

# WS 316 SE

## Self-emptying

# Sampler

### Housing

Complete housing of stainless steel **including** roof

**Simple upgrade** to Monitoring Station is possible

### Distributor

Revolver distributor with direct dosing system, **no cleaning** of distributor plate

**Standard** up to **24 x 1.8 l** borosilicate glass bottles or polypropylene (PP) bottles, **without retrofitting** 16 x 1.8 l / 8 x 1.8 l

Optional:  
4 x 10 l bottles, 4 x 5 l bottles,  
of borosilicate glass or polyethylene (PE).

**Telescope drawer** for easy bottle removal and bottle drain into a separate container.  
**Swivel tap not necessary.**

### Dosing

Dosing vessel of **borosilicate glass** (no plastic vessel)

Optional: **2. dosing vessel** for **extra composite container**

**Recalibration** of sample volume after cleaning is **not necessary**

Dosing vessel situated in **protected and thermostatted** sample chamber, thus **additional** panel door and protective heater **not necessary**

**Self-cleaning of bottle and dosing vessel** after every bottle change (optional without self-cleaning)

**No electrical equipment inside** the wetted space of sampler

**Reliable** sampling and **accurate** sample volumes with **vacuum pressure system**



**WaterSam®** self-emptying and self-cleaning sampler according to ISO 5667.

**MicroSam** The control meets all your sampling requirements such as time, volume and event proportional sampling. A manual sample is possible at any time without interrupting the program.

Up to 9 programs can individually be set by the customer. They can be interlinked or run simultaneously.

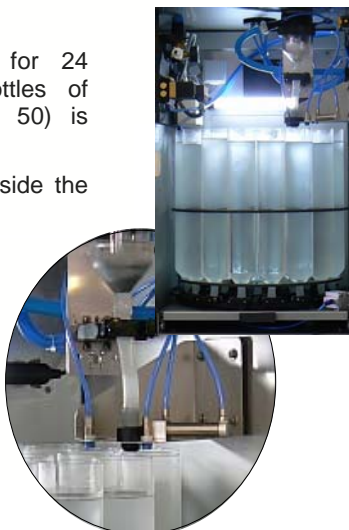
The integrated control unit protects your equipment and logs important data such as pump run time, run time of the cooling unit, failure messages etc.

A GSM modem for remote control can be connected. An SMS error message can then also be sent to a defined mobile phone.

The revolver distributor for 24 (16/8) 1.8 ltr. glass bottles of borosilicate glass (Duran 50) is pneumatically driven.

No electrical equipment inside the wetted chamber.

Should the sample not be required for further analysis, the bottle will automatically be emptied and washed.



#### Other optional bottle combinations:



16x1.8 + 1x26 ltr.



16x1.8 ltr. + 1x6 ltr.  
double dosing



4x10 ltr.

With the special air circulation system inside the storage compartment the samples are kept at optimum temperature conditions of +4°C (at ambient temperatures from -25°C up to +42°C).

Electrical and mechanical components are situated in the upper dry part of the sampler.

The housing can be disassembled and recycled.

#### Service

WaterSam® samplers are very easy to maintain. Our customer service is always ready to help you fast and reliably.

Manufactured by:

**WaterSam®**

**WaterSam GmbH & Co. KG**  
**Felix-Wankel-Straße 70**  
**72108 Rottenburg am Neckar**  
**Germany**

**Tel : + 49 (0)7472 9882-0**  
**Fax: + 49 (0)7472 9882-22**  
**E-Mail: info@watersam.de**

## Technical Data - WS 316 SE

### According to ISO 5667

Sampling method	Vacuum dosing system (Peristaltic pump upon request)
Wetted materials	Borosilicate glass, PE, PVC, stainless steel AISI 304, AISI 316 Ti, silicone
Dosing vessel	DURAN 50 borosilicate glass
Dosing volume	20 – 200 ml (multiple dosing is possible)
Suction hose	di 12 mm, PVC
Suction height	7.5 m, pump capacity 14.5 l/min without back pressure
Pump	230 V AC; -0.8 to 1 bar; no collector
Distribution	Revolver distributor, direct dosing
Distribution hose	di 15 mm, silicone
Cleaning	Rinsing with fresh- or process water, 1-6 bar, valves for water, pressure regulator with filter, PVDF sprayheads.
Housing	Stainless steel (AISI 304) Option: AISI 316 Ti or powder-coated (RAL colors) 40mm insulation, no cold bridges
Cooling unit	Compressor cooling 230 V AC; 160 W; refrigerant R 134a CFC-free; automatic defrost
Heating unit	Electric heating in stainless steel case 230 V; 350 W with excess temperature protection 70°C
Thermostat	PT100
Control	Microprocessor controlled, 4 button tactile back lighted keypad with 4 x 20 col. LCD display, Real time clock, 5 year RAM battery back-up, overload protected outputs
Software	Menu driven, 9 possible programs (simultaneously)  Memories for errors, events and operation status  Preset programs, easy to modify  Preset and free distributor settings  Combination and interlinking programs as standard features
Inputs	Flow signals : 0/4-20mA or potential free contact Event signals : Potential free contact
Interface	RS 232 or optional RS 485
Electrical Data	Mains supply 230 V / 50 Hz Power input approx. 1010 VA max. Main fuse 16 A
Dimensions	Height 1.590 mm Width 655 mm (including fastening bar =720mm) Depth 770 mm weight 120-155 kg (depending on equipment)

Supplied by: