



2/2-way Diaphragm Valve with stainless steel design, welded or clamp connection, DN 8-50

- Hermetical separation of fluids from the operating mechanism by diaphragm
- Zero dead volume
- Various surface finishes
- Certified according to **FDA**
- Clean design for optimal use in hygienic environment

Type 2103 forged On/Off can be combined with...



Type 8691
Control Head



Type 8695
Control Head



Type 8690
Pneumatic Control Unit



Type 8697
Pneumatic Control Unit



Type 8619
MultiCELL Transmitter/Controller



Type 8110
Level meter

The externally piloted diaphragm valve consists of a pneumatically operated piston actuator, a diaphragm and a 2-way valve housing made of forged stainless steel. The high-quality actuator with a stainless steel cover is designed for usage in hygienic or aggressive environments.

The flow optimised and zero dead volume valve body makes high flow rates possible and a variety of applications to be realised.

The design enables the easy integration of automation modules whether they are electrical/optical position feedback, pneumatic control units, an integrated fieldbus interface or even an explosion proof feedback.

The fully integrated system has a compact and smooth design, integrated pneumatic lines, IP65/67/NEMA4X protection class and superior chemical resistance.

Technical data	
Orifice	DN 8 to 50
Body material	Forged stainless steel 316L / 1.4435/BN2 Fe < 0.5% / C ≤ 0.03%
Actuator material Actuator / Cover	PPS / Stainless steel 1.4561 (316Ti)
Diaphragm materials	EPDM (AB), PTFE/EPDM (EA) EPDM (AD), advanced PTFE/EPDM (EU) and FKM (FF) on request
Media	Neutral gases and liquids, high purity, sterile, aggressive or abrasive fluids
Viscosity	up to viscous
Surface finishes internal mechanical polished internal electro polished (on request)	(average surface finish) Ra ≤ 0.6 µm (with external forged surface) Ra ≤ 0.4 µm (with external forged surface electro polished)
Medium temperatures EPDM (AB), PTFE/EPDM (EA) EPDM (AD), advanced PTFE/EPDM (EU) FKM (FF)	-10 to +130 °C (steam sterilisation +140 °C for 60 min) -5 to +143 °C (steam sterilisation +150 °C for 60 min) 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, 7 bar with actuator size 130 mm

Content



Valve specifications

Type 2103 forged On/Off

Technical data & ordering info.

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System spec. On/Off ELEMENT

Type 8801-DF

Ordering info. & technical data

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Request for quotation

Type 8801-DF

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Technical data, *continued*

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 ▪ BS4825 ▪ SMS 3008 (on request) ▪ DIN 32676 Series A (DIN Tube) ▪ ASME BPE ▪ DIN 32676 Series B (ISO Tube) and ISO 2852 / SMS 3017 (on request)
Weld end	
Clamp	
Pilot air ports	Push-in connector for external \varnothing 6 mm or 1/4" tube, thread G1/8 (on request)
Installation	as required, preferably with actuator in upright position

Technical data valves

Kv-value

Orifice [mm]	Orifice [inch]	Kv value water (m ³ /h)	Actuator size \varnothing [mm]	Permitted pilot pressure [bar]		Max. operating pressure [bar] for seal material	
				min.	max.	EPDM, FKM [bar]	PTFE/EPDM and 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"	19.0	70	5	10	6.5	6
		17.0	90	5.5	10	10	8
40	1 1/2"	43.0	130	5.0	7	10	10
50	2"	51.5	130	5.0	7	8	7

Flow rate: Kv value water [m³/h]: Measured at +20°C, 1 bar pressure at valve inlet and free outlet.
Pressure valves [bar]: Overpressure to the atmospheric pressure

Installation for self-draining operation

$\alpha = 15$ up to 35° (Marking must face upwards, 12 o'clock position)
 plus 3° to 5° inclination to the pipe axis.
 Drain marks permanently marked on both sides of the valve body show the correct mounting position to optimise drain ability.

Approvals

Suitability for foodstuffs / sterile applications

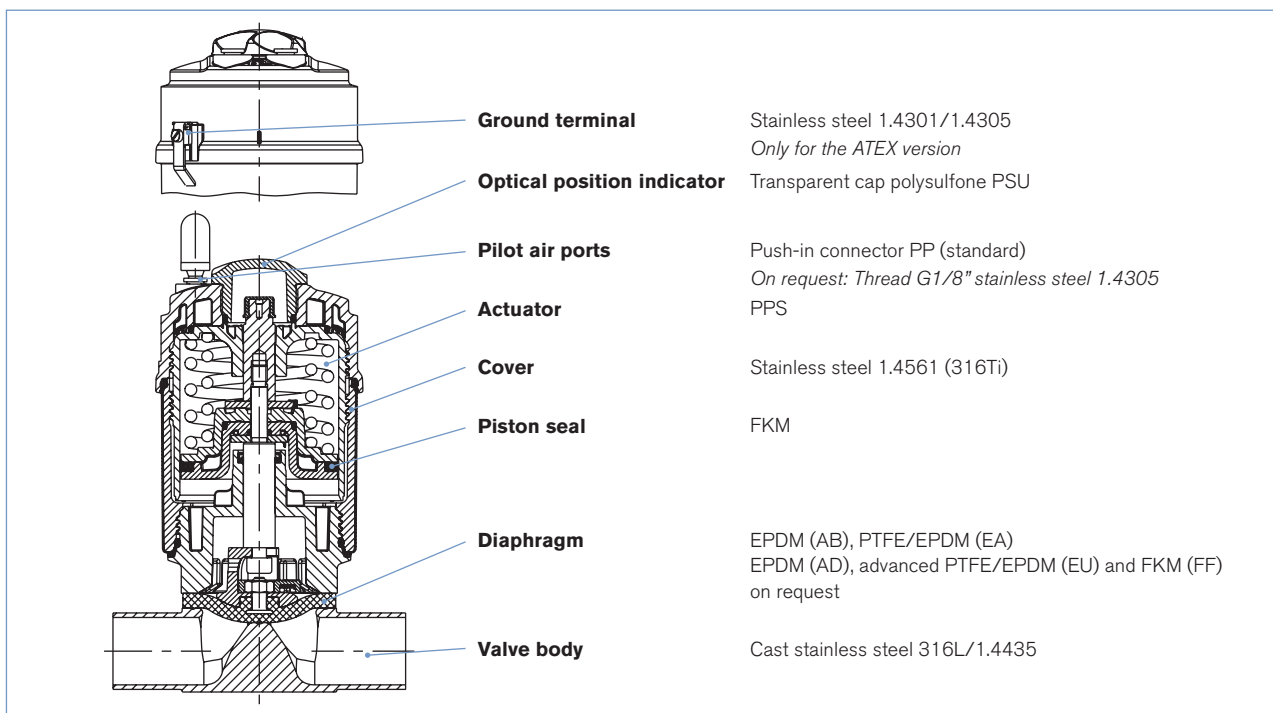


- The composition of the EPDM (AB), EPDM (AD), PTFE/EPDM (EA) and advanced PTFE (EU) diaphragms corresponds to the Code of Federal Regulations, published by the FDA (Food and Drug Administration, USA).

