

*Liquids to Value*



## Order Code for **VESTA**<sup>®</sup> Sampling Valves

Type H\_AI 2/2 Way Seat Valve

Made by GEA Tuchenhagen

# Register



# VESTA® Sampling Valve, Type H\_A/I 2/2 Way Seat Valve

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.



## Design features

- Aseptic bellows sealing system
- Pressure and vacuum resistant
- One-piece PTFE bellows for universal applications
- Defined pretension of the seal
- Self-locking groove nut connection
- Pocket-free design

## Benefits

- Valve body drains completely in straight pipes
- Reliable CIP/SIP cleaning thanks to optimised flow characteristics
- Long service life for the PTFE bellows
- Height of the valve body corresponds to that of the connecting piping
- Minimum space requirement, low process volume
- Easy and safe maintenance
- Wide range of body variants
- Sizes up to DN 65 available, larger sizes on request

## 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 with all their benefits:

- Pocket-free design, without domes and sumps
- Valve body drains completely, even in straight pipes
- 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

## Operating media

- Operating temperature -10 °C to max. 135 °C
- Sterilisation temperature max. 150 °C for 1h
- Operating pressure 0 to 6 bar

## Control air

- Control air temperature min. 0 °C, max. 70 °C  
- NO function
- Control air pressure min. 5 bar, max. 6 bar  
- NC function
- Control air pressure min. 5 bar, max. 8 bar
- Valve port cross-section 100 %

## Materials, product contact parts

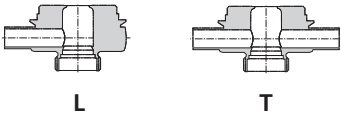
- Housing 1.4435 (AISI 316L)
- Housing socket 1.4435 (AISI 316L)
- Delta ferrite content optional
- Bellows material TFM1705 (PTFE), FDA-conformity

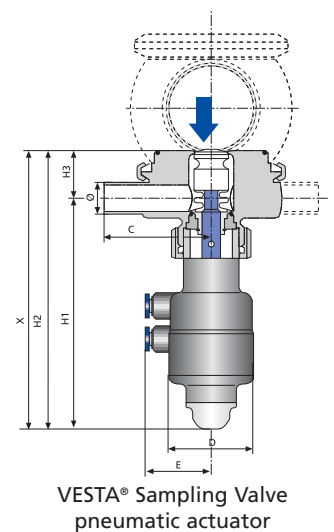
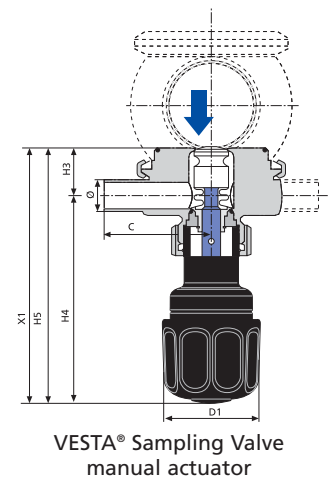
## Materials, non-product contact parts


- Stainless steel actuator 1.4301 (AISI 304)
- Synthetic actuator polyphenylene sulphide (PPS)

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Example for an order code

Code	Code	H	L	A	I/N	P	NW	NW	M	Z	000	0	0	-	0	2	52	K	-																																																				
Code	Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18																																																				
<b>H</b>	<b>1. Valve type VESTA® Sampling Valve</b>																																																																						
	<b>2. Valve body combination</b>																																																																						
																																																																							
<b>A</b>	<b>3. Aseptic bellows seal</b>																																																																						
	<b>4. Housing specification</b>																																																																						
		<p>I/F = DN 25/32, ISO 33.7                      I/N = DN 40/50, ISO 42.4/48.3/60.3, OD 1.5"/2"                      I/S = DN 65/80, OD 2.5"/3"</p>																																																																					
<b>P</b>	<b>5. PTFE bellows seal</b>																																																																						
		<p>Bellows material TFM1705 (PTFE), conforms to: FDA, 21CFR 177.150, USP class VI                      For documentation see Item 16</p>																																																																					
	<b>6. Nominal width, process connection VESTA®</b>																																																																						
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		<p>X (included the clearance required for maintenance)</p>																																																																					



