



# Bühler 2000 Portable automatic water sampler

Številka izdelka: BU2000.XX.XXXXX

EUR Cena: Kontakt

Na voljo

## Accurate sampling for precise analysis

Portable water sampler using pressure-vacuum technology. Combines small dimensions by offering the 24x1 L bottle option for glass as well as plastic bottles or 25 L composite PE bottle.

Enables the option of 24 x 1 L or 1 x 25 L PE sample bottles, respectively 24x1 L or 1x20 L glass sample bottles, in combination with an active cooled sampler base! This is especially interesting for sampling in accordance to local regulation (24 x hourly mixed sample/daily mixed sample). Cleaning efforts are reduced to a minimum due to the new designed vat sample distributor and the standard round sample bottles.

The sampler offers two cooling options for ensuring a sample storage at 4°C: passive with ice packs or active with an integrated cooling machine including autarkic temperature control.

The pressure-vacuum sampler is ISO 5667 compliant. To avoid cross contamination, the system is purged before and after each sample is taken.

The compact, weatherproof housing made of PE plastic ensures failure-free operation over many years and often changing installation locations. Even in extremely corrosive applications.

All programming features of stationary sampler products are available.

#### Various bottle options permit flexible application: up to 24x1 L standard round sample bottles with active cooling!

Only Bühler samplers enable the option of 24 x 1 litre or 1 x 25 litre PE sample bottles, respectively 24 x 1 litre or 1 x 20 litre glass sample bottles, in combination with an active cooled sampler base! This is especially interesting for sampling in accordance to local regulation (24 x hourly mixed sample/daily mixed sample).

#### Lightweight, corrosion-free PE housing

The compact, weatherproof housing made of PE plastic ensures failure-free operation over many years and often changing installation locations. Even in extremely corrosive applications.

#### Always accurate sampling for correct analysis based on active or passive cooling

Bühler 2000 offers two cooling options for ensuring a sample storage at 4 °C:

- Passive with ice packs - no dealing with chemicals, which need to be refreshed after each use

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- Active with an integrated cooling machine including autarkic temperature control - for accurate temperature controlled sample conservation

#### Cost effective and low maintenance

No consumables are needed because the sampler functions according to the pressure-vacuum principle.

It is not necessary to change any pump tubing

#### Easy to clean sample container and distributor

Cleaning efforts are reduced to a minimum due to the new designed vat sample distributor and the standard round sample bottles.

### **Specifikacije**

Čas polnjenja steklenice: 1 min to 999 hours 59 min

Certificiranje: CE, Sampling according to ISO 5667-2/3-10

Dimenzija: Isobox, passive cooling: 534 mm x 510 mm x 430 mm (H x W x D)

Distributor vzorca: Robust round distributor (vat design)

Dodatna oprema: Charger, folding transport truck, ice packs, intake device and much more

Dolžina sesalne cevi: 5 m (standard); max. hose length 30 m

Dosing system (sample): Standard vacuum system

Sample volume selectable: 20 to 350 mL

Garancija: 24 mesecev

Hladilni sistem: Insulated sample compartment (40 mm insulating layer)

Option: ice packs (200 mm x 10 mm x 8 mm) for bottle option 16 x 1 L

Option: compressor cooling (12 V/115 V/230 V);

self-contained, controlled cooling with 2 settings, independent of the programmable controller,

temperature in sample compartment: 4 °C (adjustable from 0.0 - 9.9 °C)

Interval vzorca: 1 min to 99 h 59 min in minute steps

jeziki: Multi-language, selectable Komunikacija: Optional: PC via Software

Further communication options on request.

Kontrolna enota: 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

Manual sampling: Possible at any time, without interfering with the programme sequence.

Material ohišja: PE

Material sesalne cevi: PVC

Materiali v stiku z vodo: PC, PVC, Silicone, PS, PE, EPDM (optional: metering vessel glass Duran50), sinker weight

SS304

Možnosti zagona programa: Immediately; at a certain time; by an external signal

Možnosti zaustavitve programa: End of sampling program after one program run; continuous operation or x- runs, and a certain

date / time

Načelo vzorčenja: Pressure-vacuum principle

Način ohlajevanja: Passive or active

Način premora: Sampler head: 12 V/10 Ah lead storage battery (maintenance-free, leak proof);

115 V or 230 V operation by means of battery charger in buffer mode. Range 11-14 V, power

consumption max. 30 W

With optional active sample cooling: according to ambient conditions approx. 50 W

Način vzorčenja: Time-related, flow-proportional, constant time/ variable volume (CTVV), event-related, manual

sample extraction

Napetost (V): 12 V DC, 115/230 V AC

Natančnost prostornine vzorca: Standard Vacuum System: < 2.5 % or  $\pm 3$  mL

Obseg dobave: The sampler comes ready to operate, equipped with dosing vessel (glass), double head membrane

pump for greater suction velocity, passive cooled sample compartment, distributor system,

sampler base passive cooled. Battery powered, rechargeable battery included.

Overfilling protection: Adjustable from 1 - 999 samples/bottle

Podrobnosti o ohišju: Sampler base: double-walled PE plastic

Cover: single-walled PE plastic

Cover can easily be lifted for maintenance or status check, protects all components against dirt

and humidity.

Suction inlet at right-hand side of housing.

Posoda z vzorcem: Plastic: 1 x 10 L, 1 x 25 L, 4 x 5 L, 16 x 1 L (in combination with ice packs), 24 x 1.0 L

Glass: 1 x 17 L, 24 x 1.0 L

Program protection: Up to 5 years after voltage loss

Programs: 12 freely programmable user programs, with function to link programs

Prostornina vzorca: 20 - 350 mL freely adjustable

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

Sesalna višina: Max. 6m (at 1013 hPa and static medium)

Status messages: All relevant messages and sample history are stored (such like sampling, programme start,

programme end, sample missed)

Suction hose inner diameter (mm): 10 mm

Temperatura okolja: 0 - 43 °C

Temperatura vzorca: 0 - 40 °C

Teža: Sampler head: approx. 10 kg

Isobox, passive cooling (24 x 1 L): approx. 11 kg

Isobox, active cooling (24 x 1 L): approx. 25 kg

Tlak delovanja: Pressureless

Vhodi: 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

Vmesnik: Mini-USB

Vrsta distributorja: Robust round distributor (vat design)

Vrsta ohišja: Portable
Vrsta vzorčevalnika: Portable

Zapis podatkov: 3000 entries, non-volatile data memory; storage of sampling and malfunction data like sample

extractions, bottle changes, messages, external signals

Zunanji izhod digitalnega signala: Max. 8 x digital: free to define, programmable (depending on sampler configuration)

Zunanji vhod analognega signala: 1 x analogue: mA, optional 0 to 20 mA, cut-off voltage 3.3 V (optical coupler)

Zunanji vhod digitalnega signala: 5 x digital: flow, event, 3 x free to define / programmable (depending on sampler configuration)