

Liquids to Value



[← BACK](#)

Order Code for **VESTA**® Sampling Valves

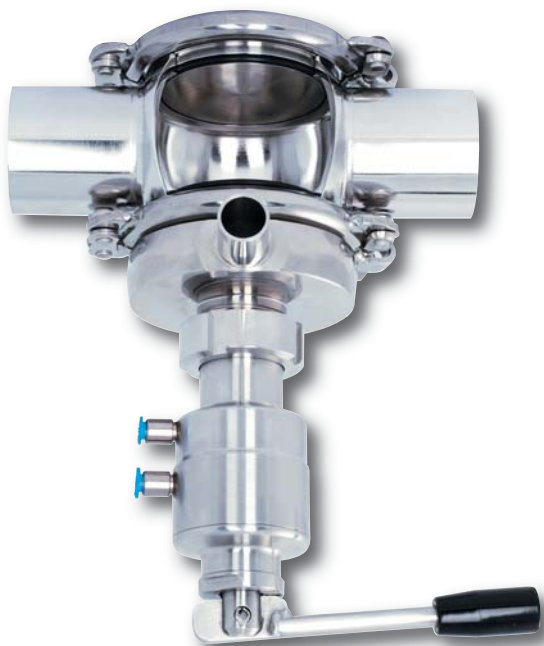
Type H_AI 2/2 Way Seat Valve

Made by GEA Tuchenhausen



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.



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

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

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

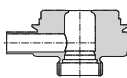
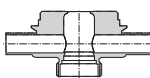
- | | |
|-------------------------|-----------------------------------|
| • Housing | 1.4435 (AISI 316L) |
| • Housing socket | 1.4435 (AISI 316L) |
| • Delta ferrite content | optional |
| • Bellows material | TFM1705 (PTFE),
FDA-conformity |

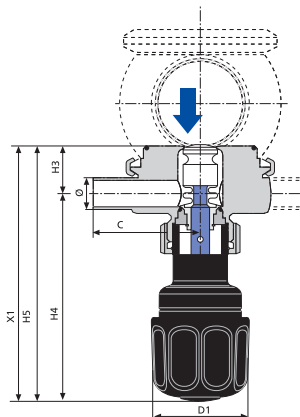
Materials, non-product contact parts

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

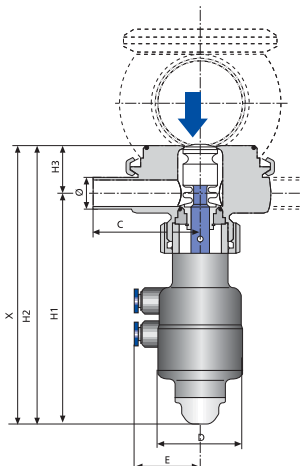
VESTA® Sampling Valve, Type H_A/I 2/2 Way Seat Valve