 Recommended flow direction

# VESTA® Sampling Valve, Type H\_A/I 2/2 Way Seat Valve

Example for an order code

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	Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

## 7. Nominal width, flange

See brochure VARINLINE® housings and connection flanges, Accessories Register 9

## 8. Type of actuator

P = synthetic material (PPS)

M = stainless steel (1.4301/316)

H = manual actuator (PPS)

## 9. Non-actuated position

Z = air-to-open/spring-to-close // and manual actuator

A = air-to-close/spring-to-open

J = air-to-open/air-to-close

Control air volume [dm<sup>3</sup>N]

Function	DN 10, 0.5" OD ISO 13.5	DN 15 0.75" OD	ISO 17.2
Z (NC)	0.011	0.013	0.014
A (NO)	0.026	0.026	0.028

## 10. Type/location of feedback element

TV<sub>1</sub> = position indicator / control module type T.VIS® V-1 (for nominal size up to DN 32, 1" OD, ISO 33.7)

TP<sub>1</sub> = position controller T.VIS® P-1 (for nominal size up to DN 32, 1" OD, ISO 33.7)

Ex = SEE / ATEX (only stainless steel actuator)

INA = proximity switch holder

ooo = visual indication (standard), (manual/pneumatic actuator)

## 11. Control module type / solenoid valve

N = without solenoid valve (TV<sub>1</sub>)

P = one solenoid valve (TV<sub>1</sub>, SEE)

I = two solenoid valves (TV<sub>1</sub>, TP<sub>1</sub>)

o = without solenoid valve (INA, ooo)

# VESTA® Sampling Valve, Type H\_A/I 2/2 Way Seat Valve

Example for an order code

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Code	Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

## 12. Number of feedback signals

o = without (ooo)  
 1 = one feedback signal (INA)  
 2 = two feedback signals (TV1, TP1, INA)

## 13. Type of sensor connection

A = AS Interface (TV1)  
 B = 24 V DC, 3 Draht, PNP (TV1, TV2o, TM1, INA)  
 N = 24 V DC, 3 Draht, NPN (TV1, INA)  
 D = DeviceNet (TV1)  
 E = EEX / ATEX (SEE, INA)  
 P = 24 V DC, programmable (TP1, TP2o)  
 X = proximity switch acc. to customer's specification

## 14. Electrical connection (cable gland) / air connection

o = without  
 D = 5-pin connector M 12 / Ø 6/4 mm (TV1, TP1, TM1, TV2o, TP2o)  
 K = 5-pin connector M 12 / Ø 6.35/4.35 mm, 0.25" OD - (TV1, TP1, TM1, TV2o, TP2o)  
 M = connection for air hose Ø 6/4 mm, proximity switch with terminal box and cable terminals (INA, ooo, manual actuator)  
 Z = connection for air hose 0.25" OD (6.35/4.35 mm), proximity switch with terminal box and cable terminals (INA, ooo)

## 15. Surface finish

1 = inside surfaces  $R_a \leq 0.8 \mu\text{m}$ , socket welds unpolished, body electrochemically cleaned  
 2 = inside surfaces  $R_a \leq 0.4 \mu\text{m}$ , socket welds polished, body electropolished

## 16. Valve tag

52 = adhesive plate

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	Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	<b>17. Certificates</b>																		
	<p>o = without                      Z = certificate acc. to EN10204-3.1                      W = factory test certificate EN10204-2.2                      F = ferrite content certificate                      O = surface test certificate                      K = certificate of FDA conformity                      U = certificate of USP class VI conformity                      X = acceptance acc. to customer's specification</p>																		
	<b>18. Accessories</b>																		
	<p>20 = stroke limiter open                      21 = seal adjuster close                      22 = 5 pin connector/junction box                      29 = quick release handle                      43 = VESTAMID®* - UV resistant material; for oil and fat containing control air</p> <p><small>*) VESTAMID® is registered as a trademark of the Degussa AG</small></p>																		

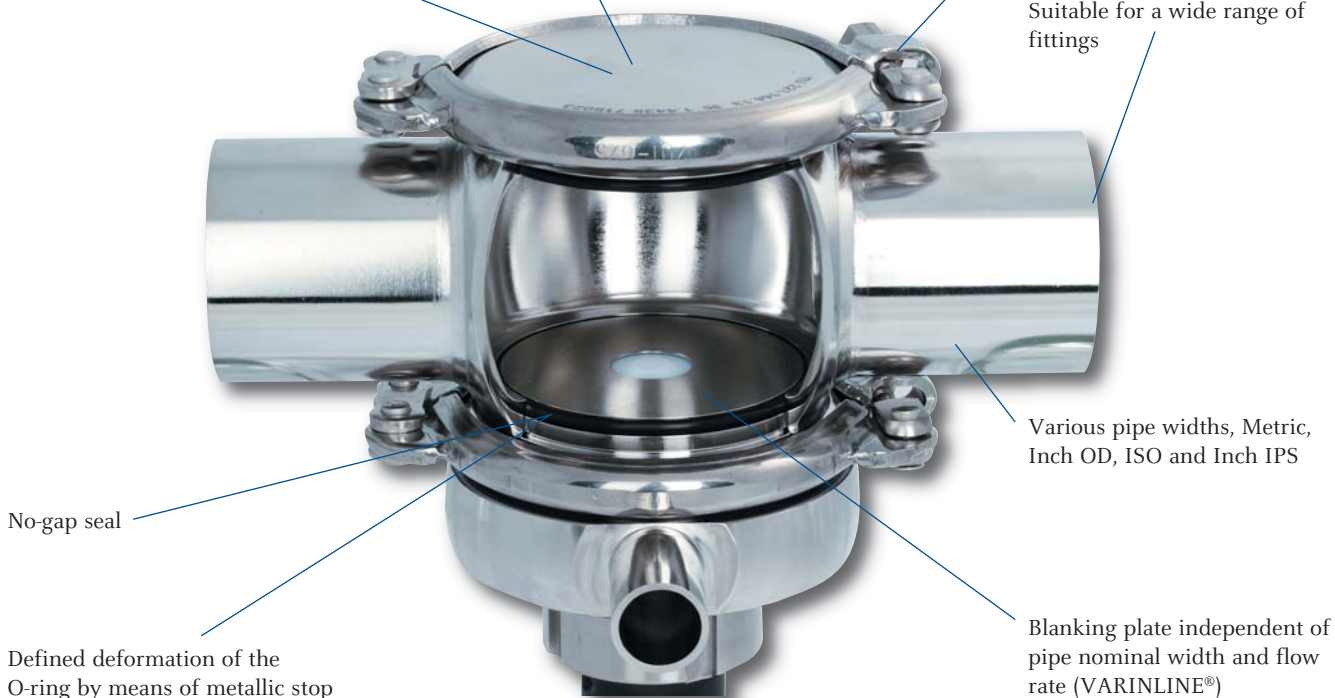
## The VARIVENT® / VARINLINE® housing

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

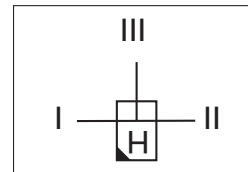
Suitable for a wide range of fittings



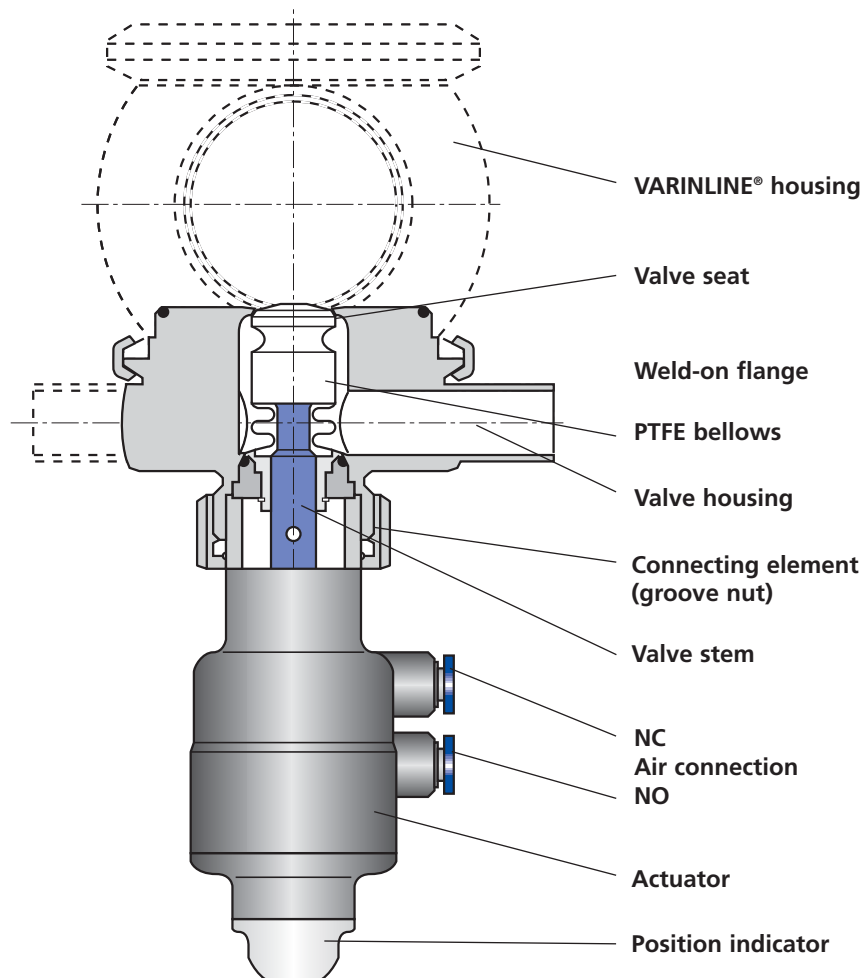
# VESTA® Sampling Valve, Type H\_A/I 2/2 Way Seat Valve

## Key figures

Ø	Stroke [mm]	Kv-Value [m³/h]			Weight acc. to actuator [kg]			
		I-II	I-III	III-I	Typ H_A/I			
					Synthetic	Stainless Steel	Manual	
<b>DIN</b> Outside socket diameter, acc. to DIN11866, series A / DIN11850, series II								
DN 10	13x1.5	2.1	2	2.3	2.1	0.86	1.32	0.86
DN 15	19x1.5	4	6.4	6.5	5.9	0.84	1.3	0.84
<b>Inch OD</b> Outside socket diameter, acc. to ASME-BPE, DIN11866, series C								
0.5" OD	12.7x1.65	2.1	2.1	2.2	2.2	0.86	1.32	0.86
0.75" OD	19.05x1.65	4	6.6	6.9	6	0.84	1.3	0.84
<b>ISO</b> Outside socket diameter, acc. to DIN EN ISO1127, DIN11866, series B								
ISO 13.5	13.5x1.6	2.1	2.4	2.8	2.5	0.86	1.32	0.86
ISO 17.2	17.2x1.6	2.9	4.1	5.2	4.5	0.84	1.3	0.84



Kv- flow direction





GEA Mechanical Equipment

**GEA Tuchenhagen GmbH**

Am Industriepark 2-10, 21514 Büchen, Germany

Phone +49-4155 49-0, Fax +49-4155 49-2423

sales.geatuchenhagen@geagroup.com, [www.tuchenhagen.com](http://www.tuchenhagen.com)