#### **DATA SHEET**

## Type 2105

Pneumatically operated diaphragm valve with ELEMENT actuator





# Tank bottom diaphragm valve with pneumatic actuator in stainless steel (Type ELEMENT) for decentralised automation

- Valve body and diaphragm are available in various materials and variants
- Product wetted surfaces in Ra ≤ 0.38 µm...1.6 µm (optionally electropolished)
- Available in all common connection sizes and variants

Product variants described in the data sheet may differ from the product presentation and description.

#### Can be combined with

#### Type 2034

Multifunction block and weld solution

#### Type 8691

Control head for decentralised automation of ELEMENT process valves

## Type 8695

Control head for decentralised automation of ELEMENT process valves

#### Type 8692

Digital electropneumatic Positioner for the integrated mounting on process control valves

#### Type 8696

Digital electropneumatic positioner for the integrated mounting on process control valves

#### **Type 8098**

FLOWave SAW flowmeter

#### Type description

The externally controlled diaphragm valve Type 2105 consists of a pneumatically operated piston actuator, a diaphragm and a tank bottom valve body. The proven and robust actuator with stainless steel housing ensures use in hygienic or aggressive ambient conditions. The flow-efficient valve bodies with little dead space enable high flow rates and a wide range of possible uses. The valve body and the diaphragm are available in all common materials and variants. The actuator has a compact, autoclavable design with a large stainless steel housing and gap-free seals. The integration of automation units Type ELEMENT is possible in all configuration levels (can be retrofitted); a fieldbus interface can also be integrated. An explosion-proof ATEX / IECEx device variant is available. It is a compact, smooth-surfaced and highly integrated system consisting of a valve and an automation unit with integrated pilot air ducts (no intake of ambient air). The add-on body is optionally available in plastic or stainless steel (can be rotated 360°). The valve offers the degrees of protection IP65/67 and NEMA Type 4X and displays high chemical resistance.





## 1. General technical data

Product properties					
Dimensions	Detailed information can be found in chapter "4. Dimensions" on page 6.				
Material					
Block body (VH) <sup>1.)</sup>	Stainless steel 1.4435/316 L				
Block body (VI) <sup>1.)</sup>	Stainless steel 1.4435/BN2/ASME BPE; Fe < 0.5 %/C ≤ 0.03 %				
Diaphragm	EPDM (AD) <sup>1,1</sup> , PTFE/EPDM (EA) <sup>1,1</sup> , advanced PTFE/EPDM (EU) <sup>1,1</sup> , Gylon®/EPDM laminated (ER) <sup>1,1</sup>				
Actuator	PPS				
Actuator cover	Stainless steel 1.4561 (316Ti)				
Diaphragm size	865				
Standard surface quality					
Block body (VH/VI) <sup>1.)</sup>	Internal electrically polished : Ra $\leq$ 0.38 µm (NO17) <sup>1,3</sup> (ASME BPE SF4/DIN HE4) (external Ra $\leq$ 1.6 µm) Internal mechanically polished : Ra $\leq$ 0.5 µm (NO14) <sup>1,3</sup> (ASME BPE SF1) (external Ra $\leq$ 1.6 µm)				
Performance data					
Pilot pressure (max.) (CF: A)	10 bar 7 bar for actuator size 130 See "5.1. Medium pressure" on page 12				
Pilot air ports	Push-in connector for external, Ø6 mm or ¼" (Standard); thread G 1/8				
Medium data					
Medium	Neutral gases and fluids, highly purified, sterile, aggressive or abrasive medium (see Resistance Chart )				
Medium temperature					
EPDM (AD) <sup>1.)</sup>	-10+143 °C (steam sterilisation +150 °C for 60 min)				
PTFE/EPDM (EA) <sup>1.)</sup>	-10+130 °C (steam sterilisation +140 °C for 60 min)				
Advanced PTFE/EPDM (EU)1.)	-5+143 °C (steam sterilisation +150 °C for 60 min)				
GYLON®/EPDM laminated (ER)1.)	-5+130 °C (steam sterilisation +140 °C for 60 min)				
Control medium	Neutral gases, air				
Process/Port connection & commun	nication				
Nominal diameter	D <mark>N</mark> 06DN65 (1/8"21/2")				
Port connections <sup>2)</sup>					
For stainless steel body <sup>2.)</sup>					
Welded connection <sup>2,)</sup>	DIN EN ISO 1127/ISO 4200/DIN 11866 series B DIN 11850 series 2/DIN 11866 series A/DIN EN 10357 series A ASME BPE/DIN 11866 series C				
Clamp connection <sup>2.)</sup>	DIN 32676 series A (DIN pipe) DIN 32676 series B (ISO pipe) ASME BPE				
Environment and installation					
Installation position	See operating manual				
Ambient temperature	-10+60 °C autoclaveable				

- 1.) This information is part of the product key (see product enquiry form at the end of this data sheet)
- 2.) Further versions on request





## 2. Approvals

#### Note:

If you need one of these certificates, please contact your Bürkert partner.

Approvals/ Conformity/ Certificate <sup>1.)</sup>	Description
$\langle \xi_{x} \rangle$	ATEX/IECEx <sup>2,3</sup> EPS 18 ATEX 2 008 X II 2G Ex h IIC T4 Gb/II 2D Ex h IIIC T135 °C Db IECEx EPS 18.0007X Ex h IIC T4 Gb/Ex h IIIC T135 °C Db
TA-air	TA-air <sup>3.)</sup>
<b>3</b>	3-A (3-A Sanitary Standards Symbol Administrative Council) <sup>4,)</sup>
밋	The diaphragms made of EPDM (AD), PTFE/EPDM (EA), advanced PTFE/EPDM (EU) and GYLON®/EPDM laminated (ER) are suitable for use with food and beverages (acc. to EC Regulation 1935/2004/EC).
	Diaphragms made of EPDM (AD), PTFE/EPDM (EA), advanced PTFE/EPDM (EU) and GYLON®/EPDM laminated (ER) are acc. to USP Class VI tested.
FDA	Diaphragms made of EPDM (AD), PTFE/EPDM (EA), advanced PTFE/EPDM (EU) and GYLON®/EPDM laminated (ER) comply with the Code of Federal Regulations published by the FDA (Food and Drug Administration, USA).

- 1.) Further approvals/conformity clarification on request
- 2.) Only in combination with variable code «PX51» (see product enquiry form at the end of this data sheet)
- 3.) Only in combination with variable code «PM01» (see product enquiry form at the end of this data sheet)
- 4.) Only in combination with variable code «PE05» (see product enquiry form at the end of this data sheet)



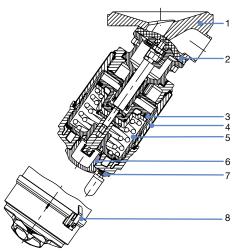


#### 3. Materials

#### 3.2. Material specifications

#### Note:

Exemplary representation may differ from the actual product.



No.	Element	Material			
1	Valve body	See "1. General technical data" on page 3			
2	Diaphragm	EPDM (AD), PTFE/EPDM (EA), advanced PTFE/ EPDM (EU), Gylon®/EPDM laminated (ER)			
3	Piston seal	FKM			
4	Cover	Stainless steel 1.4561 (316Ti)			
5	Actuator	Polyphenylene sulphide PPS			
6	Optical position indicator	Polysulfone PSU			
7	Pilot air ports	Push-in connector PP (Standard); Thread G 1/8" stainless steel 1.4305			
8	Ground terminal	Stainless steel 1.4301/1.4305 (only for ATEX/IECEx version)			

#### 3.3. Example of available membrane materials

The diaphragms have been developed to meet the unique challenges of hygienic and sterile requirements. Bürkert offers diaphragms with precise material composition and high accuracy. Bürkert diaphragms are available in a wide range of materials which have been tested and proven in applications in the food and beverage, biotechnology, pharmaceutical and cosmetics industries. The diaphragms are tested during development and production to ensure reliability under difficult process conditions.

