PRODUCT DATASHEET

Coupled-Valve Closed Sampler

Fixed-volume closed samplers with one handle and zero dead volume

Product page





Close-up: coupled-valve body and bottle holder

OVERVIEW

The Tech Inc. Coupled-Valve Closed Sampler takes a fixed volume of liquid from a pipe or loop and delivers it into a closed sample bottle, with no spill and no vapour reaching the operator. One handle drives two mechanically coupled valves: the first position fills the calibrated chamber from the flowing process, the second isolates it from the process and drains it through a closed needle into the bottle, so the process can never flow straight into the bottle.

TYPICAL DESIGN DATA

Sample volume	About 10 to 100 mL fixed chamber, interchangeable
Pressure	To about 50 barg; higher on request
Temperature	To about 200 °C; jacketed version higher
Codes and standards	Pressure parts to ASME B31.3 practice; sampling practice to ISO 3170 and ASTM D4057 where they apply
Wetted materials	316L standard; duplex, Alloy 625, C-276 or PTFE-lined on request
Connections	NPT, socket-weld, butt-weld or flanged to ASME B16.5
Bottle	Glass, coated glass or plastic with septum cap

MODELS AND CAPACITIES

- **TI-CVS-10** – about 10 mL chamber
- **TI-CVS-25** – about 25 mL chamber
- **TI-CVS-50** – about 50 mL chamber
- **TI-CVS-100** – about 100 mL chamber
- **TI-CVS-H** – jacketed high-temperature version

Indicative fixed sample volumes; other volumes on request.

ORDERING CODE

Example **TI-CVS-50-F-6-J**: **50** chamber volume, mL; **F** connection: T threaded, W welded, F flanged; **6** material: 6 316L, D duplex, 5 Alloy 625, C C-276, P PTFE-lined; **J** options: J jacket, E enclosure, N no option.

SCOPE OF SUPPLY

Included: factory acceptance test with a written report; drawings for approval, material certificates and manual. **Options:** heating jacket or heat tracing; cabinet with lighting, drip tray and lock; nitrogen purge and back-purge; carbon canister on the vent; spare chamber of another volume.

KEY ADVANTAGES

- **Repeatable** – the same fixed volume every time
- **Closed** – no spill, no vapour at the operator
- **Interlocked** – one handle; process and bottle are never open together
- **Zero dead volume** – the chamber is swept by the flowing process

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Designed and built by Tech Inc. · **Part of the Davey Group since 1990**

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