 (1930*) mm x 690 mm x 645 mm (H x W x D)
Housing material:	Double-walled stainless steel (material 1.4301/SS304) / PS / PC (GF10) with 40 mm insulation. Housing separated in sample compartment and control compartment, each with lockable door. Upper door with PMMA window. Protective top made of Styrosun which can be opened for connection and maintenance works. Optional: 1.4571/SS316Ti; SS304 Epoxy-coated; SS316Ti Epoxy-coated
Inputs:	1 x analogue: 0/4-20 mA 2 x digital (flow, event), Impulse length 60 ms, switching level 7-24 V, max. working resistance 500 Ohm, max. length of signal cable 30 m
Interface:	Mini-USB
Languages user interface:	Multi-language, selectable
Manual sampling:	Possible at any time without interrupting the current program run
Overfilling protection:	Adjustable from 1 - 999 samples/bottle
Pause Mode:	Interruption of program run at any time
Power requirements (Voltage):	115/230 V AC
Power supply:	Approx. 350 VA (with cooling)
Program protection:	Up to 5 years after voltage loss
Program Start Options:	Immediately; at a certain time; by an external signal
Program Stop Options:	End of sampling program after one program run; continuous operation or x- runs, and a certain date / time
Programs:	12 freely programmable user programs, with function to link programs
Sample collection:	Menu driven bottle discharge for sample extraction
Sample container:	Plastic: 2 x 10 L; 4 x 5 L; 4 x 10 L; 24 x 2.0 L Glass: 12 x 1.6 L; 24 x 2.0 L
Sample interval:	1 min to 99 h 59 min in steps of 1 minute 1 to 9999 pulses/sample
Sample temperature:	0 - 40°C (32 - 104°F)
Sample transport velocity:	>0.5 m/s at suction height up to at least 8 m (at 1013 hPa); pump performance can be adjusted electronically
Sample volume accuracy:	Standard Vacuum System: < 2.5 % or ± 3 mL
Sampler type:	Stationary
Sampling mode:	Time-related, flow-proportional, constant time/ variable volume (CTVV), event-related, manual sample extraction
Sampling Principle:	Standard Vacuum System 20 - 350 mL Option: Vacuum System 20 - 500 mL Option: Vacuum CTVV flow-proportional 5 - 350 mL Option: Bypass System 20 - 250 mL Option: glass dosing vessel instead of plastic
Status messages:	Standard: 1 collective malfunction message as relay output

	Option: expandable up to 5 relay outputs - freely programmable
Suction Height:	Max. 8 m (at 1013 hPa and stagnant medium), optional higher
Suction hose inner diameter (mm):	12 mm
Suction Hose Length:	7.5 m; max. hose length 30 m
Suction Hose Material:	PVC
Warranty:	24 months
Weight:	Approx. 115 kg with bottle option 2 x 10 L PE, higher weight when using other multi-bottle option and/or glass bottles
Wetted Materials:	PC, PVC, Silicone, PS, PE, EPDM (optional: metering vessel glass Duran50, sinker weight SS304)