

Pneumatically operated zero dead volume T-valve ELEMENT for decentralized automation



Type 2104 can be combined with...



Type 8691

Control Head



Type 8695

Control Head



Type 8690

Pneumatic
Control Unit



Type 8697

Pneumatic
Control Unit

- Zero deadleg monoblock without welds
- Diaphragm hermetically separates the fluids from the operating mechanism
- Easy integration of ELEMENT automation units
- Stainless steel body with clamp or weld ends
- FDA/3A quality certifications

Actuator with 360° rotation possibility

The Bürkert Zero dead volume T-Valve Type 2104 is designed for control of ultra pure, sterile, aggressive or abrasive fluids. It 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 is optimized for decentralized automation through ELEMENT pneumatic automation units. The fully integrated system has a compact and smooth design, integrated pneumatic lines, IP65/67, NEMA Type 4x protection class and superior chemical resistance.

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% 	
Diaphragm materials	EPDM (AD), PTFE/EPDM (EA), advanced PTFE/EPDM (EU), Gylon®/EPDM laminated (ER), FKM (FF)	
Actuator material	Actuator Cover	PPS Stainless steel 1.4561 (316Ti)
Pilot air ports	Stainless steel 1.4305	
Surface finish (others on request)	<ul style="list-style-type: none"> ▪ inside mechanical polished ▪ inside electro polished ▪ Ra ≤ 0,5 µm (ASME BPE SF1) (external Ra ≤ 1,6 µm) ▪ Ra ≤ 0,38 µm (ASME BPE SF4 / DIN HE4) (external Ra ≤ 1,6 µm) 	
Medium temperature	EPDM (AD) -10 to +143 °C (steam sterilisation +150 °C for 60 min) PTFE/EPDM (EA) -10 to +130 °C (steam sterilisation +140 °C for 60 min) PTFE/EPDM (EU) -5 to +143 °C (steam sterilisation +150 °C for 60 min) GYLON®/EPDM laminated (ER) -5 to +130 °C (steam sterilisation +140 °C for 60 min) FKM (FF) 0 to +130 °C (not recommended for steam)	
Ambient temperature	+5 to +60 °C	
Control medium	Neutral gases, air	
Max. pilot pressure	max. 10 bar; Actuator size 130 mm 7 bar	

Content



Valve specifications

Type 2104

Technical data & ordering info.

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System ELEMENT

Type 8801-TB

Ordering info. & technical data

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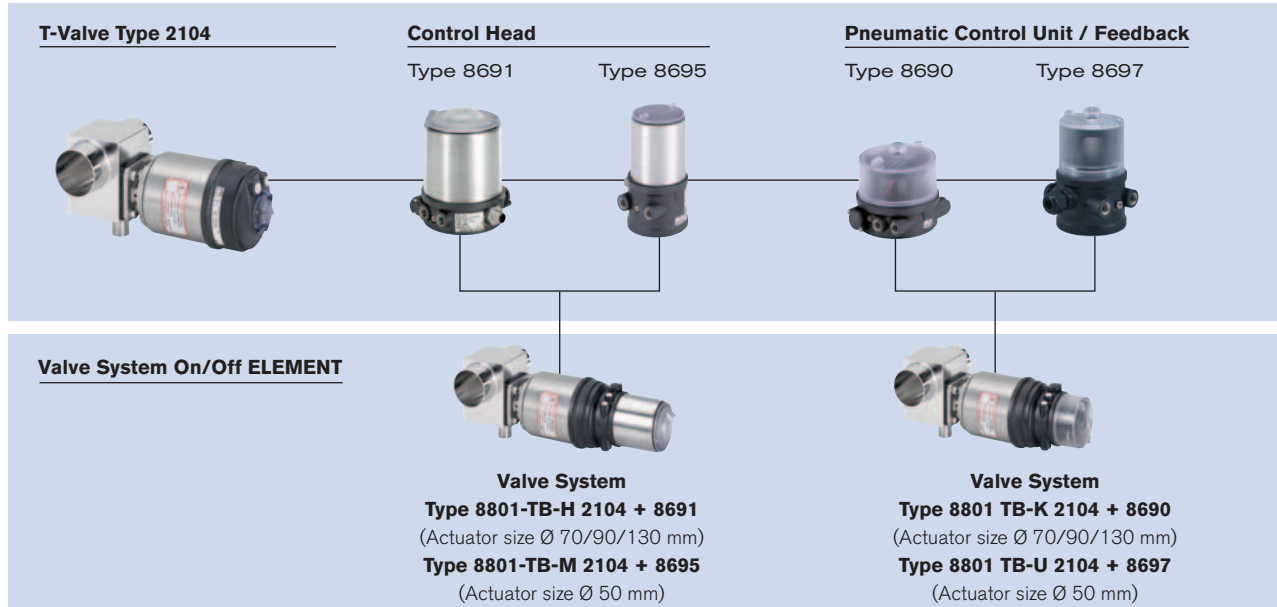
Request for quotation

Type 8801-TB

p. 12-14

Ordering information for decentralized automation of On/Off ELEMENT valve system Typ 8801-TB

A decentralized, automated **On/Off ELEMENT valve system Type 8801-TB** consists of a **T-valve Type 2104** and a valve actuation system control head **Type 8691/8695** or a pneumatic control unit **Type 8690/8697** (see separate datasheets). For the configuration of further valve systems please use the "Request for quotation" on p. 12-14. You order two components and receive a complete assembled and certified valve.