- EPDM (AD)
- PTFE/EPDM (EA)
- advanced PTFE/EPDM (EU)
- Gylon®/EPDM laminated (ER)

For further information please refer to our flyer "Diaphragm competence for hygienic applications" on our website .





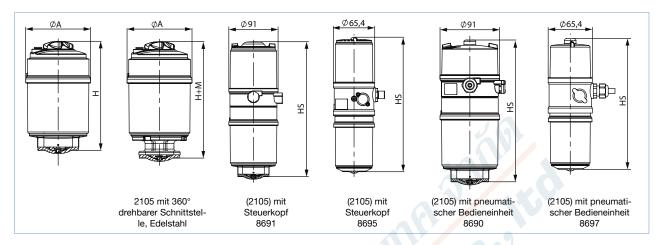
#### 4. Dimensions

#### 4.1. Actuator

#### **ELEMENT** actuator

#### Note:

Dimensions in mm, unless otherwise stated



Diaphragm size	Actuator size Ø	ctuator size Ø ØA H HS with			H+M (MT86)	
				8691/8695	8690/8697	
8	50(D)	65	119	207	194	141
15	50(D)	65	132	220	206	146
	70(M)	_	=/1	242	209	<del>-</del>
20	70(M)	92	153	248	215	165
25	70(M)	92	154	248	215	171
	90(N)	120	187	282	249	204
32	90(N)	120	202	297	264	215
40	90(N)	120	206	300	268	221
	130(P)	159	259	353	320	273
50	130(P)	159	275	369	336	281
65	130(P)	-	_	_	_	285

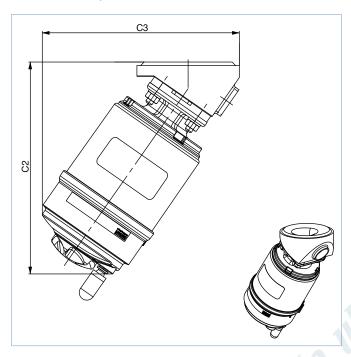




#### **ELEMENT** actuator with tank bottom body

#### Note:

Dimensions in mm, unless otherwise stated



Diaphragm size	Actuator size Ø	C2	C3
8	50(D)	139	124
15	50(D)	152	138
	70(M)	173	156
20	70(M)	176	164
25	70(M)	188	177
	90(N)	215	201
40	90(N)	241	238
	130(P)	290	285
50	130(P)	302	302
65	130(P)	314	321



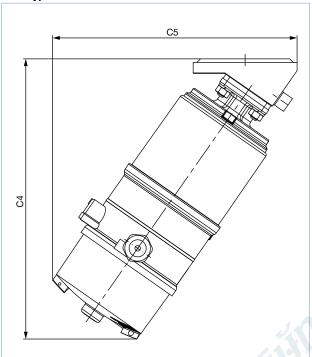


#### ELEMENT actuator with tank bottom body and pneumatic control unit

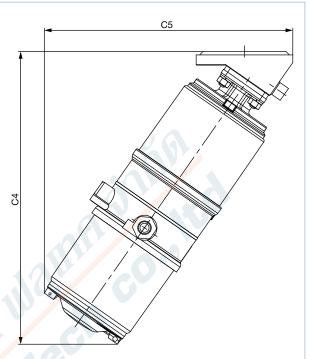
#### Note:

Dimensions in mm, unless otherwise stated

#### With Type 8690



#### With Type 8691

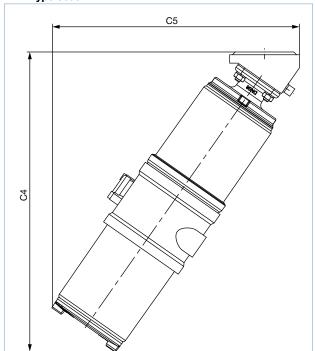


Diaphragm size	Actuator size Ø	C4	C5
15	70(M)	229.1	190.3
20	70(M)	232.6	207
25	70(M)	245.5	221.6
	90(N)	272.4	240.2
40	90(N)	298.5	278.4
	130(P)	341	308
50	130(P)	354	324.3