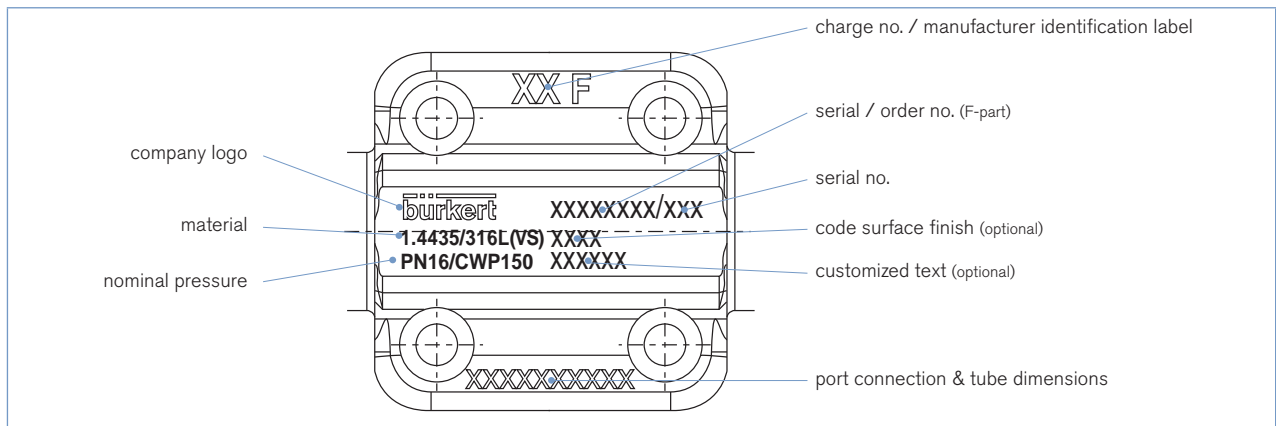


- The composition of the EPDM (AB), EPDM (AD), PTFE/EPDM (EA) and advanced PTFE (EU) diaphragms is suitable for the application with food and beverage (acc. to EC-Regulation 1935/2004/EC)
- The composition of the EPDM (AB), EPDM (AD), PTFE/EPDM (EA) und advanced PTFE (EU) diaphragms are approved acc.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

Materials

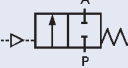


Body label



Ordering chart Type 2103 forged diaphragm valve

Welded connection, surface finish mechanical polished, Ra ≤ 0.6 µm, further on request

Control function	Orifice		External-Ø [mm]	Kv value water (m ³ /h)	Actuator size Ø [mm]	Pilot pressure [bar]	Max. operating pressure [bar]	Item no. mechanical polished, Ra ≤ 0.6 µm
	[mm]	[inch]						
A 2/2-way valve, normally closed (NC) 	Acc. to EN ISO 1127/ISO 4200 / DIN 11866 Series B							
	Diaphragm material EPDM (AB)							
	8	1/4"	13.5	1.0	50	5-10	10	218 005
	15	1/2"	21.3	5.5	70	5-10	10	218 006
	20	3/4"	26.9	10.0	70	5-10	10	218 007
	25	1"	33.7	14.0	70	5-10	6.5	218 008
					90	5.5-10	10	218 009
	40	1 1/2"	48.3	30.0	130	5-7	10	218 010
	50	2"	60.3	51.5	130	5-7	8	218 011
	Diaphragm material PTFE/EPDM (EA)							
	8	1/4"	13.5	1.0	50	5-10	10	218 012
	15	1/2"	21.3	5.5	70	5-10	10	218 013
	20	3/4"	26.9	10.0	70	5-10	10	218 014
	25	1"	33.7	14.0	70	5-10	6	218 015
					90	5.5-10	8	218 016
	40	1 1/2"	48.3	30.0	130	5-7	10	218 017
	50	2"	60.3	51.5	130	5-7	7	218 018
	Acc. to DIN 11850 Series 2 / DIN 11866 Series A							
	Diaphragm material EPDM (AB)							
	10	3/8"	13	1.0	50	5-10	10	218 019
	15	1/2"	19	5.5	70	5-10	10	218 020
	20	3/4"	23	10.0	70	5-10	10	218 021
	25	1"	29	14.0	70	5-10	6.5	218 022
					90	5.5-10	10	218 023
	40	1 1/2"	41.0	30.0	130	5-7	10	218 024
	50	2"	53.0	51.5	130	5-7	8	218 025
	Diaphragm material PTFE/EPDM (EA)							
	10	3/8"	13	1.0	50	5-10	10	218 026
	15	1/2"	19	5.5	70	5-10	10	218 027
	20	3/4"	23	10.0	70	5-10	10	218 028
	25	1"	29	14.0	70	5-10	6	218 029
					90	5.5-10	8	218 030
40	1 1/2"	41.0	30.0	130	5-7	10	218 031	
50	2"	53.0	51.5	130	5-7	7	218 032	

i Further versions on request**Material**

Diaphragms for steam sterilization EPDM (AD), advanced PTFE/EPDM (EU) and FKM (FF)

**Port connection**

Welded acc. SMS 3008

**Control function**

B (normally open) and I (double-acting)

**Additional**

Surface finishes ≤ 0.6 and further

Ordering chart Type 2103 forged diaphragm valve, continued

Welded connection, surface finish mechanical polished, Ra ≤ 0.6 µm, further on request

Control function	Orifice		External-Ø [mm]	Kv-value water [m³/h]	Actuator size Ø [mm]	Pilot pressure [bar]	Max. operating pressure [bar]	Item no. mechanical polished, Ra ≤ 0.6 µm
	[mm]	[inch]						
A 2/2-way valve, normally closed (NC) 	Acc. to ASME BPE / DIN 11866 Series C							
	Diaphragm material EPDM (AB)							
	8	1/4"	6.35	1.0	50	5-10	10	218 033
	10	3/8"	9.53	1.0	50	5-10	10	218 034
	15	1/2"	12.7	5.5	70	5-10	10	218 035
	20	3/4"	19.05	10.0	70	5-10	10	218 036
	25	1"	25.4	14.0	70	5-10	6.5	218 037
					90	5.5-10	10	218 038
	40	1 1/2"	38.1	30.0	130	5-7	10	218 039
	50	2"	50.8	51.5	130	5-7	8	218 040
	Diaphragm material PTFE/EPDM (EA)							
	8	1/4"	6.35	1.0	50	5-10	10	218 041
	10	3/8"	9.53	1.0	50	5-10	10	218 042
	15	1/2"	12.7	5.5	70	5-10	10	218 043
	20	3/4"	19.05	10.0	70	5-10	10	218 044
	25	1"	25.4	14.0	70	5-10	6	218 045
					90	5.5-10	8	218 046
	40	1 1/2"	38.1	30.0	130	5-7	10	218 047
	50	2"	50.8	51.5	130	5-7	7	218 048
	Acc. to BS 4825							
	Diaphragm material EPDM (AB)							
	8	1/4"	6.35	1.0	50	5-10	10	218 049
	10	3/8"	9.53	1.0	50	5-10	10	218 050
	15	1/2"	12.7	5.5	70	5-10	10	218 051
	20	3/4"	19.05	10.0	70	5-10	10	218 052
	Diaphragm material PTFE/EPDM (EA)							
	8	1/4"	6.35	1.0	50	5-10	10	218 053
	10	3/8"	9.53	1.0	50	5-10	10	218 054
15	1/2"	12.7	5.5	70	5-10	10	218 055	
20	3/4"	19.05	10.0	70	5-10	10	218 056	

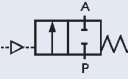
i Further versions on request

- Material**
Diaphragms for steam sterilization EPDM (AD), advanced PTFE / EPDM (EU) and FKM (FF)
- Port connection**
Welded acc. SMS 3008
- Control function**
B (normally open) and I (double-acting)
- Additional**
Further surface finishes

DTS 1000097545 EN Version: M Status: RL (released | freigegeben | validé) printed: 17.02.2016

Ordering chart Type 2103 forged diaphragm valve, continued

Clamp connection, surface finish mechanical polished, Ra ≤ 0.6 µm, further on request

Control function	Orifice		External-Ø [mm]	Kv value water (m³/h)	Actuator size ø [mm]	Pilot pressure [bar]	Max. operating pressure [bar]	Item no. mechanical polished, Ra ≤ 0.6 µm
	[mm]	[inch]						
A 2/2-way valve, normally closed (NC) 	Acc. to DIN 32676 Series A							
	Diaphragm material EPDM (AB)							
	15	1/2"	34.0	5.5	70	5-10	10	218 057
	20	3/4"	34.0	10.0	70	5-10	10	218 058
	25	1"	50.5	14.0	70	5-10	6.5	218 059
					90			
	40	1 1/2"	50.5	30.0	130	5-7	10	218 061
	50	2"	64.0	51.5	130	5-7	8	218 062
	Diaphragm material PTFE/EPDM (EA)							
	15	1/2"	34.0	5.5	70	5-10	10	218 063
	20	3/4"	34.0	10.0	70	5-10	10	218 064
	25	1"	50.5	14.0	70	5-10	6	218 065
					90			
	40	1 1/2"	50.5	30.0	130	5-7	10	218 067
	50	2"	64.0	51.5	130	5-7	7	218 068
	Acc. to ASME BPE - short dimension							
	Diaphragm material EPDM (AB)							
	8	1/4"	25.0	1.0	50	5-10	10	218 069
	10	3/8"	25.0	1.0	50	5-10	10	218 070
	15	1/2"	25.0	5.5	70	5-10	10	218 071
	20	3/4"	25.0	10.0	70	5-10	10	218 072
	25	1"	50.5	14.0	70	5-10	6.5	218 073
					90			
	40	1 1/2"	50.5	30.0	130	5-7	10	218 075
	50	2"	64.0	51.5	130	5-7	8	218 076
	Diaphragm material PTFE/EPDM (EA)							
	8	1/4"	25.0	1.0	50	5-10	10	218 077
	10	3/8"	25.0	1.0	50	5-10	10	218 078
	15	1/2"	25.0	5.5	70	5-10	10	218 079
	20	3/4"	25.0	10.0	70	5-10	10	218 080
	25	1"	50.5	14.0	70	5-10	6	218 081
					90			
	40	1 1/2"	50.5	30.0	130	5-7	10	218 083
	50	2"	64.0	51.5	130	5-7	7	218 084
	Acc. to ASME BPE - long dimension							
	Diaphragm material EPDM (AB)							
	8	1/4"	25.0	1.0	50	5-10	10	218 085
	15	1/2"	25.0	5.5	70	5-10	10	218 086
	20	3/4"	25.0	10.0	70	5-10	10	218 087
	25	1"	50.5	14.0	70	5-10	6.5	218 088
					90			
	40	1 1/2"	50.5	30.0	130	5-7	10	218 090
	50	2"	64.0	51.5	130	5-7	8	218 091
	Diaphragm material PTFE/EPDM (EA)							
	8	1/4"	25.0	1.0	50	5-10	10	218 092
15	1/2"	25.0	5.5	70	5-10	10	218 093	
20	3/4"	25.0	10.0	70	5-10	10	218 094	
25	1"	50.5	14.0	70	5-10	6	218 095	
				90				5.5-10
40	1 1/2"	50.5	30.0	130	5-7	10	218 097	
50	2"	64.0	51.5	130	5-7	7	218 098	

i Further versions on request**Material**

Diaphragms for steam sterilization EPDM (AD), advanced PTFE / EPDM (EU) and FKM (FF)