Control Head



Type 8691
Actuator size Ø 70/90/130 mm

More info.



Type 8695
Actuator size Ø 50 mm

More info.

The Control Head Type 8691/ 8695 is optimised for integrated mounting on the 21XX process valve series. The registration of the valve end position is done through a contactless analog position sensor, which automatically recognises and saves the valve end position through the Teach function when starting up. The integrated pilot valve controls single or double-acting actuators. The status of the valve is shown through high power coloured LEDs.

- Features**
- High power coloured Status-LEDs
 - Contactless inductive position sensor
 - Pilot valve with manual override
 - Teach function for automatic registration of valve positions
 - Hygienic stainless steel design
 - Easy to clean chemically resistant housing featuring IP65 / IP67, 4X Rating
 - AS-Interface or DeviceNet Fieldbus communication

- Benefits**
- Easy and safe Start-up through Teach function
 - Easy process monitoring and error detection through clearly visible high-power coloured LEDs
 - High plant availability due to prolonged actuator life boosted by spring chamber ventilation
 - Minimised space requirement in the plant piping for more flexibility in plant design

Pneumatic Control Unit / Feedback



Type 8690
Actuator size Ø 70/90/130 mm

More info.



Type 8697
Actuator size Ø 50 mm

More info.

The pneumatic control unit Type 8697/8690 is optimised for integrated mounting on the 21XX process valve series. Mechanical or inductive limit switches register the position of the valve. The integrated pilot valve controls single or double-acting (8690) actuators.

- Features**
- Visual position indicator
 - Mechanical or inductive limit switches for end position registering
 - Pilot valve with manual override
 - Compact design
 - Easy to clean chemically resistant housing featuring IP65 / IP67, 4X Rating
 - Optional intrinsically safe version acc. to ATEX

- Benefits**
- Easy and safe Start-up through Teach function (Type 8697)
 - High level of signal reliability thanks to self adjusting limit switches
 - Minimised space requirement in the plant piping for more flexibility in plant design

Click on the orange box "More info"... you will come to our website for the resp. product where you can download the data sheet.

Technical data, *continued*

Port connections	
Weld end	<ul style="list-style-type: none"> ▪ DIN EN ISO 1127 / ISO 4200 / DIN 11866 Series B ▪ DIN 11850 Series 2 / DIN 11866 Series A
Clamp	<ul style="list-style-type: none"> ▪ ASME BPE / DIN 11866 Series C ▪ DIN 32676 Series A (DIN tube) ▪ DIN 32676 Series B (ISO tube) ▪ ASME BPE
Installation for self-draining	
Inclined 3 to 5° downwards	

¹⁾ Advanced PTFE/EPDM is recommended for sterilization cycle

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

Suitability for foodstuffs / sterile applications

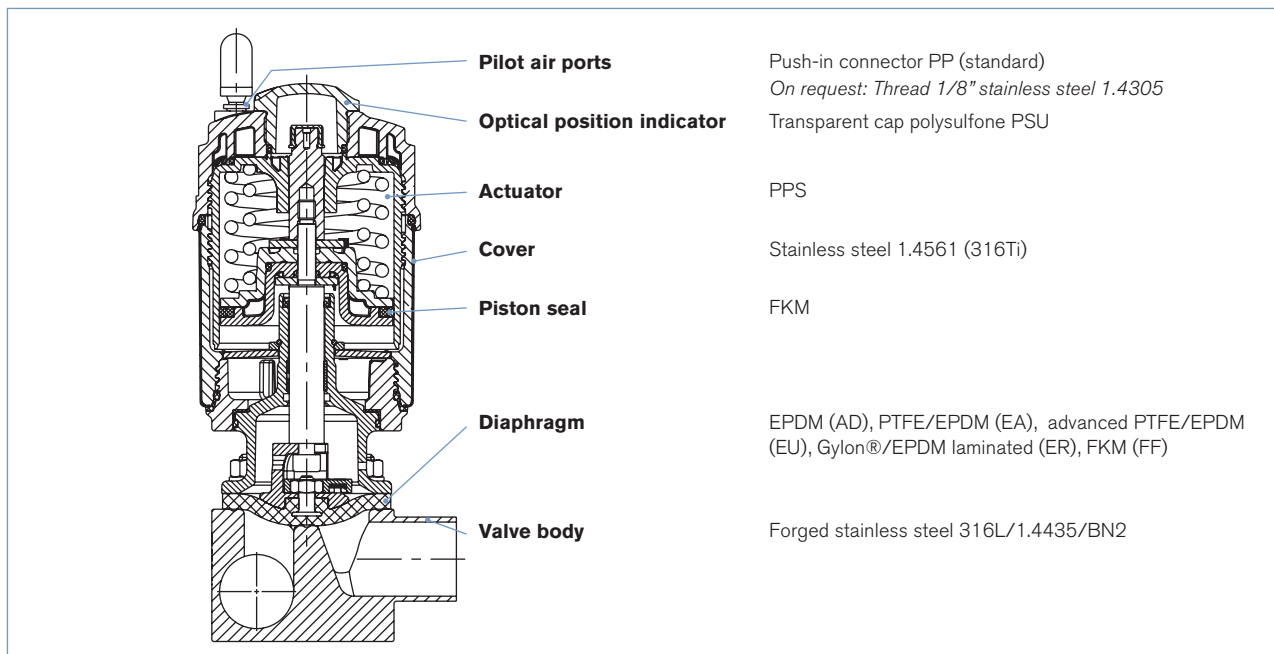


- The composition of the EPDM (AD), PTFE/EPDM (EA), advanced PTFE/EPDM (EU) and GYLON®/EPDM laminated (ER) diaphragms corresponds to the Code of Federal Regulations, published by the FDA (Food and Drug Administration, USA).



- The composition of the EPDM (AD), PTFE/EPDM (EA), advanced PTFE/EPDM (EU) and GYLON®/EPDM laminated (ER) diaphragms is suitable for the application with food and beverage (acc. to EC-Regulation 1935/2004/EC)
- The composition of the EPDM (AD), PTFE/EPDM (EA), advanced PTFE/EPDM (EU) and GYLON®/EPDM laminated (ER) diaphragms are approved acc. USP Class VI
- Approval according to TA-air (Port size DN4-50)

Materials



Example of available diaphragm materials

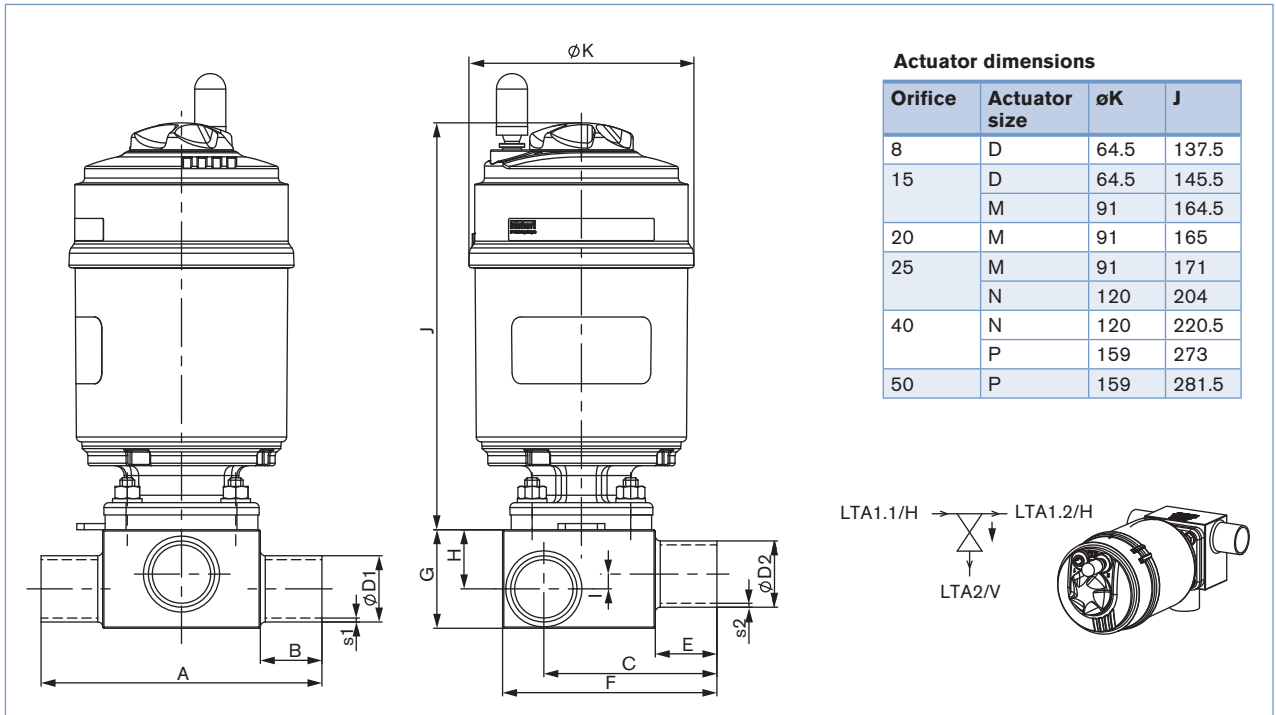
Developed to handle the unique challenges of hygienic and sterile applications, Bürkert offers diaphragms with precise material formula and physical tolerances. Bürkert diaphragms are available in a wide range of materials which have been proven in food & beverage, biotechnology, pharmaceutical and cosmetic 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 (AD)
- PTFE/EPDM (EA)
- advanced PTFE/EPDM (EU)
- FKM (FF)
- Gylon®/EPDM laminated (ER)

