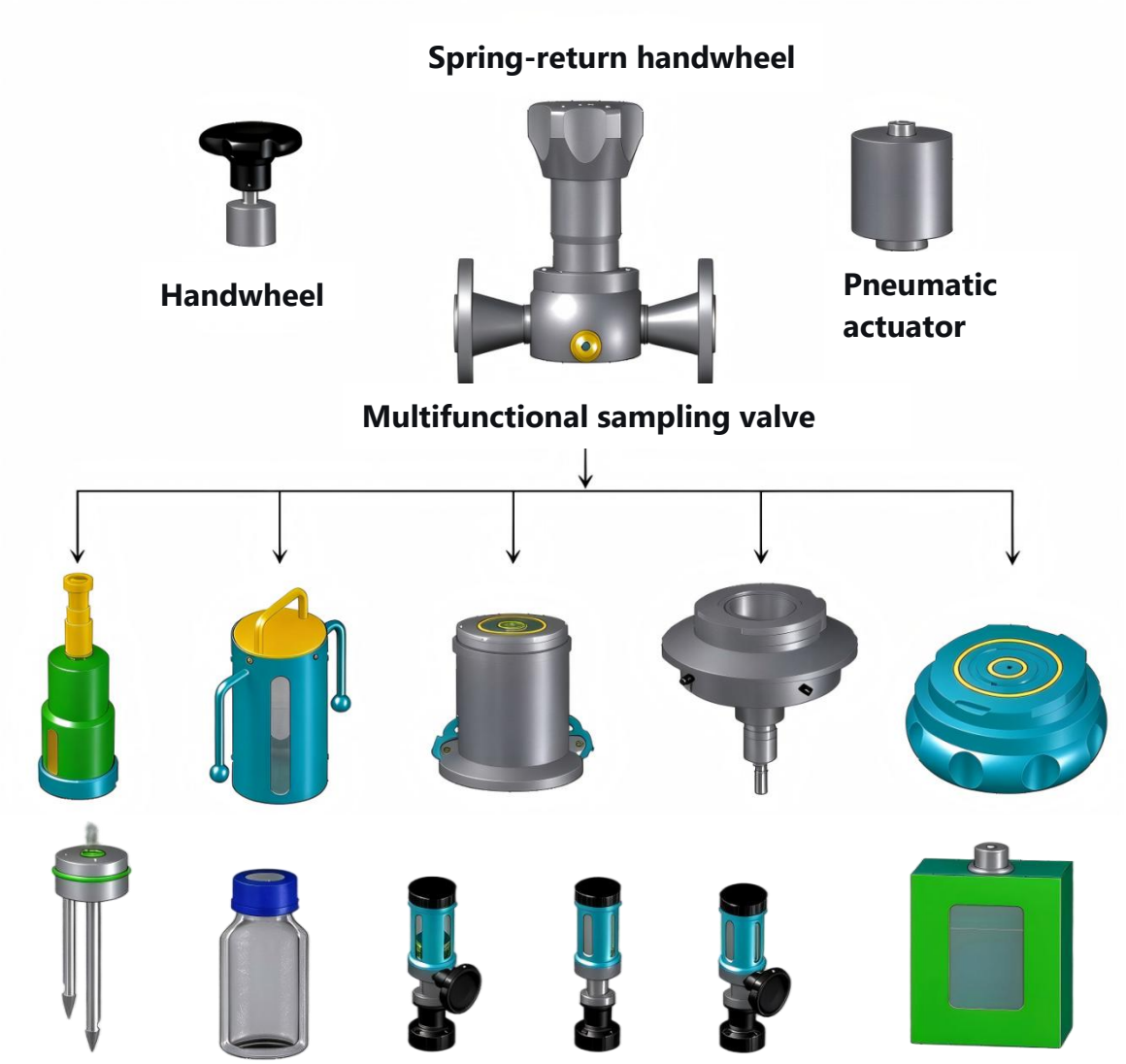
Sampling Valves



Exal Technology GmbH

Product Overview



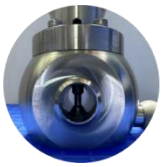
- EXaL sampling valve series features a modular design that eliminates the drawbacks of combined instrument valve and fitting sampling systems, such as complex operation, multiple leak points, easy clogging, large space occupation, numerous wear parts, and high maintenance costs.

- EXaL adopts a process-valve design concept, using control valve and globe valve structures. Its core sampling valve is precision-machined for harsh sampling conditions. With various sampling containers and customization options, it ensures authentic and safe sampling.

Key Features

No. 01

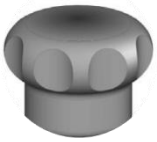
One-Piece Forging



One-piece forging satisfies sampling of liquid media across various temperatures, pressures, and viscosities.

No. 02

Friction-Free Auto Close



Friction-free auto-close handwheel enables simple operation and worry-free sampling.

No. 03

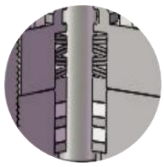
Conical Plunger Core



The sampler core adopts a long-stroke conical plunger design, achieving zero leakage through soft and hard dual sealing.

No. 04

Disc Spring Pack



The shaft seal combines carefully designed soft and hard packing with a multi-layer disc spring pack, effectively ensuring zero leakage during shaft seal operation.

No. 05

Versatile Connection



Versatile sampling connections satisfy various sampling conditions.

No. 06

Multiple Actuators



Pneumatic, manual, and auto-close actuators are available to suit different operating conditions.

No. 07

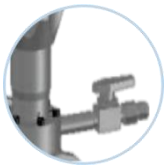
Side-Hole Design



Extends diaphragm service life, reduces fluid impact on the glass bottle bottom, and effectively prevents bottle breakage.

No. 08

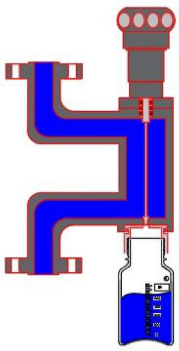
Long Valve Life



The main sampling valve lasts for years with no replacement needed—only the gasket and bonnet seal every three to five years.

Long-term stable operation, low failure rate, few wear parts, low maintenance cost, and simple operation.

Mounting Type

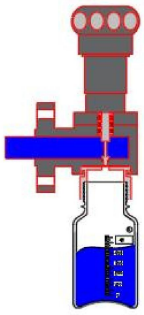


Vertical Sampling Valve

Vertical

VERTICAL MOUNTED SAMPLING VALVE

Size	DN15 - DN100 & Above
Pressure	Vacuum ~ 10 MPa
Temperature	-29 °C ~ 380 °C
Connection	GB / ANSI / Others
Material	SS / Lined & Special
Mounting	Vertical

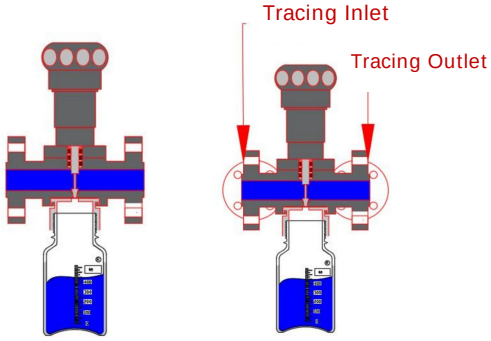


Side-Mounted Sampling Valve

Side-Mounted

SIDE-MOUNTED SAMPLING VALVE

Size	DN15 - DN100 & Above
Pressure	Vacuum ~ 10 MPa
Temperature	-29 °C ~ 380 °C
Connection	GB / ANSI / Others
Material	SS / Lined & Special
Mounting	Side- Mounted



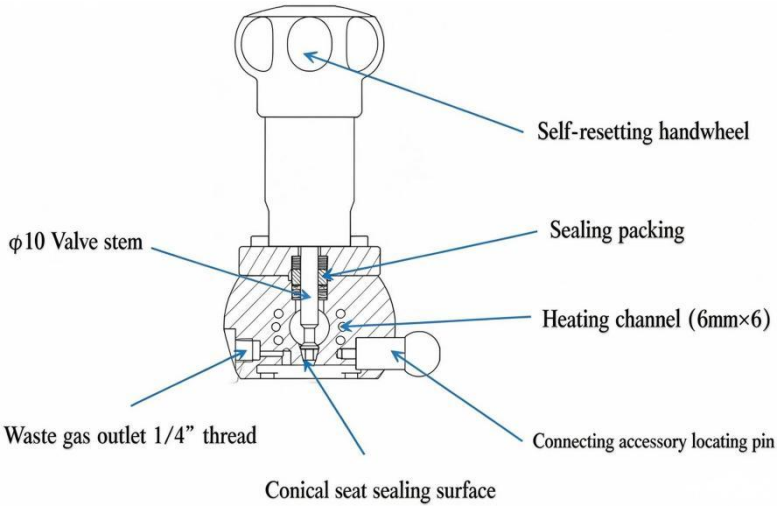
Horizontal Sampling Valve

Horizontal

HORIZONTAL MOUNTED SAMPLING VALVE

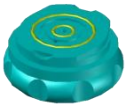
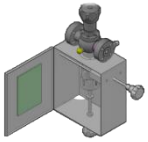
Size	DN15 - DN100 & Above
Pressure	Vacuum ~ 10 MPa
Temperature	-29 °C ~ 380 °C
Connection	GB / ANSI / Others
Material	SS / Lined & Special
Mounting	Horizontal
Optional	Jacketed for Heating or Cooling

System & Legend





Component Legend

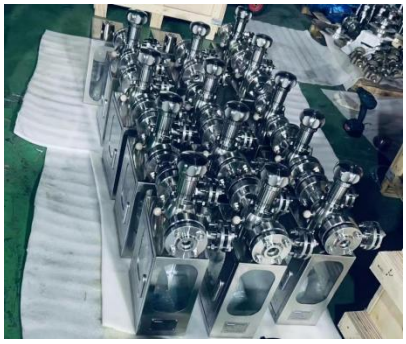
① Dual-needle sampling connector 	② Vertical detachable cooler 
③ Pneumatic actuator 	④ Visible isolation / heating jacket 
⑤ Manual self-closing handwheel 	⑥ GL45 threaded interface 
⑦ Liquid negative-pressure sample bottle 	⑧ Purge accessory 
⑨ Sampling isolation cup 	⑩ Jacket heat tracing 
⑪ Sealed isolation sampling box 	⑫ Spring-return handwheel 

Product Pictures

Self-Resetting Series



Self-Resetting Valve



Self-Resetting Jacketed / Heat-Traced



Self-Resetting Purge & Adsorption

Other Sampling Valve Series



On-line quantitative sampling valve



Slurry sampling valve



Handwheel-operated sampling valve with cooling

Selection Plan

Company Code	Type	Phase	Temperature	Pressure	Mounting	Purge	Heating/ Tracing	Accessories	Material
L	V Self-return / F Manual / Q Pneumatic	L Liquid / G Gas / H Gas-Liquid	T ≤60°C / R ≥60°C	B ≤0 MPa / P Atmospheric / J ≥2.5 MPa	4 Horizontal / 5 Vertical / 6 Side-mounted	C	L / D / T / U2 / CL (Cooling)	Sampling Box / 2 GL45 / 3 Isolation Box / 4 Isolation Cup / 5 Dual Needle	6L (316L) / M (Hastelloy) / Zr (Zirconium) / Ti (Titanium)

Model Code Example

L	V	L	T	P	4	C	L	2	6L
Company Code	Type — Self-return	Phase — Liquid	Temperature — ≤60°C	Pressure — Atmospheric	Mounting — Horizontal	Purge	Heating/Tracing	Accessory — GL45 Thread	Material — 316L

Complete Selection Example:

L • V • L • T • P • 4 • C • L • 2 • 6L



Exal Technology GmbH

Adress: An der Koppel 2D-29227 Celle

Email: sales@exal-technology-sh.com