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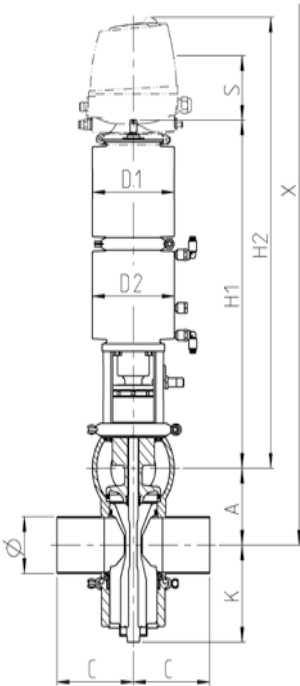
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КЛАПАНЫ И КОМПОНЕНТЫ VARIVENT Технические характеристики

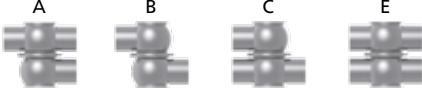




Technical data of the standard version	
Material in contact with the product	1.4404 (AISI 316L)
Material not in contact with the product	1.4301 (AISI 304)
Seal material in contact with the product	EPDM, FKM, HNBR
Ambient temperature	0 to 45 °C
Air supply pressure	6 bar (87 psi)
Product pressure	10 bar (145 psi)
Surface in contact with the product	R _a ≤ 0.8 µm
External housing surface	Matte blasted
Control and feedback system	Selectable; the feedback of all valve positions is required acc. to PMO
Actuator type	Pneumatic actuator air/spring
Connection fittings	Welding end
Identification	Adhesive ID tag
Valve seat version	Welded seat ring
Certificates	   



	Pipe	Housing			Actuator		Dimensions		Valve	
Nominal width	Ø [mm]	A [mm]	C [mm]	K [mm]	D1 [mm]	D2 [mm]	H2 [mm]	Extension X [mm]	Stroke S [mm]	Weight [kg]
OD 1 ½"	38.1 × 1.65	59.0	90	94.5	110	110	564	789	27.5	17
OD 2"	50.8 × 1.65	71.5	90	108.5	110	110	570	795	35.0	20
OD 2 ½"	63.5 × 1.65	90.0	125	124.0	135	135	598	948	45.0	27
OD 3"	76.2 × 1.65	103.0	125	130.5	135	135	605	955	45.0	27
OD 4"	101.6 × 2.11	127.5	125	142.5	135	135	617	967	45.0	39
OD 6"	152.4 × 2.77	177.0	150	190.0	210	210	809	1,299	65.0	90

Position	Description of the order code for the standard version	
1	Valve type	
	M	VARIVENT® 24/7 PMO Valve 2.0
2	Housing combinations	
		
3	Supplement to the valve type	
	O	With lifting actuator without spray cleaning
4/5	Nominal width (upper housing / lower housing)	
	OD 1 ½"	
	OD 2"	
	OD 2 ½"	
	OD 3"	
	OD 4"	
	OD 6"	
6	Actuator type	
	S	Air/Spring
7	Non-actuated position	
	Z	Spring-to-close (NC)
8	Standard configuration with 6 bar air supply pressure for 10 bar product pressure	
	Actuator (spring-to-close)	/ Lifting actuator
	BD	/BLM
	CF5	/CLM
	EH6	/ELM
		For nominal widths
		OD 1 ½", OD 2"
		OD 2 ½", OD 3", OD 4"
		OD 6"
9	Valve seat version	Housing combination
		A B C E
	V1 Welded seat ring/ Port orientation 90°	   
	V2 Welded seat ring/ Port orientation 180°	
	V3 Welded seat ring/ Port orientation 270°	
10	Seal material in contact with the product	
	1	EPDM (FDA)
	2	FKM (FDA)
	3	HNBR (FDA); (up to OD 4")
11	Surface quality of the housing	
	5	Inside $R_a \leq 0.8 \mu\text{m}$, valve completely ground
12	Connection fittings	
	N	Welding end
13	Accessories	
	/3A/52	Valve after 3-A, adhesive ID tag, with outer balancer flushing (balancer cleaning device)
	/B/2.0	Valve after 3-A, adhesive ID tag, without outer balancer flushing (balancer cleaning device)
	/3A/52	Valve after 3-A, adhesive ID tag, with outer balancer flushing (balancer cleaning device)
	/2.0	Valve after 3-A, adhesive ID tag, without outer balancer flushing (balancer cleaning device)
+		
14–19	Air connection/Control and feedback system	
	XXXXX	Order code for control and feedback systems see catalog GEA Valve Automation

The code is composed as following, depending on the chosen configuration:

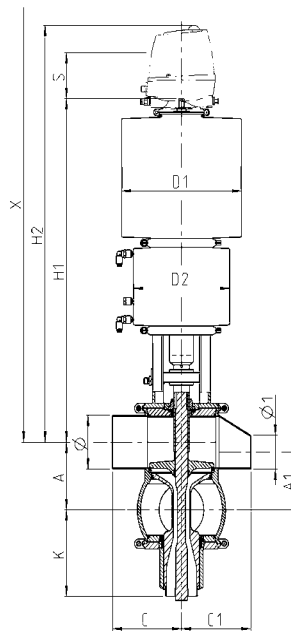
Position	1	2	3	4/5	6	7	8	9	10	11	12	13	14 to 19					
Code	M		O	/	S	Z				5	N							

For order codes differing from the standard version, please refer to section 2.



Technical data of the standard version

Material in contact with the product	1.4404 (AISI 316L)
Material not in contact with the product	1.4301 (AISI 304)
Seal material in contact with the product	EPDM, FKM
Ambient temperature	0 to 45 °C
Air supply pressure	6 bar (87 psi)
Product pressure	10 bar (145 psi)
Surface in contact with the product	$R_a \leq 0.8 \mu\text{m}$
External housing surface	Matte blasted
Control and feedback system	Selectable; the feedback of all valve positions is required acc. to PMO
Actuator type	Pneumatic actuator air/spring
Connection fittings	Welding end
Identification	Adhesive ID tag
Valve seat version	Welded seat ring
Certificates	



	Pipe		Housing					Actuator		Dimensions		Valve		
Nominal width Valve-/CIP-Connection	Ø [mm]	Ø1 [mm]	A [mm]	A1 [mm]	C [mm]	C1 [mm]	K [mm]	D1 [mm]	D2 [mm]	H2 [mm]	Extension X [mm]	Stroke S [mm]	Particle size [mm]	Weight [kg]
OD 4"/2.5"	101.6 × 2.11	63.5 × 1.6	127.5	108.5	150	150.5	171	261	210	786.0	1,150	65	45	80
OD 4"/3"	101.6 × 2.11	76.2 × 1.6	127.5	115.0	150	150.0	171	261	210	786.0	1,150	65	45	80
OD 4"/4"	101.6 × 2.11	101.6 × 2.11	127.5	127.5	150	150.0	171	261	210	786.0	1,150	65	45	80
OD 6"/2.5"*	101.6 × 2.11	63.5 × 1.6	177.0	158.0	150	303.0	190	210	210	808.5	1,217	65	45	90
OD 6"/3"*	101.6 × 2.11	76.2 × 1.6	177.0	164.5	234	282.0	190	210	210	808.5	1,217	65	45	90
OD 6"/4"*	101.6 × 2.11	101.6 × 2.11	177.0	177.0	234	234.0	190	210	210	808.5	1,217	65	45	90
OD 6"/2.5"	152.4 × 2.77	63.5 × 1.6	177.0	132.5	150	303.0	190	210	644.5	808.5	1,217	65	45	90
OD 6"/3"	152.4 × 2.77	76.2 × 1.6	177.0	139.0	150	282.0	190	210	644.5	808.5	1,217	65	45	90
OD 6"/4"	152.4 × 2.77	101.6 × 2.11	177.0	151.5	150	234.0	190	210	644.5	808.5	1,217	65	45	90
OD 6"/6"	152.4 × 2.77	152.4 × 2.77	177.0	177.0	150	150.0	190	210	210	808.5	1,217	65	45	90

* Valve with 6" seat diameter, but 4" ports

Position	Description of the order code for the standard version				
1	Valve type				
	M VARIVENT® 24/7 PMO Valve 2.0				
2	Housing combinations				
	E 				
3	Supplement to the valve type			For nominal widths	
	C/CC With lifting actuator without spray cleaning, only lower balancer			OD 4"	
	O/CC With lifting actuator without spray cleaning, double balanced			OD 6"	
4/5	Nominal width upper / lower housing				
	Seat diameter	Port 1 (CIP port)	Port 2	Port 3	Port 4
	OD 4"	OD 2.5" OD 3" OD 4"	OD 4"	OD 4"	OD 4"
	OD 6"	OD 2.5" OD 3" OD 4"	OD 4"	OD 4"	OD 4"
	OD 6"	OD 2.5" OD 3" OD 4" OD 6"	OD 6"	OD 6"	OD 6"
6	Actuator type				
	S Air/Spring				
7	Non-actuated position				
	Z Spring-to-close (NC)				
8	Standard configuration with 6 bar air supply pressure for 10 bar product pressure				
	Actuator (spring-to-close)	/Lifting actuator	For nominal widths		
	SN6	/ELMN6	OD 4"		
	EH6	/ELMN6	OD 6"		
9	Valve seat version		Housing combination		
	V1 Welded seat ring/ Port orientation 90°		E 		
10	Seal material in contact with the product				
	1 EPDM (FDA)				
	2 FKM (FDA)				
11	Surface quality of the housing				
	5 Inside R _a ≤ 0.8 µm, valve completely ground				
12	Connection fittings				
	N Welding end				
13	Accessories				
	/3A/52/B Valve after 3-A, adhesive ID tag, with outer balancer flushing (balancer cleaning device)				
	/3A/52 Valve after 3-A, adhesive ID tag, without outer balancer flushing (balancer cleaning device)				
+					
14–19	Air connection / Control and feedback system				
	XXXXXX Order code for control and feedback systems see catalog GEA Valve Automation				

The code is composed as following, depending on the chosen configuration:

Position	1	2	3	4/5	6	7	8	9	10	11	12	13	14 to 19					
Code	M	E		-		S	Z	-		V1	-		5	N				

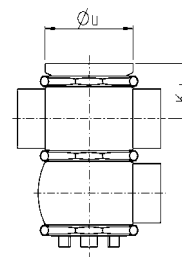
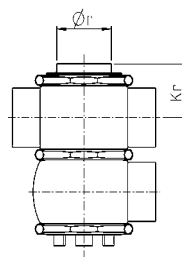
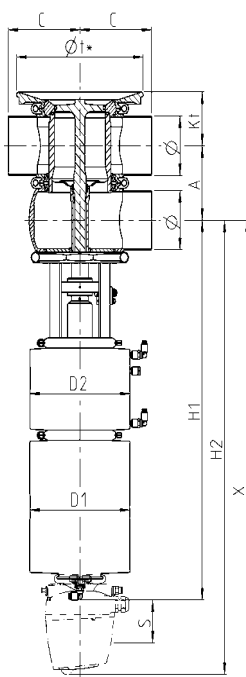
For order codes differing from the standard version, please refer to section 2.



Technical data of the standard version

Material in contact with the product	1.4404 (AISI 316L)
Material not in contact with the product	1.4301 (AISI 304)
Seal material in contact with the product	EPDM, FKM
Ambient temperature	0 to 45 °C
Air supply pressure	Min. 4.8 bar (70 psi)
Product pressure	Max. 6 bar (87 psi)
Surface in contact with the product	OD $R_a \leq 0.8 \mu m$
External housing surface	Matte blasted
Control and feedback system	T.VIS® M-15
Actuator type	Pneumatic actuator air/spring
Connection fittings	Welding end
Identification	Adhesive ID tag
Valve seat version	Welded or loose seat ring

Certificates



	Pipe	Housing		Actuator		Dimensions			Housing connection U		Housing connection T		Housing connection R		Valve	
Nominal width	Ø [mm]	A [mm]	C [mm]	D1 [mm]	D2 [mm]	H1 [mm]	H2 [mm]	Extension X [mm]	Ku [mm]	Øu [mm]	Kt [mm]	Øt* [mm]	Kr [mm]	Ør [mm]	Stroke S [mm]	Weight [kg]
OD 2"	50.8 × 1.65	77.5	125.0	110	110	426	555	805	68.5	114	66.5	200	67.0	60.3	35	31.5
OD 2 ½"	63.5 × 1.65	90.0	125.0	170	135	492	621	871	75.0	154	73.0	225	73.0	88.9	45	32.5
OD 3"	76.2 × 1.65	103.0	125.0	210	210	637	766	1,016	81.5	154	79.5	225	79.5	88.9	65	57.5
OD 4"	101.6 × 2.11	127.5	150.0	210	210	649	778	1,028	93.0	184	—	—	92.0	114.3	65	65.5

* The maximum wall thickness of the tank can be 8 mm.

Position	Description of the order code for the standard version		
1	Valve type		
	MT/T VARIVENT® 24/7 PMO Tank Valve		
2	Housing combinations		
	L* T* F D H R		
3	Supplement to the valve type		
	RC Radial		
4/5	Nominal width (upper housing /lower housing)		
	OD 2"		
	OD 2 ½"		
	OD 3"		
	OD 4"		
6	Actuator type		
	S Air/Spring		
7	Non-actuated position		
	Z Closed		
8	Standard configuration with 4.8 bar air supply pressure for 6 bar product pressure		
	Actuator (spring-to-close)	/ Lifting actuator	For nominal widths
	BD	/BLT	OD 2"
	DF5	/CLR	OD 2 ½"
	EK6	/ELMT	OD 3", OD 4"
9	Valve seat version		
	L0 Loose seat ring		
	V0 Welded seat ring (only for housing combinations H and R)		
10	Seal material in contact with the product		
	1 EPDM (FDA)		
	2 FKM (FDA)		
11	Surface quality of the housing		
	5 Inside $R_a \leq 0.8 \mu\text{m}$, Valve cpl. ground blasted		
12	Connection fittings		
	J With connection fittings		
	N Welding end		
13	Accessories		
	/52 Identification label sticker		
	/3A Valve design acc. to 3-A		
+			
14–19	Air connection / Control and feedback system		
	XXXXX Order code for control and feedback systems see catalog GEA Valve Automation		

* only OD 2", 2 ½" and 3"

The code is composed as following, depending on the chosen configuration:

Position	1	2	3	4/5	6	7	8	9	10	11	12	13	14 to 19					
Code	MT/T		RC	- /	- S	Z	-		-		5							

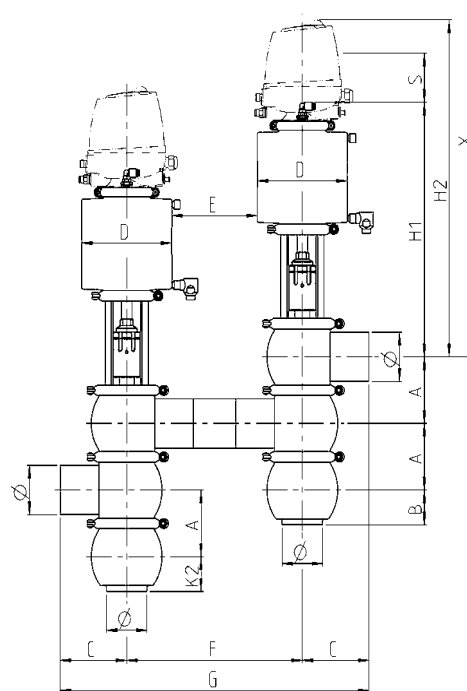
For order codes differing from the standard version, please refer to section 2.



Technical data of standard version

Recommended flow direction	Against the closing direction
Material in contact with the product	1.4404 (AISI 316L)
Material not in contact with the product	1.4301 (AISI 304)
Seal material in contact with the product	EPDM, FKM, HNBR
Ambient temperature	0 to 45 °C
Air supply pressure	6 bar (87 psi)
Product pressure	5 bar (73 psi)
Surface in contact with the product	$R_a \leq 0,8 \mu\text{m}$
External housing surface	Matte blasted
Control and feedback system	Connection 0 (without control top)
Actuator type	Pneumatic actuator air/spring
Connection fittings	Welding end
Identification	Adhesive ID tag
Valve seat version	Welded seat ring

Certificates



	Pipe	Housing				Actuator	Dimensions						Valve	
Nominal width	Ø [mm]	A [mm]	C [mm]	K1 [mm]	K2 [mm]	D1 [mm]	E [mm]	F [mm]	G [mm]	H1 [mm]	P [mm]	Extension X [mm]	Stroke S [mm]	Weight [kg]
OD 1"	25.4 x 1.60	46.0	90	30.0	29	110	70	180	360	456.0	50	570	15	–
OD 1 ½"	38.1 x 1.60	59.0	90	36.5	39	135	45	180	360	465.5	60	615	23	–
OD 2"	50.8 x 1.60	71.5	90	43.0	42	135	45	180	360	472.0	65	650	30	–
OD 2 ½"	63.5 x 1.65	90.0	125	52.0	54	170	80	250	500	515.0	75	740	30	17.5
OD 3"	76.2 x 1.65	103.0	125	58.5	54	170	80	250	500	521.5	80	780	30	18.5
OD 4"	101.6 x 2.00	127.5	125	71.0	69	210	40	250	500	530.0	95	850	30	40.0
OD 6"	152.4 x 2.77	177.0	150	95.5	94	260	40	300	600	707.0	120	1,150	60	–

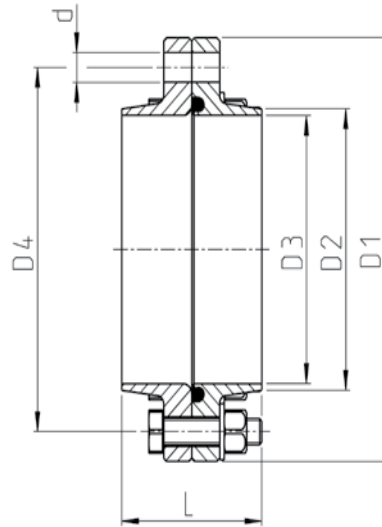
Position	Description of the order code for the standard version	
1	Valve type	
	X	VARIVENT® divert valve
2	Housing combinations	
	W	K
		
3	Supplement to the valve type	
	R	Lower radial seal
4/5	Nominal width (upper housing / lower housing)	
	OD 1"	
	OD 1 ½"	
	OD 2"	
	OD 2 ½"	
	OD 3"	
	OD 4"	
	OD 6"	
6	Actuator type	
	Z	VARIVENT® Actuator Air/Spring, Air-assisted
7	Non-actuated position	
	Z	Spring-to-close (NC)
8	Standard configuration with 6 bar air supply pressure for 5 bar product pressure (higher pressures on request)	
	Actuator (spring-to-close)	For nominal widths
	Z/FDD CB	OD 1", OD 1 ½", OD 2"
	Z/FDD DD	OD 2 ½", OD 3"
	Z/FDD EF	OD 4"
	Z/FDD EH	OD 6"
9	Valve seat version	
	L0	Loose seat ring
10	Seal material in contact with the product	
	1	EPDM (FDA)
	2	FKM (FDA)
	3	HNBR (FDA); (up to OD 4")
11	Surface quality of the housing	
	3	Inside $R_a \leq 0,8 \mu\text{m}$, outside ground blasted
12	Connection fittings	
	N	Welding end
13	Accessories	
	/52	Adhesive ID tag
+		
14–19	Air connection / Control and feedback systems	
	XXXXX	Order code for control and feedback systems see catalog GEA Valve Automation

VARIVENT® Flange Connection



Technical data

Material	1.4404
Surface in contact with the product	$Ra \leq 0.8 \mu m$
Certificates	3.1/AD2000W2
Seal materials	EPDM (FDA), FKM (FDA), HNBR (FDA)

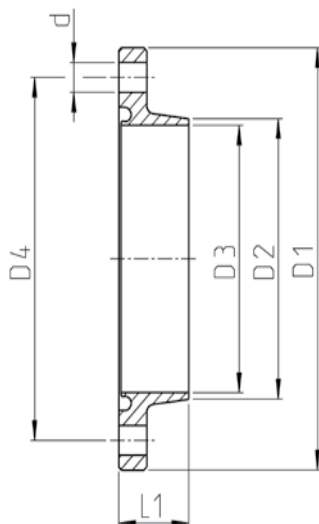


Nominal width	Dimension						O-ring	PS	Weight [kg]	Article number		
	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	d [mm]	L [mm]	[mm]			Material		
										EPDM	FKM	HNBR
DN 25	70	30.0	26.0	53	4 × Ø 9	50	25.0 × 5.0	16	0.6	752-828	752-838	752-848
DN 40	82	42.0	38.0	65	4 × Ø 9	50	36.0 × 5.0	16	0.7	752-830	752-840	752-849
DN 50	94	54.0	50.0	77	4 × Ø 9	50	47.0 × 5.0	16	0.9	752-831	752-841	752-850
DN 65	113	70.0	66.0	95	8 × Ø 9	50	62.0 × 5.0	16	1.2	752-832	752-842	752-851
DN 80	128	85.0	81.0	110	8 × Ø 9	50	75.0 × 5.0	10	1.5	752-833	752-843	752-852
DN 100	159	104.0	100.0	137	8 × Ø 11	50	95.0 × 5.0	10	2.3	752-834	752-844	752-853
DN 125	183	129.0	125.0	161	8 × Ø 11	50	115.0 × 5.0	10	2.7	752-835	752-845	752-854
DN 150	213	154.0	150.0	188	8 × Ø 14	60	134.2 × 5.7	10	4.8	752-836	752-846	752-878
OD 1"	66	25.5	22.0	49	4 × Ø 9	50	25 × 5.0	16	0.6	752-858	752-864	752-872
OD 1 ½"	79	38.5	35.0	62	4 × Ø 9	50	36 × 5.0	16	0.7	752-859	752-865	752-873
OD 2"	91	51.0	47.5	74	4 × Ø 9	50	47 × 5.0	16	0.9	752-860	752-866	752-874
OD 2 ½"	106	63.5	60.0	88	8 × Ø 9	50	62 × 5.0	16	1.0	752-861	752-867	752-875
OD 3"	119	76.5	73.0	101	8 × Ø 9	50	75 × 5.0	10	1.3	752-862	752-868	752-876
OD 4"	156	102.0	97.5	134	8 × Ø 11	50	95 × 5.0	10	2.3	752-863	752-869	752-877
OD 6"	211	152.4	146.5	186	8 × Ø 14	50	115 × 5.0	10	5.2	752-691	752-692	752-693
IPS 2"	101	60.5	57.0	84	8 × Ø 9	50	25 × 5.0	16	1.0	752-855	–	–
IPS 3"	132	89.0	85.0	114	8 × Ø 9	50	36 × 5.0	10	1.5	752-856	–	–
IPS 4"	169	114.0	110.0	147	8 × Ø 9	50	47 × 5.0	10	2.5	752-857	–	–
IPS 6"	227	168.0	162.0	202	8 × Ø 14	60	62 × 5.0	10	5.4	752-837	752-847	–

VARIVENT® Grooved Flange



Technical data	
Material	1.4404
Surface in contact with the product	$Ra \leq 0.8 \mu m$
Certificates	3.1/AD2000W2
Seal materials	EPDM (FDA), FKM (FDA), HNBR (FDA)



Grooved flange



O-Ring

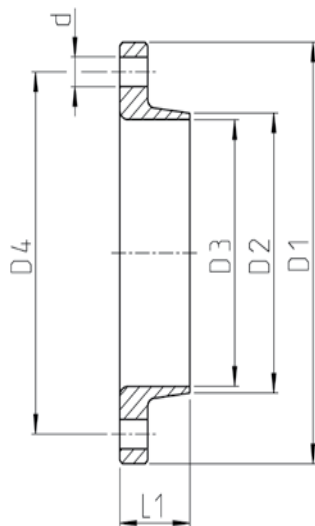
Grooved flange										O-ring			
Dimensions										Dimensions	Article number		
Nominal width	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	d [mm]	L1 [mm]	PS	Weight [kg]	Article number	D1 [mm]	Material		
											EPDM	FKM	HNBR
DN 25	70	30.0	26.0	53	4 × Ø 9	25	16	0.3	752-703	25.0 × 5.0	930-393	930-564	930-551
DN 40	82	42.0	38.0	65	4 × Ø 9	25	16	0.3	752-705	36.0 × 5.0	930-545	930-566	930-552
DN 50	94	54.0	50.0	77	4 × Ø 9	25	16	0.4	752-706	47.0 × 5.0	930-546	930-567	930-553
DN 65	113	70.0	66.0	95	8 × Ø 9	25	16	0.5	752-707	62.0 × 5.0	930-547	930-526	930-554
DN 80	128	85.0	81.0	110	8 × Ø 9	25	10	0.6	752-708	75.0 × 5.0	930-450	930-527	930-555
DN 100	159	104.0	100.0	137	8 × Ø 11	25	10	1.0	752-709	92.0 × 5.0	930-549	930-568	930-556
DN 125	183	129.0	125.0	161	8 × Ø 11	25	10	1.2	752-710	115.0 × 5.0	930-550	930-569	930-557
DN 150	213	154.0	150.0	188	8 × Ø 14	30	10	2.0	752-711	134.2 × 5.7	930-574	930-575	930-872
OD 1"	66	25.5	22.0	49	4 × Ø 9	25	16	0.3	752-718	22.0 × 5.0	930-376	930-593	930-851
OD 1 ½"	79	38.5	35.0	62	4 × Ø 9	25	16	0.3	752-719	33.5 × 5.0	930-497	930-570	930-852
OD 2"	91	51.0	47.5	74	4 × Ø 9	25	16	0.4	752-720	45.0 × 5.0	930-559	930-571	930-853
OD 2 ½"	106	63.5	60.0	88	8 × Ø 9	25	16	0.5	752-721	56.0 × 5.0	930-560	930-572	930-854
OD 3"	119	76.5	73.0	101	8 × Ø 9	25	10	0.6	752-722	68.0 × 5.0	930-319	930-666	930-652
OD 4"	156	102.0	97.5	134	8 × Ø 11	25	10	1.0	752-723	90.0 × 5.0	930-561	930-573	930-855
OD 6"	211	152.4	146.5	186	8 × Ø 14	30	10	2.0	752-694	134.2 × 5.7	930-574	930-575	930-872
IPS 2"	101	60.5	57.0	84	8 × Ø 9	25	16	0.4	752-715	53.0 × 5.0	930-562	–	–
IPS 3"	132	89.0	85.0	114	8 × Ø 9	25	10	0.6	752-716	78.0 × 5.0	930-563	–	–
IPS 4"	169	114.0	110.0	147	8 × Ø 9	25	10	1.0	752-717	102.0 × 5.0	930-154	930-667	930-654
IPS 6"	227	168.0	162.0	202	8 × Ø 14	30	10	2.3	752-712	149.0 × 5.7	930-403	930-404	–

VARIVENT® Smooth Flange



Technical data

Material	1.4404
Surface in contact with the product	$Ra \leq 0.8 \mu m$
Certificates	3.1/AD2000W2



Smooth flange

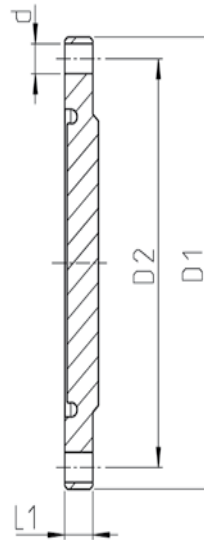
	Dimensions								Article number
Nominal width	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	d [mm]	L1 [mm]	PS	Weight [kg]	
DN 25	70	30.0	26.0	53	4 × Ø 9	25	16	0.3	752-724
DN 40	82	42.0	38.0	65	4 × Ø 9	25	16	0.3	752-726
DN 50	94	54.0	50.0	77	4 × Ø 9	25	16	0.4	752-727
DN 65	113	70.0	66.0	95	8 × Ø 9	25	16	0.6	752-728
DN 80	128	85.0	81.0	110	8 × Ø 9	25	10	0.7	752-729
DN 100	159	104.0	100.0	137	8 × Ø 11	25	10	1.1	752-730
DN 125	183	129.0	125.0	161	8 × Ø 11	25	10	1.2	752-731
DN 150	213	154.0	150.0	188	8 × Ø 14	30	10	2.1	752-733
OD 1"	66	25.5	22.0	49	4 × Ø 9	25	16	0.2	752-739
OD 1 ½"	79	38.5	35.0	62	4 × Ø 9	25	16	0.3	752-740
OD 2"	91	51.0	47.5	74	4 × Ø 9	25	16	0.4	752-741
OD 2 ½"	106	63.5	60.0	88	8 × Ø 9	25	16	0.5	752-742
OD 3"	119	76.5	73.0	101	8 × Ø 9	25	10	0.6	752-743
OD 4"	156	102.0	97.5	134	8 × Ø 11	25	10	1.0	752-744
OD 6"	211	152.4	146.5	186	8 × Ø 14	30	10	2.4	752-695
IPS 2"	101	60.5	57.0	84	8 × Ø 9	25	16	0.4	752-736
IPS 3"	132	89.0	85.0	114	8 × Ø 9	25	10	0.7	752-737
IPS 4"	169	114.0	110.0	147	8 × Ø 9	25	10	1.1	752-738
IPS 6"	227	168.0	162.0	202	8 × Ø 14	30	10	2.4	752-734

VARIVENT® Blind Grooved Flange



Technical data

Material	1.4404
Surface in contact with the product	$Ra \leq 0.8 \mu m$
Certificates	3.1/AD2000W2
Seal materials	EPDM (FDA), FKM (FDA), HNBR (FDA)



Blind grooved flange



O-Ring

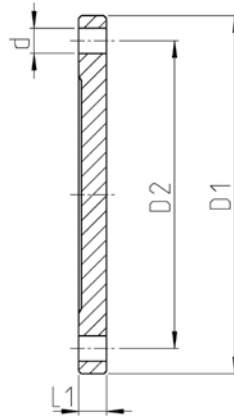
Blind grooved flange								O-ring			
	Dimensions						Article number	Dimensions	Article number		
Nominal width	D1 [mm]	D2 [mm]	d [mm]	L1 [mm]	PS	Weight [kg]		D1 [mm]	Material		
									EPDM	FKM	HNBR
DN 25	70	53	4 × Ø 9	10	16	0.3	752-763	25.0 × 5.0	930-393	930-564	930-551
DN 40	82	65	4 × Ø 9	10	16	0.4	752-766	36.0 × 5.0	930-545	930-566	930-552
DN 50	94	77	4 × Ø 9	10	16	0.5	752-792	47.0 × 5.0	930-546	930-567	930-553
DN 65	113	95	8 × Ø 9	10	16	0.7	752-790	62.0 × 5.0	930-547	930-526	930-554
DN 80	128	110	8 × Ø 9	10	10	0.9	752-770	75.0 × 5.0	930-450	930-527	930-555
DN 100	159	137	8 × Ø 11	10	10	1.4	752-772	92.0 × 5.0	930-549	930-568	930-556
DN 125	183	161	8 × Ø 11	10	10	2.0	752-773	115.0 × 5.0	930-550	930-569	930-557
DN 150	213	188	8 × Ø 14	15	10	4.1	752-638	134.2 × 5.7	930-574	930-575	930-872
OD 1"	66	49	4 × Ø 9	25	16	0.2	752-762	22.0 × 5.0	930-376	930-593	930-851
OD 1 ½"	79	62	4 × Ø 9	25	16	0.4	752-765	33.5 × 5.0	930-497	930-570	930-852
OD 2"	91	74	4 × Ø 9	25	16	0.5	752-767	45.0 × 5.0	930-559	930-571	930-853
OD 2 ½"	106	88	8 × Ø 9	25	16	0.6	752-768	56.0 × 5.0	930-560	930-572	930-854
OD 3"	119	101	8 × Ø 9	25	10	0.8	752-769	68.0 × 5.0	930-319	930-666	930-652
OD 4"	156	134	8 × Ø 11	25	10	1.5	752-771	90.0 × 5.0	930-561	930-573	930-855
OD 6"	211	186	8 × Ø 14	30	10	4.2	752-070	134.2 × 5.7	930-574	930-575	930-872
IPS 6"	227	202	8 × Ø 14	30	10	4.9	752-004	149.0 × 5.7	930-403	930-404	–

VARIVENT® Plain Blind Flange



Technical data

Material	1.4404
Surface in contact with the product	$Ra \leq 0.8 \mu m$
Certificates	3.1/AD2000W2



Plain flange

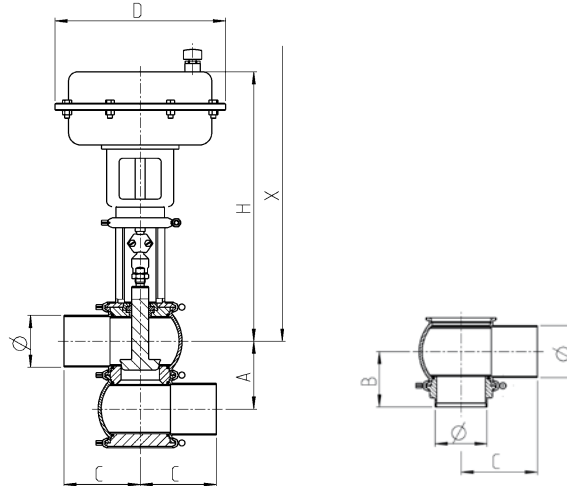
Plain flange							
	Dimensions						Article number
Nominal width	D1 [mm]	D2 [mm]	d [mm]	L1 [mm]	PS	Weight [kg]	
DN 25	70	53	4 × Ø 9	10	16	0.3	752-774
DN 40	82	65	4 × Ø 9	10	16	0.4	752-777
DN 50	94	77	4 × Ø 9	10	16	0.5	752-779
DN 65	113	95	8 × Ø 9	10	16	0.7	752-782
DN 80	128	110	8 × Ø 9	10	10	0.9	752-784
DN 100	159	137	8 × Ø 11	10	10	1.4	752-787
DN 125	183	161	8 × Ø 11	10	10	2.0	752-788
DN 150	213	188	8 × Ø 14	15	10	4.1	752-791
OD 1"	66	49	4 × Ø 9	25	16	0.2	752-825
OD 1 ½"	79	62	4 × Ø 9	25	16	0.4	752-776
OD 2"	91	74	4 × Ø 9	25	16	0.5	752-778
OD 2 ½"	106	88	8 × Ø 9	25	16	0.6	752-781
OD 3"	119	101	8 × Ø 9	25	10	0.8	752-783
OD 4"	156	134	8 × Ø 11	25	10	1.5	752-786
OD 6"	211	186	8 × Ø 14	30	10	4.2	752-071
IPS 2"	101	84	8 × Ø 9	25	16	0.6	752-780
IPS 3"	132	114	8 × Ø 9	25	10	1.0	752-785
IPS 4"	169	147	8 × Ø 9	25	10	1.6	752-789
IPS 6"	227	202	8 × Ø 14	30	10	4.4	752-212



Technical data of the standard version

Control characteristics	Equal-percentage
Recommended flow direction	From bottom to top
Material in contact with the product	1.4404/AISI 316 L
Material not in contact with the product	1.4301/AISI 304
Seal material in contact with the product	EPDM, FKM, HNBR
Ambient temperature	0 to 45 °C
Air supply pressure	Max. 6 bar (max. 87 psi) Certificates
Product pressure	DN 25–65, OD 1"–2 ½", IPS 2" 16 bar*
	DN 80–150, OD 3"–6", IPS 3"–6" 10 bar
Surface in contact with the product	DN, OD Ra ≤ 0.8 µm IPS Ra ≤ 1.2 µm
External housing surface	Matte blasted
Positioner	I/P positioner; type 3725
Actuator type	Diaphragm actuator air/spring
Connection fittings	Welding end
Identification	Adhesive ID tag
Valve seat version	Clamped seat ring
Certificates	CE 

* A product pressure of more than 10 bar is only available for control valves with metallic control cone seal.



	Pipe	Housing			Diaphragm surface 175 cm²		Diaphragm surface 350 cm²		Diaphragm surface 750 cm²		Valve
Nominal width	Ø [mm]	C [mm]	A [mm]	B [mm]	D [mm]	H [mm]	D [mm]	H [mm]	D [mm]	H [mm]	X [mm]
DN 25	29.0 × 1.50	90.0	50.0	58.0	215	370	–	–	–	–	393
DN 40	41.0 × 1.50	90.0	62.0	64.0	215	376	280	380	–	–	415
DN 50	53.0 × 1.50	90.0	74.0	70.0	215	382	280	386	–	–	433
DN 65	70.0 × 2.00	125.0	96.0	83.0	215	393	280	397	–	–	466
DN 80	85.0 × 2.00	125.0	111.0	90.5	215	401	280	405	–	–	489
DN 100	104.0 × 2.00	125.0	130.0	100.0	–	–	280	414	390	471	574
DN 125	129.0 × 2.00	150.0	155.0	112.5	–	–	–	–	390	479	612
DN 150	154.0 × 2.00	150.0	180.0	125.0	–	–	–	–	390	560	718
OD 1"	25.4 × 1.60	90.0	46.0	56.0	215	368	–	–	–	–	391
OD 1 ½"	38.1 × 1.60	90.0	59.0	62.5	215	378	280	382	–	–	414
OD 2"	50.8 × 1.60	90.0	71.5	69.0	215	381	280	385	–	–	432
OD 2 ½"	63.5 × 1.60	125.0	90.0	80.0	215	397	280	401	–	–	464
OD 3"	76.2 × 1.60	125.0	103.0	86.5	215	–	280	408	–	–	541
OD 4"	101.6 × 2.00	125.0	127.5	99.0	–	–	280	416	390	537	573
OD 6"	152.4 × 2.77	150.0	177.0	123.0	–	–	–	–	390	559	714
IPS 2"	60.3 × 2.00	114.3	81.0	73.5	215	379	280	383	–	–	437
IPS 3"	88.9 × 2.30	152.5	115.0	92.5	215	399	280	403	–	–	491
IPS 4"	114.3 × 2.30	152.5	140.0	105.0	–	–	280	409	390	439	579
IPS 6"	168.2 × 2.00	152.5	192.0	131.0	–	–	–	–	390	555	724

Position	Description of the order code					
1	Valve type					
	S VARIVENT® control valve					
2	Housing combinations					
	A B C E L T					
3	Supplement to the valve type					
	F Equal-percentage characteristic curve					
4/5	Nominal width (upper housing/lower housing)					
	DN 25	OD 1"				
	DN 40	OD 1 ½"				
	DN 50	OD 2"		IPS 2"		
	DN 65	OD 2 ½"				
	DN 80	OD 3"		IPS 3"		
	DN 100	OD 4"		IPS 4"		
	DN 125					
	DN 150	OD 6"		IPS 6"		
6	Non-actuated position					
	Z	Spring-to-close (NC)				
	A	Spring-to-open (NO)				
7	Control cone seal					
	M	Metallic, no V-ring				
	W	Soft-sealing, with V-ring				
8	Kvs value					
	0.1	DN 25, OD 1"	4	DN 25, OD 1"	80	DN 80–100, OD 3"–4", IPS 3"–4"
	0.16	DN 25, OD 1"	6.3	DN 25–40, OD 1"–1 ½"	100	DN 100–125, OD 4", IPS 4"
	0.25	DN 25, OD 1"	10	DN 25–50, OD 1"–2", IPS 2"	160	DN 100–125, OD 4", IPS 4"
	0.4	DN 25, OD 1"	16	DN 40–50, OD 1 ½"–2", IPS 2"	200	DN 125–150, OD 6", IPS 6"
	0.63	DN 25, OD 1"	25	DN 40–65, OD 1 ½"–2 ½", IPS 2"	260	DN 125–150, OD 6", IPS 6"
	1	DN 25, OD 1"	35	DN 50–80, OD 2"–3", IPS 2"–3"	360	DN 150, OD 6", IPS 6"
	1.6	DN 25, OD 1"	40	DN 50–80, OD 2"–3", IPS 2"–3"		
	2.5	DN 25, OD 1"	60	DN 65–100, OD 2 ½"–4", IPS 2"–4"		
9	Actuator					
	175	Diaphragm surface 175 cm²				
	350	Diaphragm surface 350 cm²				
	750	Diaphragm surface 750 cm²				
10	Actuation pressure					
	1	0.4–0.2 bar	4	1.65–2.65 bar	7	2.3–4.2 bar
	2	0.8–2.4 bar	5	2.1–3.3 bar		
	3	1.0–3.0 bar	6	2.2–3.4 bar		
11	Actuator material					
	S	Stainless Steel				
	P	Steel sheet, powder-coated				
12	Seal material in contact with the product					
	1	EPDM (FDA)	2	FKM (FDA)	3	HNBR (FDA; to DN 100, OD 4")
13	Surface quality of the housing					
	1	Inside Ra ≤ 1.2 µm, outside matte blasted (IPS)				
	2	Inside Ra ≤ 0.8 µm, outside matte blasted (DN, OD)				
14	Connection fittings					
	N	Welding end				
15	Options (See acc. to valve types)					
+						
16	Positioner					
	0----- Order code for positioners, see at the end of the Section Control Valves index					

The code is composed as follows, depending on the chosen configuration:

Position	1	2	3	4/5	6	7	8	9	10	11	12	13	14	15	16
Code	S		F	/									N		0-----

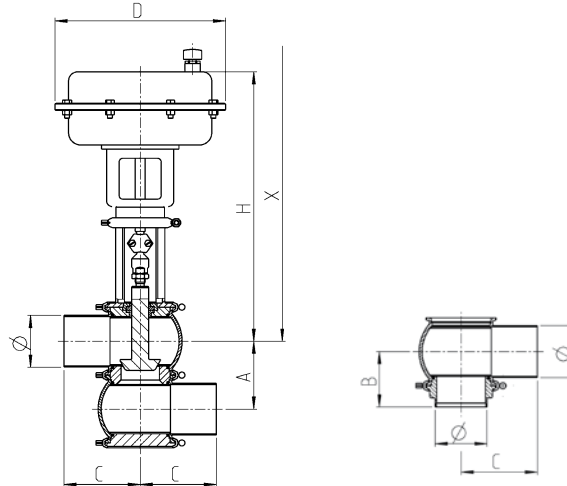
For order codes differing from the standard version, please refer to section 7 (options).



Technical data of the standard version

Control characteristics	Linear
Recommended flow direction	From bottom to top
Material in contact with the product	1.4404/AISI 316 L
Material not in contact with the product	1.4301/AISI 304
Seal material in contact with the product	EPDM, FKM, HNBR
Ambient temperature	0 to 45 °C
Air supply pressure	Max. 6 bar (max. 87 psi) Certificates
Product pressure	DN 25–65, OD 1"–2 ½", IPS 2" 16 bar*
	DN 80–150, OD 3"–6", IPS 3" 10 bar
Surface in contact with the product	DN, OD Ra ≤ 0.8 µm IPS Ra ≤ 1.2 µm
External housing surface	Matte blasted
Positioner	I/P positioner; type 3725
Actuator type	Diaphragm actuator air/spring
Connection fittings	Welding end
Identification	Adhesive ID tag
Valve seat version	Clamped seat ring
Certificates	 

* A product pressure of more than 10 bar is only available for control valves with metallic control cone seal.



	Pipe	Housing			Diaphragm surface 175 cm²		Diaphragm surface 350 cm²		Diaphragm surface 750 cm²		Valve
Nominal width	Ø [mm]	C [mm]	A [mm]	B [mm]	D [mm]	H [mm]	D [mm]	H [mm]	D [mm]	H [mm]	X [mm]
DN 25	29.0 × 1.50	90.0	50.0	58.0	215	370	–	–	–	–	393
DN 40	41.0 × 1.50	90.0	62.0	64.0	215	376	280	380	–	–	415
DN 50	53.0 × 1.50	90.0	74.0	70.0	215	382	280	386	–	–	433
DN 65	70.0 × 2.00	125.0	96.0	83.0	215	393	280	397	–	–	466
DN 80	85.0 × 2.00	125.0	111.0	90.5	215	401	280	405	–	–	489
DN 100	104.0 × 2.00	125.0	130.0	100.0	–	–	280	414	390	471	574
DN 125	129.0 × 2.00	150.0	155.0	112.5	–	–	–	–	390	479	612
DN 150	154.0 × 2.00	150.0	180.0	125.0	–	–	–	–	390	560	718
OD 1"	25.4 × 1.60	90.0	46.0	56.0	215	368	–	–	–	–	391
OD 1 ½"	38.1 × 1.60	90.0	59.0	62.5	215	378	280	382	–	–	414
OD 2"	50.8 × 1.60	90.0	71.5	69.0	215	381	280	385	–	–	432
OD 2 ½"	63.5 × 1.60	125.0	90.0	80.0	215	397	280	401	–	–	464
OD 3"	76.2 × 1.60	125.0	103.0	86.5	215	–	280	408	–	–	541
OD 4"	101.6 × 2.00	125.0	127.5	99.0	–	–	280	416	390	537	573
OD 6"	152.4 × 2.77	150.0	177.0	123.0	–	–	–	–	390	559	714
IPS 2"	60.3 × 2.00	114.3	81.0	73.5	215	379	280	383	–	–	437
IPS 3"	88.9 × 2.30	152.5	115.0	92.5	215	399	280	403	–	–	491
IPS 4"	114.3 × 2.30	152.5	140.0	105.0	–	–	280	409	390	439	579
IPS 6"	168.2 × 2.00	152.5	192.0	131.0	–	–	–	–	390	555	724

Position	Description of the order code					
1	Valve type					
	S VARIVENT® control valve					
2	Housing combinations					
	A B C E L T					
3	Supplement to the valve type					
	J Linear characteristic curve					
4/5	Nominal width (upper housing/lower housing)					
	DN 25	OD 1"		IPS 2"		
	DN 40	OD 1 ½"				
	DN 50	OD 2"				
	DN 65	OD 2 ½"				
	DN 80	OD 3"		IPS 3"		
	DN 100	OD 4"		IPS 4"		
	DN 125					
	DN 150	OD 6"		IPS 6"		
6	Non-actuated position					
	Z Spring-to-close (NC)					
	A Spring-to-open (NO)					
7	Control cone seal					
	M Metallic, no V-ring					
	W Soft-sealing, with V-ring					
8	Kvs value					
	0.1 DN 25, OD 1"	4 DN 25, OD 1"	80 DN 80–100, OD 3"–4", IPS 3"–4"			
	0.16 DN 25, OD 1"	6,3 DN 25–40, OD 1"–1 ½"	100 DN 100–125, OD 4", IPS 4"			
	0.25 DN 25, OD 1"	10 DN 25–50, OD 1"–2", IPS 2"	160 DN 100–125, OD 4", IPS 4"			
	0.4 DN 25, OD 1"	16 DN 40–50, OD 1 ½"–2", IPS 2"	200 DN 125–150, OD 6", IPS 6"			
	0.63 DN 25, OD 1"	25 DN 40–65, OD 1 ½"–2 ½", IPS 2"	260 DN 125–150, OD 6", IPS 6"			
	1 DN 25, OD 1"	35 DN 50–80, OD 2"–3", IPS 2"–3"	360 DN 150, OD 6", IPS 6"			
	1.6 DN 25, OD 1"	40 DN 50–80, OD 2"–3", IPS 2"–3"				
	2.5 DN 25, OD 1"	60 DN 65–100, OD 2 ½"–4", IPS 2"–4"				
9	Actuator					
	175 Diaphragm surface 175 cm²					
	350 Diaphragm surface 350 cm²					
	750 Diaphragm surface 750 cm²					
10	Actuation pressure					
	1 0.4–0.2 bar	4 1.65–2.65 bar	7 2.3–4.2 bar			
	2 0.8–2.4 bar	5 2.1–3.3 bar				
	3 1.0–3.0 bar	6 2.2–3.4 bar				
11	Actuator material					
	S Stainless Steel					
	P Steel sheet, powder-coated					
12	Seal material in contact with the product					
	1 EPDM (FDA)	2 FKM (FDA)	3 HNBR (FDA; to DN 100, OD 4")			
13	Surface quality of the housing					
	1 Inside Ra ≤ 1.2 µm, outside matte blasted (IPS)					
	2 Inside Ra ≤ 0.8 µm, outside matte blasted (DN, OD)					
14	Connection fittings					
	N Welding end					
15	Options (See acc. to valve types)					
+						
16	Positioner					
	0----- Order code for positioners, see at the end of the Section Control Valves index					

The code is composed as follows, depending on the chosen configuration:

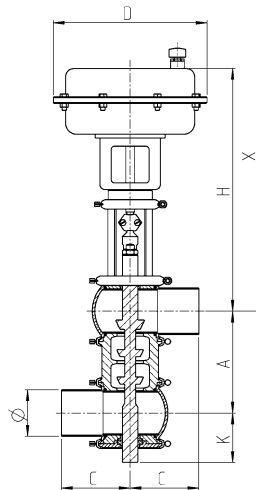
Position	1	2	3	4/5	6	7	8	9	10	11	12	13	14	15	16
Code	S		J	/									N		0-----

For order codes differing from the standard version, please refer to section 7 (options).

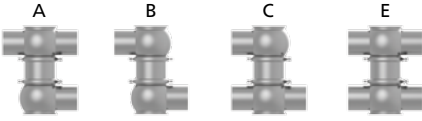


Technical data of the standard version

Control characteristics	Linear
Recommended flow direction	From bottom to top
Material in contact with the product	1.4404/AISI 316 L
Material not in contact with the product	1.4301/AISI 304
Seal material in contact with the product	EPDM, FKM, HNBR
Ambient temperature	0 to 45 °C
Air supply pressure	Max. 6 bar (max. 87 psi) Certificates
Product pressure	DN 25–65, OD 1"–2 ½", IPS 2" 16 bar
	DN 80–100, OD 3"–4", IPS 3"–4" 10 bar
Surface in contact with the product	DN, OD Ra ≤ 0.8 µm IPS Ra ≤ 1.2 µm
External housing surface	Matte blasted
Positioner	I/P positioner; type 3725
Actuator type	Diaphragm actuator air/spring
Connection fittings	Welding end
Identification	Adhesive ID tag
Valve seat version	Clamped seat ring
Certificates	CE A3



	Pipe	Housing			Diaphragm surface 175 cm ²		Diaphragm surface 350 cm ²		Diaphragm surface 750 cm ²		Valve
Nominal width	Ø [mm]	C [mm]	A [mm]	K [mm]	D [mm]	H [mm]	D [mm]	H [mm]	D [mm]	H [mm]	X [mm]
DN 25	29.0 × 1.50	90.0	On request	On request	–	–	–	–	–	–	393
DN 40	41.0 × 1.50	90.0	On request	On request	–	–	280	380	–	–	415
DN 50	53.0 × 1.50	90.0	On request	On request	–	–	280	386	–	–	433
DN 65	70.0 × 2.00	125.0	On request	On request	–	–	–	–	390	454	466
DN 80	85.0 × 2.00	125.0	On request	On request	–	–	–	–	390	462	489
DN 100	104.0 × 2.00	125.0	On request	On request	–	–	–	–	390	471	574
OD 1"	25.4 × 1.60	90.0	On request	On request	–	–	–	372	–	–	391
OD 1 ½"	38.1 × 1.60	90.0	On request	On request	–	–	280	382	–	–	414
OD 2"	50.8 × 1.60	90.0	On request	On request	–	–	280	388	–	–	432
OD 2 ½"	63.5 × 1.60	125.0	On request	On request	–	–	280	401	390	451	464
OD 3"	76.2 × 1.60	125.0	On request	On request	–	–	–	–	390	465	541
OD 4"	101.6 × 2.00	125.0	On request	On request	–	–	–	–	390	473	573
IPS 2"	60.3 × 2.00	114.3	On request	On request	–	–	280	383	–	–	437
IPS 3"	88.9 × 2.30	152.5	On request	On request	–	–	–	–	390	460	491
IPS 4"	114.3 × 2.30	152.5	On request	On request	–	–	280	–	390	466	579

Position	Description of the order code		
1	Valve type		
	S VARIVENT® control valve		
2	Housing combinations		
			
3	Supplement to the valve type		
	K 3-stage seat, linear characteristic curve		
4/5	Nominal width (upper housing/lower housing)		
	DN 25	OD 1"	
	DN 40	OD 1 ½"	
	DN 50	OD 2"	IPS 2"
	DN 65	OD 2 ½"	
	DN 80	OD 3"	IPS 3"
	DN 100	OD 4"	IPS 4"
	DN 125		
	DN 150	OD 6"	IPS 6"
6	Non-actuated position		
	Z Spring-to-close (NC)		
	A Spring-to-open (NO)		
7	Control cone seal		
	M Metallic, no V-ring		
8	Kvs value		
	2.3	DN 25, OD 1"	
	5.8	DN 40, OD 1 ½"	
	9.2	DN 50, OD 2", IPS 2"	
	14.4	DN 65, OD 2 ½"	
	23.1	DN 80, OD 3", IPS 3"	
	34.6	DN 100, OD 4", IPS 4"	
	115.5	DN 125, DN 150, OD 6", IPS 6"	
9	Actuator		
	350	Diaphragm surface 350 cm²	
	750	Diaphragm surface 750 cm²	
10	Actuation pressure		
	1	0.4–0.2 bar	
	2	0.6–1.8 bar	
	3	0.8–2.4 bar	
	4	2.4–3.6 bar	
11	Actuator material		
	S	Stainless Steel	
	P	Steel sheet, powder-coated	
12	Seal material in contact with the product		
	1	EPDM (FDA)	
	2	FKM (FDA)	
	3	HNBR (FDA; to DN 100, OD 4")	
13	Surface quality of the housing		
	1	Inside Ra ≤ 1.2 µm, outside matte blasted (IPS)	
	2	Inside Ra ≤ 0.8 µm, outside matte blasted (DN, OD)	
14	Connection fittings		
	N	Welding end	
15	Options (See acc. to valve types)		
+			
16	Positioner		
	0----- Order code for positioners, see at the end of the Section Control Valves index		

The code is composed as follows, depending on the chosen configuration:

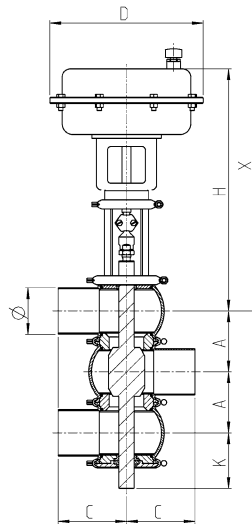
Position	1	2	3	4/5	6	7	8	9	10	11	12	13	14	15	16
Code	S		K	- / -		M							N	/2F	+ 0-----

For order codes differing from the standard version, please refer to section 7 (options).

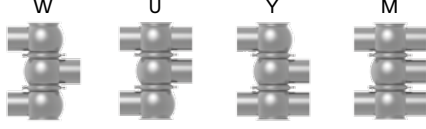


Technical data of the standard version

Control characteristics	Linear
Recommended flow direction	From bottom to top
Material in contact with the product	1.4404/AISI 316 L
Material not in contact with the product	1.4301/AISI 304
Seal material in contact with the product	EPDM, FKM, HNBR
Ambient temperature	0 to 45 °C
Air supply pressure	Max. 6 bar (max. 87 psi) Certificates
Product pressure	DN 25–65, OD 1"–2 ½", IPS 2" 16 bar
	DN 80–100, OD 3"–4", IPS 3"–4" 10 bar
Surface in contact with the product	DN, OD Ra ≤ 0.8 µm IPS Ra ≤ 1.2 µm
External housing surface	Matte blasted
Positioner	I/P positioner; type 3725
Actuator type	Diaphragm actuator air/spring
Connection fittings	Welding end
Identification	Adhesive ID tag
Valve seat version	Clamped seat ring
Certificates	CE A3



	Pipe	Housing			Diaphragm surface 175 cm²		Diaphragm surface 350 cm²		Diaphragm surface 750 cm²		Valve
Nominal width	Ø [mm]	C [mm]	A [mm]	K [mm]	D [mm]	H [mm]	D [mm]	H [mm]	D [mm]	H [mm]	X [mm]
DN 25	29.0 × 1.50	90.0	50.0	On request	215	370	280	347	–	–	393
DN 40	41.0 × 1.50	90.0	62.0	On request	215	376	280	380	–	–	415
DN 50	53.0 × 1.50	90.0	74.0	On request	–	382	280	386	–	–	433
DN 65	70.0 × 2.00	125.0	96.0	On request	–	393	280	397	–	–	466
DN 80	85.0 × 2.00	125.0	111.0	On request	–	401	280	405	–	–	489
DN 100	104.0 × 2.00	125.0	130.0	On request	–	–	280	414	390	471	574
OD 1"	25.4 × 1.60	90.0	46.0	On request	215	368	–	–	–	–	391
OD 1 ½"	38.1 × 1.60	90.0	59.0	On request	215	378	280	382	–	–	414
OD 2"	50.8 × 1.60	90.0	71.5	On request	–	381	280	385	–	–	432
OD 2 ½"	63.5 × 1.60	125.0	90.0	On request	–	397	280	401	–	–	464
OD 3"	76.2 × 1.60	125.0	103.0	On request	–	–	280	408	–	465	541
OD 4"	101.6 × 2.00	125.0	127.5	On request	–	–	280	416	390	473	573
IPS 2"	60.3 × 2.00	114.3	81.0	On request	–	379	280	383	–	–	437
IPS 3"	88.9 × 2.30	152.5	115.0	On request	–	399	280	403	–	–	491
IPS 4"	114.3 × 2.30	152.5	140.0	On request	–	–	280	409	390	466	579

Position	Description of the order code		
1	Valve type		
	S VARIVENT® control valve		
2	Housing combinations		
			
3	Supplement to the valve type		
	W Divert valve, product-merging, linear characteristic curve		
4/5	Nominal width (upper housing/lower housing)		
	DN 25	OD 1"	
	DN 40	OD 1 ½"	
	DN 50	OD 2"	IPS 2"
	DN 65	OD 2 ½"	
	DN 80	OD 3"	IPS 3"
	DN 100	OD 4"	IPS 4"
	DN 125		
	DN 150	OD 6"	IPS 6"
6	Non-actuated position		
	Z Spring-to-close (NC)		
	A Spring-to-open (NO)		
7	Control cone seal		
	M Metallic, no V-ring		
8	Kvs value		
	6.3	DN 25, OD 1"	
	16	DN 40, OD 1 ½"	
	25	DN 50, OD 2", IPS 2"	
	35	DN 65, OD 2 ½"	
	60	DN 80, OD 3", IPS 3"	
	100	DN 100, OD 4", IPS 4"	
	260	DN 125	
	360	DN 150, OD 6", IPS 6"	
9	Actuator		
	175	Diaphragm surface 175 cm²	
	350	Diaphragm surface 350 cm²	
	750	Diaphragm surface 750 cm²	
10	Actuation pressure		
	1	0.4–0.2 bar	
	2	1.4–2.3 bar	
	3	1.4–2.4 bar	
11	Actuator material		
	S Stainless Steel		
	P Steel sheet, powder-coated		
12	Seal material in contact with the product		
	1 EPDM (FDA)		
	2 FKM (FDA)		
	3 HNBR (FDA; to DN 100, OD 4")		
13	Surface quality of the housing		
	1 Inside Ra ≤ 1.2 µm, outside matte blasted (IPS)		
	2 Inside Ra ≤ 0.8 µm, outside matte blasted (DN, OD)		
14	Connection fittings		
	N Welding end		
15	Options (See acc. to valve types)		
+			
16	Positioner		
	0----- Order code for positioners, see at the end of the Section Control Valves index		

The code is composed as follows, depending on the chosen configuration:

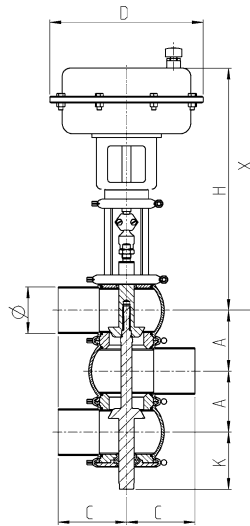
Position	1	2	3	4/5	6	7	8	9	10	11	12	13	14	15	16
Code	S		W	/		M							N	/2F	0-----

For order codes differing from the standard version, please refer to section 7 (options).



Technical data of the standard version

Control characteristics	Linear
Recommended flow direction	From bottom to top
Material in contact with the product	1.4404/AISI 316 L
Material not in contact with the product	1.4301/AISI 304
Seal material in contact with the product	EPDM, FKM, HNBR
Ambient temperature	0 to 45 °C
Air supply pressure	Max. 6 bar (max. 87 psi) Certificates
Product pressure	DN 25–65, OD 1"–2 ½", IPS 2" 16 bar
	DN 80–100, OD 3"–4", IPS 3"–4" 10 bar
Surface in contact with the product	DN, OD Ra ≤ 0.8 µm IPS Ra ≤ 1.2 µm
External housing surface	Matte blasted
Positioner	I/P positioner; type 3725
Actuator type	Diaphragm actuator air/spring
Connection fittings	Welding end
Identification	Adhesive ID tag
Valve seat version	Clamped seat ring
Certificates	CE A3



	Pipe	Housing			Diaphragm surface 175 cm²		Diaphragm surface 350 cm²		Diaphragm surface 750 cm²		Valve
Nominal width	Ø [mm]	C [mm]	A [mm]	K [mm]	D [mm]	H [mm]	D [mm]	H [mm]	D [mm]	H [mm]	X [mm]
DN 25	29.0 × 1.50	90.0	50.0	On request	215	370	280	347	–	–	393
DN 40	41.0 × 1.50	90.0	62.0	On request	215	376	280	380	–	–	415
DN 50	53.0 × 1.50	90.0	74.0	On request	–	382	280	386	–	–	433
DN 65	70.0 × 2.00	125.0	96.0	On request	–	393	280	397	–	–	466
DN 80	85.0 × 2.00	125.0	111.0	On request	–	401	280	405	–	–	489
DN 100	104.0 × 2.00	125.0	130.0	On request	–	–	280	414	390	471	574
OD 1"	25.4 × 1.60	90.0	46.0	On request	215	368	–	–	–	–	391
OD 1 ½"	38.1 × 1.60	90.0	59.0	On request	215	378	280	382	–	–	414
OD 2"	50.8 × 1.60	90.0	71.5	On request	–	381	280	385	–	–	432
OD 2 ½"	63.5 × 1.60	125.0	90.0	On request	–	397	280	401	–	–	464
OD 3"	76.2 × 1.60	125.0	103.0	On request	–	–	280	408	–	465	541
OD 4"	101.6 × 2.00	125.0	127.5	On request	–	–	280	416	390	473	573
IPS 2"	60.3 × 2.00	114.3	81.0	On request	–	379	280	383	–	–	437
IPS 3"	88.9 × 2.30	152.5	115.0	On request	–	399	280	403	–	–	491
IPS 4"	114.3 × 2.30	152.5	140.0	On request	–	–	280	409	390	466	579

Position	Description of the order code		
1	Valve type		
	S VARIVENT® control valve		
2	Housing combinations		
	W U Y M		
3	Supplement to the valve type		
	X Divert valve, product distribution, linear characteristic curve		
4/5	Nominal width (upper housing/lower housing)		
	DN 25	OD 1"	
	DN 40	OD 1 ½"	
	DN 50	OD 2"	IPS 2"
	DN 65	OD 2 ½"	
	DN 80	OD 3"	IPS 3"
	DN 100	OD 4"	IPS 4"
	DN 125		
	DN 150	OD 6"	IPS 6"
6	Non-actuated position		
	Z Spring-to-close (NC)		
	A Spring-to-open (NO)		
7	Control cone seal		
	M Metallic, no V-ring		
8	Kvs value		
	6.3	DN 25, OD 1"	
	16	DN 40, OD 1 ½"	
	25	DN 50, OD 2", IPS 2"	
	35	DN 65, OD 2 ½"	
	60	DN 80, OD 3", IPS 3"	
	100	DN 100, OD 4", IPS 4"	
	260	DN 125	
	360	DN 150, OD 6", IPS 6"	
9	Actuator		
	175	Diaphragm surface 175 cm²	
	350	Diaphragm surface 350 cm²	
	750	Diaphragm surface 750 cm²	
10	Actuation pressure		
	1	0.4–0.2 bar	
	2	1.4–2.3 bar	
	3	1.4–2.4 bar	
11	Actuator material		
	S Stainless Steel		
	P Steel sheet, powder-coated		
12	Seal material in contact with the product		
	1 EPDM (FDA)		
	2 FKM (FDA)		
	3 HNBR (FDA; to DN 100, OD 4")		
13	Surface quality of the housing		
	1 Inside Ra ≤ 1.2 µm, outside matte blasted (IPS)		
	2 Inside Ra ≤ 0.8 µm, outside matte blasted (DN, OD)		
14	Connection fittings		
	N Welding end		
15	Options (See acc. to valve types)		
+			
16	Positioner		
	0----- Order code for positioners, see at the end of the Section Control Valves index		

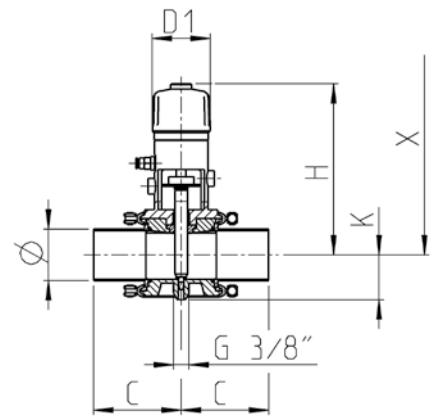
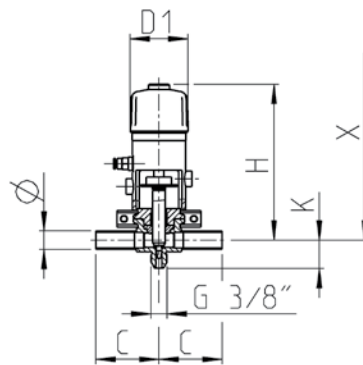
The code is composed as follows, depending on the chosen configuration:

Position	1	2	3	4/5	6	7	8	9	10	11	12	13	14	15	16
Code	S		X	/		M							N	/2F	0-----

For order codes differing from the standard version, please refer to section 7 (options).


Technical data of the standard version

Material in contact with the product	1.4404/AISI 316 L, 1.4460	
Material not in contact with the product	1.4301/AISI 304	
Seal material in contact with the product	EPDM, FKM, HNBR	
Ambient temperature	0 to 60 °C	
Air supply pressure	Min. 4 bar (87 psi)	
Product pressure	Max. 10 bar (145 psi)	
Surface in contact with the product	DN, OD	$Ra \leq 0.8 \mu m$
	IPS	$Ra \leq 1.2 \mu m$
External housing surface	Matte blasted	
Control and feedback system	Connection 0 (without control top)	
Actuator type	Pneumatic actuator air/spring	
Connection fittings	Welding end with additional connection fittings	
Identification	Adhesive ID tag	
Certificates		

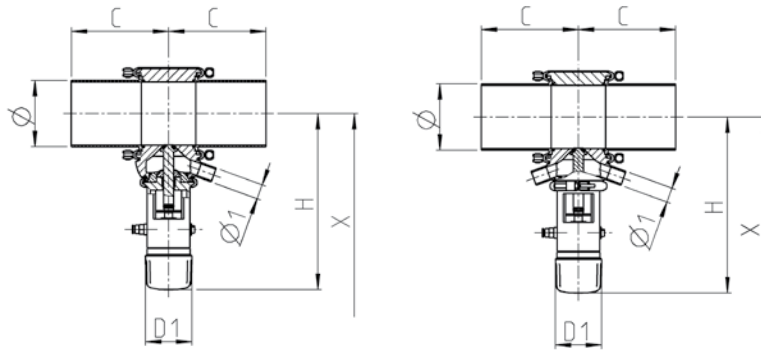


Pipe		Housing		Dimension		Actuator	Valve	
Nominal width	Ø [mm]	C [mm]	K [mm]	H [mm]	X [mm]	D1 [mm]	Stroke [mm]	Weight [kg]
DN 10	13.0 × 1.50	65.0	26.0	156.0	193	60	5.5	1.5
DN 15	19.0 × 1.50	65.0	29.0	159.0	202	60	8.0	1.6
DN 25	29.0 × 1.50	90.0	34.0	162.0	210	60	8.0	2.2
DN 40	41.0 × 1.50	90.0	40.0	168.0	222	60	8.0	3.0
DN 50	53.0 × 1.50	90.0	46.0	174.0	234	60	8.0	3.2
DN 65	70.0 × 2.00	125.0	54.0	182.0	250	60	8.0	3.8
DN 80	85.0 × 2.00	125.0	61.5	189.5	265	60	8.0	4.0
DN 100	104.0 × 2.00	125.0	71.0	199.0	284	60	8.0	4.4
DN 125	129.0 × 2.00	125.0	83.5	211.5	310	60	8.0	4.7
DN 150	159.0 × 2.00	150.0	96.0	224.0	323	60	8.0	9.1
OD 1"	25.4 × 1.60	90.0	32.0	160.0	206	60	8.0	2.1
OD 1 ½"	38.1 × 1.60	90.0	38.5	166.5	219	60	8.0	3.0
OD 2"	50.8 × 1.60	90.0	44.7	173.0	232	60	8.0	3.1
OD 2 ½"	63.5 × 1.60	125.0	51.0	179.0	244	60	8.0	3.6
OD 3"	76.2 × 1.60	125.0	57.5	185.5	257	60	8.0	3.8
OD 4"	101.6 × 2.00	125.0	69.7	198.0	282	60	8.0	4.3
OD 6"	152.4 × 2.77	150.0	92.7	221.0	346	60	8.0	9.5
IPS 2"	60.3 × 2.00	114.3	49.5	177.5	241	60	8.0	3.6
IPS 3"	88.9 × 2.30	152.5	63.4	191.5	269	60	8.0	4.2
IPS 4"	114.3 × 2.30	152.5	76.0	204.0	294	60	8.0	5.2
IPS 6"	168.2 × 2.00	152.5	102.0	230.0	346	60	8.0	10.3

Position	Description of the order code		
1	Valve type		
	I VARIVENT® sampling valve		
2	Gehäusekombinationen		
	L T		
3	Nominal width (housing)		
	DN 10		
	DN 15		
	DN 25	OD 1 "	
	DN 40	OD 1 ½ "	
	DN 50	OD 2 "	IPS 2 "
	DN 65	OD 2 ½ "	
	DN 80	OD 3 "	IPS 3 "
	DN 100	OD 4 "	IPS 4 "
	DN 125		
DN 150	OD 6 "	IPS 6 "	
4	Seal material in contact with the product		
	1	EPDM (FDA)	
	2	FKM (FDA)	
	3	HNBR (FDA)	
5	Surface quality of the housing		
	1	Inside Ra ≤ 1.2 µm, outside matte (standard with IPS)	
	2	Inside Ra ≤ 0.8 µm, outside matte (standard with DN and OD)	
6	Connection fittings		
	N	Welding end	
7	Type of outlet		Connection sleeve (optionally for outlet type threaded connection)
	/O	Threaded connection (standard)	– Without connection sleeve
	/S	Schütt connection	/A Hose nozzle
	/L	LUER connection	/B Flammable nozzle straight
	/M	LUER connection 90°	/C Flammable nozzles 90°
	/K	KEOFITT connection	/D Spiral-type flammable nozzle
8	Accessories		
	/52	Adhesive ID tag	
+			
9–14	Air connection/control and feedback system		
	LAT.0000M	Metric for air hose Ø 6/4 mm	
	LAT.0000Z	Inch for air hose Ø OD ¼" (6.35/4.35 mm)	
	XXXXX	Order code for different control and feedback systems see section 9	


Technical data of the standard version

Material in contact with the product	1.4404/AISI 316 L
Material not in contact with the product	1.4301/AISI 304
Seal material in contact with the product	EPDM, FKM, HNBR
Ambient temperature	0 to 60 °C
Air supply pressure	Min. 6 bar (87 psi)
Product pressure	Max. 10 bar (145 psi) With stainless steel bellows max. 5 bar (73 psi)
Surface in contact with the product	Ra ≤ 0.8 µm
External housing surface	Matte blasted
Actuator type	Pneumatic actuator air/spring
Connection fittings	Welding end
Identification	Adhesive ID tag
Certificates	



		Pipe	Housing		Dimension		Actuator	Valve	
Nominal width	Process connection	Ø [mm]	Ø1 [mm]	C [mm]	H [mm]	X [mm]	D1 [mm]	Stroke [mm]	Weight [kg]
DN 25	F	29.0 × 1.50	10	90.0	193.0	205.0	60	8	3.0
DN 40	N	41.0 × 1.50	16	90.0	199.0	212.0	60	8	3.9
DN 50	N	53.0 × 1.50	16	90.0	205.0	218.0	60	8	4.0
DN 65	N	70.0 × 2.00	16	125.0	213.0	226.0	60	8	4.6
DN 80	N	85.0 × 2.00	16	125.0	220.5	233.5	60	8	4.8
DN 100	N	104.0 × 2.00	16	125.0	230.0	243.0	60	8	5.2
DN 125	N	129.0 × 2.00	16	125.0	242.5	255.5	60	8	5.5
DN 150	N	154.0 × 2.00	16	150.0	255.0	268.0	60	8	9.9
OD 1"	F	25.4 × 1.60	10	90.0	191.0	204.0	60	8	2.9
OD 1 ½"	N	38.1 × 1.60	16	90.0	197.5	210.5	60	8	3.8
OD 2"	N	50.8 × 1.60	16	90.0	203.8	216.8	60	8	4.0
OD 2 ½"	N	63.5 × 1.60	16	125.0	210.0	223.0	60	8	4.4
OD 3"	N	76.2 × 1.60	16	125.0	216.5	229.5	60	8	4.6
OD 4"	N	101.6 × 2.00	16	125.0	228.8	241.8	60	8	5.1
OD 6"	N	152.4 × 2.77	16	150.0	258.0	272.0	60	8	10.5
IPS 2"	N	60.3 × 2.00	16	114.3	208.5	221.5	60	8	4.4
IPS 3"	N	88.9 × 2.30	16	152.4	222.5	235.5	60	8	5.0
IPS 4"	N	114.3 × 2.30	16	152.4	235.0	248.0	60	8	6.0
IPS 6"	N	168.3 × 2.70	16	152.4	261.0	274.0	60	8	11.0
ISO 33.7	F	33.7 × 2.00	10	114.3	194.9	207.9	60	8	3.1
ISO 42.4	N	42.4 × 2.00	16	114.3	199.2	212.2	60	8	4.0
ISO 48.3	N	48.3 × 2.00	16	114.3	202.2	215.2	60	8	4.1
ISO 60.3	N	60.3 × 2.00	16	114.3	208.1	221.1	60	8	4.5
ISO 76.1	N	76.1 × 2.00	16	152.4	216.5	229.5	60	8	4.8
ISO 88.9	N	88.9 × 2.30	16	152.4	222.5	235.5	60	8	5.3
ISO 114.3	N	114.3 × 2.30	16	152.4	235.0	248.0	60	8	6.1

Position	Description of the order code
1	Valve type TSV VARINLINE® sampling valve
2	Type N Fail-safe position against the flow direction
3	Process connection N Housing DN 40–125, OD 1 ½"–6", IPS 2"–6", ISO 42.4–114.3 F Housing DN 25, OD 1", ISO 33.7
4	Sampling housing 1 2 
5	Seal material in contact with the product 1 EPDM (FDA) 2 FKM (FDA) 3 HNBR (FDA)
6	Aseptic K Without metal bellows M With metal bellows
7	Installation type VARINLINE® fitting* /- Without in-line housing /T With housing /TT With housing connection T /TU With housing connection U /TT-S With housing connection T-S /TU-S With housing connection U-S
8	Installation fittings (optional for the VARINLINE® fitting) N Welding end
9	Accessories /52 Adhesive ID tag
+	
10–15	Air connection/control and feedback system LAT.0000M Metric for air hose Ø 6/4 mm LAT.0000Z Inch for air hose Ø OD ¼" (6.35/4.35 mm) XXXXX Order code for different control and feedback systems see section 9

* Detailed information on VARINLINE® can be found in section 1

The code is composed as follows, depending on the chosen configuration:

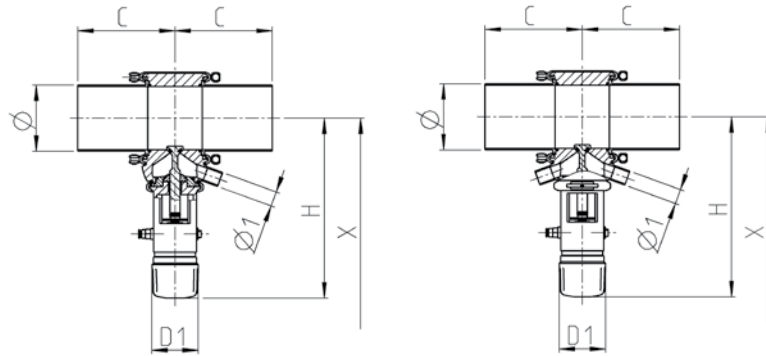
Position	1	2	3		4	5	6	7	8	9	10 to 15						
Code	TSV	N	-			-				N	/52	+					

For order codes differing from the standard version, please refer to section 7 (options).



Technical data of the standard version

Material in contact with the product	1.4404/AISI 316 L
Material not in contact with the product	1.4301/AISI 304
Seal material in contact with the product	EPDM, FKM, HNBR
Ambient temperature	0 to 60 °C
Air supply pressure	Min. 6 bar (87 psi)
Product pressure	Max. 10 bar (145 psi) With stainless steel bellows max. 5 bar (73 psi)
Surface in contact with the product	Ra ≤ 0.8 µm
External housing surface	Matte blasted
Actuator type	Pneumatic actuator air/spring
Connection fittings	Welding end
Identification	Adhesive ID tag
Certificates	



		Pipe	Housing		Dimension		Actuator	Valve	
Nominal width	Process connection	Ø [mm]	Ø1 [mm]	C [mm]	H [mm]	X [mm]	D1 [mm]	Stroke [mm]	Weight [kg]
DN 25	F	29.0 × 1.50	10	90.0	193.0	209.0	60	8	3.0
DN 40	N	41.0 × 1.50	16	90.0	199.0	216.0	60	8	3.9
DN 50	N	53.0 × 1.50	16	90.0	205.0	222.0	60	8	4.0
DN 65	N	70.0 × 2.00	16	125.0	213.0	230.0	60	8	4.6
DN 80	N	85.0 × 2.00	16	125.0	220.5	237.5	60	8	4.8
DN 100	N	104.0 × 2.00	16	125.0	230.0	247.0	60	8	5.2
DN 125	N	129.0 × 2.00	16	125.0	242.5	259.5	60	8	5.5
DN 150	N	154.0 × 2.00	16	150.0	255.0	272.0	60	8	9.9
OD 1"	F	25.4 × 1.60	10	90.0	191.0	208.0	60	8	2.9
OD 1 ½"	N	38.1 × 1.60	16	90.0	197.5	214.5	60	8	3.8
OD 2"	N	50.8 × 1.60	16	90.0	203.8	220.8	60	8	4.0
OD 2 ½"	N	63.5 × 1.60	16	125.0	210.0	227.0	60	8	4.4
OD 3"	N	76.2 × 1.60	16	125.0	216.5	223.5	60	8	4.6
OD 4"	N	101.6 × 2.00	16	125.0	228.8	245.8	60	8	5.1
OD 6"	N	152.4 × 2.77	16	150.0	258.0	272.0	60	8	10.5
IPS 2"	N	60.3 × 2.00	16	114.3	208.5	225.5	60	8	4.4
IPS 3"	N	88.9 × 2.30	16	152.4	222.5	239.5	60	8	5.0
IPS 4"	N	114.3 × 2.30	16	152.4	235.0	252.0	60	8	6.0
IPS 6"	N	168.3 × 2.70	16	152.4	261.0	279.0	60	8	11.0
ISO 33.7	F	33.7 × 2.00	10	114.3	194.9	211.9	60	8	3.1
ISO 42.4	N	42.4 × 2.00	16	114.3	199.2	216.2	60	8	4.0
ISO 48.3	N	48.3 × 2.00	16	114.3	202.2	219.2	60	8	4.1
ISO 60.3	N	60.3 × 2.00	16	114.3	208.1	225.1	60	8	4.5
ISO 76.1	N	76.1 × 2.00	16	152.4	216.5	233.5	60	8	4.8
ISO 88.9	N	88.9 × 2.30	16	152.4	222.5	239.5	60	8	5.3
ISO 114.3	N	114.3 × 2.30	16	152.4	235.0	252.0	60	8	6.1

Position	Description of the order code
1	Valve type TSV VARINLINE® sampling valve
2	Type U Fail-safe position with the flow direction
3	Process connection N Housing DN 40–125, OD 1 ½"–6", IPS 2"–6", ISO 42.4–114.3 F Housing DN 25, OD 1", ISO 33.7
4	Sampling housing 
5	Seal material in contact with the product 1 EPDM (FDA) 2 FKM (FDA) 3 HNBR (FDA)
6	Aseptic K Without metal bellows M With metal bellows
7	Installation type VARINLINE® fitting* /- Without in-line housing /T With housing /TT With housing connection T /TU With housing connection U /TT-S With housing connection T-S /TU-S With housing connection U-S
8	Installation fittings (optional for the VARINLINE® fitting) N Welding end
9	Accessories /52 Adhesive ID tag
+	
10–15	Air connection/control and feedback system LAT.0000M Metric for air hose Ø 6/4 mm LAT.0000Z Inch for air hose Ø OD ¼" (6.35/4.35 mm) XXXXX Order code for different control and feedback systems see section 9

* detailed information on VARINLINE® can be found in section 1

The code is composed as follows, depending on the chosen configuration:

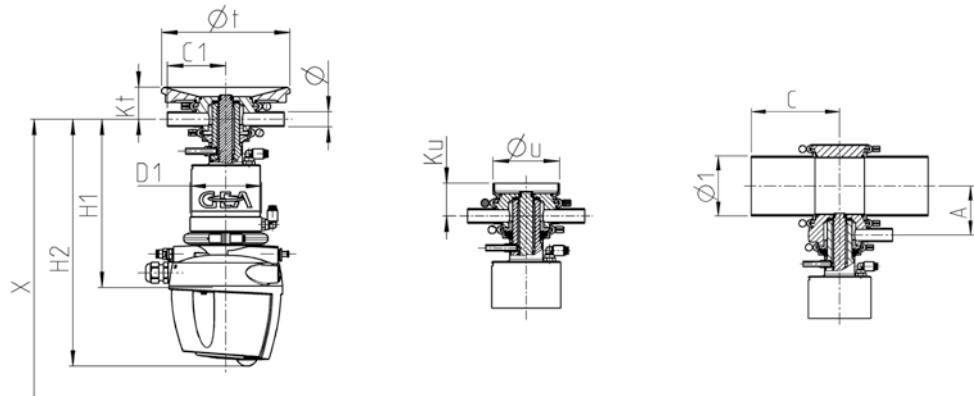
Position	1	2	3	4	5	6	7	8	9	10 to 15					
Code	TSV	U	-					N	/52	+					

For order codes differing from the standard version, please refer to section 7 (options).