Dimensions [mm]

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



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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		

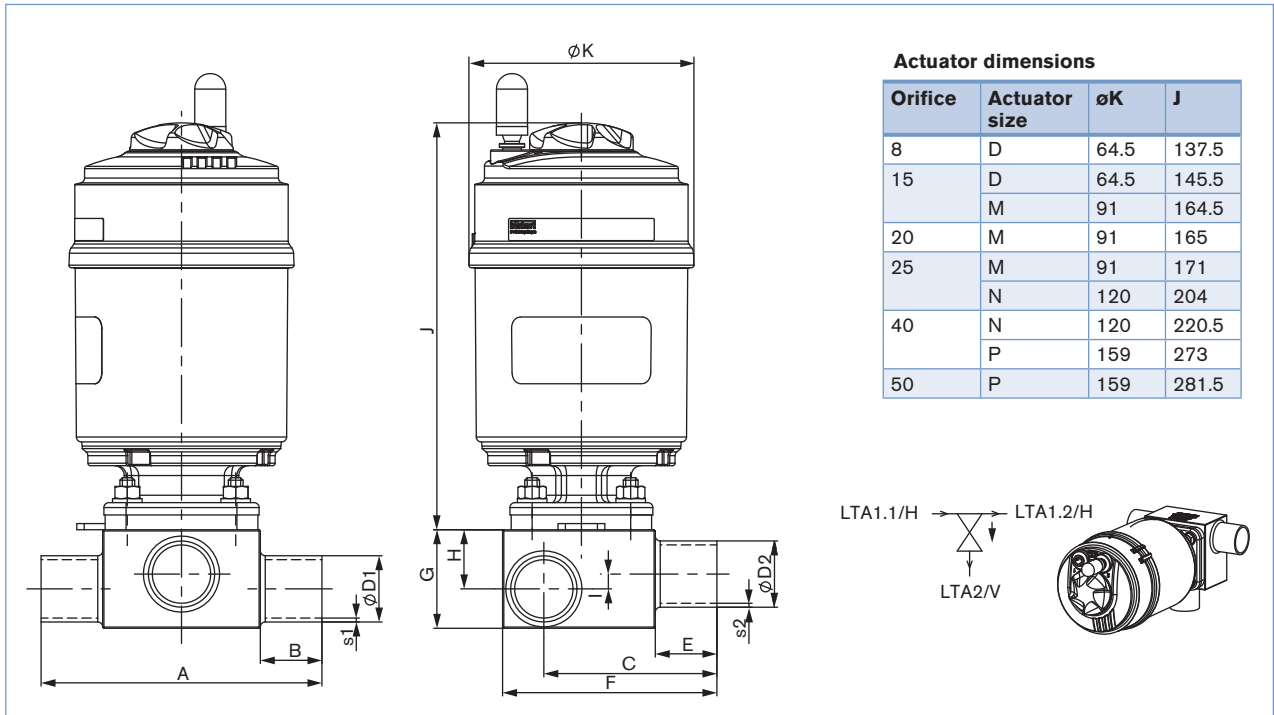
Dimensions [mm], continued

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	N / P	42.4	2.0	42.4	2.0	152.0	25	97.00	25	122	62
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
	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