**Port connection**

Clamp acc. to ISO 2852/SMS 3017

**Control function**

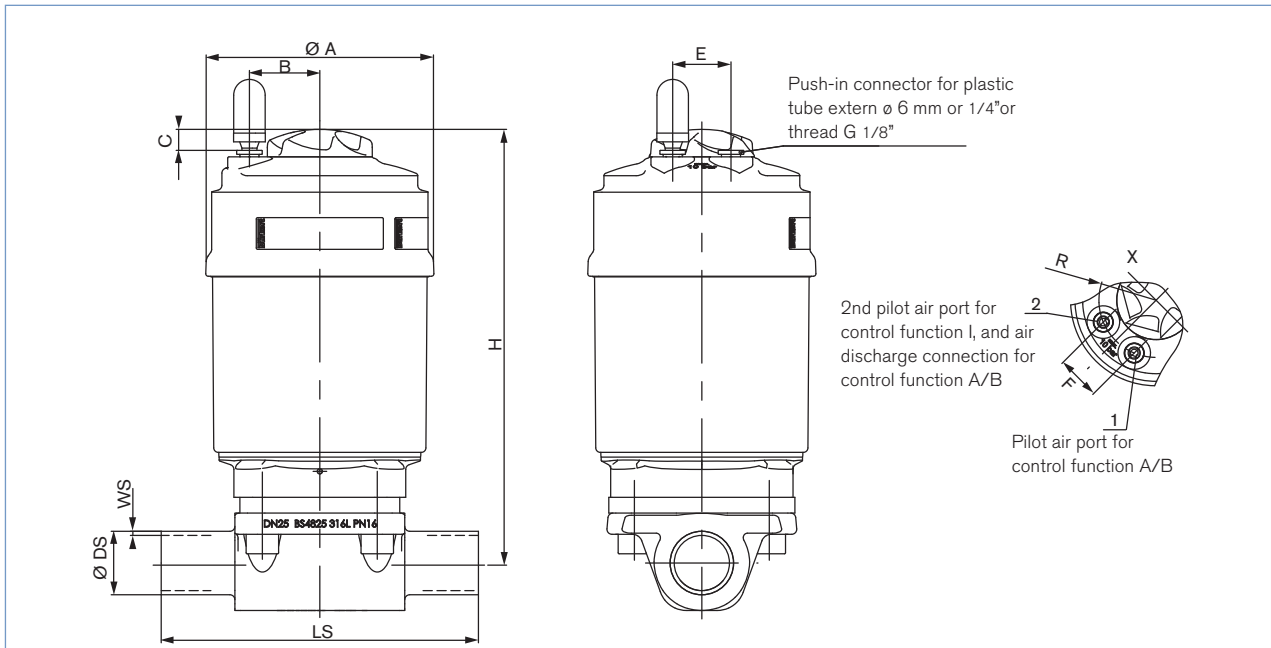
B (normally open) and I (double-acting)

**Additional**

Further surface finishes

Dimensions Type 2103 forged diaphragm valve [mm]

Welded connection



EN ISO 1127 / ISO 4200 / DIN 11866 Series B and DIN 11850 Series 2 / DIN 11866 Series A

All bodies									EN ISO 1127/ ISO 4200/ DIN 11866 S. B		DIN 11850 S. 2/ DIN 11866 S. A	
Orifice		Actuator size Ø [mm]	Ø A	B	C	E	H	LS	Ø DS	WS	Ø DS	WS
[mm]	[inch]											
8	1/4"	50	64.5	17.15	6.1	19.8	129	90	13.5	1.6	-	-
10	3/8"	50	64.5	17.15	6.1	19.8	144	110	17.2	1.6	13.0	1.5
15	1/2"	70	91	30.5	8.5	23.3	161	110	21.3	1.6	19.0	1.5
20	3/4"	70	91	30.5	8.5	23.3	171	119	26.9	1.6	23.0	1.5
25	1"	70	91	30.5	8.5	23.3	174	129	33.7	2.0	29.0	1.5
		90	120	30.5	8.5	23.3	207	129	33.7	2.0	29.0	1.5
40	1 1/2"	130	159	30.5	8.5	23.3	288	161	48.3	2.0	41.0	1.5
50	2"	130	159	30.5	8.5	23.3	311	192	60.3	2.0	53.0	1.5

ASME BPE and BS 4825

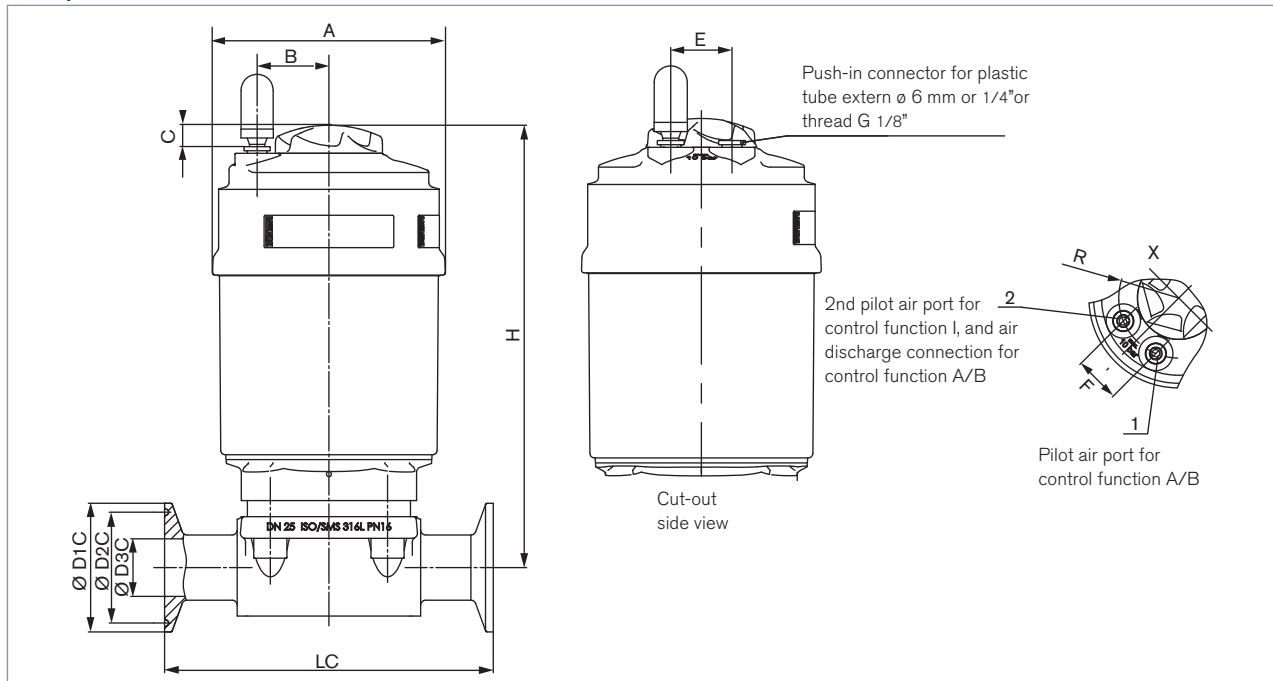
All bodies									ASME BPE		BS 4825	
Orifice		Actuator size Ø [mm]	Ø A	B	C	E	H	LS	Ø DS	WS	Ø DS	WS
[mm]	[inch]											
8	1/4"	50	64.5	17.15	6.1	19.8	129	78	6.35	0.89	6.35	1.2
10	3/8"	50	64.5	17.15	6.1	19.8	144	108	9.53	0.89	9.53	1.2
15	1/2"	70	91	30.5	8.5	23.3	161	108	12.70	1.65	12.70	1.2
20	3/4"	70	91	30.5	8.5	23.3	171	117	19.05	1.65	19.05	1.2
25	1"	70	91	30.5	8.5	23.3	174	127	25.40	1.65	25.40	1.65
		90	120	30.5	8.5	23.3	207	127	25.40	1.65	25.40	1.65
40	1 1/2"	130	159	30.5	8.5	23.3	288	159	38.10	1.65	38.10	1.65
50	2"	130	159	30.5	8.5	23.3	311	190	50.80	1.65	50.80	1.65

On request: SMS 3008

Orifice		Actuator size Ø [mm]	Ø A	B	C	E	H	LS	Ø DS	WS
[mm]	[inch]									
25	1"	70	91	30.5	8.5	23.3	174	127	25	1.2
		90	120	30.5	8.5	23.3	207	127	25	1.2

Dimensions Type 2103 forged diaphragm valve [mm], *continued*

Clamp connection



DIN 32676 Series A

Orifice		Actuator size Ø	Ø A	B	C	E	H	LC	Ø D1C	Ø D2C	Ø D3C
[mm]	[inch]										
15	1/2"	70	91	30.5	8.5	23.3	161	110	34	27.5	16
20	3/4"	70	91	30.5	8.5	23.3	171	119	34	27.5	20
25	1"	70	91	30.5	8.5	23.3	174	129	50.5	43.5	26
		90	120	30.5	8.5	23.3	207	129	50.5	43.5	26
40	1 1/2"	130	159	30.5	8.5	23.3	288	161	50.5	43.5	38
50	2"	130	159	30.5	8.5	23.3	311	192	64	56.5	50

ASME BPE

Orifice		Actuator size Ø	Ø A	B	C	E	H	LC		Ø D1C	Ø D2C	Ø D3C
[mm]	[inch]							long dimension	short dimension			
8	1/4"	50	64.5	17.15	6.1	19.8	129	78	64.5	25	21.8	3.95
10	3/8"	50	64.5	17.15	6.1	19.8	144	89	89	25	21.8	9.4
15	1/2"	70	91	30.5	8.5	23.3	161	108	89	25	21.8	9.4
20	3/4"	70	91	30.5	8.5	23.3	171	117	102	25	21.8	15.75
		90	120	30.5	8.5	23.3	207	127	114	50.5	43.5	22.2
25	1"	70	91	30.5	8.5	23.3	174	127	114	50.5	43.5	22.2
		90	120	30.5	8.5	23.3	207	127	114	50.5	43.5	22.2
40	1 1/2"	130	159	30.5	8.5	23.3	288	159	140	50.5	43.5	34.9
50	2"	130	159	30.5	8.5	23.3	311	190	159	64	56.5	47.6

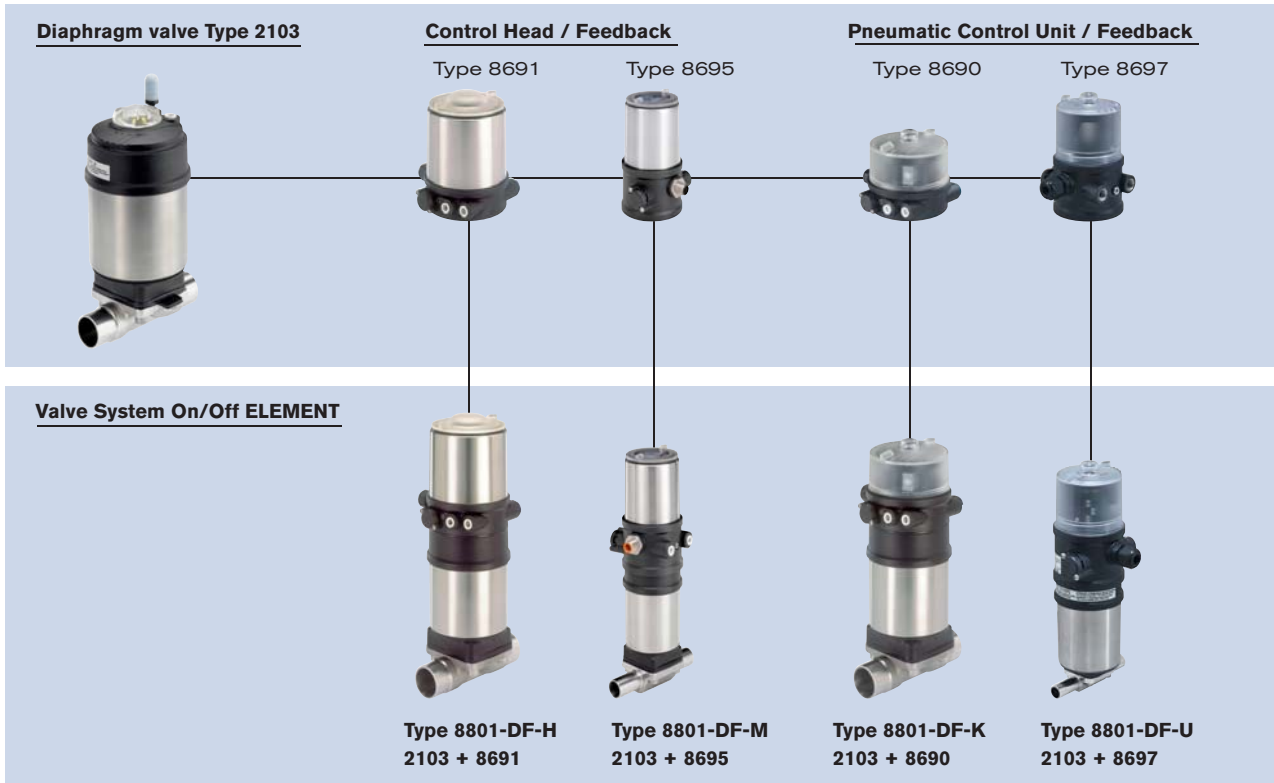
On request: ISO 2852/ SMS 3017

Orifice		Actuator size Ø	H	LC	Ø D1C	Ø D2C	Ø D3C
[mm]	[inch]						
25	1"	70	174	129	50.5	43.5	22.6
		90	207	129	50.5	43.5	22.6

Ordering information for valve system On/Off ELEMENT Type 8801-DF

A **valve system On/Off ELEMENT Type 8801-DF** consists of a **diaphragm valve Type 2103** 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. 15-17. [go to page](#)
You order two components and receive a complete assembled and certified valve.



