


Zero dead volume T-valve, pneumatically operated, stainless steel block material



- Fully integrated in Burkert's Process Control Systems
- Zero dead volume
- Monoblock – no welds
- Quality certifications 

Actuator
with
360° rotation
possibility

Type 2104 can be combined with...



Type 8691

Control Head



Type 8690

Pneum. control unit
with feedback



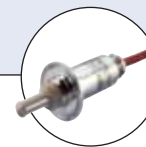
Type 8692

Positioner Top-
Control continuous



Stroke limitation

Min./max. stroke
limitation



Type 8221

Conductivity
sensor

The Bürkert Zero dead volume T-Valve system is designed for control of ultra pure, sterile, aggressive or abrasive fluids. Enables especially optimal sampling, draining or diverting of critical process fluids. The valve body is machined from a single piece of block material (monoblock – no weld seam).

The high quality diaphragms separate hermetically critical fluids from the actuator. The pneumatic actuator can be controlled by pneumatic pilot valves (single pilot valves, valve islands and control heads). Control function A, normally closed by spring return.

Technical data			
Orifice	DN 8 to 50		
Body material	<ul style="list-style-type: none"> ▪ Stainless steel 1.4435 / 316 L ▪ Stainless steel 1.4435BN2 / ASME BPE Fe < 0.5% / C ≤ 0.03%		
Seal materials	EPDM, PTFE/EPDM, advanced PTFE/EPDM, FKM		
Actuator material	Actuator	PPS	
	Cover	Stainless steel 1.4561 (316Ti)	
Pilot air ports	Stainless steel 1.4305		
Surface finish	Ra [µm]	Ra [µlnch]	Ra [Grit #]
	internal	internal	internal
mechanical polished	0.6	25	180
electro polished	0.6	25	180
mirror finished	0.25	10	330
Media temperature	EPDM, PTFE/EPDM, advanced PTFE/EPDM ¹⁾ FKM		
	-10 to +130 °C (briefly up to +150 °C for steam sterilisation) -10 to +130 °C		
Ambient temperature	+5 to +60 °C		
Control medium	Neutral gases, air		
Max. pilot pressure	max. 10 bar; Actuator size 130 mm 7 bar		
Port connections	<ul style="list-style-type: none"> ▪ DIN EN ISO 1127 / ISO 4200 / DIN 11866 Series B ▪ DIN 11850 Series 2 / DIN 11866 Series A ▪ ASME BPE / DIN 11866 Series C ▪ DIN 32676 Series A (DIN tube) ▪ DIN 32676 Series B (ISO tube) ▪ ASME BPE 		
	Weld end		
	Clamp		
Installation for self-draining	Inclined 3 to 5° downwards		

¹⁾ Advanced PTFE/EPDM is recommended for sterilization cycle

Content



Valve specifications

Type 2104

Technical data & ordering info. p. 1-9



System ELEMENT

Type 8801/8803

Ordering info. & technical data p.9-11

Request for quotation

Type 8801/8803-TB

p. 12

Technical data valves

Kv-values

Port size		Kv value water (m ³ /h)	Actuator size Ø [mm]	Permitted pilot pressure [bar]		Max. operating pressure [bar] for seal material	
[mm]	[Zoll]			min.	max.	EPDM, FKM [bar]	PTFE/EPDM, advanced PTFE/ EPDM [bar]
8	1/4"	1.0	50	5	10	10	10
10	3/8"	1.0	50	5	10	10	10
15	1/2"	5.5	70	5	10	10	10
20	3/4"	10.0	70	5	10	10	10
25	1"	14.0	70	5	10	6.5	6
			90	5.5	10	10	8
40	1 1/2"	30.0	130	5.0	7	10	10
50	2"	51.5	130	5.0	7	8	7

Flow: Kv-value water (m³/h)

Measured at +20°C, 1 bar pressure at valve inlet and free outlet.

Statement of pressure (bar)

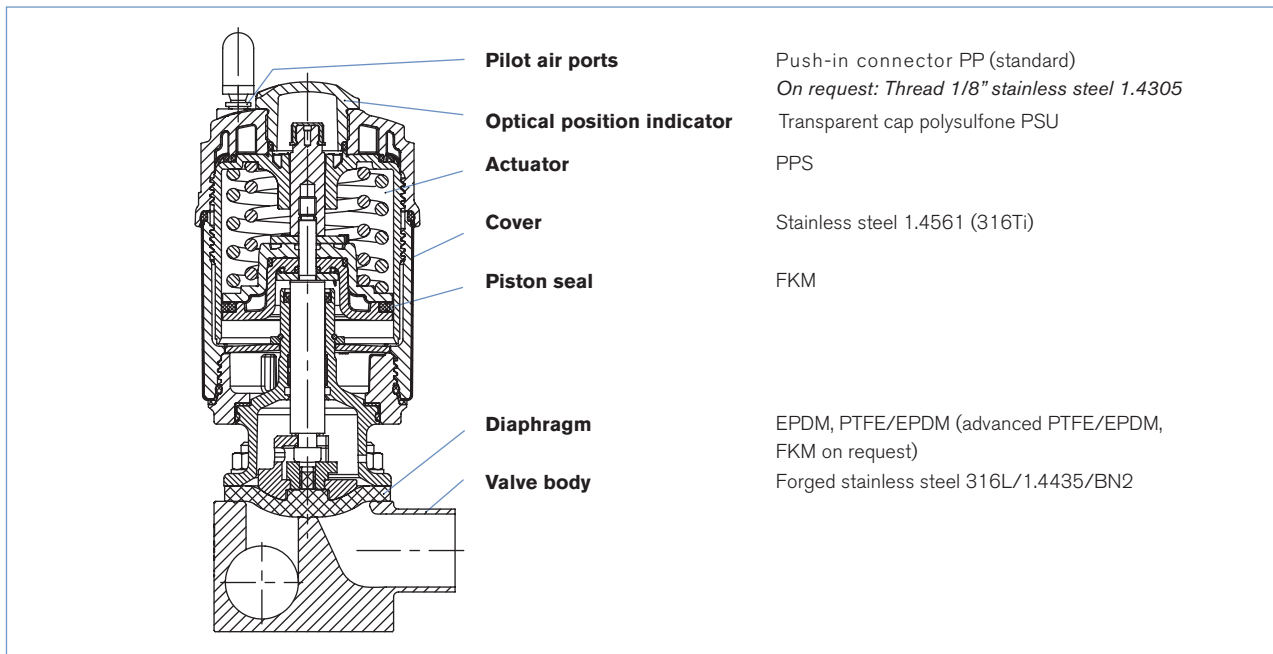
Gauge pressures with respect to the prevailing atmospheric pressure.

Approvals/certifications

- Certification of Conformity for Raw Material EN-ISO 10204 3.1
- Attestation of compliance with the order EN-ISO 10204 2.1
- Test report EN-ISO 10204 2.2
- 3A certification on request
- Certification of Conformity for Pickling and Electropolishing Processes
- Certification of Conformity for the Surface Quality DIN4762-DIN4768-ISO/4287/1
- Certification for the fulfillment of FDA CFR No. 21.177.1550 for PTFE/EPDM and advanced PTFE/EPDM and 21.177.2600 for EPDM
- USP CLASS VI certification for EPDM and PTFE diaphragm
- Test Certification and Conformity Certification for the Final Assembly of Diaphragm Valves
- ISO 9001 Certification

Note: Retrospective manufacturing certification for process diaphragm valves can not be made, therefore please notify when ordering.