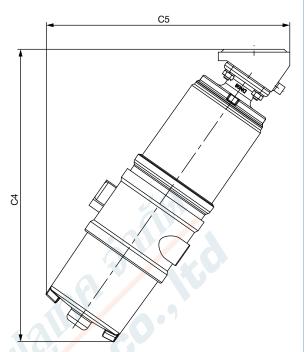
Diaphragm size	Actuator size Ø	C4	C5
15	70(M)	257.4	218.5
20	70(M)	260.8	225.7
25	70(M)	273.7	240.2
	90(N)	300.7	259.1
40	90(N)	326.7	297
	130(P)	370	327.3
50	130(P)	382.2	343.2

# burkert

With Type 8695







Diaphragm size	Actuator size Ø	C4	C5
8	50(D)	215.3	177.5
15	50(D)	223.2	189.7

Diaphragm size	Actuator size Ø	C4	C5
8	50(D)	204	170.3
15	50(D)	212	182.3

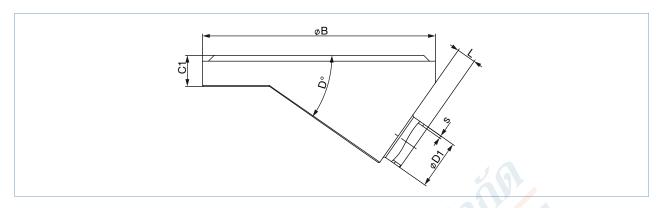




## 4.2. Tank bottom body with welded connection

#### Note:

Dimensions in mm, unless otherwise stated



Dia- phragm size	Port connection DN	ØB	C1	D	ØD1	S	L	Product key <sup>1.)</sup>
DIN EN IS	O 1127/ISO 4200	/DIN 11866 serie	s B	<u>'</u>				
8	8	50	8	35°	13.5	1.6	5	SA40
15	15	65 (Actuator D)	12	35°	21.3	1.6	4	SA42
		85 (Actuator M)		4			8	SA42
20	20	85	12	35°	26.9	1.6	5.6	SA43
25	25	120	16	35°	33.7	2	8	SA44
40	32	150	18	35°	42.4 (Port 32)	2	20	SA45
	40				48.3		15	SA46
50	50	180	22	35°	60.3	2	12	SA47
DIN 11850	series 2/DIN 11	866 series A/DIN	EN 10357	series A				
8	10	50	8	35°	13	1.5	5	SD40
15	15	85	12	35°	19	1.5	8	SD42
20	20	85	12	35°	23	1.5	7	SD43
25	25	120	16	35°	29	1.5	8	SD44
40	40	150	18	35°	41	1.5	20	SD46
50	50	180	22	35°	53	1.5	15	SD47
ASME BP	E/DIN 11866 seri	es C						
8	1/4"	50	8	35°	6.35	0.89	6	SA90
15	1/2"	85	12	35°	12.7	1.65	10	SA92
20	3/4"	85	12	35°	19.05	1.65	8	SA93
25	1"	120	16	35°	25.4	1.65	12	SODF
40	1½"	150	18	35°	38.1	1.65	15	SODH
50	11/2"	180	22	35°	38.1	1.65	25	SODH
	2"				50.8		15	SODI
	2½"				63.5		11	SODJ
SMS 3008								
25	25	120	16	35°	25	1.2	8	SA60
40	40	150	18	35°	38	1.2	20	SA62
50	50	180	22	35°	51	1.2	15	SA63

<sup>1.)</sup> This information is part of the product key (see product enquiry form at the end of this data sheet)

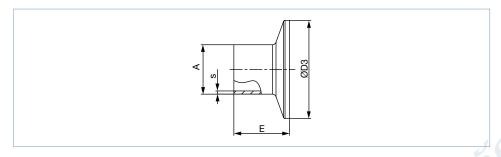




## 4.3. Tank bottom body with clamp connection

#### Note:

- Dimensions in mm, unless otherwise stated
- Clamp dimensions must be added to the welded connection dimensions.



