

# IsoControl M4KSA

## Volumetric In-Line Sampler

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Volumetric  
In-Line Sampler  
for liquids in food  
pharmaceuticals-  
processes

An Isolok® and  
Labocontrole® product



With sampling bottle adapter



With sampling bottle directly screwed  
onto the sampler body

## APPLICATION

The **IsoControl M4KSA** sampler can be installed on a pressurized or a vacuum process line for the volumetric sampling of liquid foods or pharmaceutical products (maximum viscosity 1000cPs).

The simple design of the **IsoControl M4KSA** sampler and the assembly by 3 clamps both allow quick dismantling and easy cleaning when CIP is unavailable.

The product sampled is carried into the sampler's body and collected in a PP bottle directly screwed onto the sampler or mounted via a bottle adapter.



## SAMPLING PROCESS

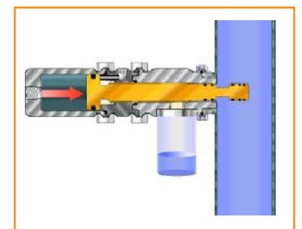
The **IsoControl M4KSA** sampler is air actuated by a double acting stroke pneumatic plunger/piston, allowing the extraction of an accurately metered volume of 3 ml with each stroke.

This operation can be easily automated, allowing pre-programmed time-based sampling cycles.

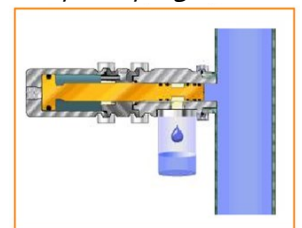
This enclosed concept ensures a representative sample and avoids any loss or contamination of the sampled product, as well as any exposure to the operator or the environment.

Each sampling cycle allows the collection of a pre-determined product volume and therefore it gives an average representation on time-based sampling.

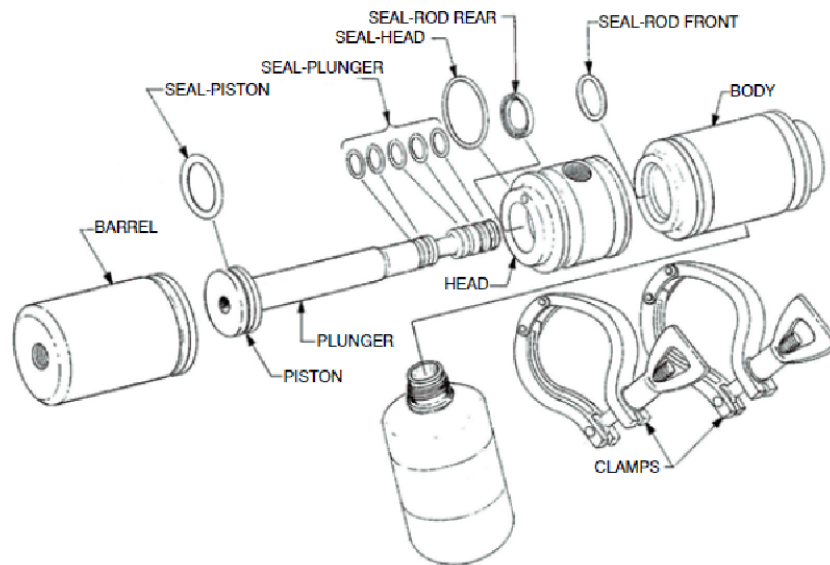
Maximum cycle frequency : 30 strokes/minute



*Drip sampling*



## SPECIFICATIONS AND TECHNICAL DATA



**FDA - 3A approved materials** : 316L stainless steel, Buna N or Viton or Kalrez or Silicone (both FDA & CE 1935/2004 compliant) seals, PP bottles

**Surface Roughness**  $\leq 0.4\mu\text{m}$  inside and  $\leq 0.75\mu\text{m}$  outside

**Clamp connections** for a quick disassembly and easy cleaning of wetted parts

This sampling device has been designed for easy mounting / dismantling operations prior to easy cleanability. All wetted parts comply with hygienic and safety requirements of European Machine Directive 2006/42/EC (CE marking) ATEX 94/9/CE, and meet American sanitary construction standards carrying the 3A symbol.

### CIP CLEANING UNIT (Optional)



This stainless steel CIP unit can simply be mounted on the sampling flask adapter before the start of the cleaning process.

It has internal ducting which causes the cleaning liquid to pass vertically in the wetted areas, thus providing hygienic cleaning.

Used water is discharged through a drain at the bottom of the unit.

As an option, the solenoid valve of the CIP cleaning unit can be operated by our control unit.

### CONTROL UNIT (Optional)

The **IsoControl M4KSA** sampler is operated by an electro-pneumatic control unit, allowing control of the frequency of the sampling cycles relative to the total volume to be sampled.

Upon installation, the required parameters are initiated in a simple menu via the touch screen. A computer constantly adjusts the sampling frequency to obtain a representative sample of the product transferred.

Three different steering modes are available and one for the Clean In Place sequence.

The control unit can be controlled by an external contact (pump, flowmeter) in order to manage starts and stops of the cycle.

The required air pressure: 3-8 bar (48-120 psi) and the required power supply is 24 VDC.



Control Unit with touch screen