Actuator dimensions

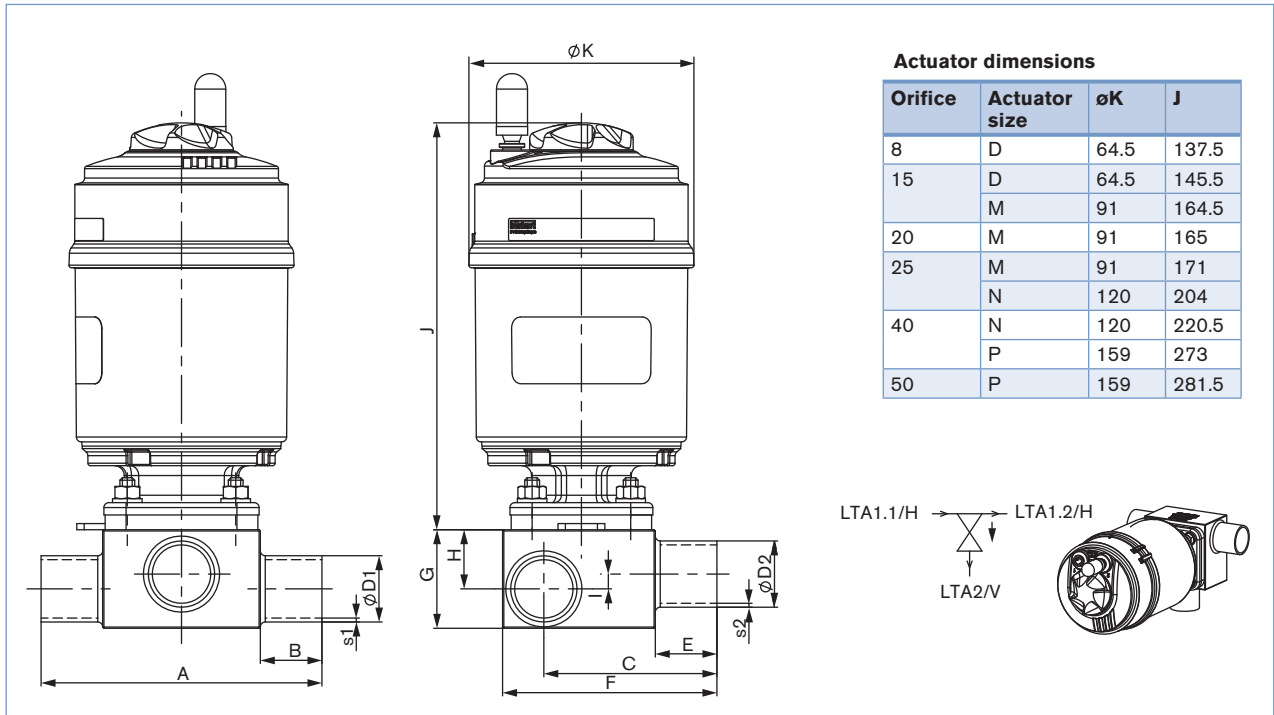
Orifice	Actuator size	øK	J
8	D	64.5	137.5
	M	91	164.5
20	M	91	165
	N	120	204
40	N	120	220.5
	P	159	273
50	P	159	281.5

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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

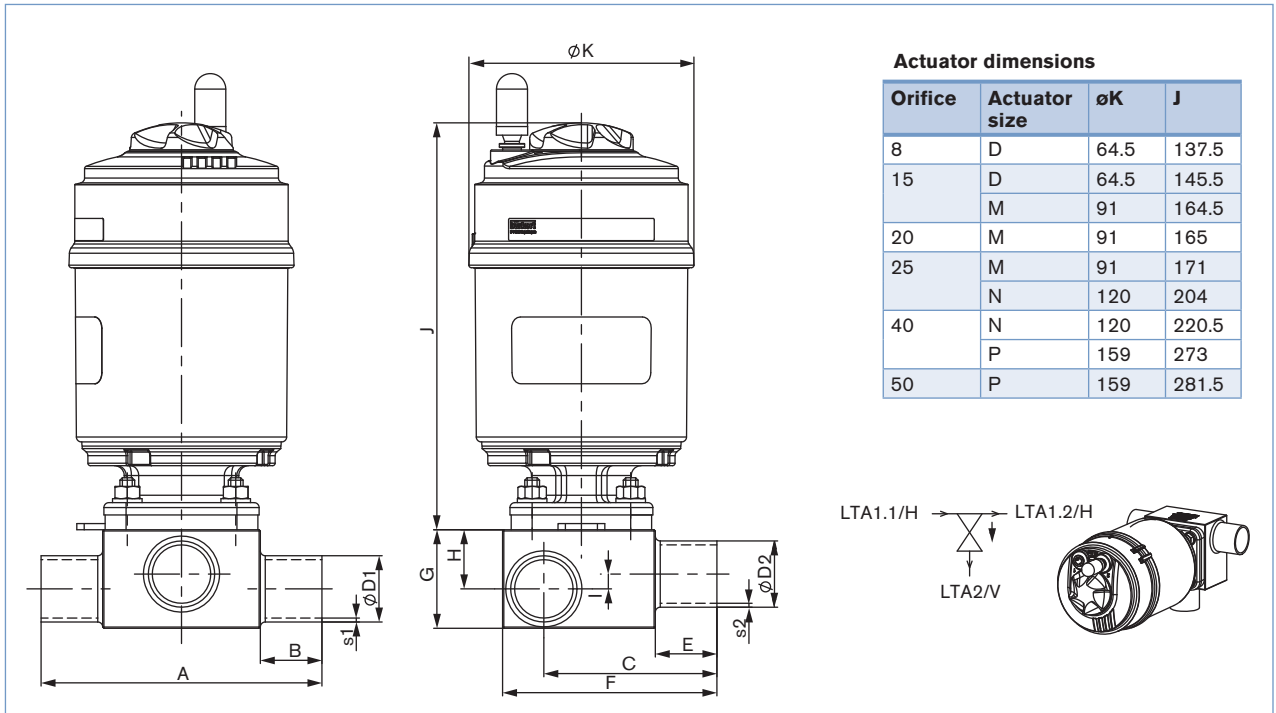
DN-Sitz	LTA1-LTA2	ANTG	øD1 ±0.1	s1 ±0.1	øD2 ±0.1	s2 ±0.1	A ±0.3	B	C	E	F	G	H	I
08.0	04 - 04	D	6.0	1.0	6.0	1.0	78.0	20	43.0	20	60	17	6.5	0.0
	06 - 06		8.0	1.0	8.0	1.0	75.0	17.5	46.5	20	60	13	7	0.0
	40 - 04		40.0	1.5	6.0	1.0	88.0	25	60.5	20	83	51	29	19.0
	40 - 08		40.0	1.5	10.0	1.0	88.0	25	60.5	20	83	51	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

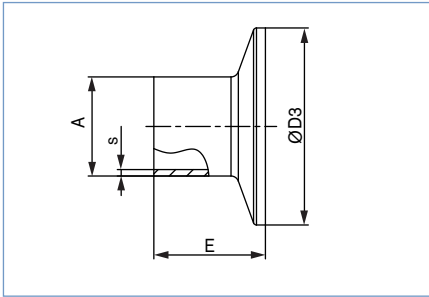


SMS Version

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]	[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	13	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

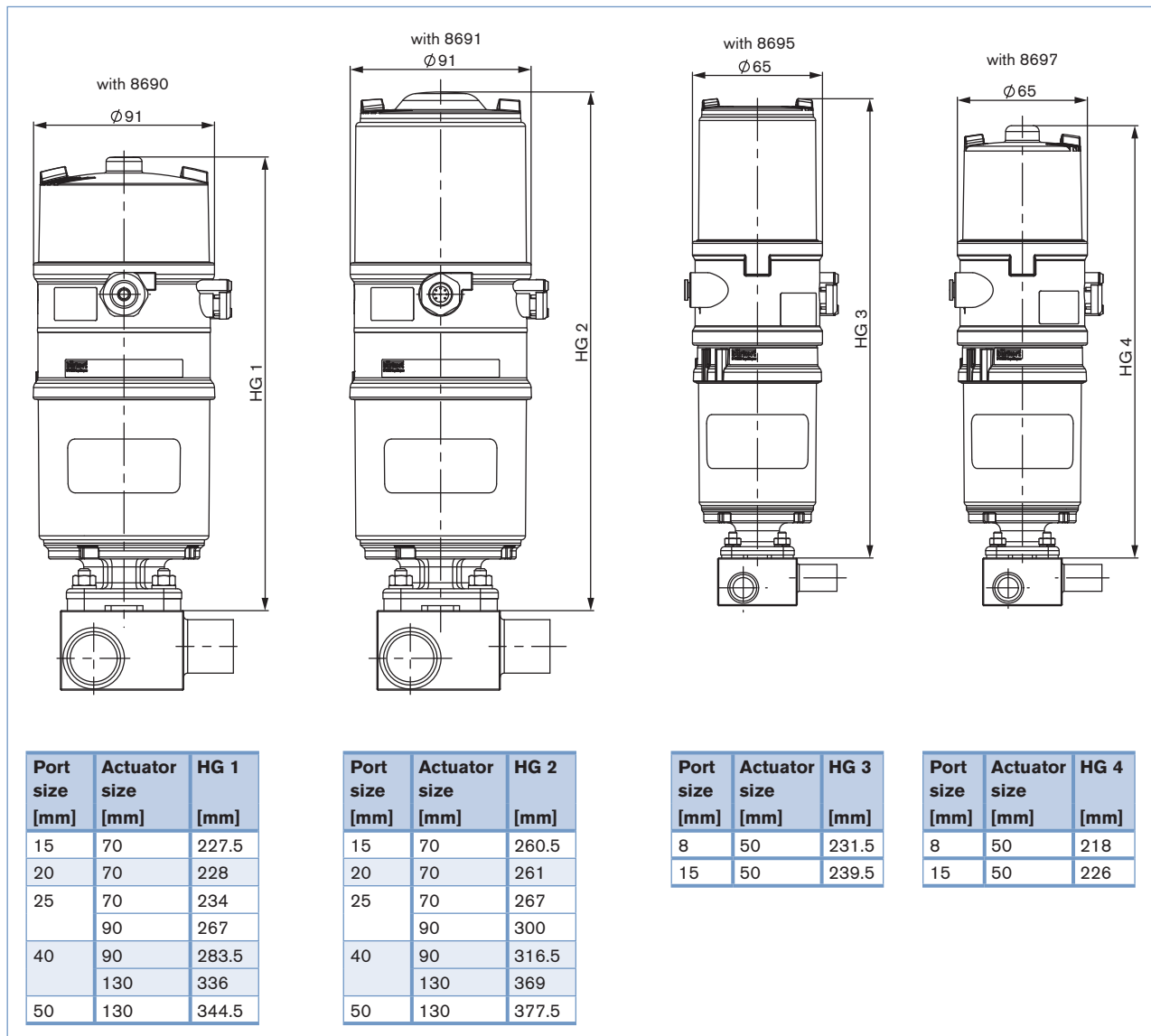
DIN 32676 Series B (ISO tube)

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

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 – 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"/>			
<input type="checkbox"/> Process medium	<input type="text"/>			
<input type="checkbox"/> Type of medium	<input type="checkbox"/> Liquid	<input type="checkbox"/> Steam	<input type="checkbox"/> Gas	
<input type="checkbox"/> Flow rate (Q, Q_N, W) ¹⁾	nominal	unit		
<input type="checkbox"/> Temperature at valve inlet T1	<input type="text"/>	<input type="text"/>		
<input type="checkbox"/> Absolute pressure at valve inlet P1	<input type="text"/>	<input type="text"/>		
<input type="checkbox"/> 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









<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Continued on next page →

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

Automation unit features

Click on the orange box "More info"... you will come to our website for the resp. product where you can download the data sheet.

Control Head		Pneumatic Control Unit / Feedback	
<input type="checkbox"/> Type 8691  For actuator size Ø 70/90/130 mm 	<input type="checkbox"/> Type 8695  For actuator size Ø 50 mm 	<input type="checkbox"/> Type 8690  For actuator size Ø 70/90/130 mm 	<input type="checkbox"/> Type 8697  For actuator size Ø 50 mm 
<ul style="list-style-type: none"> Inductive position sensor with automatic Teach function Coloured high power LEDs With/without pilot valve for single or double-acting actuators Fieldbus communication Hygienic stainless steel design 		<ul style="list-style-type: none"> visual status indicator Micro- or proximity switches for end position feedback With/ without pilot valve for single or double-acting actuators Optional intrinsically safe version acc. to ATEX / IECEx 	
Pneumatic function <input type="checkbox"/> Single-acting <input type="checkbox"/> Double-acting <input type="checkbox"/> Without pilot valve	Electrical connection <input type="checkbox"/> Cable gland <input type="checkbox"/> M12 connector	Pneumatic function <input type="checkbox"/> Single-acting <input type="checkbox"/> Double-acting (only with 8690) <input type="checkbox"/> Without pilot valve	Number of Position feedback switches <input type="checkbox"/> 1x <input type="checkbox"/> 2x
Communication <input type="checkbox"/> AS-Interface <input type="checkbox"/> DeviceNet <input type="checkbox"/> without	Approvals <input type="checkbox"/> ATEX cat. 3GD, IECEx <input type="checkbox"/> without	Position feedback switches <input type="checkbox"/> Micro-switch 24V DC <input type="checkbox"/> Micro-switch 50 – 225 V DC/AC (only 8697) <input type="checkbox"/> Inductive switch 3-wire PNP <input type="checkbox"/> Inductive switch 2-wire NAMUR <input type="checkbox"/> Inductive switch 2-wire 24V DC <input type="checkbox"/> without	Electrical connection <input type="checkbox"/> Cable gland <input type="checkbox"/> M12 connector
		Approvals <input type="checkbox"/> ATEX cat. 3GD, IECEx <input type="checkbox"/> ATEX cat. 2DG, IECEx <input type="checkbox"/> without	

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 (Included in delivery)
- Certification according to FDA - USP

Comment /sketch

Valve features

Example

A 15 AD B VH SA42 SA42 NO19 + NO14 + NK52

Specification key

Please make a choice

Control function

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

Diaphragm size

8
15
20
25
40
50

Seal material

AD	EPDM
EA	PTFE/EPDM
EU	advanced PTFE/EPDM
ER	Gylon®/EPDM laminated
FF	FKM

PRODUCTION OF BODY

B	Monoblock
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Body material

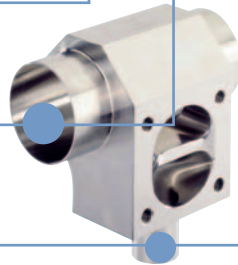
VH	1.4435/AISI 316 L
VI	1.4435 acc. to BN2/ASME

VARIABLE CODES

Surface finish external		
-	clamped Ra ≤ 1.6 µm	standard
NO19	mechanical polished Ra ≤ 1.6 µm	
NO02	mechanical polished Ra ≤ 0.76 µm	
NO28	electro polished Ra ≤ 1.6 µm	
NO15	electro polished Ra ≤ 0.76 µm	
Surface finish, internal		
NO14	mechanical polished Ra ≤ 0.5 µm (ASME BPE SF1)	standard
NO06	mechanical polished Ra ≤ 0.76 µm (ASME BPE SF3 / DIN H2)	
NO17	electro polished Ra ≤ 0.38 µm (ASME BPE SF4 / DIN HE4)	standard
NO16	electro polished Ra ≤ 0.6 µm (ASME BPE SF6)	
Certificate		
NK52	3.1 Certificate	

øD1 main tube connection

øD2 outlet tube connection



Orifice	DIN EN ISO 1127 ISO 4200 DIN 11866 series B	SMS 3008	DIN 11850 series 0	DIN 11850 series 1 DIN EN 10357 series B	DIN 11850 series 2 DIN 11866 series A DIN EN 10357 series A	DIN 11850 series 3	BS 4825	ASME BPE DIN 11866 series C
DN 4			SC40 - 6.0x1.0					
DN 6	1/8"	SA78 - 10.2x1.6	SC41 - 8.0x1.0					SA89 - 3.17x0.56
DN 8	1/4"	SA40 - 13.5x1.6	SC42 - 10.0x1.0				SODB - 6.35x1.2	SA90 - 6.35x0.89
DN 10	3/8"	SA41 - 17.2x1.6		SF40 - 12.0x1.0	SD40 - 13.0x1.5	SE40 - 14.0x2.0	SODC - 9.53x1.2	SA91 - 9.53x0.89
DN 15	1/2"	SA42 - 21.3x1.6	SC43 - 18.0x1.5	SF41 - 18.0x1.0	SD42 - 19.0x1.5	SE42 - 20.0x2.0	SODD - 12.7x1.2	SA92 - 12.7x1.65
DN 20	3/4"	SA43 - 26.9x1.6	SC44 - 22.0x1.5	SF42 - 22.0x1.0	SD43 - 23.0x1.5	SE43 - 24.0x2.0	SODE - 19.05x1.2	SA93 - 19.05x1.65
DN 25	1"	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
DN 32	1 1/4"	SA45 - 42.4x2.0	SA61 - 33.7x1.2	SC46 - 34.0x1.5	SF44 - 34.0x1.0	SD45 - 35.0x1.5	SE45 - 36.0x2.0	
DN 40	1 1/2"	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
DN 50	2"	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
DN 65	2 1/2"	SA48 - 76.1x2.0	SA64 - 63.5x1.6			SD48 - 70.0x2.0		SODJ - 63.5x1.65
DN 80	3"	SA49 - 88.9x2.3	SA65 - 76.1x1.6			SD49 - 85.0x2.0		SODK - 76.2x1.65
DN 100	4"	SA39 - 114.3x2.3	SA66 - 101.6x2.0			SD50 - 104.0x2.0		SODL - 101.6x2.11

Orifice	Clamp 34.0 similar DIN 32676 series B (ISO-tube)	DIN 32676 Reihe A (DIN-Rohr)	DIN 32676 Reihe B (ISO-Rohr)	ASME BPE	BS 4825 Clamp BS 4825-3 Rohr BS 4825-1
DN 8	1/4" 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	TH40 - 6.35x1.2 Ci: 25.0
DN 10	3/8" 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	TH41 - 9.53x1.2 Ci: 25.0
DN 15	1/2" 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
DN 20	3/4" TC43 - 26.9x1.6 Ci: 34.0	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
DN 25	1" TC44 - 33.7x2.0 Ci: 50.5	TD44 - 29.0x1.5 Ci: 50.5	TC44 - 33.7x2.0 Ci: 50.5	TG04 - 25.4x1.65 Ci: 50.5	TG04 - 25.4x1.65 Ci: 50.5
DN 40	1 1/2" TC46 - 48.3x2.0 Ci: 50.5	TD46 - 41.0x1.5 Ci: 50.5	TC46 - 48.3x2.0 Ci: 64.0	TG05 - 38.1x1.65 Ci: 50.5	TG05 - 38.1x1.65 Ci: 50.5
DN 50	2" TC47 - 60.3x2.0 Ci: 64.0	TD47 - 53.0x1.5 Ci: 64.0	TC47 - 60.3x2.0 Ci: 77.5	TG06 - 50.8x1.65 Ci: 64.0	TG06 - 50.8x1.65 Ci: 64.0
DN 65	2 1/2" TC48 - 76.1x2.0 Ci: 91.0	TD48 - 70.0x2.0 Ci: 91.0	TC48 - 76.1x2.0 Ci: 91.0	TG07 - 63.5x1.65 Ci: 77.5	TG07 - 63.5x1.65 Ci: 77.5
DN 80	3" TC49 - 88.9x2.3 Ci: 106.0		TC49 - 88.9x2.3 Ci: 106.0	TG08 - 76.2x1.65 Ci: 91.0	TG08 - 76.2x1.65 Ci: 91.0
DN 100	4" TC50 - 114.3x2.3 Ci: 130.0		TC50 - 114.3x2.3 Ci: 130.0	TG09 - 101.6x2.11 Ci: 119.0	TG09 - 101.6x2.11 Ci: 119.0

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

Subject to alteration.
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