A detailed description of the control heads and pneumatic control units is on the next page... →

Ordering information for valve system On/Off ELEMENT Type 8801-DF, *continued*

Control Head / Feedback



More info.



More info.

Type 8691

Actuator size 70/90/130

Type 8695

Actuator size 50

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



More info.



More info.

Type 8690

Actuator size 70/90/130

Type 8697

Actuator size 50

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

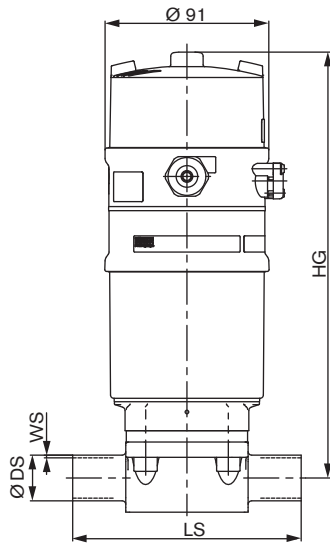
- Easy and safe Start-up through Teach function (Type 8697)
- High level of signal reliability thanks to self adjusting limit switches
- Minimised space requirement in the plant piping for more flexibility in plant design

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

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

Dimensions valve system On/Off ELEMENT Type 8801-DF-K (with pneumatic control unit Type 8690) [mm]

Welded connection



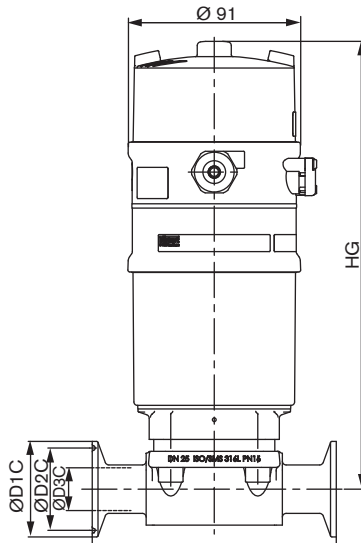
EN ISO 1127/ISO 4200/ DIN 11866 S. B and DIN 11850 S. 2/ DIN 11866 S. A (SMS 3008 on request)

Orifice		Actuator size Ø			EN ISO 1127/ ISO 4200/ DIN 11866 S. B		DIN 11850 S. 2/ DIN 11866 S. A		SMS 3008 (on request)	
[mm]	[inch]	[mm]	HG	LS	Ø DS	WS	Ø DS	WS	Ø DS	WS
15	1/2"	70	224	110	21.3	1.6	19	1.5	-	-
20	3/4"	70	234	119	26.9	1.6	23	1.5	-	-
25	1"	70	237	129	33.7	2.0	29	1.5	25	1.2
		90	270	129	33.7	2.0	29	1.5	25	1.2
40	1 1/2"	130	351	161	48.3	2.0	41	1.5	38	1.2
50	2	130	374	192	60.3	2.0	53	1.5	51	1.2

ASME BPE and BS 4825

Orifice		Actuator size Ø			ASME BPE		BS 4825	
[mm]	[inch]	[mm]	HG	LS	Ø DS	WS	Ø DS	WS
15	1/2"	70	224	108	12.70	1.65	12.70	1.2
20	3/4"	70	234	117	19.05	1.65	19.05	1.2
25	1"	70	237	127	25.40	1.65	25.40	1.65
		90	270	127	25.40	1.65	25.40	1.65
40	1 1/2"	130	351	159	38.10	1.65	38.10	1.65
50	2	130	374	190	50.80	1.65	50.80	1.65

Clamp connection



DIN 32676 S. A and ASME BPE

Orifice		Actuator size Ø	DIN 32676 S. A			ASME BPE						
[mm]	[inch]	[mm]	HG	LC	Ø D1C	Ø D2C	Ø D3C	LC long dimension	short dimension	Ø D1C	Ø D2C	Ø D3C
15	1/2"	70	224	110	34	27.5	16	108	89	25	-	9.4
20	3/4"	70	234	119	34	27.5	20	117	102	25	-	15.75
25	1"	70	237	129	50.5	43.5	26	127	114	50.5	43.5	22.2
		90	270	129	50.5	43.5	26	127	114	50.5	43.5	22.2
40	1 1/2"	130	351	161	50.5	43.5	38	159	140	50.5	43.5	34.9
50	2	130	374	192	64.0	56.5	50	190	159	64	56.5	47.6

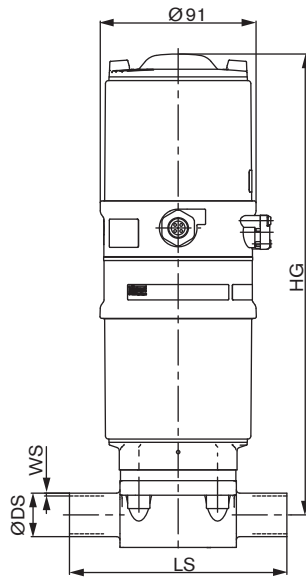
On request: ISO 2852/SMS 3017

Orifice		Actuator size Ø					
[mm]	[inch]	[mm]	HG	LC	Ø D1C	Ø D2C	Ø D3C
25	1"	70	237	129	50.5	43.5	22.6
		90	270	129	50.5	43.5	22.6

Dimensions for valve system On/Off ELEMENT Type 8801-DF [mm], *continued*

Dimensions valve system On/Off ELEMENT Type 8801-DF-H (with control head Type 8691) [mm]