Example for an order code


Code	Code	H	L	A	I/N	P	NW	NW	M	Z	000	0	0	–	0	2	52	K	-																																																																																																																																																																																																															
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H	1.	Valve type VESTA® Sampling Valve																																																																																																																																																																																																																																
	2.	Valve body combination																																																																																																																																																																																																																																
		<div> L</div> <div> T</div>																																																																																																																																																																																																																																
A	3.	Aseptic bellows seal																																																																																																																																																																																																																																
	4.	Housing specification																																																																																																																																																																																																																																
		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	5.	PTFE bellows seal																																																																																																																																																																																																																																
		Bellows material TFM1705 (PTFE), conforms to: FDA, 21CFR 177.150, USP class VI For documentation see Item 16																																																																																																																																																																																																																																
	6.	Nominal width, process connection VESTA®																																																																																																																																																																																																																																
		<table><tr><th>DIN</th><th colspan="13">Outside diameter acc. to DIN 11850, series II, DIN 11866, series A</th><th colspan="4"></th></tr><tr><th></th><th>Ø</th><th>C</th><th>D</th><th>D1</th><th>E</th><th>H1</th><th>H2</th><th>H3</th><th>H4</th><th>H5</th><th>X1</th><th>X</th><th colspan="4"></th></tr><tr><td>DN 10</td><td>13x1.5</td><td>60</td><td>50</td><td>59</td><td>40</td><td>130</td><td>163</td><td>29.5</td><td>113</td><td>146</td><td>187</td><td>198</td><td colspan="4"></td></tr><tr><td>DN 15</td><td>19x1.5</td><td>60</td><td>50</td><td>59</td><td>40</td><td>133</td><td>163</td><td>32.5</td><td>116</td><td>146</td><td>197</td><td>208</td><td colspan="4"></td></tr></table> <table><tr><th>ISO</th><th colspan="13">Outside diameter acc. to DIN EN ISO 1127, series II, DIN 11866, series B</th><th colspan="4"></th></tr><tr><th></th><th>Ø</th><th>C</th><th>D</th><th>D1</th><th>E</th><th>H1</th><th>H2</th><th>H3</th><th>H4</th><th>H5</th><th>X1</th><th>X</th><th colspan="4"></th></tr><tr><td>ISO 13.5</td><td>13.5x1.6</td><td>60</td><td>50</td><td>59</td><td>40</td><td>130</td><td>163</td><td>29.5</td><td>113</td><td>146</td><td>187</td><td>198</td><td colspan="4"></td></tr><tr><td>ISO 17.2</td><td>17.2x1.6</td><td>60</td><td>50</td><td>59</td><td>40</td><td>133</td><td>163</td><td>32.5</td><td>116</td><td>146</td><td>197</td><td>208</td><td colspan="4"></td></tr></table> <table><tr><th>Inch OD</th><th colspan="13">Outside diameter acc. to ASME-BPE 1997, DIN 11866, series C</th><th colspan="4"></th></tr><tr><th></th><th>Ø</th><th>C</th><th>D</th><th>D1</th><th>E</th><th>H1</th><th>H2</th><th>H3</th><th>H4</th><th>H5</th><th>X1</th><th>X</th><th colspan="4"></th></tr><tr><td>0.5" OD</td><td>12.7x1.65</td><td>60</td><td>50</td><td>59</td><td>40</td><td>130</td><td>163</td><td>29.5</td><td>113</td><td>146</td><td>187</td><td>198</td><td colspan="4"></td></tr><tr><td>0.75" OD</td><td>19.05x1.65</td><td>60</td><td>50</td><td>59</td><td>40</td><td>133</td><td>163</td><td>32.5</td><td>116</td><td>146</td><td>197</td><td>208</td><td colspan="4"></td></tr></table>																		DIN	Outside diameter acc. to DIN 11850, series II, DIN 11866, series A																		Ø	C	D	D1	E	H1	H2	H3	H4	H5	X1	X					DN 10	13x1.5	60	50	59	40	130	163	29.5	113	146	187	198					DN 15	19x1.5	60	50	59	40	133	163	32.5	116	146	197	208					ISO	Outside diameter acc. to DIN EN ISO 1127, series II, DIN 11866, series B																		Ø	C	D	D1	E	H1	H2	H3	H4	H5	X1	X					ISO 13.5	13.5x1.6	60	50	59	40	130	163	29.5	113	146	187	198					ISO 17.2	17.2x1.6	60	50	59	40	133	163	32.5	116	146	197	208					Inch OD	Outside diameter acc. to ASME-BPE 1997, DIN 11866, series C																		Ø	C	D	D1	E	H1	H2	H3	H4	H5	X1	X					0.5" OD	12.7x1.65	60	50	59	40	130	163	29.5	113	146	187	198					0.75" OD	19.05x1.65	60	50	59	40	133	163	32.5	116	146	197	208				
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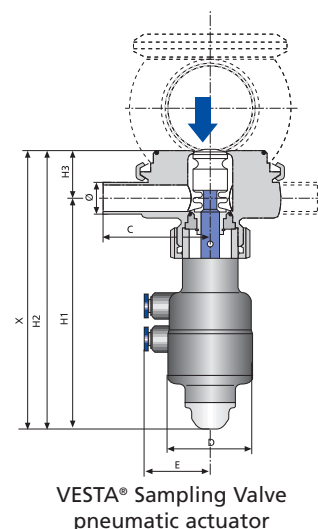
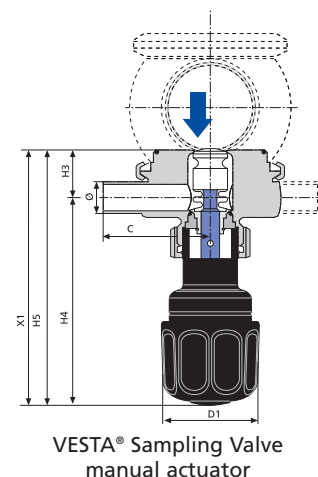
VESTA® Sampling Valve manual actuator



