



GEA Tuchenhagen VESTA® Sampling Valves

VESTA® Sampling Valves

The VESTA® sampling valve is used for aseptic product sampling from pipes or tanks. The VESTA® sampling valve prevents product contamination, thus keeping the process system free from germs.



VESTA® and VARIVENT® - a strong team

In combination with our VARIVENT® and VARINLINE® series the requirement of full CIP/SIP compatibility is easily met.

As installation fitting for the VESTA® sampling valve the VARIVENT® and VARINLINE® access units are available.

- Pocket-free design, without domes and sumps
- Valve body drains completely, even in straight pipes
- PTFE bellows as shut-off element for universal applications
- Hermetic sealing of the valve interior against the external atmosphere using a patented bellows sealing system
- Reliable CIP/SIP cleaning thanks to optimised flow characteristics
- VARIVENT® / VARINLINE® interface
- Easy and safe maintenance

The VARIVENT® / VARINLINE® housing

Even without the instrument, i.e. with the blanking plate, a perfect seal - no dome, no sump

Blanking plates to fit a variety of instruments

Rapid, accurate installation with hinged clamps

Suitable for a wide range of fittings

No-gap seal

Defined deformation of the O-ring by means of metallic stop

Various pipe widths, Metric, Inch OD, ISO and Inch IPS

Blanking plate independent of pipe nominal width and flow rate (VARINLINE®)



Nominal width range

The VESTA® sampling valve is available in three different pipe classes and in two sizes in each class.

DIN – pipe standard DIN 11866, series A

DN 10 and DN 15

OD – pipe standard ASME BPE, series C

0.5" OD and 0.75" OD

ISO – pipe standard DIN EN ISO 1127, series B

ISO 13.5 and ISO 17.2

Adaption to VARIVENT® / VARINLINE® access units

Available nominal flange widths:

DN 32/25 - size F 50 mm

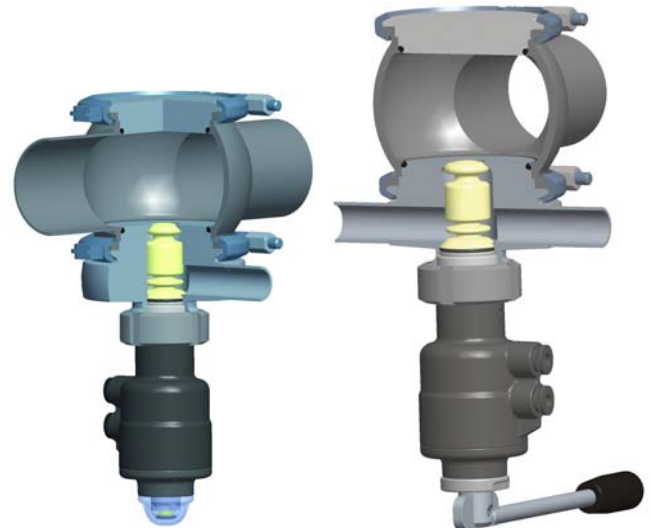
DN 50/40 - size N 68 mm

DN 80/65 - size S 95 mm (VARIVENT® only)

Housing variants

VESTA® and VARIVENT® housings are available with one socket (type L) or two sockets (type T).

The VARINLINE® access unit is only available with two sockets (type T).



Sampling (1 socket)
with VARIVENT® housing

Sampling (2 sockets)
with VARIVENT® housing

The VARINLINE® access unit and its use in matrix-piped systems.

The VARINLINE® access unit is the universal link connecting measuring, inspection, monitoring and sampling equipment with the process system. Consistent use of the VARINLINE® access unit affords the following benefits:

- The VARINLINE® access unit has two different connection fittings. Thus two instruments can be installed.

- The installation of the VARINLINE® access units at critical points in a production line allows instruments or other equipment to be fitted at a later stage without welding.
- Fitted with a glass blanking plate the VARINLINE® access unit can also be used as a sight glass.

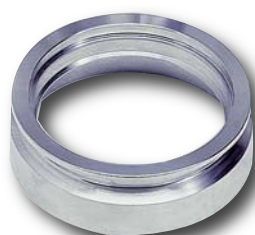
Housing connection flanges

The housing connection flange ensures front-flush, pocket-free installation of a VESTA® sampling valve. The flange is welded to the tank or vessel wall or to the conical or dished bottom.

The housing connection flange type T is suitable for installation in tanks with a wall thickness up to 8 mm.



T flange



U flange



VARIVENT® / VARINLINE® housings

VESTA® Sampling Valves

Applications	For the sampling of all types of liquid and gaseous media from pipes, vessels and tanks
Operating pressure	max 6 bar (87 psi)
Control air pressure	NC actuator - min. 5 bar (72.5 psi), max. 8 bar (116 psi) NO actuator - min. 5 bar (72.5 psi), max. 6 bar (87 psi)
Operating temperature	-10 °C (+14° F) to max 135 °C (max. 275° F)
Sterilisation temperature	max 150 °C (302° F)

Installation orientation Preferably actuator upside down or at the deepest point of a tank

Materials

<i>In contact with product</i>	body	1.4435 / AISI 316L
	PTFE-bellows	TFM 1705, FDA-conformity
<i>Non contact with product</i>	synthetic actuator	polyphenylene sulphide (PPS)
	stainless steel actuator	1.4301 / AISI 304

Surfaces

<i>Internal</i>	Ra ≤ 0.8 µm / Rz ≤ 32 µin (standard) Ra ≤ 0.4 µm / Rz ≤ 16 µin (as option)
<i>External</i>	bright metal (body and stainless steel drives) Synthetic actuator - surface structure in accordance with VDI 3400, roughness level 30

Nominal widths process connection VESTA® sampling valve

DIN - DN 10 and DN 15
external diameter in accordance with DIN 11850 series 2 / DIN 11866, series A
ISO - ISO 13.5 and ISO 17.2
external diameter in accordance with DIN EN ISO 1127 / DIN 11866, series B
OD - 0.5" OD and 0.75"OD
external diameter in accordance with ASME BPE / DIN 11866, series C

Nominal widths process connection VARIVENT® / VARINLINE® housing

DIN - DN 25 to DN 100, outside diameter acc. to DIN 11850 series 2 / DIN 11866, series A
ISO - ISO 33.7 to ISO 60.3, outside diameter acc. to DIN EN ISO 1127 / DIN 11866, series B
OD - 1" OD to 4"OD, outside diameter acc. to ASME BPE / DIN 11866, series C

Actuator variants

Manual actuator made of synthetic material
Pneumatic actuator made of synthetic material or stainless steel

Certifications

Documented verification of the following quality features

- body with material inspection certificate in accordance with EN 10204/3.1 (on request)
- documented verification of the surface roughness in form of a test report in accordance with EN 10204 (on request to 3.1)
- documented verification of the delta ferrite content in form of a test report in accordance with EN 10204, optional (on request)
- documented verification for the PTFE bellows in form of a test report in accordance with EN 10204 FDA certificate of conformity– FDA 21 § 177.1550 (on request to 3.1)
- certificate for PTFE bellows (TFM 1705) concerning the documented evidence of biocompatibility in accordance with USP Class VI (on request)



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GEA Group is a global engineering company with multi-billion euro sales and operations in more than 50 countries. Founded in 1881, the company is one of the largest providers of innovative equipment and process technology. GEA Group is listed in the STOXX® Europe 600 Index.

GEA Mechanical Equipment

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