Technical data of the standard version

Material in contact with the product	1.4404/AISI 316 L
Material not in contact with the product	1.4301/AISI 304
Seal material in contact with the product	EPDM, FKM
Ambient temperature	0 to 45 °C
Air supply pressure	6 to 8 bar (87 to 116 psi)
Product pressure	Max. 8 bar (116 psi)
Surface in contact with the product	Ra ≤ 0.8 µm
External housing surface	Matte blasted
Control and feedback system	Connection 0 (without control top)
Actuator type	Pneumatic actuator air/spring
Connection fittings	Welding end
Certificates	



With housing connection

	Pipe			Dimension				Actuator	Valve
Nominal width	Ø [mm]	Øt [mm]	Øu [mm]	C1 [mm]	H2 [mm]	Kt [mm]	Ku [mm]	D1 [mm]	Stroke [mm]
DN 15	19.0 × 1.5	165	85 × 2	75	317.5	41	41.5	93	15

With in-line housing

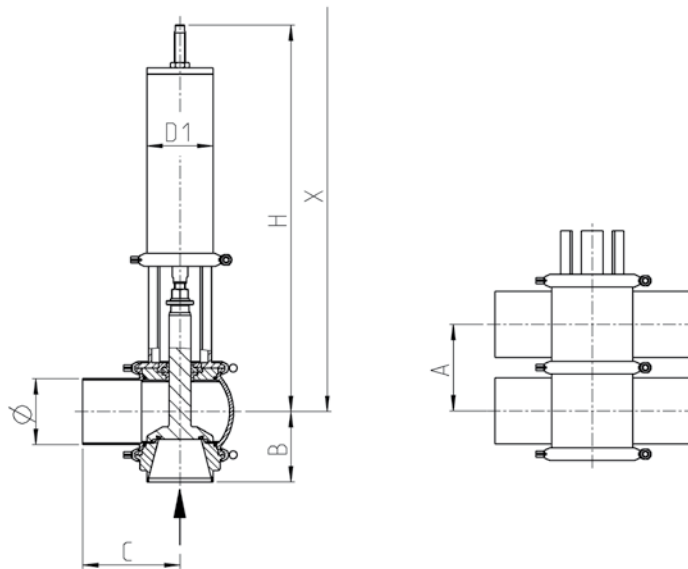
		Pipe		Dimension					Actuator	Valve	
Nominal width	Process connection	Ø [mm]	Ø1 [mm]	A [mm]	C [mm]	H1 [mm]	H2 [mm]	X [mm]	D1 [mm]	Stroke [mm]	Weight [kg]
DN 15/DN 40	N	19 × 1.5	41.0 × 1.50	47.5	90.0	204	317.5	368	93	15	7.9
DN 15/DN 50	N	19 × 1.5	53.0 × 1.50	53.5	90.0	204	317.5	368	93	15	8.1
DN 15/DN 65	N	19 × 1.5	70.0 × 2.00	61.5	125.0	204	317.5	368	93	15	8.7
DN 15/DN 80	N	19 × 1.5	85.0 × 2.00	69.0	125.0	204	317.5	368	93	15	8.9
DN 15/DN 100	N	19 × 1.5	104.0 × 2.00	78.5	125.0	204	317.5	368	93	15	9.2
DN 15/DN 125	N	19 × 1.5	129.0 × 2.00	91.0	125.0	204	317.5	368	93	15	9.6
DN 15/DN 150	N	19 × 1.5	154.0 × 2.00	103.5	150.0	204	317.5	368	93	15	14.0
DN 15/OD 1 ½"	N	19 × 1.5	38.1 × 1.60	46.0	90.0	204	317.5	368	93	15	7.9
DN 15/OD 2"	N	19 × 1.5	50.8 × 1.60	52.0	90.0	204	317.5	368	93	15	8.0
DN 15/OD 2 ½"	N	19 × 1.5	63.5 × 1.60	58.5	125.0	204	317.5	368	93	15	8.5
DN 15/OD 3"	N	19 × 1.5	76.2 × 1.60	65.0	125.0	204	317.5	368	93	15	8.6
DN 15/OD 4"	N	19 × 1.5	101.6 × 2.00	77.0	125.0	204	317.5	368	93	15	9.2
DN 15/OD 6"	N	19 × 1.5	152.4 × 2.77	92.7	150.0	204	317.5	368	93	15	9.2
DN 15/IPS 2"	N	19 × 1.5	60.3 × 2.00	57.0	114.3	204	317.5	368	93	15	8.5
DN 15/IPS 3"	N	19 × 1.5	88.9 × 2.30	71.0	152.4	204	317.5	368	93	15	9.1
DN 15/IPS 4"	N	19 × 1.5	114.3 × 2.30	83.0	152.4	204	317.5	368	93	15	10.0
DN 15/IPS 6"	N	19 × 1.5	168.3 × 2.70	110.0	152.4	204	317.5	368	93	15	15.1

Position	Description of the order code	
1	Valve type	
	T Mixproof sampling valve	
2	Housing combinations	
	L T F D C (VARINLINE®) E (VARINLINE®)	
3	Supplement to the valve type	
	RC Lifting actuator without spray cleaning	
4	Nominal width top	
	DN 15	
5	Nominal width bottom (optional for the VARINLINE® housing combination)	
	DN 40	OD 1 ½"
	DN 50	OD 2"
	DN 65	OD 2 ½"
	DN 80	OD 3"
	DN 100	OD 4"
	DN 125	
	DN 150	OD 6"
6	Actuator type	
	S Air/spring	
7	Non-actuated position	
	Z Spring-to-close (NC)	
8	Actuator	
	T/09	
9	Valve seat version	
	L0 Clamped seat ring/clamp connection	
10	Seal material in contact with the product	
	1 EPDM (FDA)	
	2 FKM (FDA)	
11/12	Surface quality of the sampling housing	/Surface quality of the sampling housings
	3 Inside Ra ≤ 0.8 µm, outside ground	2 Inside Ra ≤ 0.8 µm, outside matte
		3 Inside Ra ≤ 0.8 µm, outside ground
13	Connection fittings	
	N Welding end	
14	Accessories	
	/52 Adhesive ID tag	
+		
15–20	Air connection/control and feedback system	
	00000M Metric for air hose Ø 6/4 mm	
	00000Z Inch for air hose Ø OD ¼" (6.35/4.35 mm)	
	XXXXX Order code for different control and feedback systems see section 9	



Technical data of the standard version

Recommended flow direction	From bottom to top
Material in contact with the product	1.4404/AISI 316 L
Material not in contact with the product	1.4301/AISI 304
Seal material in contact with the product	EPDM, FKM, HNBR
Valve disc sealing	Soft-sealing with V-ring
Ambient temperature	0 to 45 °C
Product pressure	See separate table set pressures
Surface in contact with the product	Ra ≤ 0.8 µm
External housing surface	Matte blasted
Actuator type	Adjustable spring
Connection fittings	Welding end
Identification	Adhesive ID tag
Valve seat version	Clamped seat ring
Certificates	



	Pipe	Housing			Actuator	Dimension		Valve	
Nominal width	Ø [mm]	A [mm]	B [mm]	C [mm]	D1 [mm]	H [mm]	X [mm]	Stroke [mm]	Weight [kg]
DN 25	29.0 × 1.5	50.0	58.0	90.0	85	394.0	644.0	10.0	4.6
DN 40	41.0 × 1.5	62.0	64.0	90.0	85	490.0	740.0	15.0	6.6
DN 50	53.0 × 1.5	74.0	70.0	90.0	85	496.0	746.0	27.0	6.8
DN 65	70.0 × 2.0	96.0	83.0	125.0	85	517.0	767.0	30.0	10.8
DN 80	85.0 × 2.0	111.0	90.5	125.0	85	524.5	774.5	30.0	11.0
DN 100	104.0 × 2.0	130.0	100.0	125.0	85	534.0	784.0	30.0	13.9
OD 1"	25.4 × 1.6	46.0	56.0	90.0	85	392.0	642.0	6.0	4.5
OD 1 ½"	38.1 × 1.6	59.0	62.5	90.0	85	491.5	741.5	15.0	6.5
OD 2"	50.8 × 1.6	71.5	69.0	90.0	85	498.0	748.0	27.5	6.7
OD 2 ½"	63.5 × 1.6	90.0	80.0	125.0	85	521.0	771.0	31.0	10.7
OD 3"	76.2 × 1.6	103.0	86.5	125.0	85	527.5	777.5	29.0	10.9
OD 4"	101.6 × 2.0	127.5	99.0	125.0	85	536.0	786.0	30.5	13.6
IPS 2"	60.3 × 2.0	81.0	73.5	114.3	85	492.5	742.5	27.0	7.0
IPS 3"	88.9 × 2.3	115.0	92.5	152.4	85	522.5	772.5	30.0	11.1
IPS 4"	114.3 × 2.3	140.0	105.0	152.4	85	529.0	779.0	30.0	14.1

Position	Description of the order code																		
1	Valve type Q Overflow valve																		
2	Housing combinations A B C E L T																		
3	Valve disc sealing W Soft-sealing (with V-ring) M Metallic (no V-ring)																		
4/5	Nominal width (upper housing/lower housing) <table><tr><td>DN 25</td><td>OD 1"</td><td></td></tr><tr><td>DN 40</td><td>OD 1 ½"</td><td></td></tr><tr><td>DN 50</td><td>OD 2"</td><td>IPS 2"</td></tr><tr><td>DN 65</td><td>OD 2 ½"</td><td></td></tr><tr><td>DN 80</td><td>OD 3"</td><td>IPS 3"</td></tr><tr><td>DN 100</td><td>OD 4"</td><td>IPS 4"</td></tr></table>	DN 25	OD 1"		DN 40	OD 1 ½"		DN 50	OD 2"	IPS 2"	DN 65	OD 2 ½"		DN 80	OD 3"	IPS 3"	DN 100	OD 4"	IPS 4"
DN 25	OD 1"																		
DN 40	OD 1 ½"																		
DN 50	OD 2"	IPS 2"																	
DN 65	OD 2 ½"																		
DN 80	OD 3"	IPS 3"																	
DN 100	OD 4"	IPS 4"																	
6	Actuator type F F-actuator without lifting																		
7	Actuator type F11 F21 F1 F2 F3 F4																		
8	Valve seat version L0 Clamped seat ring/clamp connection																		
9	Seal material in contact with the product 1 EPDM (FDA) 2 FKM (FDA) 3 HNBR (FDA)																		
10	Surface quality of the housing 2 Inside Ra ≤0.8 μm, outside matte blasted																		
11	Connection fittings N Welding end																		
12	Accessories /52 Adhesive ID tag																		
+																			
13–18	Air connection/control and feedback system 00000M Metric for air hose Ø 6/4 mm 00000Z Inch for air hose Ø OD ¼" (6.35/4.35 mm) XXXXX Order code for different control and feedback systems see section 9																		

The code is composed as follows, depending on the chosen configuration:

Position	1	2	3	4/5	6	7	8	9	10	11	12	13 to 18
Code	Q			/	F		L0		2	N	/52	+

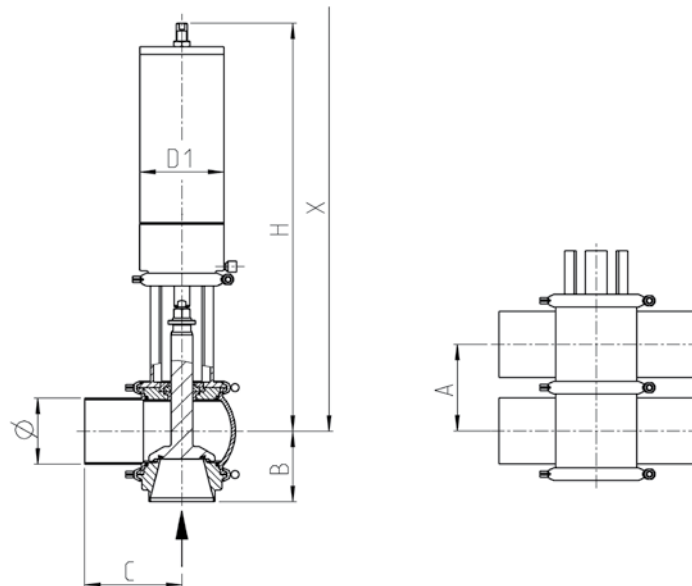
For order codes differing from the standard version, please refer to section 7 (options).



Technical data of the standard version

Recommended flow direction	From bottom to top
Material in contact with the product	1.4404/AISI 316 L
Material not in contact with the product	1.4301/AISI 304
Seal material in contact with the product	EPDM, FKM, HNBR
Valve disc sealing	Soft-sealing with V-ring
Ambient temperature	0 to 45 °C
Air supply pressure	Max. 8 bar (116 psi)
Product pressure	See separate table set pressures
Surface in contact with the product	Ra ≤ 0.8 µm
External housing surface	Matte blasted
Actuator type	Adjustable spring with pneumatic lifting
Connection fittings	Welding end
Identification	Adhesive ID tag
Valve seat version	Clamped seat ring

Certificates



	Pipe	Housing			Actuator	Dimension		Valve	
Nominal width	Ø [mm]	A [mm]	B [mm]	C [mm]	D1 [mm]	H [mm]	X [mm]	Stroke [mm]	Weight [kg]
DN 25	29.0 × 1.5	50.0	58.0	90.0	108	439.0	689.0	10.0	9.5
DN 40	41.0 × 1.5	62.0	64.0	90.0	108	545.0	795.0	15.0	10.3
DN 50	53.0 × 1.5	74.0	70.0	90.0	108	551.0	801.0	27.0	10.5
DN 65	70.0 × 2.0	96.0	83.0	125.0	168	562.0	812.0	30.0	16.8
DN 80	85.0 × 2.0	111.0	90.5	125.0	168	569.5	819.5	30.0	17.0
DN 100	104.0 × 2.0	130.0	100.0	125.0	168	579.0	829.0	30.0	19.9
OD 1"	25.4 × 1.6	46.0	56.0	90.0	108	437.0	687.0	6.0	9.5
OD 1 ½"	38.1 × 1.6	59.0	62.5	90.0	108	546.5	796.5	15.0	10.2
OD 2"	50.8 × 1.6	71.5	69.0	90.0	108	553.0	803.0	27.5	10.5
OD 2 ½"	63.5 × 1.6	90.0	80.0	125.0	168	566.0	816.0	31.0	16.7
OD 3"	76.2 × 1.6	103.0	86.5	125.0	168	572.5	822.5	29.0	16.9
OD 4"	101.6 × 2.0	127.5	99.0	125.0	168	581.0	831.0	30.5	19.6
IPS 2"	60.3 × 2.0	81.0	73.5	114.3	108	547.5	797.5	27.0	10.8
IPS 3"	88.9 × 2.3	115.0	92.5	152.4	168	567.5	817.5	30.0	17.2
IPS 4"	114.3 × 2.3	140.0	105.0	152.4	168	574.0	824.0	30.0	20.1

Position	Description of the order code					
1	Valve type					
	Q	Overflow valve				
2	Housing combinations					
	A	B	C	E	L	T
3	Valve disc sealing					
	W	Soft-sealing (with V-ring)				
	M	Metallic (no V-ring)				
	4/5					
Nominal width (upper housing/lower housing)						
DN 25		OD 1"				
DN 40		OD 1 ½"				
DN 50		OD 2"		IPS 2"		
DN 65		OD 2 ½"				
DN 80		OD 3"		IPS 3"		
DN 100		OD 4"		IPS 4"		
6	Actuator type					
	M	M-actuator with lifting				
7	Actuator type					
	M11					
	M21					
	M1					
	M2					
	M3					
	M4					
	8					
Valve seat version						
L0		Clamped seat ring/clamp connection				
9	Seal material in contact with the product					
	1	EPDM (FDA)				
	2	FKM (FDA)				
	3	HNBR (FDA)				
10	Surface quality of the housing					
	2	Inside Ra ≤0.8 µm, outside matte blasted				
11	Connection fittings					
	N	Welding end				
12	Accessories					
	/52	Adhesive ID tag				
+						
13–18	Air connection/control and feedback system					
	00000M	Metric for air hose Ø 6/4 mm				
00000Z		Inch for air hose Ø OD ¼" (6.35/4.35 mm)				
XXXXX		Order code for different control and feedback systems see section 9				

The code is composed as follows, depending on the chosen configuration:

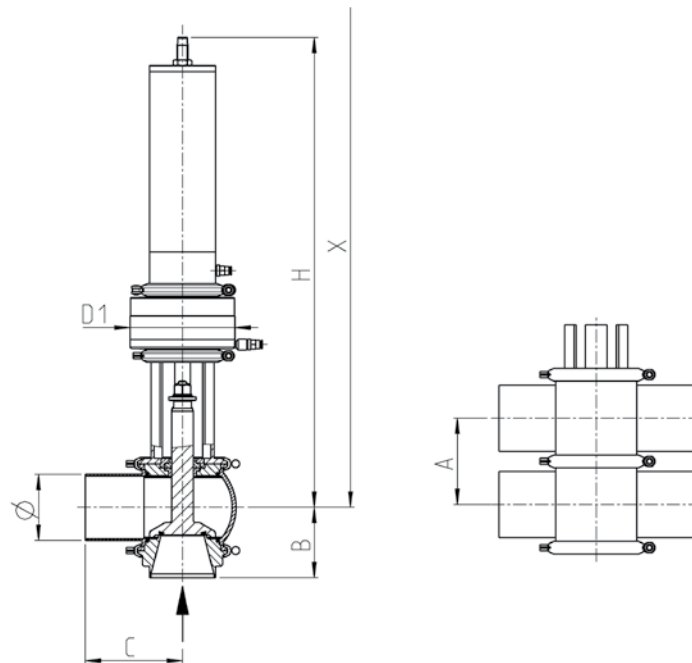
Position	1	2	3	4/5	6	7	8	9	10	11	12	13 to 18
Code	Q			/	M		L0		2	N	/52	+

For order codes differing from the standard version, please refer to section 7 (options).



Technical data of the standard version

Recommended flow direction	From bottom to top
Material in contact with the product	1.4404/AISI 316 L
Material not in contact with the product	1.4301/AISI 304
Seal material in contact with the product	EPDM, FKM, HNBR
Valve disc sealing	Soft-sealing with V-ring
Ambient temperature	0 to 45 °C
Air supply pressure	Max. 8 bar (116 psi)
Product pressure	See separate table set pressures
Surface in contact with the product	Ra ≤ 0.8 µm
External housing surface	Matte blasted
Actuator type	Adjustable spring with pneumatic guard against higher pressures and lifting
Connection fittings	Welding end
Identification	Adhesive ID tag
Valve seat version	Clamped seat ring
Certificates	



	Pipe	Housing			Actuator	Dimension		Valve	
Nominal width	Ø [mm]	A [mm]	B [mm]	C [mm]	D1 [mm]	H1 [mm]	X [mm]	Stroke [mm]	Weight [kg]
DN 25	29.0 × 1.5	50.0	58.0	90.0	135	524.0	774.0	10.0	12.6
DN 40	41.0 × 1.5	62.0	64.0	90.0	135	630.0	880.0	15.0	13.6
DN 50	53.0 × 1.5	74.0	70.0	90.0	135	636.0	886.0	27.0	13.8
DN 65	70.0 × 2.0	96.0	83.0	125.0	135	647.0	897.0	30.0	17.5
DN 80	85.0 × 2.0	111.0	90.5	125.0	135	654.5	904.5	30.0	17.7
DN 100	104.0 × 2.0	130.0	100.0	125.0	135	664.0	914.0	30.0	20.9
OD 1"	25.4 × 1.6	46.0	56.0	90.0	135	522.0	772.0	6.0	12.6
OD 1 ½"	38.1 × 1.6	59.0	62.5	90.0	135	631.5	881.5	15.0	13.5
OD 2"	50.8 × 1.6	71.5	69.0	90.0	135	638.0	888.0	27.5	13.7
OD 2 ½"	63.5 × 1.6	90.0	80.0	125.0	135	651.0	901.0	31.0	17.4
OD 3"	76.2 × 1.6	103.0	86.5	125.0	135	657.5	907.5	29.0	17.6
OD 4"	101.6 × 2.0	127.5	99.0	125.0	135	666.0	916.0	30.5	20.7
IPS 2"	60.3 × 2.0	81.0	73.5	114.3	135	632.5	882.5	27.0	14.0
IPS 3"	88.9 × 2.3	115.0	92.5	152.4	135	652.5	902.5	30.0	17.8
IPS 4"	114.3 × 2.3	140.0	105.0	152.4	135	659.0	909.0	30.0	21.1

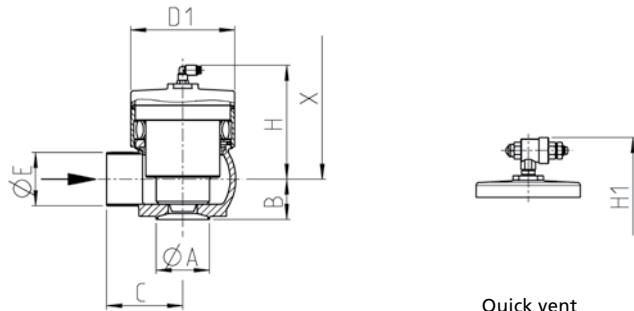
Position	Description of the order code		
1	Valve type		
	Q Overflow valve		
2	Housing combinations		
	A B C E L T		
3	Valve disc sealing		
	W Soft-sealing (with V-ring)		
	M Metallic (no V-ring)		
4/5	Nominal width (upper housing/lower housing)		
	DN 25	OD 1"	
	DN 40	OD 1 ½"	
	DN 50	OD 2"	IPS 2"
	DN 65	OD 2 ½"	
	DN 80	OD 3"	IPS 3"
	DN 100	OD 4"	IPS 4"
6	Actuator type		
	D D-Force		
7	Actuator type		
	F1-CJ		
	F2-CJ		
	F3-CJ		
	F4-CJ		
8	Valve seat version		
	L0 Clamped seat ring/clamp connection		
9	Seal material in contact with the product		
	1 EPDM (FDA)		
	2 FKM (FDA)		
	3 HNBR (FDA)		
10	Surface quality of the housing		
	2 Inside Ra ≤0.8 µm, outside matte blasted		
11	Connection fittings		
	N Welding end		
12	Accessories		
	/52 Adhesive ID tag		
+			
13–18	Air connection/control and feedback system		
	00000M	Metric for air hose Ø 6/4 mm	
	00000Z	Inch for air hose Ø OD ¼" (6.35/4.35 mm)	
	XXXXXX	Order code for different control and feedback systems see section 9	

VARIVENT® Constant Pressure Valve, Type DHV



Technical data of the standard version

Recommended flow direction	From top to bottom
Material housing	1.4404/AISI 316 L
Material valve disc	PTFE (FDA)
Seal material in contact with the product	EPDM, FKM, HNBR
Ambient temperature	0 to 45 °C
Air supply pressure	Max. 8 bar (116 psi)
Product pressure	Max. 10 bar (145 psi)
Surface in contact with the product	Ra ≤ 0.8 µm
External housing surface	Matte blasted
Connection fittings	Welding end
Identification	Adhesive ID tag



	Housing				Actuator	Dimension			Valve		
Nominal width (inlet/outlet)	ØE [mm]	ØA [mm]	B [mm]	C [mm]	D1 [mm]	H [mm]	H1 [mm]	X [mm]	Stroke [mm]	Kvs [m³/h]	Weight [kg]
DN 40/25	41.0	29.0	39	70	76.5	141	161	169	15	4	2.0
DN 40/40	41.0	41.0	39	70	76.5	141	161	169	15	4	2.0
DN 40/40	41.0	41.0	39	70	76.5	141	161	169	15	10	2.0
DN 65/50	70.0	53.0	53	100	137.0	155	175	203	15	16	7.0
DN 65/65	70.0	70.0	53	100	137.0	155	175	200	15	25	6.9
DN 65/65	70.0	70.0	53	100	137.0	155	175	200	15	35	6.9
DN 65/65	70.0	70.0	53	100	137.0	155	175	203	15	60	6.7
OD 1 ½"/1"	38.1	25.4	39	70	76.5	141	161	169	15	4	2.0
OD 1 ½"/1 ½"	38.1	38.1	39	70	76.5	141	161	169	15	4	2.0
OD 1 ½"/1 ½"	38.1	38.1	39	70	137.0	141	161	169	15	10	2.0
OD 2 ½"/2"	63.5	50.8	53	100	137.0	155	175	203	15	16	7.0
OD 2 ½"/2 ½"	63.5	63.5	53	100	137.0	155	175	200	15	25	6.9
OD 2 ½"/2 ½"	63.5	63.5	53	100	137.0	155	175	200	15	35	6.9
OD 2 ½"/2 ½"	63.5	63.5	53	100	137.0	155	175	203	15	60	6.7

VARIVENT® Constant Pressure Valve, Type DHV

Position	Description of the order code			
1	Valve type			
	DHV VARIVENT® constant pressure valve			
2	Nominal width inlet			
	40	DN 40	1.5	OD 1 ½"
	65	DN 65	2.5	OD 2 ½"
3	Connection fitting inlet			
	00 Welding end			
4	Nominal width outlet			
	25	DN 25	1	OD 1"
	40	DN 40	1.5	OD 1 ½"
	50	DN 50	2	OD 2"
	65	DN 65	2.5	OD 2 ½"
5	Connection fitting outlet			
	00 Welding end			
6	Kvs value			
	4			
	10			
	16			
	25			
	35			
	60			
7	Air connection			
	0 Without			
	M Metric Ø 6/4 mm			
	Z Ø G ½"/Ø OD ¼" (standard-US)			
8	Pressure control			
	0 Without			
	1 With quick vent			
	2 With pressure control valve, G ½"*			
9	Seal material in contact with the product			
	1 EPDM (FDA)			
	2 FKM (FDA)			
	3 HNBR (FDA)			

* Only available with air connection Z.

The code is composed as follows, depending on the chosen configuration:

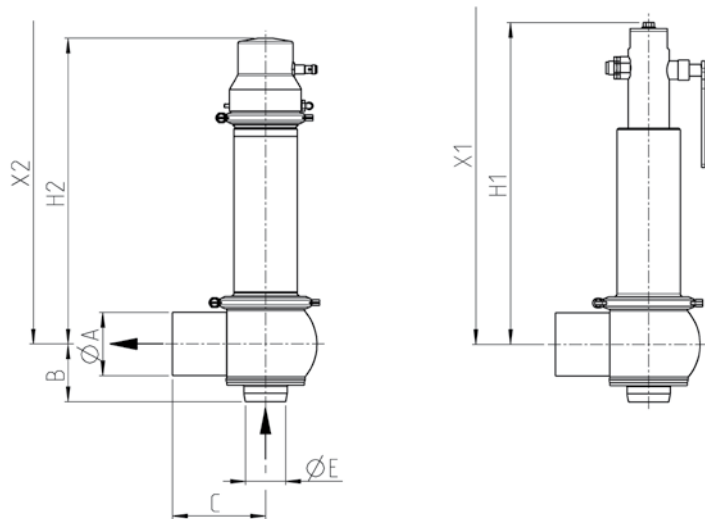
Position	1	2	3	4	5	6	7	8	9									
Code	DHV	-		-	00	/		-	00	-		-		-			-	



Technical data of the standard version

Material in contact with the product	1.4404/AISI 316 L
Material not in contact with the product	1.4310, 1.4401
Seal material in contact with the product	EPDM
Ambient temperature	2 to 60 °C
Air supply pressure	3.5 to 10 bar
Set pressure	0.2 to 16 bar
Surface in contact with the product	Ra ≤ 0.8 µm
External housing surface	Matte blasted
Connection fittings	VARINLINE® grooved flange
Lifting	Manual lifting

Certificates



		Pipe		Housing				Lifting		Valve		
ØE		Ø [mm]	ØA	Flow diameter d ₀ [mm]	Flow cross section A ₀ [mm²]	B [mm]	C [mm]	H (H4) [mm]	H (H8) [mm]	Actuation pressure min. [bar]	Actuation pressure max. [bar]	Weight* [kg]
DN 25		29.0 × 1.5	DN 40	23	416	53.0	90.0	257	265	0.20	16.00	8
DN 40		41.0 × 1.5	DN 65	37	1,075	70.0	125.0	417	444	0.20	16.00	14
DN 50		53.0 × 1.5	DN 80	46	1,662	77.5	125.0	424	451	0.25	15.00	16
DN 65		70.0 × 2.0	DN 100	60	2,827	87.0	125.0	434	461	0.23	10.34	24
DN 80		85.0 × 2.0	DN 125	74	4,301	102.5	150.0	522	584	0.26	10.34	39
DN 100		104.0 × 2.0	DN 150	92	6,648	121.0	152.5	541	603	0.20	8.20	39
OD 1 ½***		29.0 × 1.5	OD 2"	23	416	53.0	90.0	257	265	0.20	16.00	8
OD 2"***		41.0 × 1.5	OD 3"	37	1,075	70.0	125.0	417	444	0.20	16.00	14
OD 2 ½***		53.0 × 1.5	OD 3 ½"	46	1,662	77.5	125.0	424	451	0.25	15.00	16
OD 3"***		70.0 × 2.0	OD 4"	60	2,827	87.0	125.0	434	461	0.23	10.34	24
OD 3 ½***		85.0 × 2.0	OD 5"	74	4,301	102.5	150.0	522	584	0.26	10.34	39
OD 4"***		104.0 × 2.0	OD 6"	92	6,648	121.0	152.5	541	603	0.20	8.20	39

* Weights refer to the valve without connection fitting

** The nominal widths in inch are only available with the connection type clamping flange ISO 2852 (CO)!

Position	Description of the order code	
1	Valve type	
	488	VARIVENT® full stroke safety relief valve
2	Nominal width inlet	
	DN 25	OD 1 ½"
	DN 40	OD 2"
	DN 50	OD 2 ½"
	DN 65	OD 3"
	DN 80	OD 3 ½"
	DN 100	OD 4"
3	Connection type inlet	
	00	Welding end
	TN	VARIVENT® grooved flange incl. O-ring and connecting parts
	CO	Clamp connection/TRI-clamp*
	SO	Clamp connection DIN 32676
	GO	Male end SC, DIN 11851, incl. sealing ring G
	KO	Liner SD, DIN 11851, incl. grooved nut
	VG	VARIVENT® process connection F
	VH	VARIVENT® process connection N
	VE	VARIVENT® process connection G
4	Connection type outlet	
	00	Welding end
	TN	VARIVENT® grooved flange incl. O-ring and connecting parts
	CO	Clamp connection/TRI-clamp*
	SO	Clamp connection DIN 32676
	GO	Male end SC, DIN 11851, incl. sealing ring G
	KO	Liner SD, DIN 11851, incl. grooved nut
5	Lifting	
	H4	Manual lifting
	H8	Pneumatic lifting
6	Certificates	
	–	No approvals
	ASME	ASME VII – US
	A	ASME VIII AD2000 – US
	R	EAC (TR) – Russia
	C	AQSIQ – China
	K	CRN – Canada
7	Accessories	
	/52	Adhesive ID tag
+		
8	Feedback	
	0	Without feedback
	1	One feedback
9	Type of switch	
	–	Without switch
	B	NI 24 V DC 3-wire PNP M12×1
	F	NI 24 V DC 2-wire M12×1
	E	NI 8.2 V DC NAMUR, ATEX M12×1
	X	NI 24 V DC 3-wire NPN M12×1, opener
	I	(J38) with proximity switch holder M12×1 (for DN 25, lifting H4+H8)
	J	(J39) with proximity switch holder M12×1 (for DN 40–100, lifting H4)
	K	(J40) with proximity switch holder M12×1 (for DN 40–100, lifting H8)

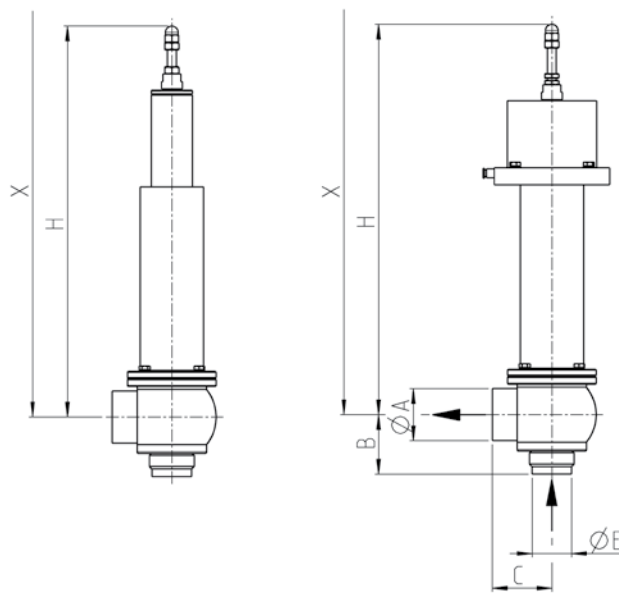
* Connections in OD-nominal widths

The code is composed as follows, depending on the chosen configuration:

Position	1	2	3	4	5	6	7	8	9
Code	488	-		/		-		/52	+


Technical data of the standard version

Material in contact with the product	1.4404/AISI 316 L
Material not in contact with the product	1.4310/AISI 304
Seal material in contact with the product	EPDM
Ambient temperature	-10 to 130 °C
Air supply pressure	6 bar
Set pressure	0.5 to 10 bar
Surface in contact with the product	Ra ≤ 0.8 µm
External housing surface	Electro-polished
Connection fittings	VARINLINE® grooved flange
Certificates	



		Pipe		Housing				Lifting		Valve			
ØE		Ø [mm]	ØA	Flow diameter d ₀ [mm]	Flow diameter d ₀ [mm]	B [mm]	C [mm]	H [mm] without lifting	H [mm] with pneumatic lifting P	Actuation pressure min. [bar]	Actuation pressure max. [bar]	Weight without lifting [kg]	Weight with pneumatic lifting [kg]
DN 25		29.0 × 1.5	DN 40	24	452	43.5	59.5	365	365	0.5	10	4.4	9.9
DN 40		41.0 × 1.5	DN 50	36	1,018	48.5	59.5	480	480	0.5	10	7.2	12.7
DN 50		53.0 × 1.5	DN 65	47	1,735	58.5	79.5	525	525	0.6	10	9.1	16.5
DN 65		70.0 × 2.0	DN 80	61	2,922	59.5	89.5	635	635	0.5	10	12.1	20.6
DN 80		85.0 × 2.0	DN 100	75	4,418	72.5	104.5	698	698	0.5	10	20.8	31.3

Position	Description of the order code
1	Valve type FHCSV02 Spring-loaded safety relief valve
2	Nominal width inlet 25 DN 25 40 DN 40 50 DN 50 65 DN 65 80 DN 80
3	Connection type inlet TN VARIVENT® grooved flange incl. O-ring and connecting parts KO Liner SD, DIN 11851, incl. grooved nut
4	Connection type outlet TN VARIVENT® grooved flange incl. O-ring and connecting parts GO Male end SC, DIN 11851, incl. sealing ring G
5	Lifting H Manual lifting P Pneumatic lifting
6	Options See following pages
+	
7	Feedback 0 Without feedback 1 One feedback
8	Type of switch – Without switch B NI 24 V DC 3-wire PNP M12×1 F NI 24 V DC 2-wire M12×1 E NI 8.2 V DC NAMUR, ATEX M12×1

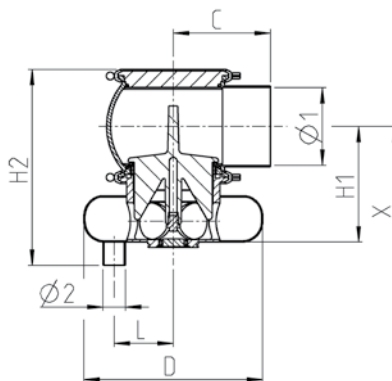
The code is composed as follows, depending on the chosen configuration:

Position	1	2	3	4	5	6	7	8
Code	FHCSV02	-		/		-		+

VARIVENT® Vacuum Valve, Type V



Technical data of the standard version		
Material in contact with the product	1.4404/AISI 316 L	
Material not in contact with the product	1.4301/AISI 304	
Seal material in contact with the product	EPDM, FKM, HNBR	
Ambient temperature	0 to 45 °C	
Air supply pressure	Min. 4 bar (58 psi)	
	Max. 8 bar (116 psi)	
Product pressure	Max. 6 bar (87 psi)	
Surface in contact with the product	DN, OD	Ra ≤ 0.8 µm
	IPS	Ra ≤ 1.2 µm
External housing surface	Matte blasted	
Actuator type	Pneumatic actuator air/spring	
Connection fittings	Welding end	
Identification	Adhesive ID tag	



Nominal width	Pipe		Housing			Dimension			Valve
	Ø1 [mm]	Ø2 [mm]	C [mm]	L [mm]	D [mm]	H1 [mm]	H2 [mm]	X [mm]	Weight [kg]
DN 65	70.0 × 2.0	29	125.0	68	230	126	210	260	6
DN 80	85.0 × 2.0	29	125.0	68	230	133	225	268	6
DN 100	104.0 × 2.0	29	125.0	76	230	152	252	295	8
OD 2 ½"	63.5 × 2.0	29	125.0	68	230	123	204	260	6
OD 3"	76.2 × 1.6	29	125.0	68	230	129	217	268	6
OD 4"	101.6 × 2.0	29	125.0	76	230	150	249	295	8
IPS 6"	168.2 × 2.7	29	152.5	102	285	231	364	417	21

VARIVENT® Vacuum Valve, Type V

Position	Description of the order code		
1	Valve type		
	V	VARIVENT® vacuum valve	
2	Housing combinations		
	L		
3	Supplement to the valve type (further information can be found under options on the reserve)		
	–	Without	
	A	With lifting	
	E	With feedback	
4	R	With lifting and feedback	
	Nominal width		
	DN 65	OD 2 ½"	IPS 6"
	DN 80	OD 3"	
	DN 100	OD 4"	
5	Valve seat version		
	L0	Clamped seat ring/clamp connection	
6	Seal material in contact with the product		
	1	EPDM (FDA)	
	2	FKM (FDA)	
	3	HNBR (FDA)	
7	Surface quality of the housing		
	1	Inside Ra ≤ 1.2 µm, outside matte blasted (IPS)	
	2	Inside Ra ≤ 0.8 µm, outside matte blasted (DN, OD)	
8	Connection fittings		
	N	Welding end	
9	Options		
	/52	Adhesive ID tag	
+			
10	Type of the switch (further information can be found under options on the reverse)		
	0	Without feedback	
	B	NI 24 V DC 3-wire M18×1	
	F	NI 24 V DC 2-wire M18×1	
11	Air connection (further information can be found under options on the reverse)		
	0	Without	
	M	Metric for air hose Ø 6/4 mm	
	Z	Inch for air hose Ø OD ¼" (6.35/4.35 mm)	

The code is composed as follows, depending on the chosen configuration:

Position	1	2	3	4	5	6	7	8	9	10	11
Code	V	L		-	L0	-		N	/52	+	

For order codes differing from the standard version, please refer to section 7 (options).



Typical application and description

For keeping chocolate or margarine fluid and for cooling ice cream.

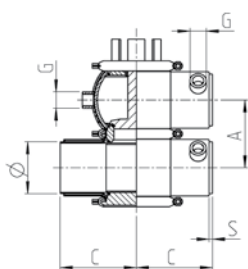
For heating or cooling products, a hot or cold medium is passed through the housing jacket in the opposite flow direction.

The product range includes jacketed valve housings with both one and two vertical ports. However, the housings cannot be supplied for valves with mix-matched nominal widths or a welded seat ring.

Available nominal widths		
Metric	DN	25–100
Inch OD	OD	1"–4"

Available valve types	
VARIVENT® control valve	S
VARIVENT® overflow valve	Q
VARINLINE® housings*	

* Only available for nominal widths DN 25 to DN 50 as well as DN 80 and OD 1" to OD 2"



Technical data	
Material	1.4404/AISI 316 L
Max. product pressure	10 bar 6 bar
Jacket pressure resistance	3.5 bar
Surface in contact with the product	Ra ≤ 0.8 µm
Outside surface	Matte blasted
Valve seat version	Clamped connection

Nominal width	Dimensions						Weight [kg] single vertical ports	Weight [kg] double vertical ports
	Ø [mm]	C [mm]	A [mm]	S [mm]	G [mm]			
DN 25	29 × 1.5	90	50	5	1/4"		0.5	0.7
DN 40	41 × 1.5	90	62	5	1/4"		0.8	1.1
DN 50	53 × 1.5	90	74	5	1/4"		1.0	1.1
DN 65	70 × 2.0	125	96	5	1/2"		2.5	2.7
DN 80	85 × 2.0	125	111	5	1/2"		3.0	3.2
DN 100	104 × 2.0	125	130	5	1/2"		4.1	4.4
OD 1"	25.4 × 1.65	90	46.0	5	1/4"		0.5	0.6
OD 1 1/2"	38.1 × 1.65	90	59.0	5	1/4"		0.8	0.9
OD 2"	50.8 × 1.65	90	71.5	5	1/4"		1.0	1.1
OD 2 1/2"	63.5 × 1.65	125	90.0	5	1/2"		2.3	2.5
OD 3"	76.2 × 1.65	125	103.0	5	1/2"		2.7	2.8
OD 4"	101.6 × 2.11	125	127.5	5	1/2"		4.1	4.0

Incorporation of the option in the order code and example

Position	Description of the order code for options									
*	Accessories									
	/25	Jacketed valve housings								

Position	1	2	3	4/5		6	7	8	9	10	11	12	13	14 to 19							
Code	D	E		DN 80/DN 80		S	Z	CD	L0	1	2	N	/25	/52	+	0	0	0	0	0	M

* According to valve type

Typical application and description

For static use of valves with increased product pressure. For increasing the strength, the half rings on the valve housings are made of cast material and the housings with nominal widths DN 100/OD 4" are made of a higher-quality material.

IMPORTANT: The differential pressure between the product chambers on both sides of the valve disc is not allowed to exceed 10 bar during switching of the valve. The actuator size of the valve must be selected based on the product data.

Available nominal widths		
Metric	DN	25–100
Inch OD	OD	1"–4"

Available valve types	
VARIVENT® control valve	S
VARIVENT® overflow valve	Q

Technical data		
Material	1.4404/AISI 316 L 1.4462	DN 25–80, OD 1"–3" DN 100, OD 4"
Pressure level	PS 20 bar	
Pressure level jacketed housing	PS 16 bar	DN 25–80, OD 1"–3"

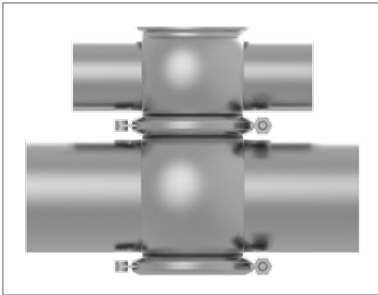
Nominal width	Dimensions		
	Ø [mm]	C [mm]	A [mm]
DN 25	29 × 1.5	90	50
DN 40	41 × 1.5	90	62
DN 50	53 × 1.5	90	74
DN 65	70 × 2.0	125	96
DN 80	85 × 2.0	125	111
DN 100	104 × 2.0	125	130
OD 1"	25.4 × 1.65	90	46.0
OD 1 ½"	38.1 × 1.65	90	59.0
OD 2"	50.8 × 1.65	90	71.5
OD 2 ½"	63.5 × 1.65	125	90.0
OD 3"	76.2 × 1.65	125	103.0
OD 4"	101.6 × 2.11	125	127.5

Incorporation of the option in the order code and example

Position	Description of the order code for options					
*	Accessories					
	/37	PS 20 bar				
	/38	PS 16 bar (jacketed valve housing)				

Position	1	2	3	4/5		6	7	8	9	10	11	12	13	14 to 19							
Code	N	E		DN 80/DN 80		S	Z	CD	L0	1	2	N	/37	/52	+	0	0	0	0	0	M

* According to valve type



Typical application and description

Many mix-matched housings are already available.

For technical reasons, however, a mix-matched combination is not possible for all valve types! If required, please contact GEA Tuchenhausen to ask about the feasibility.

The first mentioned nominal width indicates the upper valve housing, the second one is the nominal width of the lower valve housing. In divert valves, both upper housings are configured with the same nominal width. The larger housing in the mix-matched combination must always be configured as a housing with two vertical ports.

Available nominal widths		
Metric	DN	25–150
Inch OD	OD	1"–6"
Inch IPS	IPS	2"–6"

Available valve types	
VARIVENT® control valve	S
VARIVENT® overflow valve	Q

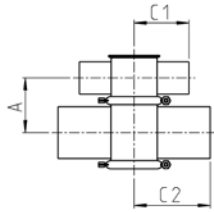
lower housing \ upper housing	DN 25			DN 40			DN 50			DN 65		
	A	C1	C2	A	C1	C2	A	C1	C2	A	C1	C2
DN 25	50	90	90	56	90	90	62	90	90	70	125	90
DN 40	56	90	90	62	90	90	68	90	90	76	125	90
DN 50	62	90	90	68	90	90	74	90	90	82	125	90
DN 65	70	90	125	76	90	125	82	90	125	96	125	125
DN 80	77.5	90	125	83.5	90	125	89.5	90	125	103.5	125	125
DN 100	87	90	125	93	90	125	99	90	125	113	125	125
DN 125	–	–	–	105.5	90	125	111.5	90	125	125.5	125	125
DN 150	–	–	–	118	90	150	124	90	150	138	125	150

lower housing \ upper housing	OD 1"			OD 1 ½"			OD 2"			OD 2 ½"		
	A	C1	C2	A	C1	C2	A	C1	C2	A	C1	C2
OD 1"	46	90	90	52.5	90	90	58.75	90	90	65	125	90
OD 1 ½"	52.5	90	90	59	90	90	65.25	90	90	71.5	125	90
OD 2"	58.75	90	90	65.25	90	90	71.5	90	90	77.75	125	90
OD 2 ½"	65	90	125	71.5	90	125	77.75	90	125	90	125	125
OD 3"	71.5	90	125	78	90	125	84.25	90	125	96.5	125	125
OD 4"	83.75	90	125	90.25	90	125	96.5	90	125	108.75	125	125
OD 6"	–	–	–	116.5	90	150	122.75	90	150	133.5	125	150

lower housing \ upper housing	IPS 2"		
	A	C1	C2
IPS 2"	58.75	90	90
IPS 3"	65.25	90	90
IPS 4"	71.5	90	90
IPS 6"	77.75	90	125

Housing and Nominal Widths

Mix-matched Housing Combinations



Technical data

Material	1.4404/AISI 316 L
Product pressure	10 bar
Valve seat version	Clamped or welded housing connection

DN 80			DN 100			DN 125			DN 150			upper housing	lower housing
A	C1	C2	A	C1	C2	A	C1	C2	A	C1	C2		
77.5	125	90	87	125	90	—	—	—	—	—	—		DN 25
83.5	125	90	93	125	90	105.5	125	90	118	150	90		DN 40
89.5	125	90	99	125	90	111.5	125	90	124	150	90		DN 50
103.5	125	125	113	125	125	125.5	125	125	138	150	125		DN 65
111	125	125	120.5	125	125	133	125	125	145.5	150	125		DN 80
120.5	125	125	130	125	125	142.5	125	125	155	150	125		DN 100
133	125	125	142.5	125	125	155	125	125	167.5	150	125		DN 125
145.5	125	150	155	125	150	167.5	125	150	180	150	150		DN 150

OD 3"			OD 4"			OD 6"			upper housing	lower housing
A	C1	C2	A	C1	C2	A	C1	C2		
71.5	125	90	83.75	125	90	—	—	—		OD 1"
78	125	90	90.25	125	90	116.5	150	90		OD 1 ½"
84.25	125	90	102.5	125	90	122.75	150	90		OD 2"
96.5	125	125	115.25	125	125	133.5	150	125		OD 2 ½"
103	125	125	115.25	125	125	140	150	125		OD 3"
115.25	125	125	127.5	125	125	152.25	150	125		OD 4"
140	125	150	152.25	125	150	177	150	150		OD 6"

IPS 3"			IPS 4"			IPS 6"			upper housing	lower housing
A	C1	C2	A	C1	C2	A	C1	C2		
95	152.5	114.5	107.5	152.5	114.5	133.5	152.5	114.5		IPS 2"
115	152.5	152.5	121.5	152.5	152.5	153.5	152.5	152.5		IPS 3"
127.5	152.5	152.5	140	152.5	152.5	166	152.5	152.5		IPS 4"
153.5	152.5	152.5	166	152.5	152.5	192	152.5	152.5		IPS 6"

Incorporation of the option in the order code and example

Position	Description of the order code for options
4/5	Nominal width (upper housing/lower housing)

Position	1	2	3	4/5	6	7	8	9	10	11	12	13 to 18
Code	Q	E	W	DN 40/DN 50	M	M3	L0	1	2	N	/52	0 0 0 0 0 M

По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48

Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курган (3522)50-90-47
Курск (4712)77-13-04
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Ноябрьск (3496)41-32-12

Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Пермь (342)205-81-47
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саранск (8342)22-96-24
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35

Сыктывкар (8212)25-95-17
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Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
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