VESTA® Sampling Valve pneumatic actuator



Recommended flow direction



Recommended flow direction

VESTA® Sampling Valve, Type H_A/I 2/2 Way Seat Valve

Example for an order code

Code	Code	H	L	A	I/N	P	NW	NW	M	Z	000	0	0	–	0	2	52	K	-												
	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 connetion 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 <div>Control air volume [dm³N]</div> <table><tr><td>Function</td><td>DN 10, 0.5" OD ISO 13.5</td><td>DN 15 0.75" OD</td><td>ISO 17.2</td></tr><tr><td>Z (NC)</td><td>0.011</td><td>0.013</td><td>0.014</td></tr><tr><td>A (NO)</td><td>0.026</td><td>0.026</td><td>0.028</td></tr></table>																			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
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 TV1 = position indicator / control module type T.VIS® V-1 (for nominal size up to DN 32, 1" OD, ISO 33.7) TP1 = 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 (TV1) P = one solenoid valve (TV1, SEE) I = two solenoid valves (TV1, TP1) o = without solenoid valve (INA, ooo)																														

VESTA® Sampling Valve, Type H_A/I 2/2 Way Seat Valve

Example for an order code

Code	Code	H	L	A	I/N	P	NW	NW	M	Z	000	0	0	–	0	2	52	K	–
	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, INA) N = 24 V DC, 3 Draht, NPN (TV1, INA) D = DeviceNet (TV1) E = EEX / ATEX (SEE, INA) P = 24 V DC, programmable (TP1) 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																		

VESTA® Sampling Valve, Type H_A/I 2/2 Way Seat Valve

Example for an order code

Code	Code	H	L	A	I/N	P	NW	NW	M	Z	000	0	0	-	0	2	52	K	-
	Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	17. Certificates 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																		
	18. Accessories 20 = stroke limiter open 21 = seal adjuster close 22 = 5 pin connector/junction box 29 = quick release handle																		

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

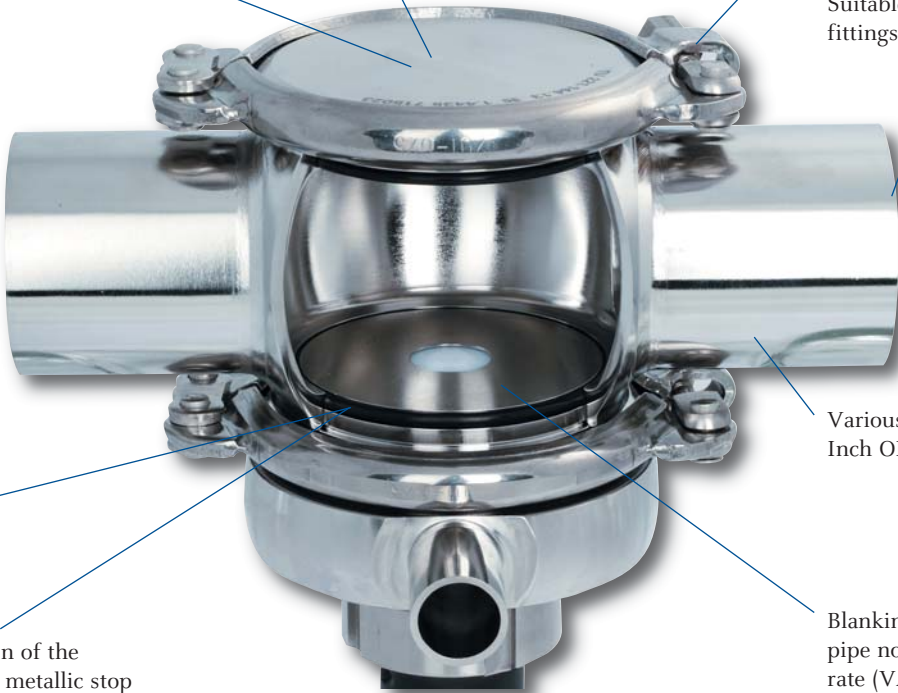
Suitable for a wide range of fittings

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

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

No-gap seal

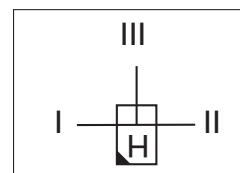
Defined deformation of the O-ring by means of metallic stop



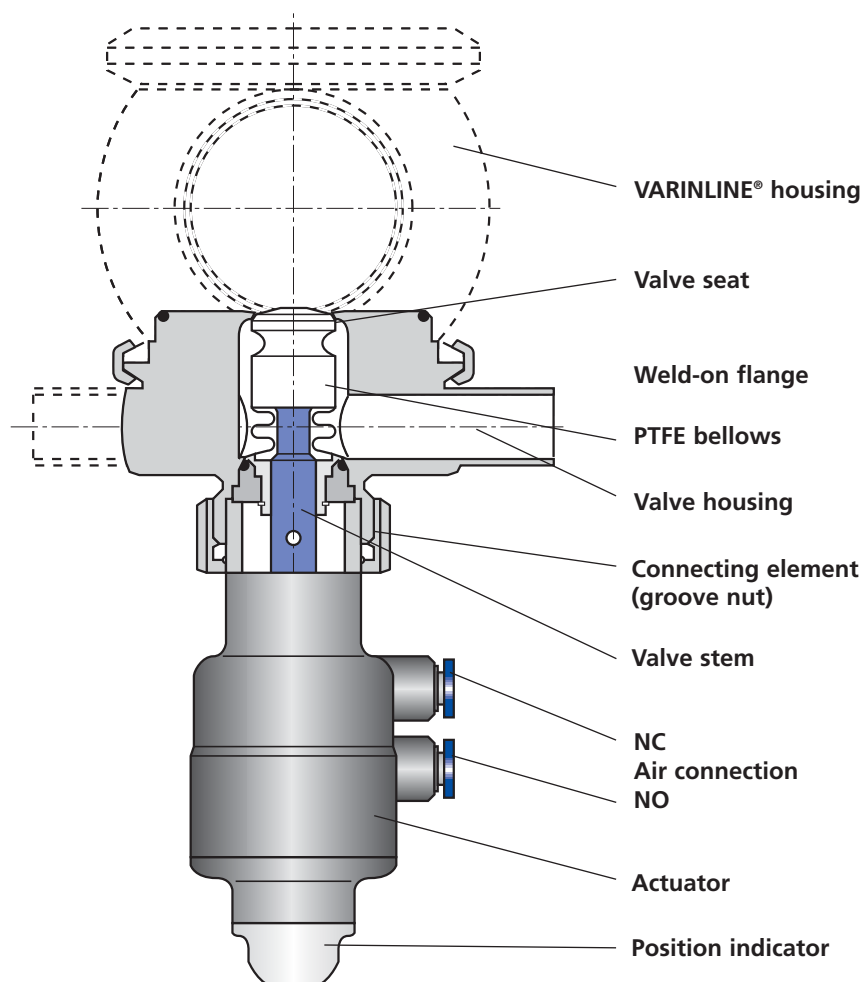
VESTA® Sampling Valve, Type H_A/I 2/2 Way Seat Valve

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
DIN 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
Inch OD 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
ISO 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 Tuchenhausen GmbH

Am Industriepark 2-10, 21514 Büchen, Germany

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

sales.geatuchenhausen@geagroup.com, www.tuchenhausen.com