



## Bühler 4011 Stationary automatic water sampler

**Product #:** BU4011.XX.XXXXXX  
**AED Price:** Contact Hach

Stationary sampler with insulated stainless steel housing, separated control and sample compartment with lockable door, flexible sampling options and various bottle configurations.

Sample volume accuracy, suction velocity and cooling performance certified according to MCERTs regulation.

This sampler covers almost 90% of the demands in routine and is ideal for use in sewage treatment and industrial facilities and for monitoring surface waters.

The sampler functions according to the pressure-vacuum principle and operates in time, volume, flow or event-based mode.

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.

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

**Strict separation of control and sample sections**

**Composite and fractionated samples**

**BUS and GSM communication**

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### Specifications

Ambient temperature:	-20 - 43 °C
Bottle filling time:	Bottle filling time adjustable 00:01 mm:hh to 999:59 mm:hh
Certifications:	CE, Sampling according to ISO 5667-2/3-10
Communication:	Optionally available Communication interfaces for MODBUS TCP, PROFIBUS DP
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:	Yes (EPOXY coated fridge as option)
Data storage:	3000 entries, non-volatile data memory; storage of sampling and malfunction data like sample extractions, bottle changes, messages, external signals
Dimensions:	1290 (1890*) 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
Keypad:	Numeric key pad, 4 arrow navigation keys, enter and back key
Languages user interface:	Multi-language, selectable
Logging:	Sample history, input signals, bottle changes, alarms in combination with time/date stamp
Manual languages:	DE, FR, GB, IT, NL, ES, SE, CZ, DK, RU, PL, RO, BG
Manual sampling:	Possible at any time without interrupting the current program run
Non return valve:	Available in combination with glass dosing systems
Number of user programs:	free to define user programs
Operatin conditions:	Pressureless sample taking is a must for all dosing options except Bypass
Overfilling protection:	Adjustable from 1 - 999 samples/bottle
Password Protection:	Programm changes and internal functions can be password protected
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, at external Signal, certain weekday
Program Stop Options:	Stopp sampling after programm is passed, after a certain amount of runs or continous run mode
Programs:	12 freely programmable user programs, with function to link programs
Relays:	Collective malfunction relay as standard, up to 4 relays optionally available
Sample container:	Plastic: 1 x 25 L; 1 x 50 L; 2 x 10 L; 2 x 22 L; 4 x 10 L; 4 x 14 L; 4 x 20 L; 4 x 25 L; 12 x 2.9 L; 24 x 1,0 L; 24 x 2.9 L  Glass: 12 x 2.0 L; 24 x 0.9 L; 24 x 2.0 L
Sample distributor:	Round distributor for multi-bottle versions (distribution plate used for some bottle configurations)
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:	Sample volume adjustable at standard dosing system 20 - 350 mL (optional Dosing Systems: Bypass, CTVV - constant time, variable volume, 500 mL dosing option)
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

Suction Hose Outer Diameter:

14 mm

Type of distributor:

Round distributor for multi-bottle versions (distribution plate used for some bottle configurations)

Warranty:

24 months

Weight:

Approx. 100 kg with composite container, higher weight when using multi bottle option and/or glass bottles

Wetted Materials:

PC, PVC, Silicone, PS, PE, EPDM (optional: metering vessel glass Duran50, sinker weight SS304)