Port conne	ection	Α	s	<b>D</b> 3	E	Product
[mm]	[inch]					key <sup>1.)</sup>
DIN 32676	series A (DIN pi	pe)	'			
10	_	13	1.5	34.0	18	TD41
15	_	19	1.5	34.0	18	TD42
20	_	23	1.5	34.0	18	TD43
25	_	29	1.5	50.5	21.5	TD44
32	_	35	1.5	50.5	21.5	TD45
40	_	41	1.5	50.5	21.5	TD46
50	_	53	1.5	64.0	21.5	TD47
<b>DIN 32676</b>	series B (ISO pi	pe)	'	1.0		
8	_	13.5	1.6	25.0	28.6	TC40
8	_	13.5	1.6	34.0 <sup>2.)</sup>	28.6	TC51 <sup>2.)</sup>
10	_	17.2	1.6	34.02.)	28.6	TC41 <sup>2.)</sup>
15	_	21.3	1.6	34.02.)	28.6	TC42 <sup>2.)</sup>
15	_	21.3	1.6	50.5	28.6	TC52
20	_	26.9	1.6	50.5	28.6	TC43
25	-	33.7	2	50.5	28.6	TC44
32	-	42.4	2	50.5 <sup>2.)</sup>	28.6	TC45 <sup>2.)</sup>
40	- /	48.3	2	64.0	28.6	TC46
50	-//	60.3	2	77.5	28.6	TC47
ASME BPE						
8	1/4"	6.35	0.89	25.0	28.6	TG50
10	3/8"	9.53	0.89	25.0	28.6	TG01
15	1/2"	12.7	1.65	25.0	28.6	TG02
20	3/4"	19.05	1.65	25.0	28.6	TG03
25	1"	25.4	1.65	50.5	28.6	TG04
40	1½"	38.1	1.65	50.5	28.6	TG05
50	2"	50.8	1.65	64.0	28.6	TG06

<sup>1.)</sup> This information is part of the product key (see product enquiry form at the end of this data sheet)



<sup>2.)</sup> Deviating from the standard, because of different clamp outer diameter.



## 5. Performance specifications

#### 5.1. Medium pressure

#### Information for control function A

#### Note:

- For low operating pressures, optional versions with reduced spring force (EC04) are recommended.
- Pressure data [bar]: Overpressure to atmospheric pressure. Valve closes dynamically against max. operating pressure.
- Information for control function B and I on request.

Diaphragm size	Actuator size Ø	Pilot pressure	Max. operating pressure for seal material		
			EPDM, FKM	PTFE/EPDM, advanced PTFE/EPDM, GYLON®/EPDM laminated	
DN	[mm]	[bar]	[bar]	[bar]	
8	50(D)	5.010	10	10	
15	50(D)	5.010	7.5	-	
	70(M)		10	10	
20	70(M)	5.010	10	10	
25	70(M)	5.010	6.5	4.5	
	90(N)	5.010	10	8	
40	90(N) <sup>1.)</sup>	5.510	5.5	5	
	130(P)	5.07	10	10	
50	130(P)	5.07	8	7	
65	130(P)	5.07	5.5	3.5	