Welded connection



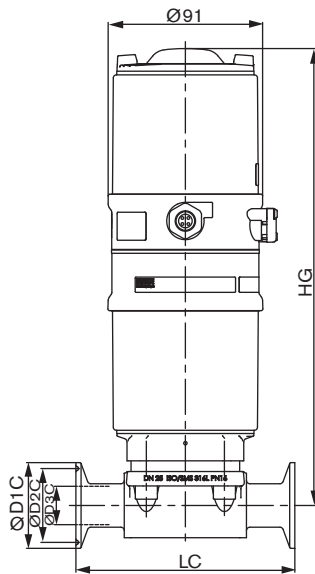
EN ISO 1127/ISO 4200/ DIN 11866 S. B and DIN 11850 S. 2/ DIN 11866 S. A (SMS 3008 on request)

Orifice		Actuator size Ø			EN ISO 1127/ ISO 4200/ DIN 11866 S. B		DIN 11850 S. 2/ DIN 11866 S. A		SMS 3008 (on request)	
[mm]	[inch]	[mm]	HG	LS	Ø DS	WS	Ø DS	WS	Ø DS	WS
15	1/2"	70	257	110	21.3	1.6	19	1.5	-	-
20	3/4"	70	267	119	26.9	1.6	23	1.5	-	-
25	1"	70	270	129	33.7	2.0	29	1.5	25	1.2
		90	303	129	33.7	2.0	29	1.5	25	1.2
40	1 1/2"	130	384	161	48.3	2.0	41	1.5	38	1.2
50	2	130	407	192	60.3	2.0	53	1.5	51	1.2

ASME BPE and BS 4825

Orifice		Actuator size Ø			ASME BPE		BS 4825	
[mm]	[inch]	[mm]	HG	LS	Ø DS	WS	Ø DS	WS
15	1/2"	70	257	108	12.70	1.65	12.70	1.2
20	3/4"	70	267	117	19.05	1.65	19.05	1.2
25	1"	70	270	127	25.40	1.65	25.40	1.65
		90	303	127	25.40	1.65	25.40	1.65
40	1 1/2"	130	384	159	38.10	1.65	38.10	1.65
50	2	130	407	190	50.80	1.65	50.80	1.65

Clamp connection



DIN 32676 S. A and ASME BPE

Orifice		Actuator size Ø	DIN 32676 S. A			ASME BPE						
[mm]	[inch]	[mm]	HG	LC	Ø D1C	Ø D2C	Ø D3C	LC long dimension	short dimension	Ø D1C	Ø D2C	Ø D3C
15	1/2"	70	257	110	34	27.5	16	108	89	25	-	9.4
20	3/4"	70	267	119	34	27.5	20	117	102	25	-	15.75
25	1"	70	270	129	50.5	43.5	26	127	114	50.5	43.5	22.2
		90	303	129	50.5	43.5	26	127	114	50.5	43.5	22.2
40	1 1/2"	130	384	161	50.5	43.5	38	159	140	50.5	43.5	34.9
50	2	130	407	192	64.0	56.5	50	190	159	64.0	56.5	47.6

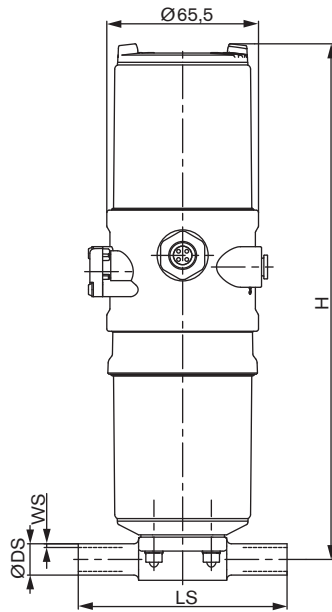
On request: ISO 2852/SMS 3017

Orifice		Actuator size Ø					
[mm]	[inch]	[mm]	HG	LC	Ø D1 C	Ø D2 C	Ø D3 C
25	1"	70	270	129	50.5	43.5	22.6
		90	303	129	50.5	43.5	22.6

Dimensions for valve system On/Off ELEMENT Type 8801-DF [mm], *continued*

Dimensions valve system On/Off ELEMENT Type 8801-DF-M (with control head Type 8695) [mm]

Welded connection



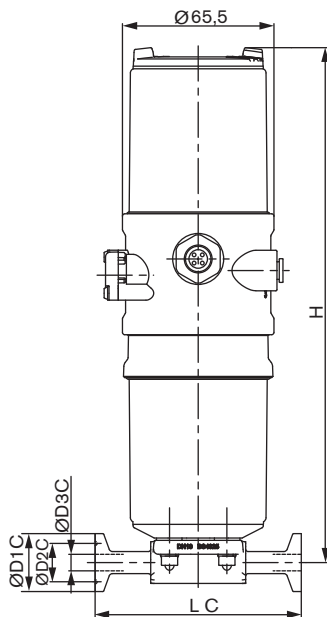
EN ISO 1127/ISO 4200/ DIN 11866 S. B and DIN 11850 S. 2/ DIN 11866 S. A

Orifice		Actuator size Ø		EN ISO 1127/ ISO 4200/ DIN 11866 S. B		DIN 11850 S. 2/ DIN 11866 S. A		
[mm]	[inch]	[mm]	H	LS	Ø DS	WS	Ø DS	WS
08	1/4"	50	223	90	13.5	1.6	-	-
10	3/8"	50	238	110	17.2	1.6	13.0	1.5

On request: ASME BPE and BS 4825

Orifice		Actuator size Ø		ASME BPE		BS 4825		
[mm]	[inch]	[mm]	H	LS	Ø DS	WS	Ø DS	WS
08	1/4"	50	223	78	6.35	0.89	6.35	1.2
10	3/8"	50	238	108	9.53	0.89	9.53	1.2

