

# VESTA® Sampling Valves



Pure valve technology by GEA Tuchenhagen

Process Equipment

**GEA Tuchenhagen**

# 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

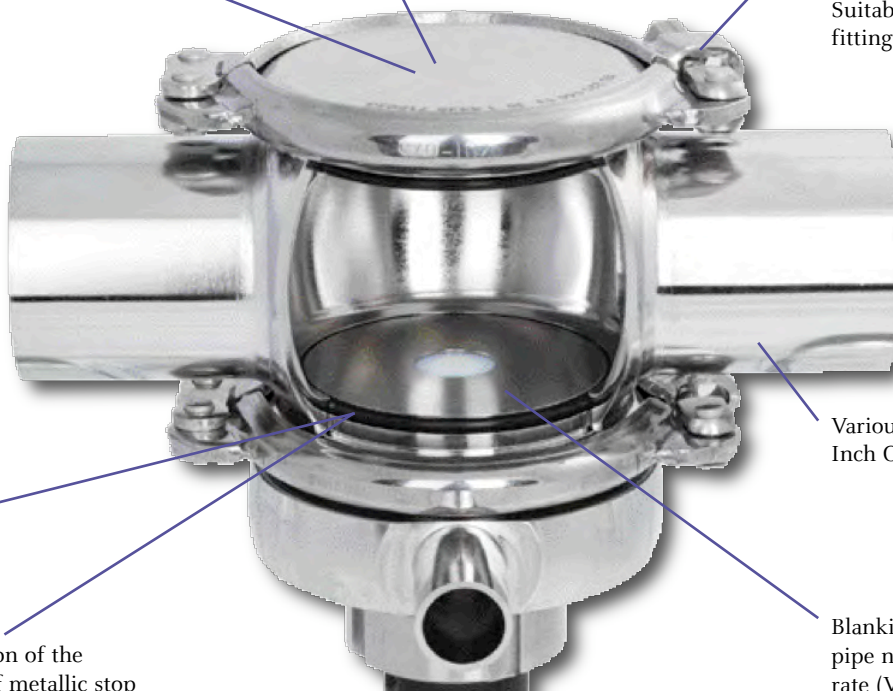
Suitable for a wide range of fittings

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

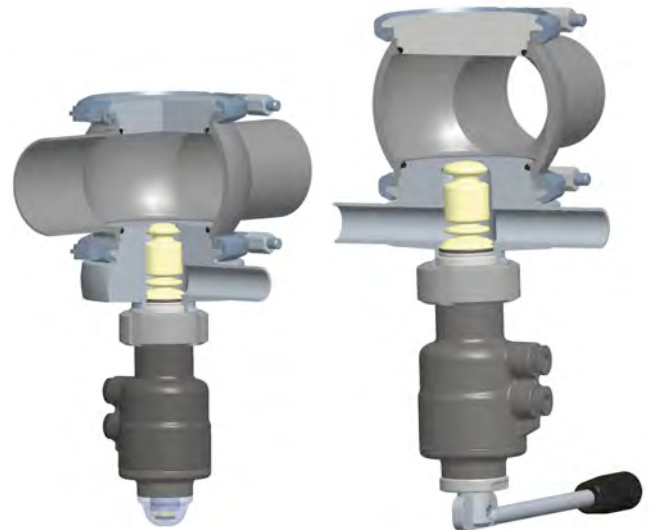
Available nominal flange widths:

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 and monitoring 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 control devices 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.

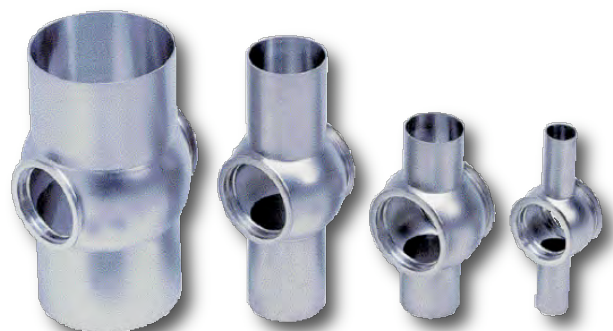
The housing connection flange type T is suitable for installation in tanks with a wall thickness up to 8 mm.



T flange



U flange



VARIVENT® / VARINLINE® housings

# VESTA® Sampling Valves

<b>Applications</b>	For the sampling of all types of liquid and gaseous media from pipes, vessels and tanks
Operating pressure	max. 6 bar (higher pressures on request)
Control air pressure	NC actuator - min. 5 bar, max. 8 bar NO actuator - min. 5 bar, max. 6 bar
Operating temperature	-10 °C to max. 135 °C
Sterilisation temperature	max. 150 °C.

**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 ( standard ) Ra ≤ 0.4 µm (optional)
<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

<b>DIN</b> - DN 10 and DN 15 external diameter in accordance with DIN 11850 series 2 / DIN 11866, series A
<b>ISO</b> - ISO 13.5 and ISO 17.2 external diameter in accordance with DIN EN ISO 1127 / DIN 11866, series B
<b>OD</b> - 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

<b>DIN</b> - DN 25 to DN 100, outside diameter acc. to DIN 11850 series 2 / DIN 11866, series A
<b>ISO</b> - ISO 33.7 to ISO 60.3, outside diameter acc. to DIN EN ISO 1127 / DIN 11866, series B
<b>OD</b> - 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)