<sup>1.)</sup> Gylon version is not available





#### 6. Product accessories

Process controller TopControl	
Type 8693 ▶ Actuator size Ø70/90/130 mm	Description
	The intelligent process controller Type 8693 is designed for integrated mounting on pneumatic actuators from the process control valve series Type 23xx/2103 and especially for the requirements of hygienic process conditions. Using the TUNE-Functions, the process controller and positioner can be initialized automatically. Easy operation and selection of additional software functions as well as parameterization are carried out via the large graphic display and the keypad. Device configuration and parameterization can also be conveniently carried out by the Bürkert Communicator software tool via a PC interface.
	Features
	Contact-free position sensor
	Universal positioning system for single and double-acting actuators
	Ultra dynamic positioning system without air consumption in steady state
	Integrated diagnostic functions for valve monitoring
	Automatic initialization of the positioner and process controller using the TUNE-Function
	Defined safe position in case of electrical or pneumatic auxiliary power failure
	PROFIBUS DP-V1, EtherNet/IP, PROFINET, Modbus TCP, Bürkert system bus (büS)
	Compact and robust hygienic stainless steel design
	Customer benefits
	Quick and easy commissioning
	Intuitive and simple operation via graphic display with backlight and keypad
	High degree of system availability due to increased actuator service life by means of spring chamber ventilation
	Guaranteed reliability and predictable maintenance through valve monitoring and diagnostics
	Easy maintenance and process monitoring





Positioner TopControl	
Type 8692 ▶	Description
Actuator size Ø 70/90/130 mm	
	The intelligent electropneumatic positioner Type 8692 is designed for integrated attachment to pneumatic actuators of the process control valve series Type 23xx/2103 and especially for the requirements of hygienic process conditions. The positioner can be initialized automaticall using the TUNE-Function. Easy operation and the selection of the extensive additional softwa functions as well as parameterization are carried out via the large graphic display and keypad. The device configuration and parameterization can also be conveniently carried out using the Bürkert Communicator software tool via a PC interface.
	Features
	Contact-free position sensor
	Universal positioning system for single and double-acting actuators
	Ultra dynamic positioning system without air consumption in steady state
	Integrated diagnostic functions for valve monitoring
	Automatic initialization of the positioner by means of the TUNE-Function
	Defined safe position in case of electrical or pneumatic auxiliary power failure
	PROFIBUS DP-V1, EtherNet/IP, PROFINET, Modbus TCP, Bürkert system bus (büS)
	Compact and robust hygienic stainless steel design
	Customer benefits
	Quick and easy commissioning
	Intuitive and simple operation via graphic display with back-light and touch keypad
	High degree of system availability due to increased actuator service life by means of spring chamber ventilation
	<ul> <li>Guaranteed reliability and predictable maintenance through valve monitoring and diagnostics</li> </ul>
Positioner TopControl BASIC	
Type 8694 ▶ Actuator size Ø70/90/130 mm	Description
	The compact positioner Type 8694/8696 is designed for integrated attachment to pneumatic actuators of the Type 23xx/2103 process control valve series and especially for the requirements of hygienic process conditions. Operation and parameterization are performed via push buttons and DIP switches. The device configuration and parameterization can also be conveniently carried out using the Bürkert Communicator software tool via a PC interface.
	Features
	Contact-free position sensor
	Universal positioning system for single and double-acting actuators
Type 8696 •	Ultra dynamic positioning system without internal control air consumption
Actuator size Ø50 mm	AS-Interface, IO-Link, Bürkert system bus (büS) (only 8694)
	Compact and robust hygienic stainless steel design
	Customer benefits
	Simple and safe commissioning through Teach-In function
	Minimum space requirement in the plant pipework for more flexibility in plant design
	High degree of system availability due to increased actuator service life by means of spring chamber ventilation



Process controller SideControl Remote		
Type 8793 ▶ with Remote Sensor 8798 ▶ Actuator size Ø70/90/130 mm	Description	
	The intelligent digital positioner/process controller Type 8793 is designed for mounting on lift or swivel drives with standardization in accordance with IEC 534-6 or VDI/VDE 3845 and is designed for demanding control tasks. The version with remote position sensor Type 8798 is used to control Bürkert process control valves. It is operated via a backlit graphic display. The initialization of process and positioner can be done automatically by means of TUNE-Function. Here the type of controlled system is automatically recognized and the appropriate controller structure with the corresponding optimum parameter set is determined.	
	Features	
	Universal control system for single and double-acting actuators	
	Integrated diagnostic functions for valve monitoring	
	Automatic initialization of the position and process controller by means of TUNE-Function	
	Ultra dynamic actuating system without internal control air consumption.	
	Illuminated graphic display with keypad	
	PROFIBUS DP-V1, EtherNet/IP, PROFINET, Modbus TCP, Bürkert system bus (büS)	
	Compact and robust design	
	<ul> <li>Adaptation acc. to IEC 534-6 or VDI/VDE 3845 for lift and swivel drives or as remote version on Bürkert process valves</li> </ul>	
	Customer benefits	
	Quick and easy commissioning	
	Intuitive and simple operation via graphic display with backlight and keypad.	
	Guaranteed reliability and scheduled maintenance thanks to valve monitoring and diagnostics.	
	Easy maintenance and process monitoring	
	Long service life	



