

Liquid Sampler

Mechatest® Govosam

Chromatography applications

The GOVOSAM sampler is simply the smallest and best solution to take samples specific for laboratory and chromatography applications.

The GOVOSAM have a reputation for reliable service and provides accurate samples of liquids. Many solvents and solvent mixtures (particularly aqueous mixtures), but also gasoline is typical the type of sample for which this sampler is ideal. It is this type of multi-component mixtures for a successful sampling and analysis.



Manual sampling

The GOVOSAM is a typical manual sampler and works with a needle in needle assembly that ensures septum integrity and full venting of process vapors.

This unique needle design punctures the septum without cutting it, allowing for full resealing of the septum when the sample vial is removed and is preventing accidental spillage or needle breakage. The vial sleeve is designed for small sample vials with crimp/snap top septum and assures proper alignment and safety for operation.

The ability to connect the sampler close to the sample point ensures optimal retrieval of a representative and contamination free sample. In spite of the low dead volume design we recommend to use the sampler in combination with a three-way valve which provides bypass configuration and allows representative product to flow true the valve and after switching directly into the sampler.

The pressure drop of the flowing fluid through the sampler is high, the sampler is for low pressure application else you need additional equipment to relief or reduce the pressure.

No waste, spent sample!

Direct sampling in small vials prevent broken needles and improve sample transfer for liquid chromatography applications.

It is easier for operation and laboratory people, there is no waste, you spent sample and it is better for the environment.

Key features

- Sampling directly under process conditions.
- Low pressure application.
- Representative sampling.
- Minimal dead volume.
- Closed loop sampling.
- Different models for sampling volumes.
- Two types of needle 0,6 mm or 1,2 mm.
- Process contact seals are Teflon® for chemical applications or wear-resistant elastomers for specific corrosive liquids.
- 316 stainless steel construction.



Works with autosamplers

Experts within the diverse analytical disciplines have chosen the best vials, septa and accessories that meet the demands of today's analysers, sampling and measurement techniques. We offer with the GOVOSAM an unique product that fits direct to autosamplers from all major manufacturers, and that have the quality and reproducibility to guarantee a successful analysis.

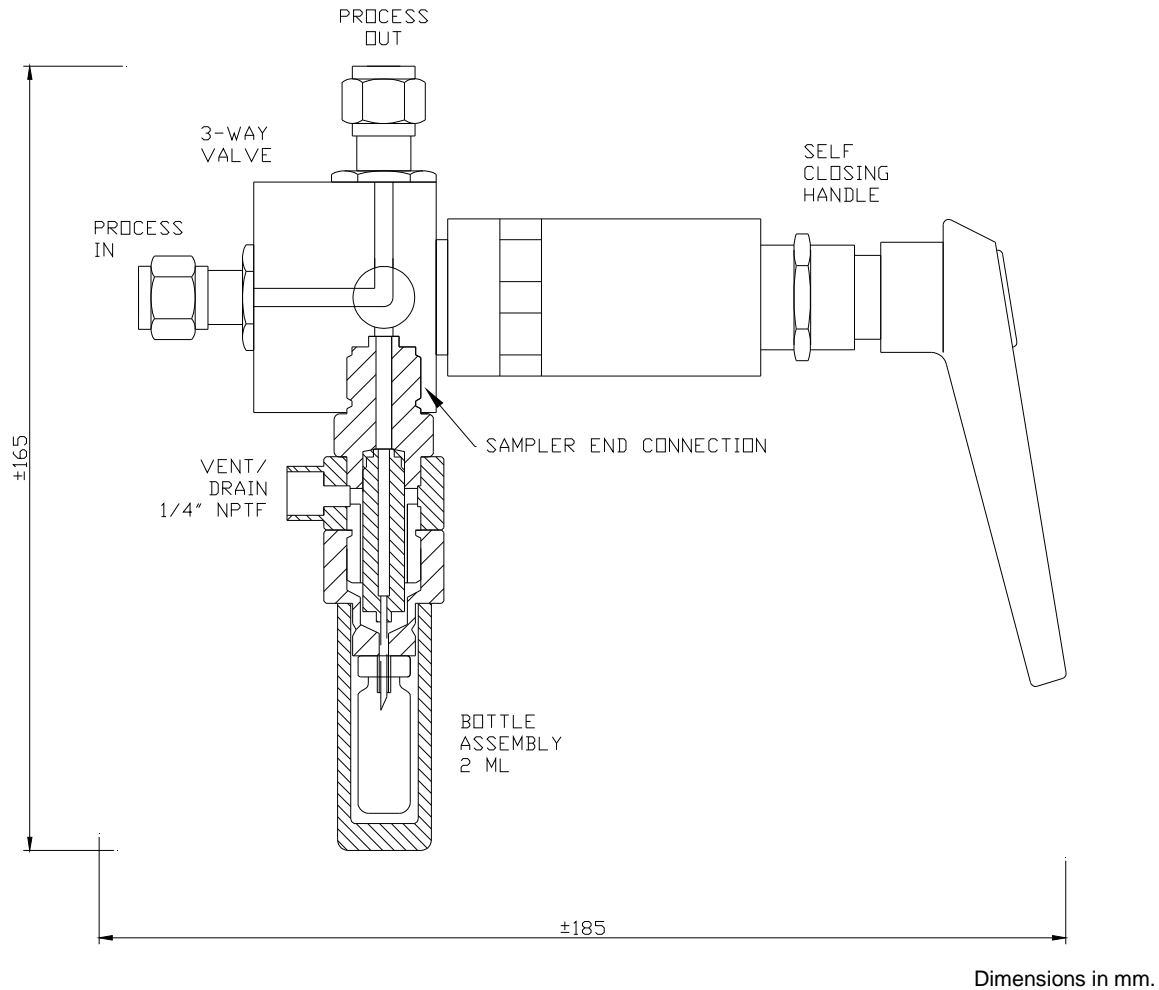
As with all of our products and solutions, they are backed by Mechatest's commitment to innovation, quality and service.

Specifications Mechatest® Govosam Sampler

| | |
|----------------------------|---|
| Materials | 316 Stainless Steel |
| Sample vial sleeve | 2 ml. vials (standard diam. 11 mm) other vials and/or diameter on request |
| Needle assembly | Needle in needle design Process needle ID: 0.6 mm or 1.2 mm |
| Pressure rating | Max. 7 barg @ 120°C (100 psig @ 248°F) |
| Seals | PTFE, Kalrez® or custom on request |
| Process connections | 1/4" male NPT or specific thread for direct mounting on Hoke valves |
| Vent connection | 1/4" female NPT |

Typical Govosam assembly

- Mechatest sampler type GOVOSAM.
- Mechatest Spring return handle type VR10.43.
- 3-Way Ball-valve.



Options

- Spring return handle.
- Process line adapters.
- Several types of sample vials (bottles).
- Process needle purge.
- Pressure relieving/reduction solutions.
- Sampler enclosures.
- Sample cooling or heating.
- Optional exotic materials of construction and seal choices.
- Modular components allow selection of various needles and vials to meet the process application.

Sampler configurator

Build an GOVOSAM Liquid Sampler ordering number by combining the designators in the sequence shown below.

Designators



Example Ordering No. **GOV 1 0 T 1 0 T 1 1 1 X**

4 Body Material

- 1 = 316 SS (Std.)
- 2 = Duplex
- 3 = Alloy HC-276

5 Sample Bottle Volume

- 0 = 2 ml (Std.)⁽¹⁾
- 1 = 10 ml
- 4 = 40 ml

6 Seat Material (Body)

- T = Teflon[®] - PTFE (Std.)
- P = PEEK

7 Process Needle Size

- 1 = 0.6 mm O.D. (I.D. = 0.37 mm)
- 2 = 1.2 mm O.D. (I.D. = 0.83 mm)
- ⓘ The needles are only available in 316 SS.

8 Needle Point Style

- 0 = Lancet Point (Std.)

9 Seal Material (Needle)

- T = Teflon[®] - PTFE (Std.)
- V = Viton[®] - FPM
- K = FFKM (Kalrez[®] 6320)
- B = Buna-N

10 Sampler End Connection

- 1 = 1/4" male NPT (Std.)
- 2 = Hoke[®] (direct connection)

11 Valves Selection⁽²⁾

- 0 = No Valve
- 1 = Hoke[®] - 3-Way Valve 1/4" female NPT
- 2 = Hoke[®] - 3-Way Valve 1/4" O.D. Gyrolok
- 3 = Hoke[®] - 3-Way Valve 6 mm O.D. Gyrolok
- 4 = Hoke[®] - 2-Way Valve 1/4" female NPT
- 5 = Swagelok[®] - 3-Way Valve 1/4" FNPT
- 6 = Swagelok[®] - 2-Way Valve 1/4" FNPT
- 9 = Swagelok[®] - 3-Way Valve HC-276 1/4" FNPT

12 Spring Return Handle Selection

- 0 = No Spring Return Handle
- 1 = 3-Way Spring Return Handle
- 2 = 2-Way Spring Return Handle

13 Options⁽³⁾

- X = No Options
- B1 = Mounting bracket
- M = Material certificate 3.1 (wetted parts)
- N = NACE Sour Sample Service
- ⓘ The sampler is available for sour sample service, all wetted parts in accordance with NACE MR0175/ISO 15156.
- O_{xx} = Orifice insert (in body of sampler)
 - 0.13 mm orifice use suffix **O13**
 - 0.15 mm orifice use suffix **O15**
 - 0.18 mm orifice use suffix **O18**
- Z2 = HL-flowpath valve + 21540 FDA approval
- Z3 = HL-flowpath valve + 16222 FDA approval

(1) The Mechatest GOVOSAM sampler is designed for 2 ml vials (standard diam. 11 mm) with cap and septum. Other vials and/or diameters available on request.

(2) For Swagelok valve select for designator (10) the 1/4" NPT connection selection 1. For Hoke valve select for designator (10) the Hoke connection selection 2.

(3) Select from the "options" designator one or more options and fill in all these letters in the same column.