Materials



Example of available diaphragm materials

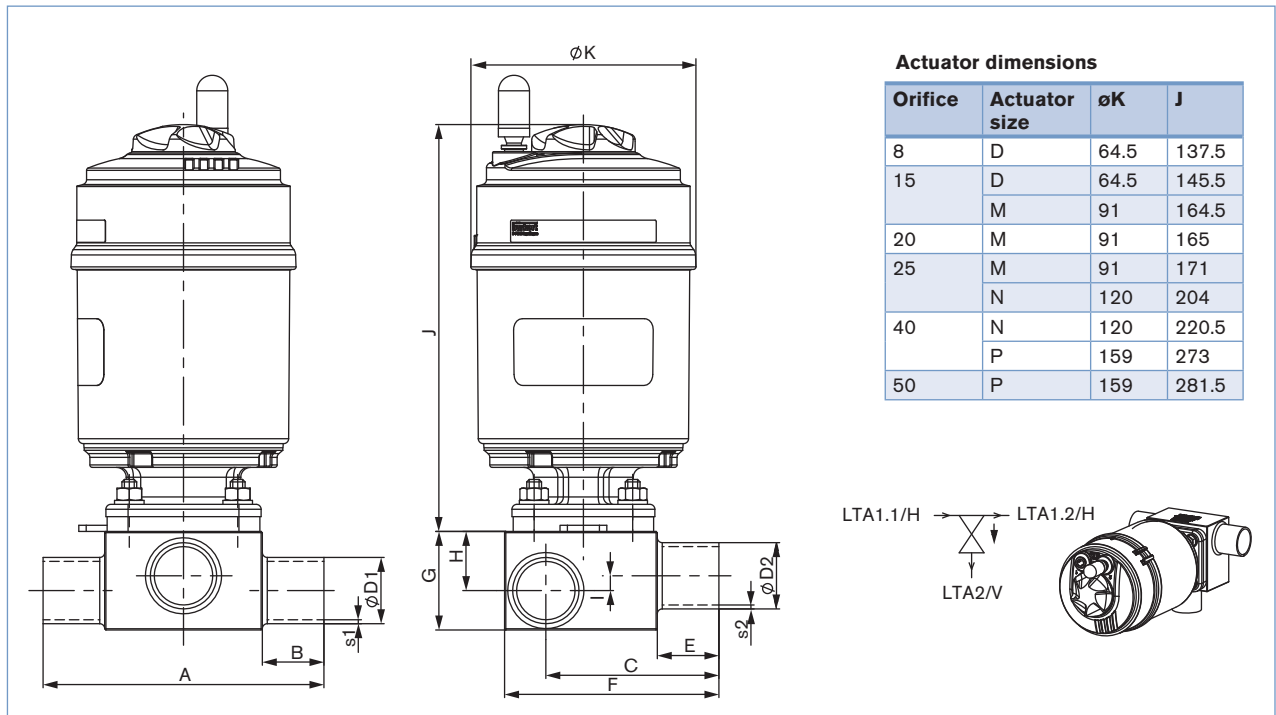
Developed to handle the unique challenges of hygienic and sterile applications, Bürkert offers diaphragms with precise material formula and physical tolerances. Bürkert diaphragms are available in a wide range of materials which have been proven in food & beverage, biotechnology, pharmaceutical and cosmetic industry applications. Bürkert diaphragms are available in a wide range of materials which have been proven in food & beverage, biotechnology, pharmaceutical and cosmetic industry applications. Diaphragms are tested during development and production to ensure reliability in critical processing environments.



- EPDM (Ethylene Propylene Rubber)
- PTFE/EPDM
- advanced PTFE/EPDM
- FKM
- PTFE/FKM

Dimensions [mm]

Body with weld end acc. to DIN EN ISO 1127 / ISO 4200 / DIN 11866 Series B



DN-Sitz	LTA1-LTA2	ANTG	øD1 ±0.1	s1 ±0.1	øD2 ±0.1	s2 ±0.1	A ±0.3	B	C	E	F	G	H	I
08.0	08 - 08	D	13.5	1.6	13.5	1.6	78.0	20	47.15	20	60	24	15	5.0
	10 - 08		17.2	1.6	13.5	1.6	78.0	20	49.00	20	60	29	18	8.0
	10 - 10		17.2	1.6	17.2	1.6	78.0	20	49.00	20	60	29	18	8.0
	15 - 08		21.3	1.6	13.5	1.6	78.0	20	51.05	20	64	34	21	11.0
	15 - 10		21.3	1.6	17.2	1.6	78.0	20	51.05	20	64	34	21	11.0
	20 - 08		26.9	1.6	13.5	1.6	88.0	25	53.85	20	70	38	23	13.0
	20 - 10		26.9	1.6	17.2	1.6	88.0	25	53.85	20	70	38	23	13.0
	25 - 08		33.7	2.0	13.5	1.6	88.0	25	56.85	20	76	45	26	16.0
	25 - 10		33.7	2.0	17.2	1.6	88.0	25	56.85	20	76	45	26	16.0
	32 - 08		42.4	2.0	13.5	1.6	88.0	25	61.20	20	84	52	29	19.0
	32 - 10		42.4	2.0	17.2	1.6	88.0	25	61.20	20	84	52	29	19.0
	40 - 08		48.3	2.0	13.5	1.6	88.0	25	64.15	20	90	57	31	21.0
	40 - 10		48.3	2.0	17.2	1.6	88.0	25	64.15	20	90	57	31	20.0
	50 - 08		60.3	2.0	13.5	1.6	98.0	30	70.15	20	102	66	34	24.0
	50 - 10		60.3	2.0	17.2	1.6	98.0	30	70.15	20	102	66	34	24.0
	65 - 08		76.1	2.0	13.5	1.6	98.0	30	78.05	20	118	80	40	30.0
	80 - 08		88.9	2.3	13.5	1.6	98.0	30	84.15	20	131	92	46	36.0
80 - 10	88.9	2.3	17.2	1.6	98.0	30	84.15	20	131	92	46	35.0		

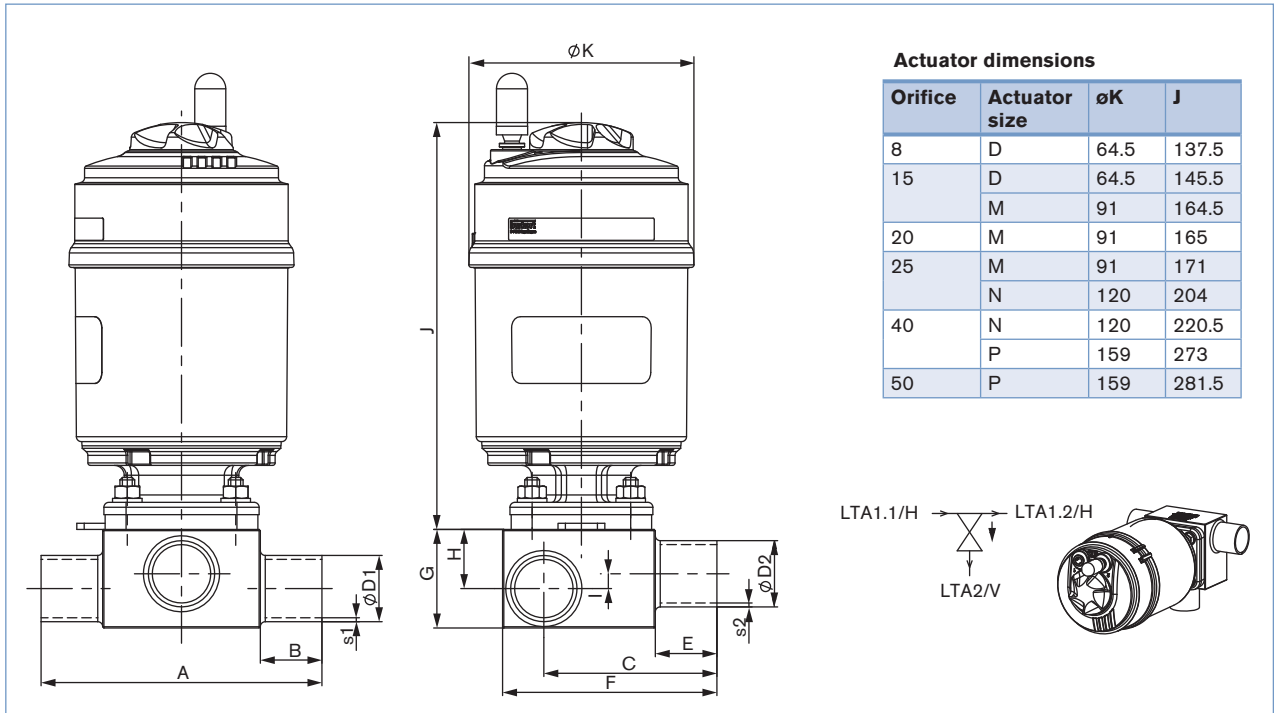
Dimensions [mm], continued

Body with weld end acc. to DIN EN ISO 1127 / ISO 4200 / DIN 11866 Series B

DN-Sitz	LTA1-LTA2	ANTG	øD1 ±0.1	s1 ±0.1	øD2 ±0.1	s2 ±0.1	A ±0.3	B	C	E	F	G	H	I
15.0	08 - 08	D / M	13.5	1.6	13.5	1.6	93.0	20	52.05	20	70	27	17	4.5
	10 - 08		17.2	1.6	13.5	1.6	93.0	20	53.90	20	70	31	18	4.5
	10 - 10		17.2	1.6	17.2	1.6	93.0	20	54.90	20	70	28	16	2.5
	15 - 08		21.3	1.6	13.5	1.6	93.0	20	56.95	20	71	34.5	21	7.5
	15 - 15		21.3	1.6	21.3	1.6	93.0	20	55.95	20	71	35	21	6.5
	20 - 08		26.9	1.6	13.5	1.6	103.0	25	59.75	20	76	41	25	11.5
	20 - 10		26.9	1.6	17.2	1.6	103.0	25	59.75	20	78	42	25	11.5
	20 - 15		26.9	1.6	21.3	1.6	103.0	25	58.75	20	78	42	25	11.5
	25 - 10		33.7	2.0	17.2	1.6	103.0	25	62.75	20	83	48	28	14.5
	25 - 15		33.7	2.0	21.3	1.6	103.0	25	62.75	20	82	47	28	14.5
	32 - 08		42.4	2.0	13.5	1.6	103.0	25	67.10	20	91	56	32	18.5
	32 - 10		42.4	2.0	17.2	1.6	103.0	25	67.10	20	91	56	32	18.5
	32 - 15		42.4	2.0	21.3	1.6	103.0	25	67.10	20	91	56	32	18.5
	40 - 08		48.3	2.0	13.5	1.6	103.0	25	69.05	20	97	61	34	20.5
	40 - 10		48.3	2.0	17.2	1.6	103.0	25	70.05	20	97	63	35	21.5
	40 - 15		48.3	2.0	21.3	1.6	103.0	25	69.05	20	97	63	35	21.5
	50 - 08		60.3	2.0	13.5	1.6	113.0	30	76.05	20	109	71	38	24.5
	50 - 10		60.3	2.0	17.2	1.6	113.0	30	76.05	20	109	72	38	24.5
	50 - 15		60.3	2.0	21.3	1.6	113.0	30	76.05	20	109	72	38	24.5
	65 - 08		76.1	2.0	13.5	1.6	113.0	30	83.95	20	125	85	44	30.5
65 - 15	76.1	2.0	21.3	1.6	113.0	30	83.95	20	125	85	44	30.5		
80 - 08	88.9	2.3	13.5	1.6	113.0	30	90.05	20	140	99	52	38.5		
80 - 10	88.9	2.3	17.2	1.6	113.0	30	90.05	20	137	94	47	33.5		
80 - 15	88.9	2.3	21.3	1.6	113.0	30	90.05	20	137	94	47	33.5		
100 - 15	114.3	2.3	21.3	1.6	113.0	30	102.75	20	163	120	60	46.5		
20.0	20 - 20	M	26.9	1.6	26.9	1.6	114.0	25	70.25	25	88	42	24	6.0
	25 - 20		33.7	2.0	26.9	1.6	114.0	25	73.25	25	94	48	28	10.0
	32 - 20		42.4	2.0	26.9	1.6	114.0	25	78.60	25	102	57	33	15.0
	40 - 20		48.3	2.0	26.9	1.6	114.0	25	80.55	25	108	63	35	17.0
	50 - 20		60.3	2.0	26.9	1.6	124.0	30	86.55	25	121	74	40	22.0
	65 - 20		76.1	2.0	26.9	1.6	124.0	30	94.45	25	136	86	45	27.0
	80 - 20		88.9	2.3	26.9	1.6	124.0	30	100.55	25	148	94	47	29.0
	100 - 20		114.3	2.3	26.9	1.6	124.0	30	113.25	25	173	120	60	42.0
25.0	25 - 25	M / N	33.7	2.0	33.7	2.0	124.5	25	78.55	25	98	53	33	13
	32 - 25		42.4	2.0	33.7	2.0	124.5	25	82.9	25	107	62	38	18
	40 - 25		48.3	2.0	33.7	2.0	124.5	25	85.85	25	114	69	41	21
	50 - 25		60.3	2.0	33.7	2.0	134.5	30	91.85	25	125	78	45	25.0
	65 - 25		76.1	2.0	33.7	2.0	134.5	30	99.75	25	142	94	52	32.0
	80 - 25		88.9	2.3	33.7	2.0	134.5	30	105.85	25	153	101	54	34.0
	150 - 25		168.3	2.6	33.7	2.0	134.5	30	145.25	25	232	174	87	67.0
40.0	32 - 32	M / P	42.4	2.0	42.4	2.0	152.0	25	97.00	25	122	62	37	8.4
	40 - 32		48.3	2.0	42.4	2.0	152.0	25	99.95	25	128	68	41	12.4
	40 - 40		48.3	2.0	48.3	2.0	152.0	25	99.95	25	128	68	41	12.4
	50 - 32		60.3	2.0	42.4	2.0	162.0	30	105.95	25	140	82	48	19.4
	50 - 40		60.3	2.0	48.3	2.0	162.0	30	105.95	25	140	82	48	19.4
	65 - 40		76.1	2.0	48.3	2.0	162.0	30	113.85	25	155	97	55	26.4
	80 - 32		88.9	2.3	42.4	2.0	162.0	30	119.95	25	168	108	60	31.4
	80 - 40		88.9	2.3	48.3	2.0	162.0	30	119.95	25	168	108	60	31.4
	100 - 32		114.3	2.3	42.4	2.0	162.0	30	132.65	25	193	129	68	39.4
	100 - 40		114.3	2.3	48.3	2.0	162.0	30	132.65	25	193	129	68	39.4
50.0	50 - 50	P	60.3	2.0	60.3	2.0	188.0	30	120.15	30	154	82	48	12.5
	65 - 50		76.1	2.0	60.3	2.0	188.0	30	128.05	30	172	100	56	20.5
	80 - 50		88.9	2.3	60.3	2.0	188.0	30	134.15	30	183	110	61	25.5
	100 - 50		114.3	2.3	60.3	2.0	188.0	30	146.85	30	208	131	70	34.5
	150 - 50		168.3	2.6	60.3	2.0	188.0	30	173.55	30	261	176	88	52.5

Dimensions [mm]

Diaphragm valve with T-body, ASME Version

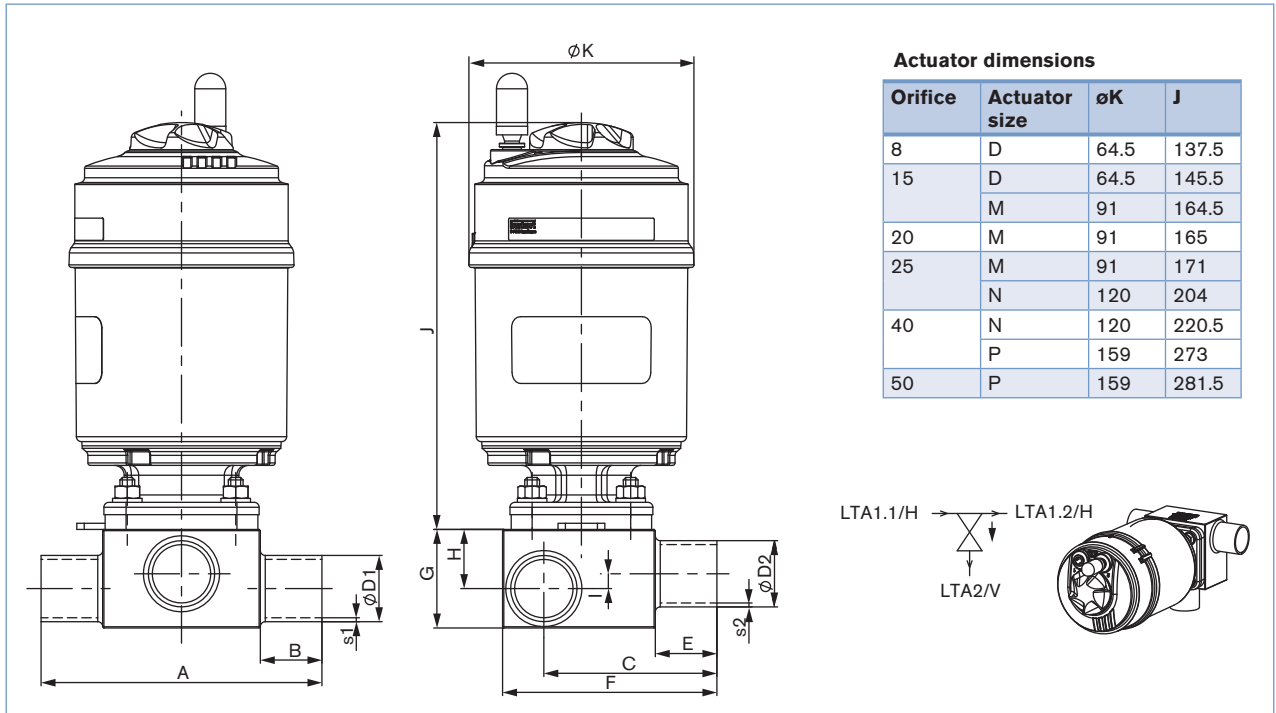


DTS 1000204566 EN Version: C Status: RL (released | freigegeben | valide) printed: 19.01.2015

DN-Sitz	LTA1-LTA2	ANTG	øD1 ±0.1	s1 ±0.1	øD2 ±0.1	s2 ±0.1	A ±0.3	B	C	E	F	G	H	I
0.8	20 - 08	D	19.05	1.65	6.35	0.89	88.0	25	49.88	20	61	32	20	10.0
	25 - 10		25.40	1.65	9.53	0.89	78.0	20	53.05	20	68	38	23	13.0
	40 - 08		38.10	1.65	6.35	0.89	88.0	25	59.40	20	80	49	28	18.0
	50 - 08		50.80	1.65	6.35	0.89	98.0	30	65.75	20	93	59	32	22.0
	65 - 08		63.50	1.65	6.35	0.89	98.0	30	72.10	20	106	70	36	26.0
15.0	15 - 15	D / M	12.70	1.65	12.70	1.65	93.0	20	51.60	20	70	27	13.5	0.0
	20 - 15		19.05	1.65	12.70	1.65	103.0	20	54.78	20	70	31	18.5	5.0
	25 - 15		25.40	1.65	12.70	1.65	103.0	20	57.95	20	75	40	24	10.5
	40 - 15		38.10	1.65	12.70	1.65	103.0	25	64.30	20	88	54	31	17.5
	50 - 15		50.80	1.65	12.70	1.65	113.0	30	71.65	20	100	64	35	21.5
	65 - 15		63.50	1.65	12.70	1.65	113.0	30	78.80	20	113	73	38	24.5
	80 - 15		76.20	1.65	12.70	1.65	113.0	30	84.35	20	125	85	44	30.5
20.0	20 - 20	M	19.05	1.65	19.05	1.65	114.0	25	66.28	25	85	36	18	0.0
	25 - 20		25.40	1.65	19.05	1.65	114.0	25	69.45	25	90	40	24	6.0
	40 - 20		38.10	1.65	19.05	1.65	114.0	25	75.80	25	98	53	31	13.0
	50 - 20		50.80	1.65	19.05	1.65	124.0	30	82.15	25	111	66	37	19.0
	65 - 20		63.50	1.65	19.05	1.65	124.0	30	88.50	25	123	75	40	22.0
	80 - 20		76.20	1.65	19.05	1.65	124.0	30	94.85	25	137	87	45	27.0
	100 - 20		101.60	2.11	19.05	1.65	124.0	30	107.09	25	161	108	54	36.0
25.0	25 - 25	M / N	25.40	1.65	25.40	1.65	124.5	25	74.75	25	95	42	26	6.0
	40 - 25		38.10	1.65	25.40	1.65	124.5	25	81.10	25	103	58	36	16.0
	50 - 25		50.80	1.65	25.40	1.65	134.5	30	87.45	25	120	75	44	24.0
	65 - 25		63.50	1.65	25.40	1.65	134.5	30	93.80	25	130	83	48	28.0
	80 - 25		76.20	1.65	25.40	1.65	134.5	30	100.15	25	142	94	52	32.0
40.0	40 - 40	N / P	38.10	1.65	38.10	1.65	152.0	25	95.20	25	121	58	35	6.4
	50 - 40		50.80	1.65	38.10	1.65	162.0	30	101.55	25	131	72	43	14.4
	65 - 40		63.50	1.65	38.10	1.65	162.0	30	107.90	25	143	85	50	21.4
	80 - 40		76.20	1.65	38.10	1.65	162.0	30	114.25	25	156	98	56	27.4
50.0	50 - 50	P	50.80	1.65	50.80	1.65	188.0	30	115.75	30	145	71	42	6.5
	65 - 50		63.50	1.65	50.80	1.65	188.0	30	122.10	30	157	85	50	14.5
	65 - 65		63.50	1.65	63.50	1.65	188.0	30	122.10	30	158	86	50	14.5
	80 - 50		76.20	1.65	50.80	1.65	188.0	30	128.45	30	169	98	56	20.5
	100 - 65		101.60	2.11	63.50	1.65	188.0	30	140.69	30	195	120	66	30.5

Dimensions [mm]

Diaphragm valve with T-body acc. to DIN 11850 Series 0 and series 2 / DIN 11866 Series A



DIN 11850 S.0 version

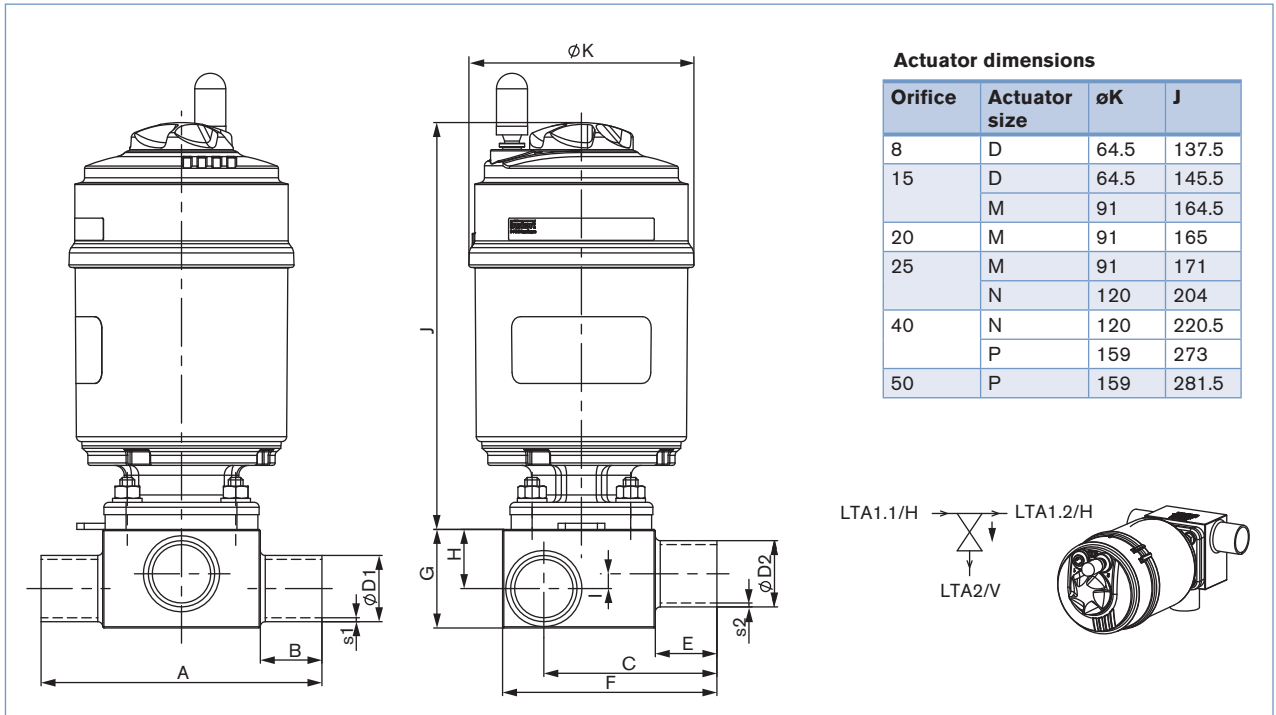
DN-Sitz	LTA1-LTA2	ANTG	ØD1 ±0.1	s1 ±0.1	ØD2 ±0.1	s2 ±0.1	A ±0.3	B	C	E	F	G	H	I
08.0	04 - 04	D	6.0	1.0	6.0	1.0	78.0	20	43.0	20	60	17	6.5	0.0
	06 - 06		8.0	1.0	8.0	1.0	75.0	17.5	46.5	20	60	13	7	0.0
	40 - 04		40.0	1.5	6.0	1.0	88.0	25	60.5	20	83	51	29	19.0
	40 - 08		40.0	1.5	10.0	1.0	88.0	25	60.5	20	83	51	29	19.0
	50 - 04		52.0	1.5	6.0	1.0	98.0	30	66.5	20	95	60	32	22.0
15.0	50 - 15	D / M	52.0	1.5	18.0	1.5	113.0	30	72.4	20	101	65	36	22.5
25.0	25 - 25	M / N	28.0	1.5	28.0	1.5	124.5	25	76.2	25	95	46	29	9.0
	50 - 25		52.0	1.5	28.0	1.5	134.5	30	88.2	25	117	71	42	22.0
40.0	25 - 32	N / P	28.0	1.5	34.0	1.5	152.0	25	90.3	25	122	58	32	3.4
	50 - 32		52.0	1.5	34.0	1.5	162.0	30	102.3	25	132	75	45	16.4
50.0	50 - 50	P	52.0	1.5	52.0	1.5	188.0	30	116.5	30	147	73	43	7.5

DIN 11850 S.2 version

DN-Sitz	LTA1-LTA2	ANTG	ØD1 ±0.1	s1 ±0.1	ØD2 ±0.1	s2 ±0.1	A ±0.3	B	C	E	F	G	H	I
08.0	10 - 10	D	13.0	1.5	13.0	1.5	78.0	20	47.0	20	60	24	15	5.0
	20 - 10		23.0	1.5	13.0	1.5	88.0	25	52.0	20	66	36	22	12.0
15.0	15 - 15	D / M	19.0	1.5	19.0	1.5	93.0	20	54.9	20	70	33	20	6.5
	20 - 15		23.0	1.5	19.0	1.5	103.0	20	56.9	20	72	37	22.5	8.5
	25 - 15		29.0	1.5	19.0	1.5	103.0	25	60.9	20	78	43	26	12.5
	32 - 15		35.0	1.5	19.0	1.5	103.0	25	62.9	20	84	50	29	14.5
	40 - 15		41.0	1.5	19.0	1.5	103.0	25	65.9	20	91	56	32	18.5
	50 - 15		53.0	1.5	19.0	1.5	113.0	30	72.9	20	102	65	36	22.5
20.0	20 - 20	M	23.0	1.5	23.0	1.5	114.0	25	68.4	25	88	42	21	3.0
	32 - 20		35.0	1.5	23.0	1.5	114.0	25	74.4	25	95	50	29	11.0
	40 - 20		41.0	1.5	23.0	1.5	114.0	25	77.4	25	101	56	32	14.0
25.0	25 - 25	M / N	29.0	1.5	29.0	1.5	124.5	25	76.7	25	98	48	30	10.0
	40 - 25		41.0	1.5	29.0	1.5	124.5	25	82.7	25	106	61	38	18.0
	50 - 25		53.0	1.5	29.0	1.5	134.5	30	88.7	25	120	73	44	24.0
40.0	32 - 32	N / P	35.0	1.5	35.0	1.5	152.0	25	93.8	25	121	52	31	2.4
	40 - 40		41.0	1.5	41.0	1.5	152.0	25	96.8	25	121	62	37	8.4
	50 - 40		53.0	1.5	41.0	1.5	162.0	30	102.8	25	133	75	45	16.4
50.0	50 - 50	P	53.0	1.5	53.0	1.5	188.0	30	117.0	30	147	74	44	8.5

Dimensions [mm], continued

Diaphragm valve with T-Body, SMS 3008

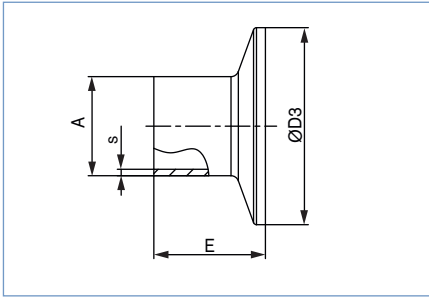


SMS Version

DN-Sitz	LTA1-LTA2	ANTG	ØD1 ±0.1	s1 ±0.1	ØD2 ±0.1	s2 ±0.1	A ±0.3	B	C	E	F	G	H	I
25.0	25 - 25	M / N	25.0	1.2	25.0	1.2	124.5	25	75.0	25	95	43	27	7.0
	40 - 25		38.0	1.2	25.0	1.2	124.5	25	81.5	25	103	58	36	16.0
	50 - 25		51.0	1.2	25.0	1.2	134.5	30	88.0	25	118	72	42	22.0
40.0	40 - 40	N / P	38.0	1.2	38.0	1.2	152.0	25	95.6	25	121	58	35	6.4
	50 - 40		51.0	1.2	38.0	1.2	162.0	30	102.1	25	131	73	44	15.4
50.0	50 - 50	P	51.0	1.2	51.0	1.2	188.0	30	116.3	30	147	73	43	7.5

Dimensions [mm], continued

Clamp body



ASME BPE

Orifice [mm]	Orifice [Zoll]	A	s	D3	E
08	1/4"	6.35	0.89	25.0	28.6
10	3/8"	9.53	0.89	25.0	28.6
15	1/2"	12.7	1.65	25.0	28.6
20	3/4"	19.05	1.65	25.0	28.6
25	1"	25.4	1.65	50.5	28.6
40	1 1/2"	38.1	1.65	50.5	28.6
50	2"	50.8	1.65	64.0	28.6
65	2 1/2"	63.5	1.65	77.5	28.6
80	3"	76.2	1.65	91.0	28.6
100	4"	101.6	2.11	119.0	28.6

DIN 32676 Series A (DIN tube)

Orifice [mm]	A	s	D3	E
10	18	1.5	34.0	18
15	19	1.5	34.0	18
20	23	1.5	34.0	18
25	29	1.5	50.5	21.5
32	35	1.5	50.5	21.5
40	41	1.5	50.5	21.5
50	53	1.5	64.0	21.5
65	70	2.0	91.0	28

DIN 32676 Series B (ISO tube)

Orifice [mm]	A	s	D3	E
8	13.5	1.6	25.0	28.6
8	13.5	1.6	34.0	28.6
10	17.2	1.6	34.0	28.6
15	21.3	1.6	34.0	28.6
15	21.3	1.6	50.5	28.6
20	26.9	1.6	50.5	28.6
25	33.7	2	50.5	28.6
32	42.4	2	50.5	28.6
40	48.3	2	64.0	28.6
50	60.3	2	77.5	28.6
65	76.1	2	91.0	28.6
100	114.3	2.3	130.0	28.6

SMS

Orifice [mm]	A	s	D3	E
25	25	1.2	50.5	21.5
40	38	1.2	50.5	28.6
50	51	1.2	64.0	28.6

Ordering information for Valve system On/Off Element Type 8801-TB/8803-TB

A valve system On/Off Element Type 8801-TB/8803-TB consists of a T valve Type 2104 and a valve actuation system control head Type 8691 or 8695, a pneumatic control unit Type 8690 or 8697 (see separate datasheets).

For the configuration of further valve systems please use the "Request for quotation" on p. 12

[go to page](#)

You order two components and receive a complete assembled and certified valve.

System On/Off Element 8801-TB/8803-TB

T valve Type 2104



Control Heads



Control Units



T valve with desired control head and units



Valve system On/Off Classic
Type 8801-TB-H 2104 + 8691
Type 8801-TB-M 2104 + 8695



Valve system On/Off Classic
Type 8801-TB-K 2104 + 8690
Type 8801-TB-U 2104 + 8697

When you click on the orange box "More info." below, you will come to our website for the resp. product where you can download the datasheet.

Control Head Type 8691



More info.

The new generation of integrated control heads for combination with actuators from the process valve series Type 20xx/21xx is specially designed for the requirements of hygienic process environments. The intelligent control head, Type 8691, detects the valve position by means of a contact-free analog position sensor circumventing excessive wear of mechanical parts. Single or double-acting actuators are controlled via the integral pilot valve. Communication interfaces AS-Interface and DeviceNet are available as options.

Main customer benefits:

- Automatic setting of the control head at the push of a button
- Even under dirty or dark environments, a clearly visible status display due to powerful LEDs
- Monitoring and diagnosis: Process valve systems with field bus interface used in modern plant processes
- Integrated pilot valve with manual actuation
- Air intake filter enhances the process valve system availability
- Simple and reliable actuator adaption
- Adaptable to a wide range of 3rd Party actuators

Control Head Type 8695



More info.

The new generation of integrated control heads for combination with small actuators from the process valve series Type 21xx is specially designed for the requirements of hygienic process environments. The intelligent control head, Type 8695, detects the valve position by means of a contact-free analog position sensor circumventing excessive wear of mechanical parts. Single and double-acting actuators are controlled via the integral pilot valve. The option of AS interface communication is available.

Main customer benefits:

- Compact, hygienic designed valve system with integrated controller meets the requirements of cleanliness through choice of materials, external seals and integrated control air supply to the actuator
- Automatic setting of the control head at the push of a button
- Visual status display on the control head
- Monitoring and diagnosis: Process valve systems with fieldbus interface for modern process landscape
- Integrated pilot valve
- Simple and reliable actuator adaption

Pneumatic control unit Type 8690 or 8697



More info.



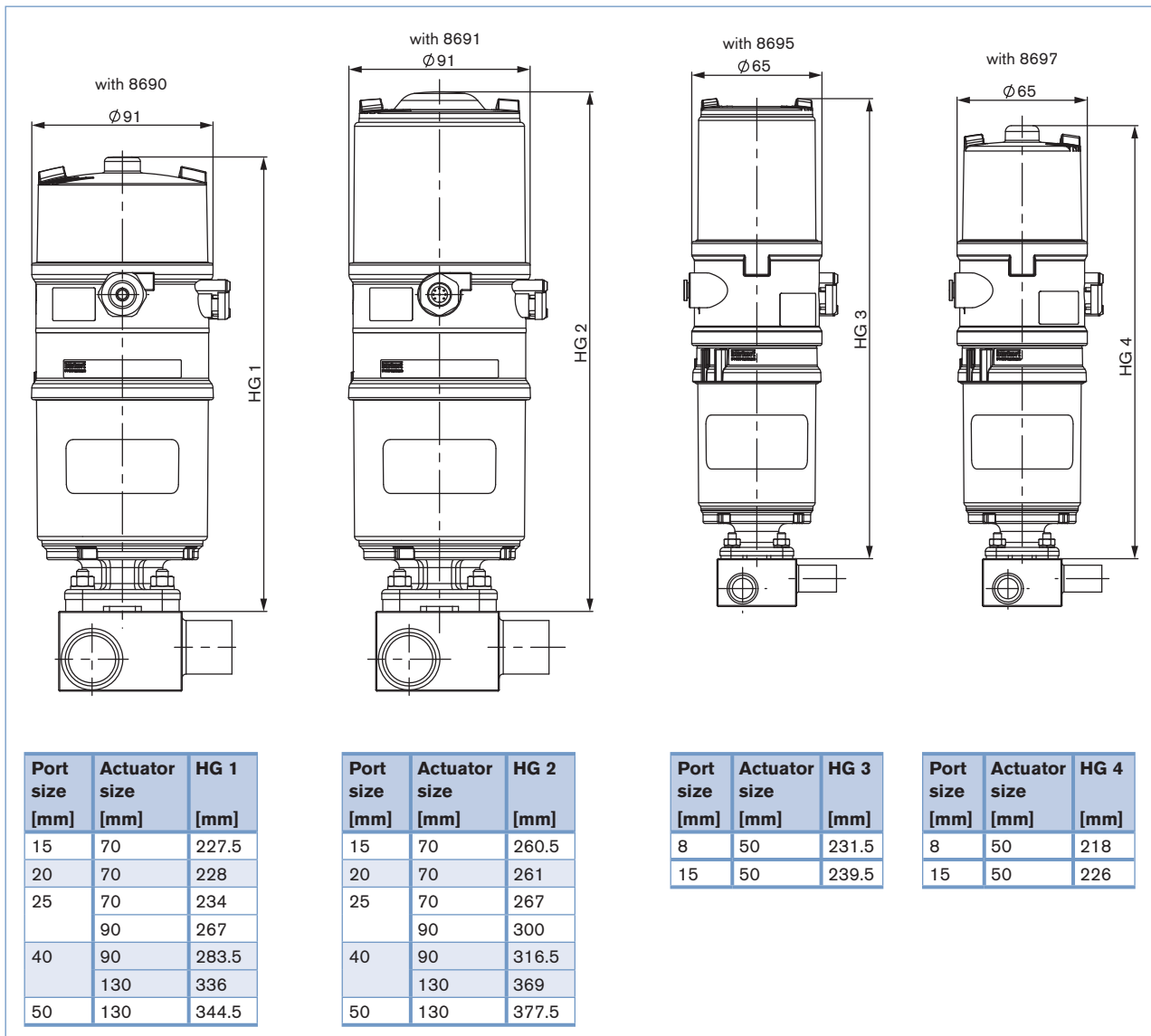
More info.

The new generation of integrated controllers for combination with actuators from the process valve series Type 20xx/21xx is specially designed for the requirements of hygienic process environments. The pneumatic control unit Type 8690/8697 combines electrical position feedback and pneumatic control for single or double-acting actuators, and is also optionally available as an intrinsically safe model to ATEX.

Main customer benefits:

- Integrated pilot valve with manual actuation
- Air intake filter enhances the process valve system availability
- Simple and reliable actuator adaption
- Adaptable to a wide range of 3rd Party actuators

Dimensions for valve system On/Off ELEMENT Type 8801-TB [mm]



Note
You can fill out the fields directly in the PDF file before printing out the form.

Valve system On/Off Element Type 8801-TB/8803-TB – Request for quotation

Please fill out and send to your nearest Bürkert facility* with your inquiry or order

Company	Contact person
Customer No	Department
Address	Tel./Fax
Postcode/Town	E-mail

= mandatory fields to fill out Quantity Required delivery date

Operating data

Pipe dimensions	Main tube $\varnothing D1 \times s1$	<input type="text"/>	Outlet tube $\varnothing D2 \times s2$	<input type="text"/>
	Clamp main tube	<input type="text"/>	Clamp outlet	<input type="text"/>
Pipe material	<input type="text"/>			
Surface finish Ra int.	<input type="text"/>			
Process medium	<input type="text"/>			
Type of medium	<input type="checkbox"/> Liquid	<input type="checkbox"/> Steam	<input type="checkbox"/> Gas	
Flow rate (Q, Q_N, W) ¹⁾	nominal	<input type="text"/>	unit	<input type="text"/>
Temperature at valve inlet T1	<input type="text"/>		<input type="text"/>	
Absolute pressure at valve inlet P1	<input type="text"/>		<input type="text"/>	
Absolute pressure at valve outlet P2	<input type="text"/>		<input type="text"/>	
Steam pressure P_v	<input type="text"/>		<input type="text"/>	

¹⁾ standard unit:
Liquid Q = m³/h;
Steam W = kg/h;
Gas Q_N = nm³/h

Valve features

Specification key
automatically transferred from last page

[go to page](#)

Control unit features

When you click on the orange box "More info." below, you will come to our website for the resp. product where you can download the datasheet.

Control Head	Control Head	Pneumatic control unit
<input type="checkbox"/> Type 8691 More info.	<input type="checkbox"/> Type 8695 More info.	<input type="checkbox"/> Type 8690 More info. <input type="checkbox"/> Type 8697 More info.
Pneumatic function <input type="checkbox"/> Single-acting <input type="checkbox"/> Double-acting	Pneumatic function <input type="checkbox"/> Single-acting <input type="checkbox"/> Double-acting	Pneumatic function <input type="checkbox"/> Single-acting <input type="checkbox"/> Double-acting <input type="checkbox"/> Without pilot valve
Pilot air ports <input type="checkbox"/> Push-in connector external \varnothing 6 mm or 1/4" <input type="checkbox"/> Thread G 1/8"	Pilot air ports <input type="checkbox"/> Push-in connector external \varnothing 6mm or 1/4" <input type="checkbox"/> Thread G 1/8"	Position feedback <input type="checkbox"/> 1x inductive <input type="checkbox"/> 2x inductive <input type="checkbox"/> 1x inductive (NAMUR) <input type="checkbox"/> 2x inductive (NAMUR) <input type="checkbox"/> 1x mechanical <input type="checkbox"/> 2x mechanical
Communication <input type="checkbox"/> ASI <input type="checkbox"/> Multipole M12 <input type="checkbox"/> Flat cable clip, 1 m cable <input type="checkbox"/> DeviceNet	Communication <input type="checkbox"/> ASI	Supply voltage <input type="checkbox"/> 24 V / DC (ATEX Zone 2/22) <input type="checkbox"/> Ex ia IIC (ATEX Zone 1)
Pilot air ports <input type="checkbox"/> Push-in connector external <input type="checkbox"/> Thread G 1/8" \varnothing 6 mm or 1/4"		Pilot air ports <input type="checkbox"/> Push-in connector external <input type="checkbox"/> Thread G 1/8" \varnothing 6 mm or 1/4"
Please specify item no. if known: <input type="text"/>	Please specify item no. if known: <input type="text"/>	Please specify item no. if known: <input type="text"/>

continued on next page →

* To find your nearest Bürkert facility, click on the orange box → www.burkert.com

Valve system On/Off Element Type 8801-TA/8803-TB – Request for quotation, *continued*

Certifications

- Attestation of compliance with the order EN-ISO 10204 2.1 (Item no. 440 788)
- Test report EN-ISO 10204 2.2 (Item no. 803 722)
- Certification of Conformity for Raw Material EN-ISO 10204 3.1 (will be supplied)
- EN161 (European Gas Device guideline)
- FDA - USP certificate

Comment / sketch

Valve features

Example

A 15 AB B VH SA42 SA42 NO14

Specification key

Please make a choice

Control function	
A	Normally closed by spring action
B	normally open by spring action
I	double acting

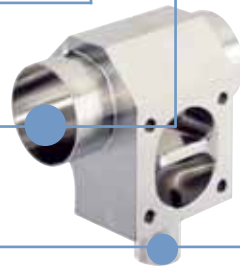
SIZE [mm] (Diaphragm)	
8	
15	
20	
25	
40	
50	

SEAL MATERIAL	
AB	EPDM in food quality
EU	Advanced PTFE
FF	FPM (Viton)

PRODUCTION OF BODY	
B	Monoblock

Body material	
VH	1.4435/AISI 316 L
VI	1.4435 acc. to BN2/ASME

VARIABLE CODES	
Surface finish external	
NO03	Ext. Mirror finished Ra=0.25 µm
NO15	Electro polished Ra=0.8 µm
NO34	Mechanical polished Ra=1.2 µm
NO22	Mechanical polished Ra=1.2 µm
Surface finish, internal	
NO07	Int. Mirror finished Ra=0.25 µm
NO14	Mechanical polished Ra=0.5 µm
NO17	Int. electro polished Ra=0.38 µm
NO23	Int. mechanical polished Ra=0.6 µm
NO16	Int. electro polished Ra=0.6 µm
NK52	3.1 Certificate integrated



øD1 main tube connection

øD2 outlet tube connection

DN [mm]	Port connection weld end							
	EN ISO 1127/ ISO 4200 DIN 11866 S. B	SMS 3008	DIN 11850 S. 0	DIN 11850 S. 1	DIN 11850 S. 2 DIN 11866 S. A	DIN 11850 S. 3	BS4825	ASME BPE DIN 11866 S. C
4			SC40 - 6.0x1.0					
6	SA78 - 10.2x1.6		SC41 - 8.0x1.0					SA89 - 3.17x0.56
8	SA40 - 13.5x1.6		SC42 - 10.0x1.0				SODB - 6.35x1.2	SA90 - 6.35x0.89
10	SA41 - 17.2x1.6			SF40 - 12.0x1.0	SD40 - 13.0x1.5	SE40 - 14.0x2.0		SA91 - 9.53x0.89
15	SA42 - 21.3x1.6	SA58 - 12.0x1.0	SC43 - 18.0x1.5	SF41 - 18.0x1.0	SD42 - 19.0x1.5	SE42 - 20.0x2.0	SODD - 12.7x1.2	SA92 - 12.7x1.65
20	SA43 - 26.9x1.6	SA59 - 18.0x1.0	SC44 - 22.0x1.5	SF42 - 22.0x1.0	SD43 - 23.0x1.5	SE43 - 24.0x2.0	SODE - 19.05x1.2	SA93 - 19.05x1.65
25	SA44 - 33.7x2.0	SA60 - 25.0x1.2	SC45 - 28.0x1.5	SF43 - 28.0x1.0	SD44 - 29.0x1.5	SE44 - 30.0x2.0		SODF - 25.4x1.65
32	SA45 - 42.4x2.0	SA61 - 33.7x1.2	SC46 - 34.0x1.5	SF44 - 34.0x1.0	SD45 - 35.0x1.5	SE45 - 36.0x2.0		
40	SA46 - 48.3x2.0	SA62 - 38.0x1.2	SC47 - 40.0x1.5	SF45 - 40.0x1.0	SD46 - 41.0x1.5	SE46 - 42.0x2.0		SODH - 38.1x1.65
50	SA47 - 60.3x2.0	SA63 - 51.0x1.2	SC48 - 52.0x1.5	SF46 - 52.0x1.0	SD47 - 53.0x1.5	SE47 - 54.0x2.0		SODI - 50.8x1.65
65	SA48 - 76.1x2.0	SA64 - 63.5x1.6			SD48 - 70.0x2.0			SODJ - 63.5x1.65
80	SA49 - 88.9x2.3	SA65 - 76.1x1.6			SD49 - 85.0x2.0			SODK - 76.2x1.65
100	SA39 - 114.3x2.3	SA66 - 101.6x2.0			SD50 - 104.0x2.0			SODL - 101.6x2.11

DN [mm]	Port connection Clamp				
	Clamp 34.0 like DIN 32676 S. B (ISO-tube (ISO4200))	DIN 32676 S. A (DIN-tube (DIN11850))	DIN 32676 S. B (ISO-tube (ISO4200))	ASME BPE	BS 4825 (Clamp BS 4825-3, tube BS 4825-1)
8	TC51 - 13.5x1.6 Ci: 34.0	TD40 - 10.0x1.0 Ci: 25.0	TC40 - 13.5x1.6 Ci: 25.0	TG50 - 6.35x0.89 Ci: 25.0	
10	TC41 - 17.2x1.6 Ci: 34.0	TD41 - 13.0x1.5 Ci: 34.0	TC53 - 17.2x1.6 Ci: 25.0	TG01 - 9.53x0.89 Ci: 25.0	
15	TC42 - 21.3x1.6 Ci: 34.0	TD42 - 19.0x1.5 Ci: 34.0	TC52 - 21.3x1.6 Ci: 50.5	TG02 - 12.7x1.65 Ci: 25.0	TH42 - 12.7x1.2 Ci: 25.0
20		TD43 - 23.0x1.5 Ci: 34.0	TC43 - 26.9x1.6 Ci: 50.5	TG03 - 19.05x1.65 Ci: 25.0	TH43 - 19.05x1.2 Ci: 25.0
25		TD44 - 29.0x1.5 Ci: 50.5	TC44 - 33.7x2.0 Ci: 50.5	TG04 - 25.4x1.65 Ci: 50.5	
32					
40		TD46 - 41.0x1.5 Ci: 50.5	TC46 - 48.3x2.0 Ci: 64.0	TG05 - 38.1x1.65 Ci: 50.5	
50		TD47 - 53.0x1.5 Ci: 64.0	TC47 - 60.3x2.0 Ci: 77.5	TG06 - 50.8x1.65 Ci: 64.0	
65			TC48 - 76.1x2.0 Ci: 91.0	TG07 - 63.5x1.65 Ci: 77.5	
80			TC49 - 88.9x2.3 Ci: 106.0	TG08 - 76.2x1.65 Ci: 91.0	
100			TC50 - 114.3x2.3 Ci: 130.0	TG09 - 101.6x2.11 Ci: 119.0	

In case of special application conditions, please consult for advice.

Subject to alteration.
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