Decilion of the Control Decided	
Positioner SideControl Remote	Describer.
Positioner Type 8792 ▶ with Remote Sensor Type 8798 ▶ Actuator size Ø70/90/130 mm	Description
	The intelligent digital position/process controller Type 8792 is designed for attachment to lift and swivel drives with standardization according to IEC 534-6 or VDI/VDE 3845 for demanding control tasks. The Type 8798 version with remote position sensor is used to control Bürkert
	process control valves. It is operated via a backlit graphic display. The initialization of process and positioner can be done automatically by means of TUNE-Function.
	Features
	Illuminated graphic display with touch screen
	Universal control system for single and double-acting actuators
	Ultra dynamic actuating system without internal control air consumption.
	Integrated diagnostic functions for valve monitoring
	PROFIBUS DP-V1, EtherNet/IP, PROFINET, Modbus TCP, Bürkert system bus (büS)
	Compact and robust design
	<ul> <li>Adaptation acc. to IEC 534-6 or VDI/VDE 3845 for lift and swivel drives or as remote version on Bürkert process valves</li> </ul>
	Customer benefits
	Quick and easy commissioning
	Intuitive and simple operation via backlit graphic display and keypad.
	Guaranteed reliability and scheduled maintenance thanks to valve monitoring and diagnostics.
	Long service life
Positioner SideControl BASIC Re	
Positioner Type 8791 ▶ with Remote Sensor Type 8798 ▶ Actuator size Ø70/90/130 mm	Description
	The positioner Type 8791 is designed for mounting on lift or swivel drives with standardization in accordance with IEC 534-6 or VDI/VDE 3845 designed for simple control tasks. The variant with the remote sensor Type 8798 is used to control Bürkert process control valves. All operating elements are located inside the housing.
	Features
	Simple design
Positioner IP20 Type 8791 ▶ with	Universal control system for single and double-acting actuators
Remote Sensor Type 8798 ▶ Actuator size Ø70/90/130 mm	Ultra dynamic positioning system without air consumption in steady state
	<ul> <li>Adaptation according to IEC 534-6 or VDI/VDE 3845 for lift and swivel drives or as remote version on Bürkert process valves</li> </ul>
	AS-Interface, IO-Link, Bürkert system bus (büS) (only for Positioner Type 8791 BASIC Remote)
	Customer benefits
	Quick and easy commissioning
	Simple device for simple control tasks
	Low energy consumption



Control head	
Type 8691 ▶ Actuator size Ø70/90/130 mm	Description
	The control heads, Type 8691 and 8695, are optimized for integrated mounting on process valves of the 21XX series. The valve position is detected without contact via an analogue sensor element, which automatically detects and stores the valve end positions during commissioning using the Teach-In function. The integrated pilot valve controls single or double-acting actuators. The switching status of the valve is indicated by coloured high-performance LEDs.
	Features
	Status indication via coloured high-power LEDs
	Non-wearing inductive position sensor
Type 8695 ▶	Pilot valve with manual override
Actuator size Ø 50 mm	Teach-In function for automatic recognition of the valve end positions
	Hygienic stainless steel design
	Easy to clean chemical resistant housing according to IP65/67, 4X rating
	AS-Interface, IO-Link, Bürkert system bus (büS)
	Customer benefits
	Simple and safe commissioning by means of Teach-In function
	Easy process monitoring and fault detection through visible coloured high-power LEDs
	<ul> <li>High degree of system availability due to increased actuator service life by means of spring chamber ventilation</li> </ul>
	Minimal space requirement in the plant piping for more flexibility in plant design
Pneumatic control unit/Positi	on feedback
Type 8690 ▶ Actuator size Ø 70/90/130 mm	Description
	The pneumatic control units, Type 8690 and 8697, are optimized for integrated mounting on process valves of the 21XX series. Mechanical or inductive limit switches detect the valve position. The integrated pilot valve controls single or double-acting (Type 8690) actuators.
	Features
	Optical position indicator
Type 8697 ▶	Mechanical or inductive proximity switches for end position detection
Actuator size Ø 50 mm	Pilot valve with manual override
	Compact design
	Easy to clean, chemical resistant housing according to IP65/67, 4X rating
	Optional intrinsically safe design according to ATEX/IECEx
	Customer benefits
	Simple and safe commissioning using the Teach-In function (Type 8697)
	Signal reliability due to the automatic adjustment of the limit position switches
	Minimal space requirement in the plant piping for more flexibility in plant design
	minimal space requirement in the plant piping for more nexionity in plant design