Clamp connection



DIN 32676 S. A

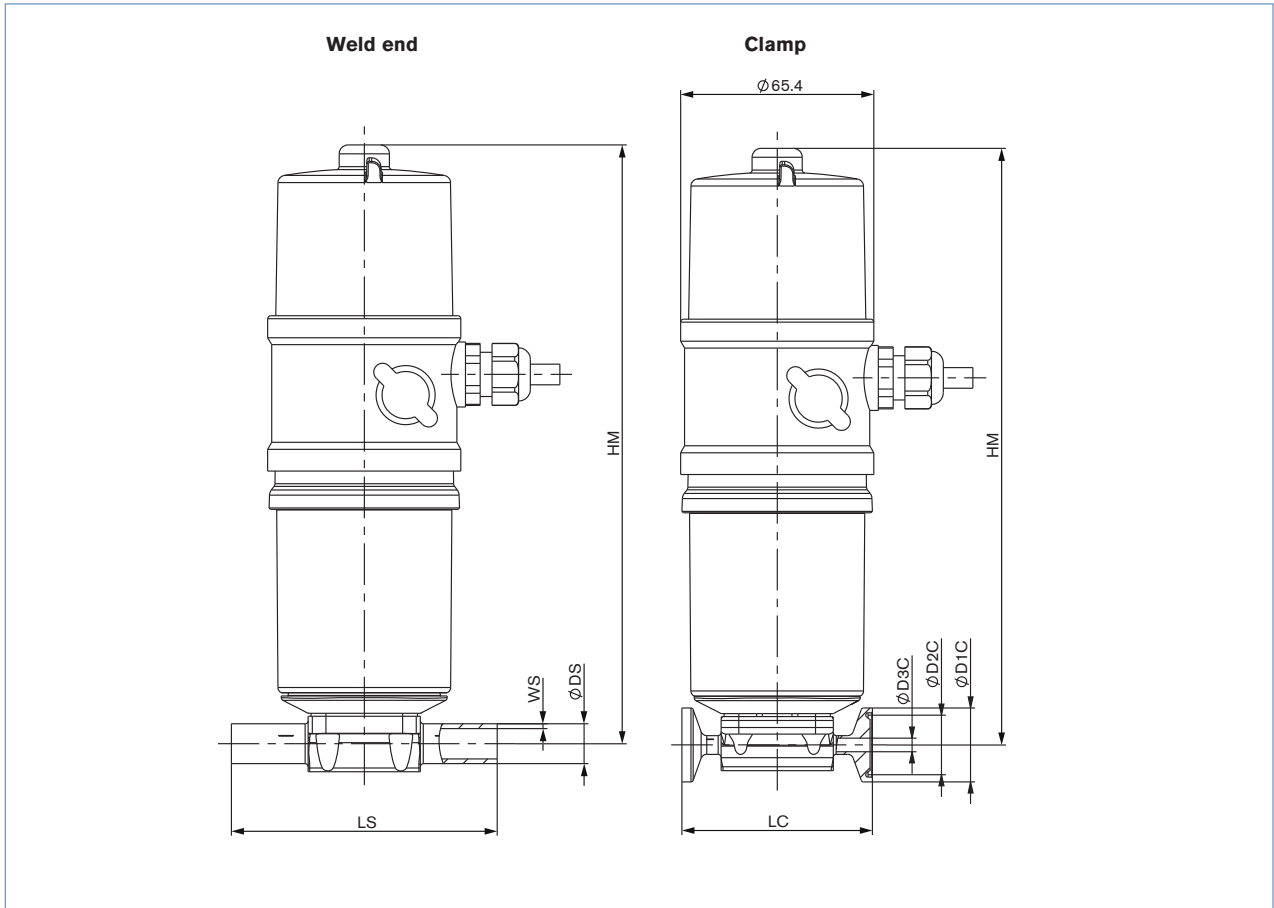
Orifice		Actuator size Ø		DIN 32676 S. A			
[mm]	[inch]	[mm]	HG	LC	Ø D1C	Ø D2C	Ø D3C
10	3/8"	50	238	110	34	27.5	16

ASME BPE

Orifice		Actuator size Ø		ASME BPE					
[mm]	[inch]	[mm]	HG	LC	long dimension	short dimension	Ø D1C	Ø D2C	Ø D3C
8	1/4"	50	223	78	64.5	25	21.8	3.95	
10	3/8"	50	238	89	89	25	21.8	9.4	

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

Dimensions valve system On/Off ELEMENT Type 8801 with with electrical position indicator Type 8697



Port connection	Actuator size	Connection [mm]															
		Weld end EN ISO 1127 / ISO 4200 / DIN 11866 Series B				DIN 11850 Series 2 / DIN 1186 Series A				ASME BPE/ DIN 11866 Series C				BS 4825			
[mm]	[mm]	HM	LS	ØDS	WS	HM	LS	ØDS	WS	HM	LS	ØDS	WS	HM	LS	ØDS	WS
8	50	200.9	90	13.5	1.6					200.9	90	13.5	1.6	200.9	78	6.35	0.89
10	50					215.9	90	17.2	1.6	215.9	90	17.2	1.6	215.9	89	9.53	0.89

Port connection	Actuator size	Anschluss [mm]				
		Clamp ASME BPE				
[mm]	[mm]	HM	LC	D1C	D2C	D3C
8	50	200.9	64.5	25	21.8	3.95
10	50	215.9	89	25	21.8	9.4

Valve features, specification key - Request for quotation

Example

2103 A 15 AB VS SA42 NO23

Specification key

(Please make a choice)

CONTROL FUNCTION

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

ORIFICE [mm] (diaphragm)

08
10
15
20
25
32
40
50

SEAL MATERIAL

AB	EPDM in food quality
AD	EPDM
EA	PTFE/EPDM
FF	FKM
EU	advanced PTFE/EPDM in two pieces

BODY MATERIAL

VS	Forged 1.4435/BN2/ASME BPE
----	----------------------------

VARIABLE CODES

NO14	Int. Mechanical polished Ra=0.5µm
NO23	Int. Mechanical polished Ra=0.6µm
NO17	Int. Electro polished Ra=0.4µm

Standard



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
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	SODC - 9.53x1.2	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
DN [mm]	Port connection Clamp					ASME BPE	BS 4825 (Clamp BS 4825-3, tube BS 4825-1)	
	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))					
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		
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		

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

Valve system On/Off ELEMENT Type 8801-DF – 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 line DN PN

Pipe material

Process medium

Type of media Liquid Steam Gas

Valve features

Specification key

2103

(automatically transferred from p. 15)









Surface finish (if not standard) internal µm external µm

Pilot pressure min. max.

Atex II 2GD Mechanical

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 / Feedback		Pneumatische Ansteuerung / Rückmelder	
<input type="checkbox"/> Type 8691  For actuator size 70/90/130 	<input type="checkbox"/> Type 8695  For actuator size 50 	<input type="checkbox"/> Type 8690  For actuator size 70/90/130 	<input type="checkbox"/> Type 8697  For actuator size 50 
<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

Continued on next page →

Valve system On/Off Classic Type 8801-DF – 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 (Included in delivery)
- EN161 (European Gas Device guideline)
- FDA and USP compliance

Comment /sketch

DTS 1000097545 EN Version: M Status: RL (released | freigegeben | valide) printed: 17.02.2016