## 7. Networking and combination with other Bürkert products

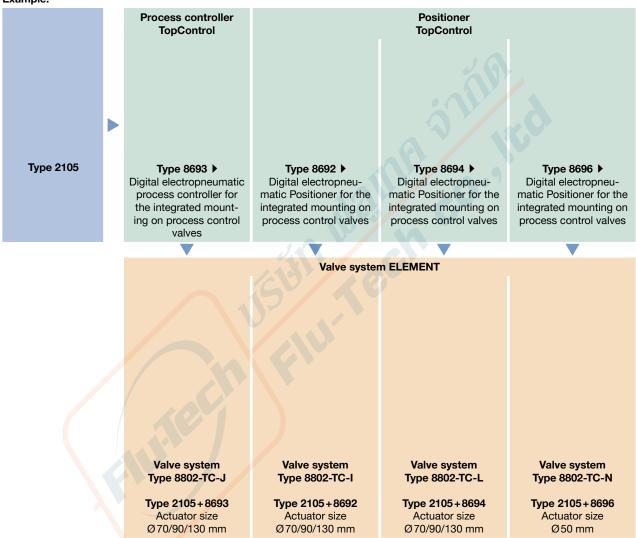
#### 7.1. Possible combinations for ELEMENT control valve system Type 8802-TC with TopControl

The **continuous ELEMENT valve system, Type 8802-TC,** consists of a **diaphragm valve, Type 2105,** and a digital electropneumatic **positioner, Type 8692** (for valve actuator size Ø 70/90/130 mm), a digital electropneumatic **process controller, Type 8693** (for valve actuator size Ø 70/90/130 mm), a basic digital electropneumatic **positioner, Type 8694** (for valve actuator size Ø 70/90/130 mm) or a digital electropneumatic **positioner, Type 8696** (for valve actuator size Ø 50 mm).

#### Note:

You order two components and receive a completely assembled and tested valve.

#### Example:





#### 7.2. Possible combinations for control valve system ELEMENT Type 8802-TC with SideControl Remote

The continuous ELEMENT valve system, Type 8802-TC with SideControl, consists of a diaphragm valve, Type 2105 and a digital electropneumatic SideControl process controller Type 8793 (for valve actuator size  $\emptyset$ 70/90/130 mm) or a digital electropneumatic SideControl positioner Type 8792/8791 (for valve actuator size  $\emptyset$ 70/90/130 mm). The SideControls can only be used in combination with the position measuring system Type 8798.

#### Note:

You order two components and receive a completely assembled and tested valve.

#### **Example:**





# 7.3. Possible combinations for ELEMENT control valve system Type 8801-TC with control head or pneumatic control unit/position feedback

A decentralized automated valve system On/Off ELEMENT, Type 8801-TC, consists of a diaphragm valve, Type 2105 and a valve control head Type 8691/8695 or a pneumatic control unit Type 8690/8697.

#### Note:

You order two components and receive a completely assembled and tested valve.

#### Example:

