

Type 2730_31

Pneumatically actuated diaphragm valve with CLASSIC control actuator



2/2 way diaphragm valve with pneumatic position-actuator (Type Classic)

- Valve housing in PVC, PP, PVDF and stainless steel
- Stainless steel surfaces in contact with the product from Ra ≤ 0.38 µm...1.6 µm (optionally electropolished)
- Diaphragms available in various materials and designs
- 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 8692 ▶ Digital electropneumatic Positioner for the integrated mounting on process control valves
	Type 8693 ▶ Digital electropneumatic process controller for the integrated mounting on process control valves
	Type 8694 ▶ Digital electropneumatic positioner for the integrated mounting on process control valves
	Type 8635 ▶ Digital electropneumatic Positioner SideControl
	Type 8792 ▶ Digital electropneumatic Positioner SideControl
	Type 8793 ▶ Digital electropneumatic Process Controller SideControl

Type description

The externally controlled diaphragm valves, Type 2730 and 2731, consist of a pneumatically operated piston actuator, a built-in positioner, a diaphragm and a 2 way valve housing. The proven and robust actuator with plastic housing ensures use under hygienic or aggressive environmental conditions. The flow-efficient valve housing with little dead space enables high flow rates and a wide range of possible uses. The valve housing and the diaphragm are available in all common materials and designs. The actuator has a compact, autoclavable design (PPS version). The integration of automation TopControl units 8692/8693/8694 and SideControl units 8635/8792/8793 is possible in all expansion stages (can be retrofitted). An explosion-proof ATEX/IECEx device variant is available.

The add-on housing is available in plastic or stainless steel. The actuator is equipped with an integrated, optical position indicator as standard, optionally a min./max. stroke limitation can be installed.

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1. General technical data

Product properties	
Dimensions	Detailed information can be found in chapter "4. Dimensions" on page 6.
Material	
Forged body (VS) ^{1.)}	Forged stainless steel 316L/1.4435/BN2, Fe < 0.5 %/C ≤ 0.03 %
Tube valve body (VP) ^{1.)}	Stainless steel 316L/1.4435/BN2
Cast body (VG) ^{1.)}	Cast stainless steel 316L/1.4435
Plastic body (PV; PP; PD) ^{1.)}	PVC (PVC-U); PP; PVDF
Diaphragm	EPDM (AD) ^{1.)} , PTFE/EPDM (EA) ^{1.)} , advanced PTFE/EPDM (EU) ^{1.)} , Gylon®/EPDM laminated (ER) ^{1.)}
Actuator	PA
Diaphragm size	65, 80, 100 mm
Standard surface quality	
Forged body (VS)^{1.)}	Internal electrically polished : Ra ≤ 0.38 µm (NO17) ^{1.)} (ASME BPE SF4/DIN HE4) (external forged surface electrically polished) Internal mechanically polished : Ra ≤ 0.5 µm (NO14) ^{1.)} (ASME BPE SF1) (external forged surface)
Tube valve body (VP) ^{1.)}	Internal electrically polished : Ra ≤ 0.38 µm (NO17) ^{1.)} (ASME BPE SF4/DIN HE4) External glass bead blasted: Ra ≤ 1.6 µm (NO01) ^{1.)} Internal glass bead blasted: Ra ≤ 1.6 µm (NO05) ^{1.)}
Cast body (VG)^{1.)}	Internal electrically polished : Ra ≤ 0.6 µm (NO16) ^{1.)} (ASME BPE SF6) (external cast surface electrically polished) Internal mechanically polished : Ra ≤ 0.76 µm (NO06) ^{1.)} (ASME BPE SF3/DIN H2) (external cast surface)
Performance data	
Max. pilot pressure	6 bar, see "5.2. Medium pressure" on page 17
Pilot air ports	Thread G ¼
Medium data	
Medium	Neutral gases and fluids, highly purified, sterile, aggressive or abrasive medium (see Resistance Chart ▶)
Medium temperature	
EPDM (AD)	- 10...+ 143 °C (steam sterilisation + 150 °C for 60 min)
PTFE/EPDM (EA)	- 10...+ 130 °C (steam sterilisation + 140 °C for 60 min)
Advanced PTFE/EPDM (EU)	- 5...+ 143 °C (steam sterilisation + 150 °C for 60 min)
GYLON®/EPDM laminated (ER)	- 5...+ 130 °C (steam sterilisation + 140 °C for 60 min)
Plastic body	See "3.2. Pressure temperature diagram for plastic body" on page 5
Control medium	Neutral gases, air
Process/Port connection & communication	
Nominal diameter	DN65...DN100 (2½" ... 4")
Port connections	
For stainless steel body	
Welded connection	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	DIN 32676 series A (DIN-pipe) DIN 32676 series B (ISO-pipe) ASME BPE
For plastic body	
Loose flange	DN65
Fixed flange	DN80...DN100
Environment and installation	
Installation position/Installation	See operating manual ▶
Ambient temperature	
PA Actuator size ≥ 175 mm	- 10...+ 50°C ^{5.)}

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

3.) Tube valve body (VP) also available with flange and threaded connections

4.) With plastic housings temperature limitation by housing material possible

5.) For standard version

2. Approvals

Note:

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

Approvals/ Conformity/ Certificate ^{1.)}	Description
 TA air	ATEX/IECEX^{2.)} 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
	3-A (3-A Sanitary Standards Symbol Administrative Council) ^{4.)}
	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).
 FDA	Diaphragms made of EPDM (AD), PTFE/EPDM (EA), advanced PTFE/EPDM (EU) and GYLON®/EPDM laminated (ER) are acc. to USP Class VI tested.
	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/certificates 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

3.1. Chemical Resistance Chart – Bürkert resistApp

Bürkert resistApp – Chemical Resistance Chart

You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

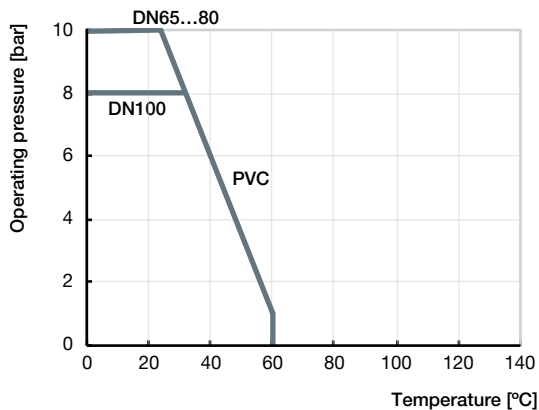
[Start Chemical Resistance Check](#)

3.2. Pressure temperature diagram for plastic body

Note:

This information is important for material selection. Observe the permissible operating pressure depending on the medium temperature.

DN65...100

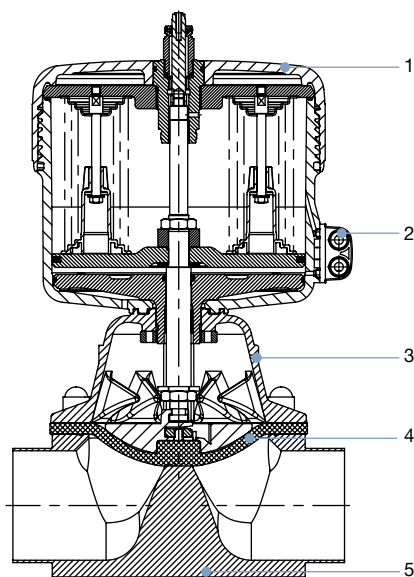


3.3. Material specifications

Actuator size 175 and 225

Note:

Exemplary representation may differ from the actual product.



No.	Element	Material
1	Cover	Polyamide PA
2	Pilot air ports	Stainless steel 1.4305
3	Attachment housing	Stainless steel 1.4308
4	Diaphragm	EPDM (AD), PTFE/EPDM (EA), advanced PTFE/EPDM (EU), Gylon®/EPDM laminated (ER)
5	Valve body	See "1. General technical data" on page 3

3.4. 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)

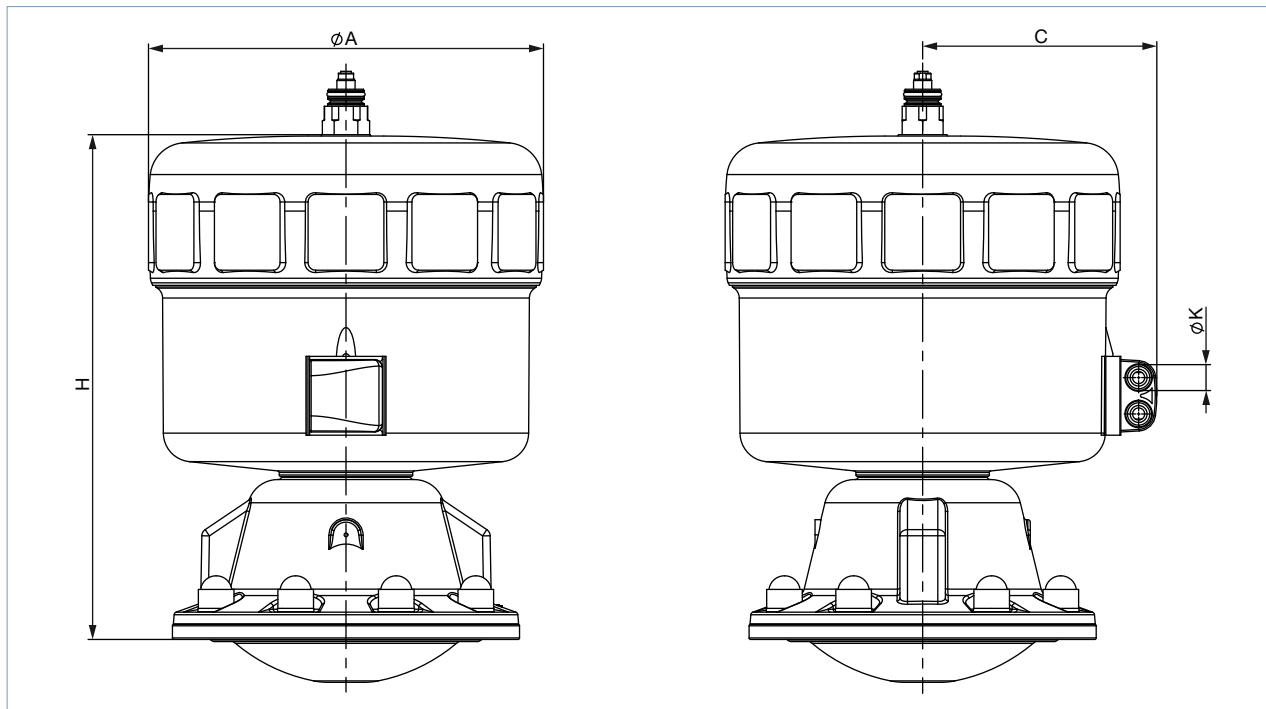
For further information please refer to our flyer “Diaphragm competence for hygienic applications” on our [website](#) ▶.

4. Dimensions

4.1. Actuator

Note:

Dimensions in mm, unless otherwise stated



DN	Actuator size Ø	ØA	C	K	H
65	175	210	130	G ¼	337
80	175	210	130	G ¼	337
	225	261	155	G ¼	334
100	225	261	155	G ¼	334

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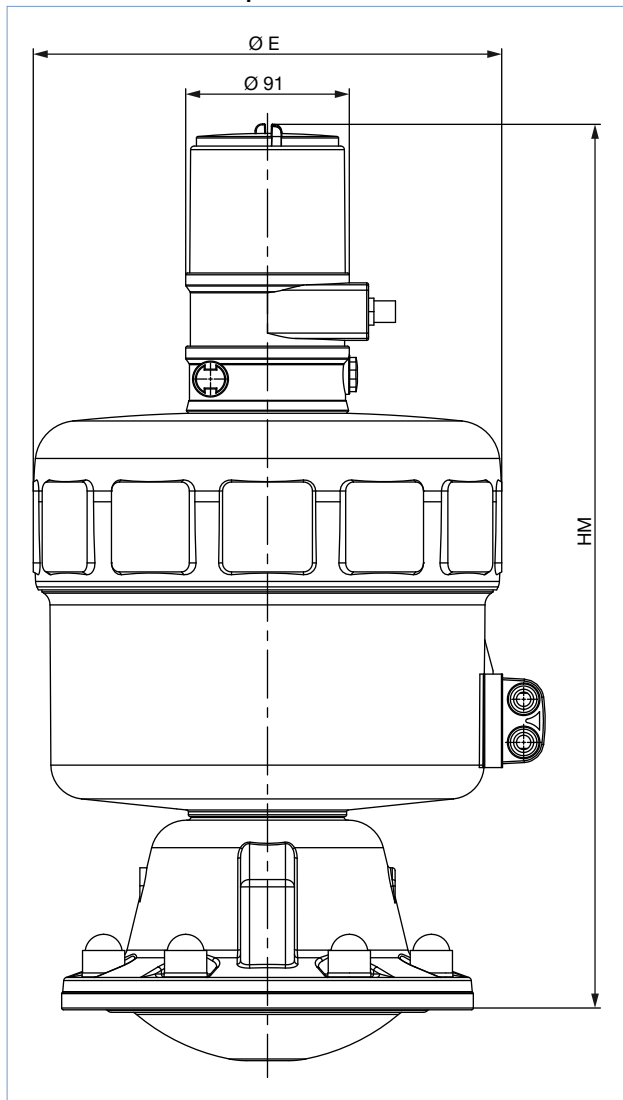
4.2. Valve system

CLASSIC actuator with positioner 8692 / process controller 8693

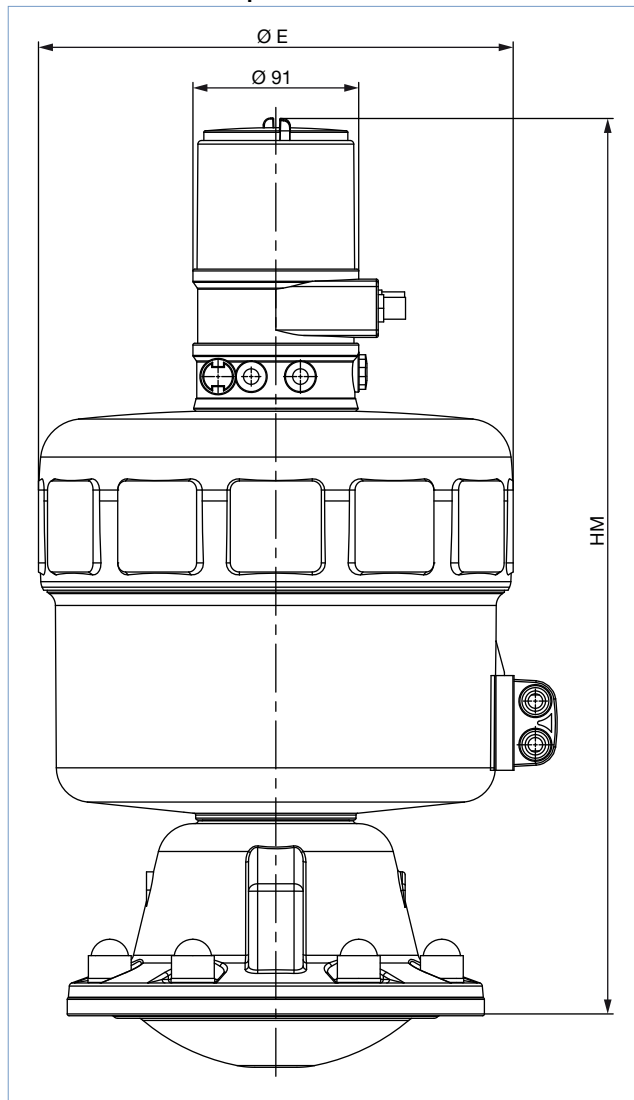
Note:

Dimensions in mm, unless otherwise stated

CLASSIC actuator with positioner 8692



CLASSIC actuator with process controller 8693



DN	Actuator size Ø	ØE	HM
65	175	210	497
80	175	210	497
	225	261	495
100	225	261	492

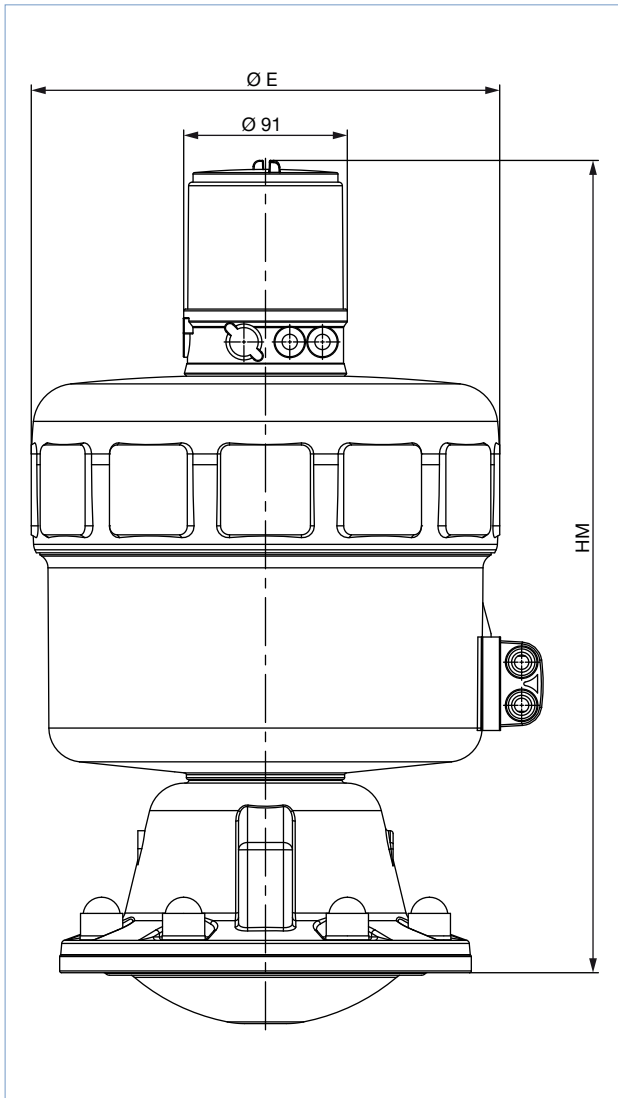
DN	Actuator size Ø	ØE	HM0
65	175	210	497
80	175	210	497
	225	261	495
100	225	261	492

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CLASSIC actuator with process controller 8694

Note:

Dimensions in mm, unless otherwise stated

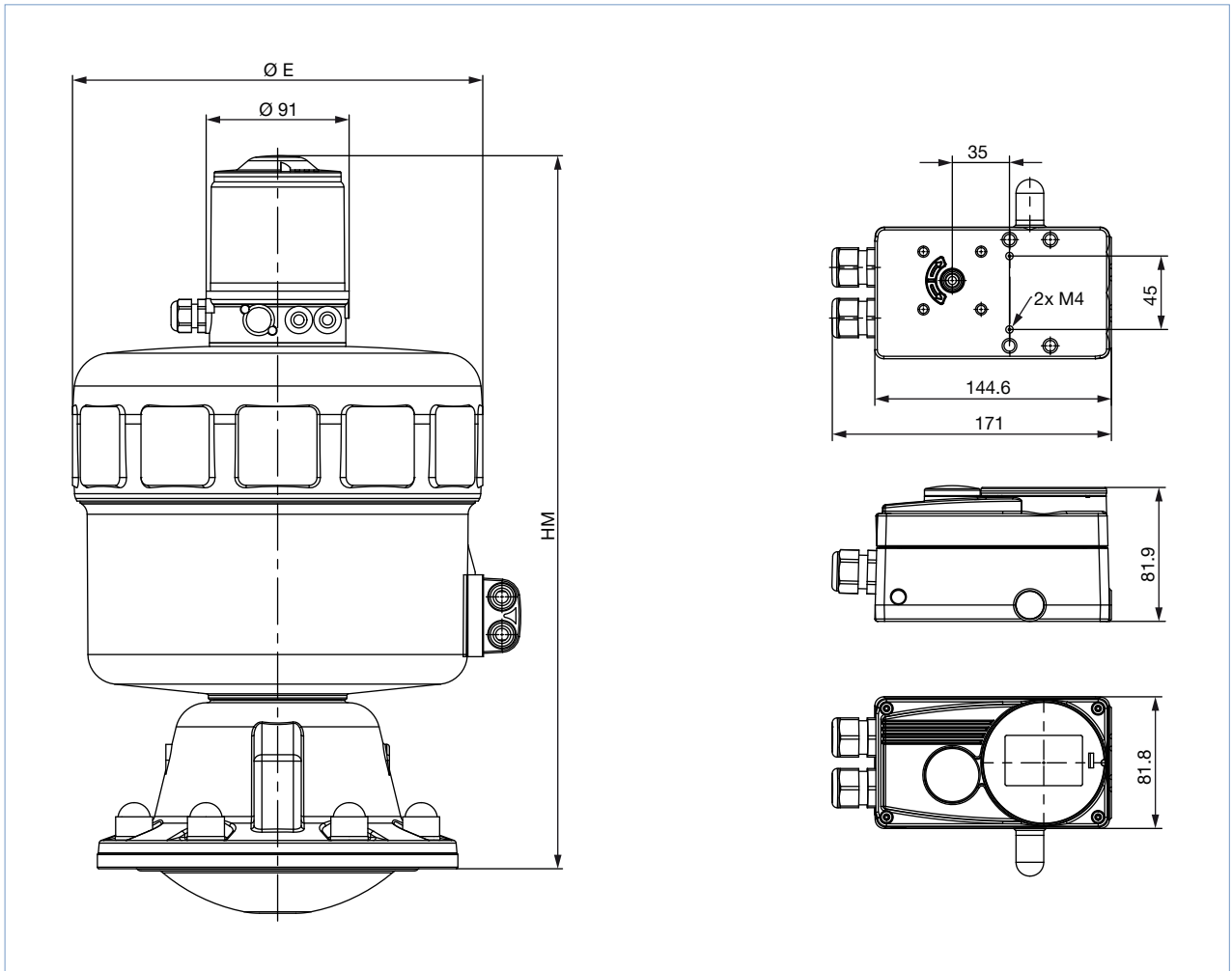


DN	Actuator size Ø	ØE	HM
65	175	210	457
80	175	210	457
	225	261	454
100	225	261	452

CLASSIC actuator with positioner SideControl 8791/8792/8793 and remote sensor 8798

Note:

Dimensions in mm, unless otherwise stated

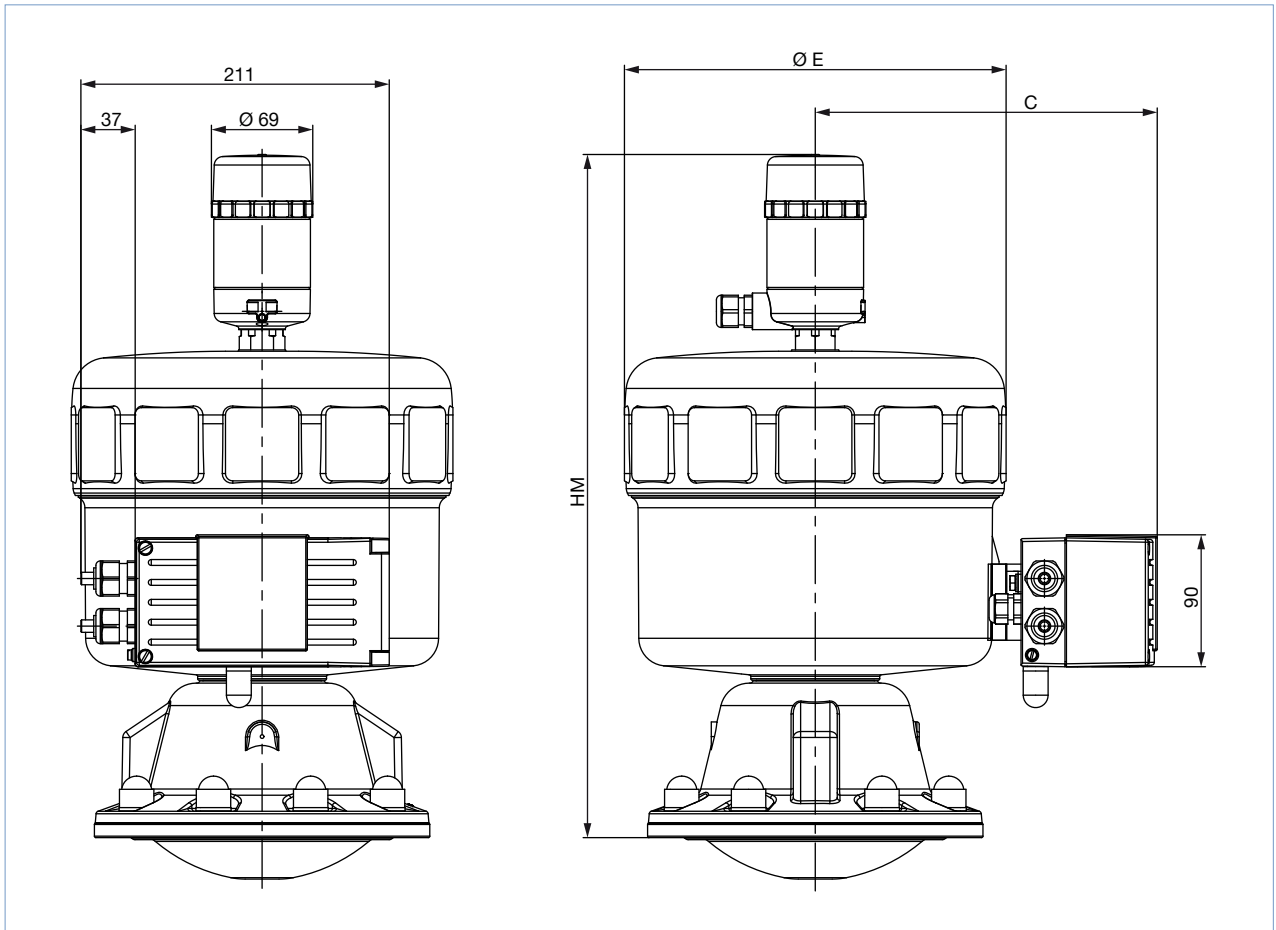


DN	Actuator size Ø	ØE	HM
65	175	210	458
80	175	210	458
	225	261	455
100	225	261	453

CLASSIC actuator with position sensor and SideControl 8635

Note:

Dimensions in mm, unless otherwise stated

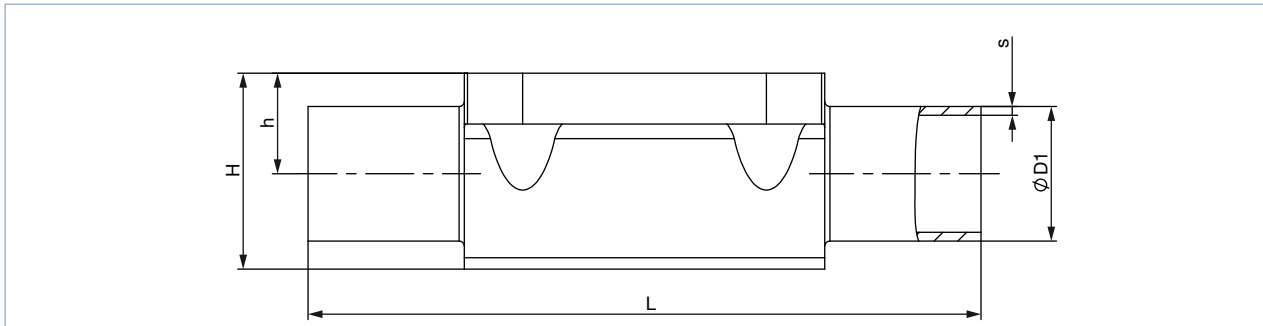


DN	Actuator size Ø	ØE	C	HM
65	175	210	209	458
80	175	210	209	458
	225	261	234	455
100	225	261	234	453

4.3. Forged body (VS) with welded connection

Note:

- Dimensions in mm, unless otherwise stated
- For detailed information on the draining angle, please refer to the “Additional manual Type 2xxx 3xxx” on our website (see [operating instructions](#) ▶).



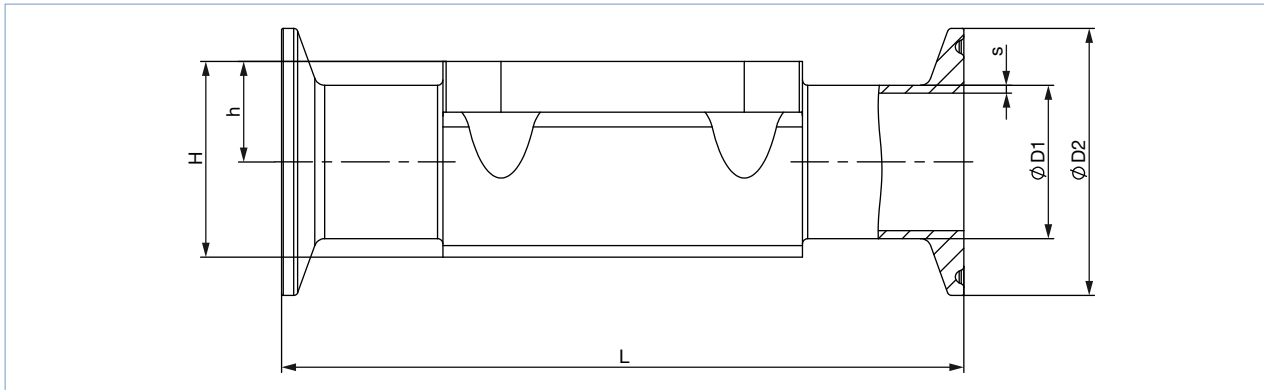
Diaphragm size	Port connection DN	ØD1	s	L	h	H	Product key ^{1.)}
DIN EN ISO 1127/ISO 4200/DIN 11866 series B							
80	65	76.1	2.0	250	51	98.1	SA48
80	80	88.9	2.3	250	51	98.1	SA49
DIN 11850 series 2/DIN 11866 series A/DIN EN 10357 series A							
80	65	70	2.0	250	51.0	98.1	SD48
80	80	85	2.0	250	51.0	98.1	SD49
ASME BPE/DIN 11866 series C							
80	2½"	63.5	1.65	250	51.0	98.1	SODJ
80	3"	76.2	1.65	250	51.0	98.1	SODK
BS 4825							
80	80	63.5	1.65	250	51.0	98.1	SODJ
80	80	76.2	1.65	250	51.0	98.1	SODK

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

4.4. Forged body (VS) with clamp connection

Note:

- Dimensions in mm, unless otherwise stated
- For detailed information on the draining angle, please refer to the “Additional manual Type 2xxx 3xxx” on our website (see **operating instructions** ▶).



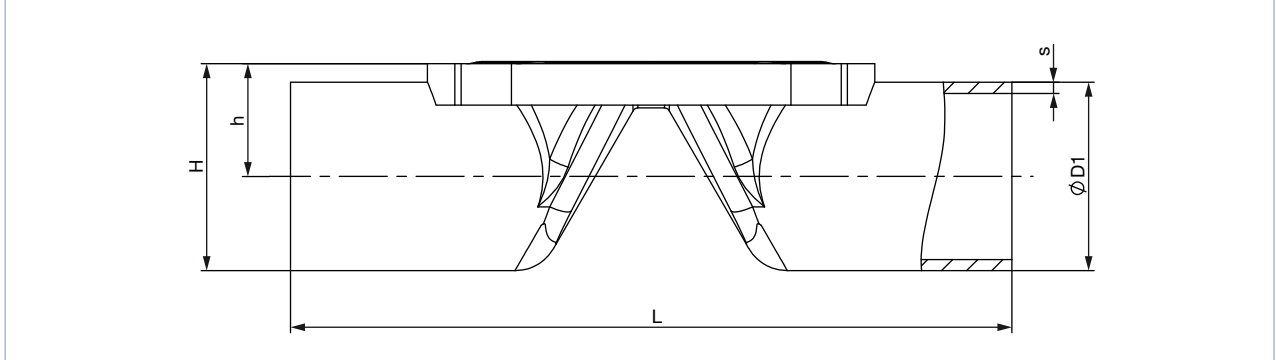
Diaphragm size	Port connection DN	ØD1	s	ØD2	L	h	H	Product key ^{1.)}	Variable Code ^{1.)}
ASME BPE									
65	2½"	63.5	1.65	77.5	249	43	83.5	TG07	–
80	2½"	63.5	1.65	77.5	216	51	98.1	TG07	–
80	3"	76.2	1.65	91.0	222	51	98.1	TG08	–

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

4.5. Tube valve body (VP) with welded connection

Note:

- Dimensions in mm, unless otherwise stated
- For detailed information on the draining angle, please refer to the “Additional manual Type 2xxx 3xxx” on our website (see [operating instructions](#) ▶).



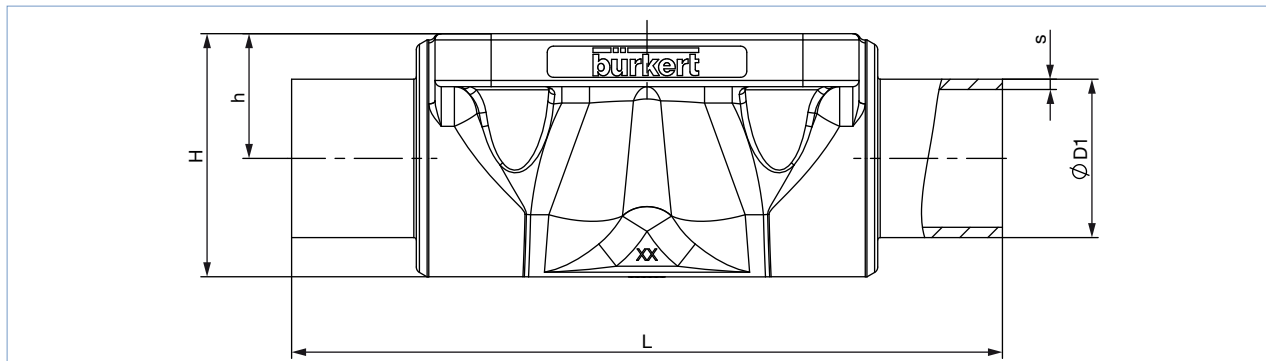
Diaphragm size	Port connection DN	ØD1	s	L	h	H	Product key ^{1.)}
ASME BPE/DIN 11866 series C							
65	3"	76.2	1.65	250	46.3	84.4	SODK
80	4"	101.6	2.11	295	60	110.8	SODL

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

4.6. Cast body (VG) with welded connection

Note:

- Dimensions in mm, unless otherwise stated
- For detailed information on the draining angle, please refer to the “Additional manual Type 2xxx 3xxx” on our website (see **operating instructions** ▶).



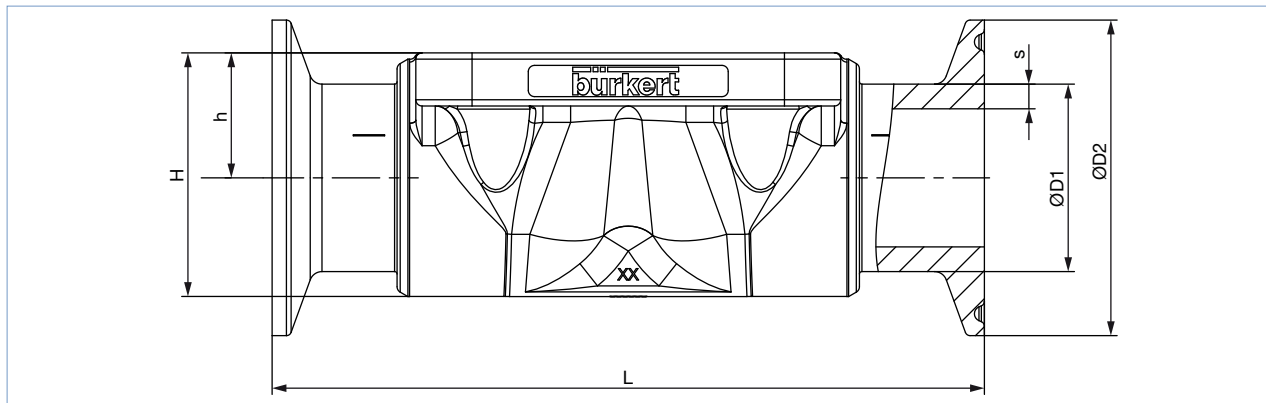
Diaphragm size	Port connection DN	ØD1	s	L	h	H	Product key ^{1.)}
DIN EN ISO 1127/ISO 4200/DIN 11866 series B							
65	65	76.1	2.0	192	43.0	82.0	SA48
80	80	76.1	2.0	250	51.0	101.0	SA48
80	80	88.9	2.3	250	51.0	101.0	SA49
100	100	114.3	2.3	295	63.5	123.5	SA39
DIN 11850 series 2/DIN 11866 series A/DIN EN 10357 series A							
65	65	70	2.0	192	43.0	82.0	SD48
80	80	85	2.0	250	51.0	101.0	SD49
100	100	104	2.0	295	63.5	123.5	SD50
ASME BPE/DIN 11866 series C							
65	2½"	63.5	1.65	192	43.0	82.0	SODJ
80	3"	76.2	1.65	250	51.0	101.0	SODK
100	4"	101.6	2.11	295	63.5	123.5	SODL
BS 4825							
65	65	63.5	1.65	192	43.0	82.0	SODJ
80	80	76.2	1.65	250	51.0	101.0	SODK
100	100	101.6	2.11	295	63.5	123.5	SODL

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

4.7. Cast body (VG) with clamp connection

Note:

- Dimensions in mm, unless otherwise stated
- For detailed information on the draining angle, please refer to the “Additional manual Type 2xxx 3xxx” on our website (see **operating instructions** ▶).



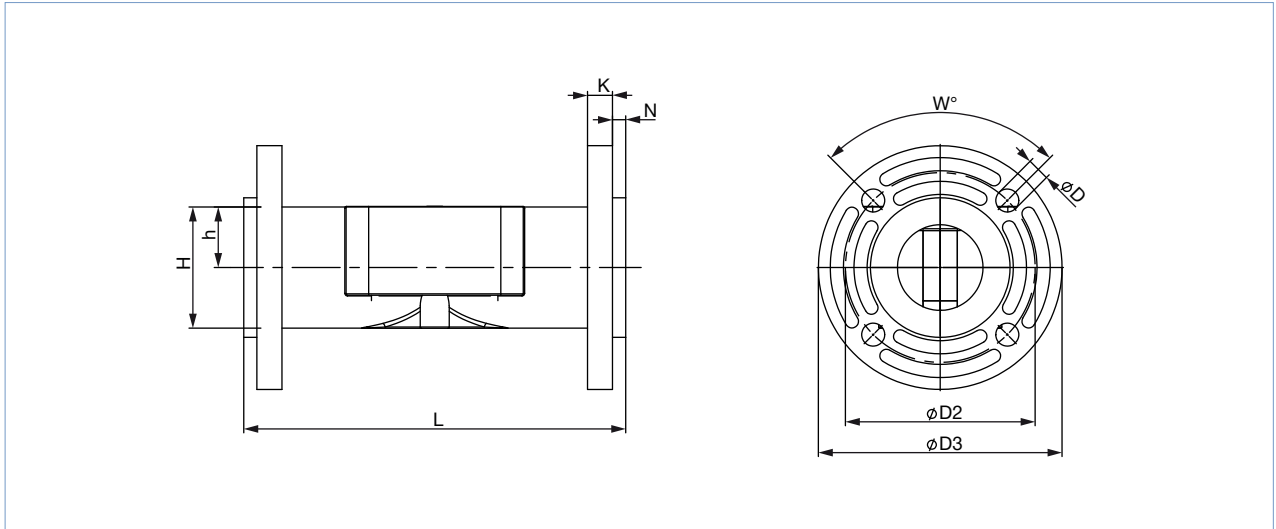
Diaphragm size	Port connection DN	ØD1	s	ØD2	L	h	H	Product key ^{1.)}
ASME BPE								
65	2½"	63.5	1.65	77.5	249.2	43.0	82.0	TG07
80	3"	76.2	1.65	91	306.2	51.0	101.0	TG08
100	4"	101.6	2.11	119	352.2	63.5	123.5	TG09

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

4.8. Plastic body (PV, PD, PP) with flange connection

Note:

Dimensions in mm, unless otherwise stated



Diaphragm size	L	ØD2	ØD3	K	H	h	ØD	W	N	Product key ^{1.)}
PVC-U (PV), PVDF (PD) and PP (PP)										
65	290	145	185	19	92	47	18	4x90°	10	FL30
80	310	160	200	36	107	50	18	8x45°	–	FF31
100	350	180	225	35	134.5	65.5	18	8x45°	–	FF31

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

5. Device/Process connections

5.1. Flow characteristics

For further information please use our data sheet on flow characteristics on our homepage [Type 273x Flow-rate curves for diaphragm valves](#) ▶

5.2. 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]
65	175 (K)	5.0...6	8	5
80	175 (K)	5.0...6	5	4.5
	225 (L)	5.0...6	10	7 ^{1.)}
100	225 (L)	5.0...6	8	4



2.) Max. operating pressure for GYLON®/EPDM laminated is 8.5 bar

6. Product accessories


Process controller TopControl	
Type 8693 ▶ Actuator size Ø 175/225 mm	Description
	<p>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.</p> <p>Features</p> <ul style="list-style-type: none"> • 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 <p>Customer benefits</p> <ul style="list-style-type: none"> • 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 ▶ Actuator size Ø 175/225 mm	Description <p>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 automatically using the TUNE-Function. Easy operation and the selection of the extensive additional software 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.</p> <p>Features</p> <ul style="list-style-type: none"> • 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 <p>Customer benefits</p> <ul style="list-style-type: none"> • Quick and easy commissioning • Intuitive and simple operation via graphic display with backlight and touch 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
	
Positioner TopControl BASIC	
Type 8694 ▶ Actuator size Ø 175/225 mm	Description <p>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.</p> <p>Features</p> <ul style="list-style-type: none"> • Contact-free position sensor • Universal positioning system for single and double-acting actuators • Ultra dynamic positioning system without internal control air consumption • AS-Interface, IO-Link, Bürkert system bus (bÜS) (only 8694) • Compact and robust hygienic stainless steel design <p>Customer benefits</p> <ul style="list-style-type: none"> • 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 Ø 175/225 mm	Description
	<p>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.</p> <p>Features</p> <ul style="list-style-type: none"> • 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 • Adaptation acc. to IEC 534 - 6 or VDI/VDE 3845 for lift and swivel drives or as remote version on Bürkert process valves <p>Customer benefits</p> <ul style="list-style-type: none"> • 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

Positioner SideControl Remote	
<p>Positioner Type 8792 ▶ with Remote Sensor Type 8798 ▶ Actuator size Ø 175/225 mm</p> 	<p>Description</p> <p>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.</p> <p>Features</p> <ul style="list-style-type: none"> • 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 • Adaptation acc. to IEC 534 - 6 or VDI/VDE 3845 for lift and swivel drives or as remote version on Bürkert process valves <p>Customer benefits</p> <ul style="list-style-type: none"> • 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 Remote	
<p>Positioner Type 8791 ▶ with Remote Sensor Type 8798 ▶ Actuator size Ø 175/225 mm</p> 	<p>Description</p> <p>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.</p> <p>Features</p> <ul style="list-style-type: none"> • Simple design • Universal control system for single and double-acting actuators • Ultra dynamic positioning system without air consumption in steady state • Adaptation according to IEC 534 - 6 or VDI/VDE 3845 for lift and swivel drives or as remote version on Bürkert process valves • AS-Interface, IO-Link, Bürkert system bus (büS) (only for Positioner Type 8791 BASIC Remote) <p>Customer benefits</p> <ul style="list-style-type: none"> • Quick and easy commissioning • Simple device for simple control tasks • Low energy consumption

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Positioner/Process controller with remote SideControl	
Type 8635 ▶ 2-wire, intrinsically safe Actuator size Ø 175/225 mm	Description
	<p>The Type 8635 is an electro-pneumatic positioner with optional integrated process controller for precise control tasks. The robust design with integrated LCD plain text display was developed for demanding applications in the process industry.</p> <p>Customer benefits</p> <ul style="list-style-type: none"> • Time-saving algorithms for temperature, flow and pressure PID parameters through Process TUNE function. • Fast and easy menu-driven parameterisation via keyboard input or PROFIBUS PA. • Instrument supply via setpoint signal 4-20 mA • Adaption acc. to IEC534 -6 for stroke and rotary actuators • Robust body made of hard-coated and plastic-coated aluminium • Explosion-proof versions for zone 1, zone 21 or zone 2/22

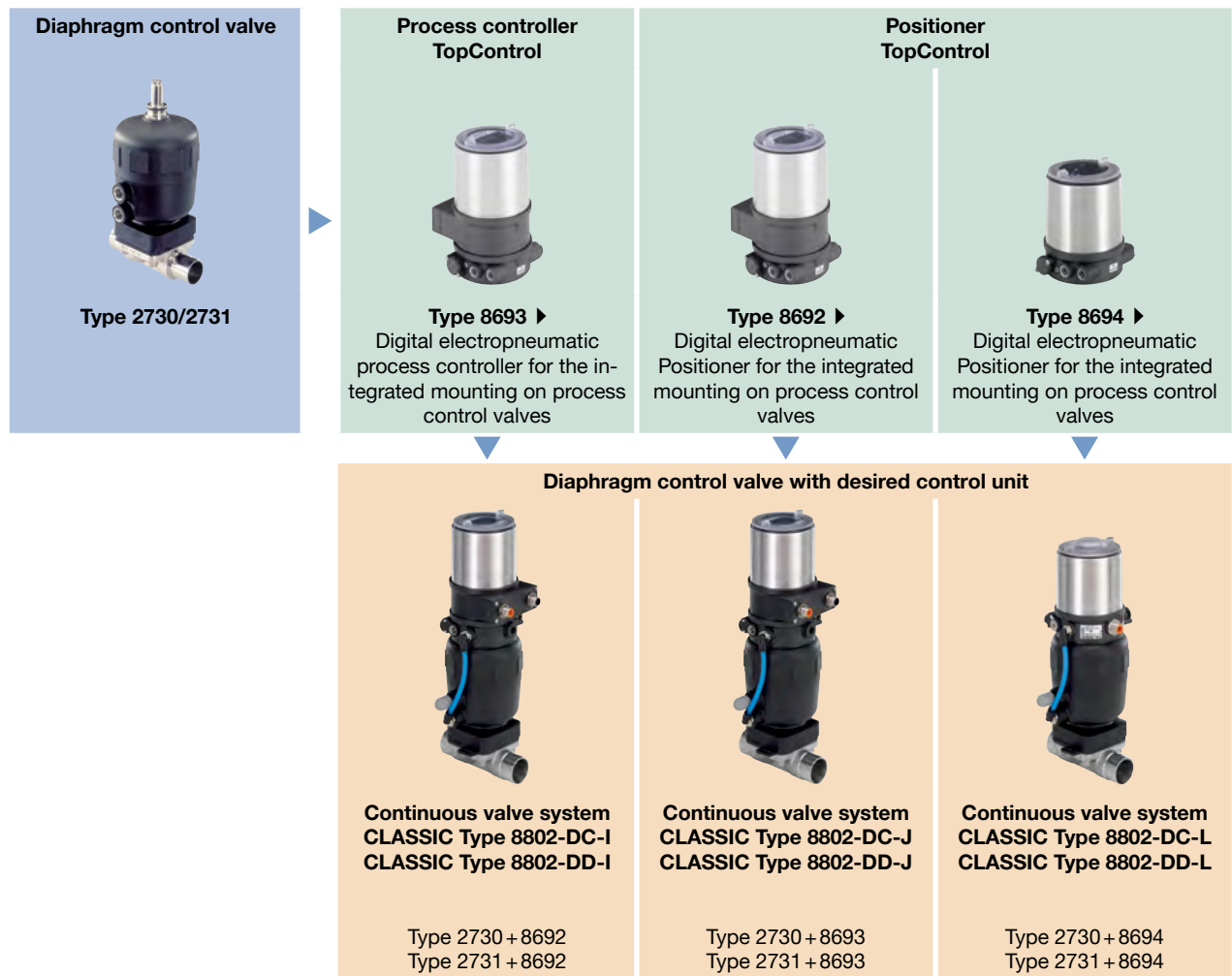
7. Networking and combination with other Bürkert products

7.1. Possible combinations for continuous CLASSIC valve system Type 8802-DC/DD

The continuous CLASSIC valve system, Type 8802-DC/8802-DD, consists of a diaphragm control valve Type 2730/2731 and a digital electropneumatic **positioner**, Type 8692, a digital electropneumatic **process controller**, Type 8693, a digital electropneumatic **positioner basic**, Type 8694 (below) or a **SideControl** Type 8635 or a electropneumatic **positioner**, Type 8792 or 8793.

Note:

- For the configuration of further valve systems, please use the product enquiry form at the end of this document.
- You order two components and receive a completely assembled and tested valve.



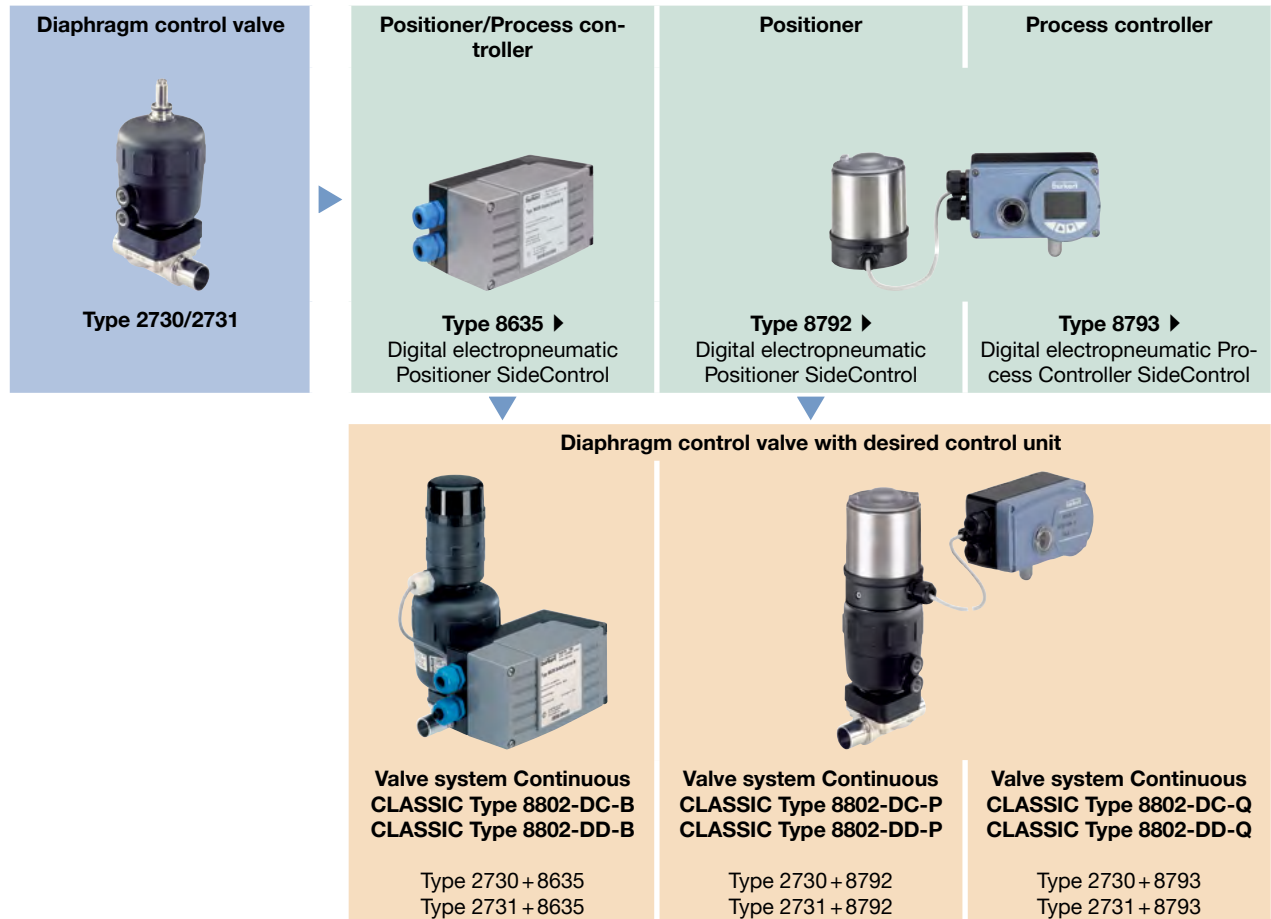
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7.2. Possible combinations for continuous CLASSIC valve system, Type 8802-DC/DD

The continuous CLASSIC valve system, Type 8802-DC/8802-DD, consists of a diaphragm control valve, Type 2730/2731, and a digital electropneumatic positioner, Type 8692, a digital electropneumatic process controller, Type 8693, a digital electropneumatic positioner basic, Type 8694 (below) or a SideControl, Type 8635, or and a electropneumatic positioner, Type 8792 or 8793.

Note:

- For the configuration of further valve systems, please use the product enquiry form at the end of this document.
- You order two components and receive a completely assembled and tested valve.



8. Ordering information

8.1. Bürkert eShop – Easy ordering and quick delivery



Bürkert eShop – Easy ordering and fast delivery

You want to find your desired Bürkert product or spare part quickly and order directly? Our online shop is available for you 24/7. Sign up and enjoy all the benefits.

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8.2. Bürkert product filter



Bürkert product filter – Get quickly to the right product

You want to select products comfortably based on your technical requirements? Use the Bürkert product filter and find suitable articles for your application quickly and easily.

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8.3. Bürkert product enquiry form

Bürkert product enquiry form: Would you like to make a specific product enquiry based on your technical requirements? Please use our product enquiry form **at the end of this data sheet**. There you will find all the information relevant to your Bürkert contact person that will help us to process your enquiry in the best possible way.

Bürkert specification key: In our product enquiry form you will find a complete explanation of the composition of our specification key. You will find our product enquiry form **at the end of this data sheet**.

Bürkert – Close to You

For up-to-date addresses
please visit us at
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Product Enquiry Form
Diaphragm valve with straight
way valve, T-valve or tank bottom
valve



Product Enquiry Form - Diaphragm valve with globe valve, T-valve or
tank bottom valve

Thank you for your interest in our products! In order to provide you with optimum advice, please fill out the following form and send it to your **Bürkert representative** or e-mail address: info@burkert.com. All information submitted will of course be kept strictly confidential.

Please fill in the **required fields!** *

***Note:** The interactive functions of this PDF may be restricted depending on the PDF reader used.

Personal Information			
Company		Contact person	
Customer no.		Department	
Street		Postcode / Town	
Telephone no.		Email	

Delivery
Required delivery date

Operating data					
Process medium					
Medium	Liquid	Steam	Gas	CIP	SIP
Medium temperature	T _{med}				
Medium pressure	P _{med}				

Valve data				
Surface quality (valid for stainless steel)	Standard:	Ra 0.5 internal	Ra 0.38 e-pol internal	Plastic
	Non standard:	internal	external	
Body material				
Body design	2 way valve	T-valve	Tank bottom valve	
Seal material	EPDM	PTFE	GYLON®	others
Nominal diameter	DN			
Pilot pressure	min.		max.	
Connection	Weld end	EN ISO 1127 / ISO 4200 DIN 11866 R. B	DIN 11850 DIN 11866 R. A	ASME BPE DIN 11866 R. C
	Clamp connection	DIN 32676 R. B (ISO tube (ISO4200))	DIN 32676 R. A (DIN tube (DIN11850))	ASME BPE
	Plastic	Flange	Threated	Spigot
	Others			

Article no. (if known)
Are you interested in ordering a complete Valve System Open/Close or Continuous? For more information on Valve Systems Open/Close or Continuous, please visit our Website ►.

Additional Requirements / Comment

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Specification key

Note:





- Please fill out this Product Inquiry Form as completely as possible!
- For more information on Valve Systems Open/Close or Continuous, please visit our **Website** ►.
- See **Specification key - Examples** how to fill in the specification key.





Key Feature	Quantity	Type	Control function	Nominal diameter diaphragm	Diaphragm material	Body material	Port connection	Port connection	Actuator version	Actuator size	Pilot air port	Actuator	Variable	Variable	Variable	
		TYP	SF	DN	DWST	WKST	LTA1	LTA2	ANTA	ANTG	STLA	ANTR	* VAR1	VAR2	VAR3	
Key No. →		1	2	3	4	5	6	6	7	8	9	10	V1	V2	V3	
1 Selection →													*			
	Comments															
2 Selection →													*			
	Comments															
3 Selection →													*			
	Comments															
4 Selection →													*			
	Comments															
5 Selection →													*			
	Comments															
6 Selection →													*			
	Comments															

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Specification key - Examples

2 way diaphragm valve					
Type 2030 ▶ CLASSIC with plastic body 	Type 2031 ▶ CLASSIC with stainless steel body 	Type 2063 ▶ INOX with stainless steel body 	Type 2103 ▶ ELEMENT with stainless steel or plastic body 	Type 3232 ▶ Manually operated with plastic body 	Type 3233 ▶ Manually operated with stainless steel body 

T-diaphragm valve			
Type 2032 ▶ CLASSIC T-valve 	Type 2064 ▶ INOX T-valve 	Type 2104 ▶ ELEMENT T-valve 	Type 3234 ▶ Manually operated T-valve 

Tank bottom diaphragm valve			
Type 2033 ▶ CLASSIC Tank bottom valve 	Type 2065 ▶ INOX Tank bottom valve 	Type 2105 ▶ ELEMENT Tank bottom valve 	Type 3235 ▶ Manually operated tank bottom valve 

	Type	Control function	Nominal diameter diaphragm	Diaphragm material	Body material	Port connection	Port connection	Actuator version	Actuator size	Pilot air port	Actuator	Variable	Variable	Variable
Key Feature	TYP	SF	DN	DWST	WKST	LTA1	LTA2	ANTA	ANTG	STLA	ANTR	VAR1	VAR2	VAR3
Key No. →	1	2	3	4	5	6	6	7	8	9	10	V1	V2	V3

2 way diaphragm valve														
Type 2030 CLASSIC	2030	A	20.0	AD	PV	KM26	-	C	E	-	-			
Type 2031 CLASSIC	2031	A	20.0	AD	VS	SA93	-	C	E	-	-	NK52	NO14	
Type 2063 INOX	2063	A	20.0	AD	VS	SA93	-	H	M	-	-	NK52	NO14	
Type 2103 ELEMENT	2103	A	20.0	AD	PV	KM26	-	G	M	FA01	-			
Type 2103 ELEMENT	2103	A	20.0	AD	VS	SA93	-	G	M	FA01	-	NK52	NO14	
Type 3232	3232	-	20.0	AD	PV	KM26	-	-	-	-	D050			
Type 3233	3233	-	20.0	AD	VS	SA93	-	-	-	-	D051	NK52	NO14	
T-diaphragm valve														
Type 2032 CLASSIC	2032	A	20.0	AD	VH	SODH	SA93	D	E	-	-	NK52	NO14	
Type 2064 INOX	2064	A	20.0	AD	VH	SODH	SA93	-	M	-	-	NK52	NO14	
Type 2104 ELEMENT	2104	A	20.0	AD	VH	SODH	SA93	-	M	FA01	-	NK52	NO14	
Type 3234	3234	-	20.0	AD	VH	SODH	SA93	-	-	-	D050	NK52	NO14	
Tank bottom diaphragm valve														
Type 2033 CLASSIC	2033	A	20.0	AD	VH	SA93	-	D	F	-	-	NK52	NO14	
Type 2065 INOX	2065	A	20.0	AD	VH	SA93	-	-	M	-	-	NK52	NO14	
Type 2105 ELEMENT	2105	A	20.0	AD	VH	SA93	-	-	M	FA01	-	NK52	NO14	
Type 3235	3235	-	20.0	AD	VH	SA93	-	-	-	-	D050	NK52	NO14	

1.) NK52, NOxx only for stainless steel bodies

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Key Legend

Note:

- Other versions on request
- Available Type sizes see corresponding data sheet

Key no. 2: Control function (SF)	
A	Closed with spring force
B	Open with spring force
I	Without pressure spring

Key no. 3: Nominal diameter diaphragm (DN)			
8	25	50	100
15	32	65	
20	40	80	

Key no. 4: Diaphragm material (DWST)	
AD	EPDM
EA	PTFE/EPDM
EU	Advanced PTFE/EPDM laminated
ER	Gylon®/EPDM laminated

Key no. 5: Body material (WKST)	
PD	PVDF (Polyvinylidene fluoride)
PP	PP (Polypropylene)
PV	PVC-U (Polyvinyl chloride)
VG	Stainless steel precision casting 1.4435/316L
VH	Stainless steel block material 1.4435/316L
VI	Stainless steel block material 1.4435 BN2/316L ASME BPE
VP	Stainless steel tube 1.4435 BN2/316L
VS	Stainless steel-forged 1.4435 BN2/316L ASME BPE

Key no. 6: Port connection (LTA1, LTA2)	
Listed in detail below	

Key no. 7: Actuator version (ANTA)	
C	PA actuator (only CLASSIC)
D	PPS actuator (only CLASSIC)
G	ELEMENT design actuator (only ELEMENT)
H	St. St. actuator (only INOX)

Key no. 8: Actuator size (ANTG)	
B	ø 32
C	ø 40
D	ø 50
E	ø 63
F	ø 80
G	ø 100
H	ø 125
K	ø 175
L	ø 225
M	ø 70
N	ø 90
P	ø 130

Key no. 9: Pilot air port (ELEMENT) (STLA)	
FA01	Pilot air port Push-In 6/4, 1/4"
FA02	Pilot air port G1/8
FA03	Interface ELEMENT control

Key no. 10: Actuator (ANTR)	
D050	Handwheel and attachment PPS
D051 ^{1.)}	Handwheel PPS and attachment St. St.
D052 ^{2.)}	Handwheel and attachment St. St.

1.) Alternatively D058

2.) Alternatively D059 or D102

Key no. V1, V2, ...: Variable code (VAR1, VAR2, VAR3)	
NK52 ^{3.)}	Acceptance test certificate 3.1 according to EN 10204
NO14 ^{3.)}	Mechanically polished Ra ≤ 0.5 µm (ASME BPE SF1)
NO17 ^{3.)}	Electropolished Ra ≤ 0.38 µm (ASME BPE SF4 / DIN HE4)
NO06 ^{3.)}	Mechanically polished Ra ≤ 0.76 µm (ASME BPE SF3 / DIN H2)
NO16 ^{3.)}	Electropolished Ra ≤ 0.6 µm (ASME BPE SF6)
EC04	Reduced spring force

3.) NK52, NOxx only for stainless steel bodies

Key no. 6: Port connection (LTA)

Weld connection								
DN [mm]	EN ISO 1127 / ISO 4200 DIN 11866 R. B	SMS 3008	DIN 11850 R. 0	DIN 11850 R. 1	DIN 11850 R. 2 DIN 11866 R. A	DIN 11850 R. 3	BS4825	ASME BPE DIN 11866 R. 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	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
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

Product Enquiry Form
Diaphragm valve with straight
way valve, T-valve or tank bottom
valve





Clamp connection					
DN [mm]	Clamp 34,0 similar to DIN 32676 R. B (ISO tube (ISO4200))	DIN 32676 R. A (DIN tube (DIN11850))	DIN 32676 R. B (ISO tube (ISO4200))	ASME BPE	BS 4825 (Clamp BS 4825-3, tube BS 4825-1)
8	TC51-13.5×1.6 Cl: 34.0	TD40-10.0×1.0 Cl: 25.0	TC40-13.5×1.6 Cl: 25.0	TG 50-6.35×0.89 Cl: 25.0	-
10	TC41-17.2×1.6 Cl: 34.0	TD41-13.0×1.5 Cl: 34.0	TC53-17.2×1.6 Cl: 25.0	TG 01-9.53×0.89 Cl: 25.0	-
15	TC42-21.3×1.6 Cl: 34.0	TD42-19,0×1.5 Cl: 34.0	TC52-21.3×1.6 Cl: 50.5	TG 02-12.7×1.65 Cl: 25.0	TH42-12.7×1.2 Cl: 25.0
20	-	TD43-23.0×1.5 Cl: 34.0	TC43-26.9×1.6 Cl: 50.5	TG 03-19.05×1.65 Cl: 25.0	TH43-19.05×1.2 Cl: 25.0
25	-	TD44-29.0×1.5 Cl: 50.5	TC44-33.7×2.0 Cl: 50.5	TG 04-25.4×1.65 Cl: 50.5	-
32	-	-	-	-	-
40	-	TD46-41.0×1.5 Cl: 50.5	TC46-48.3×2.0 Cl: 64.0	TG 05-38.1×1.65 Cl: 50.5	-
50	-	TD47-53.0×1.5 Cl: 64.0	TC47-60.3×2.0 Cl: 77.5	TG 06-50.8×1.65 Cl: 64.0	-
65	-	-	TC48-76.1×2.0 Cl: 91.0	TG 07-63.5×1.65 Cl: 77.5	-
80	-	-	TC49-88.9×2.3 Cl: 106.0	TG 08-76.2x,65 Cl: 91.0	-
100	-	-	TC50-114.3×2.3 Cl: 130.0	TG 09-101.6×2.11 Cl: 119.0	-

Plastic connection					
DN [mm]	Welded connection socket (only WKST=PD, PP)	Welded connection threaded socket (only WKST=PD, PP)	Adhesive bond socket (only WKST=PV)	Adhesive bond threaded socket (only WKST=PV)	Loose-type flange (up to DN65) Fixed flange (from DN80)
15	SS25 - ø20	SM25 - ø20	KS25 - ø20	KM25 - ø20	FL24
20	SS26 - ø25	SM26 - ø25	KS26 - ø25	KM26 - ø25	FL25
25	SS27 - ø32	SM27 - ø32	KS27 - ø32	KM27 - ø32	FL26
32	SS28 - ø40	SM28 - ø40	KS28 - ø40	KM28 - ø40	FL27
40	SS29 - ø50	SM29 - ø50	KS29 - ø50	KM29 - ø50	FL28
50	SS30 - ø63	SM30 - ø63	KS30 - ø63	KM30 - ø63	FL29
65	-	-	-	-	FL30
80	-	-	-	-	FF31
100	-	-	-	-	FF32

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Positioner / process controller TopControl for control valves of the ELEMENT series

For actuator size $\varnothing 70/\varnothing 90/\varnothing 130$ mm

Process Controller TopControl Type 8693 ▶		Positioner TopControl Type 8692 ▶	
	<ul style="list-style-type: none"> Intelligent digital positioners and process controllers with integrated PID controller for accurate process control Lighted graphic display with membrane keypad Tune function for automatic start-up Field bus communication Diagnostic functions 		<ul style="list-style-type: none"> Digital positioner without sensor input Lighted graphic display with membrane keypad Tune function for automatic start-up Field bus communication Diagnostic functions
Pneumatic function Single-acting Double-acting		Electrical connection Cable gland M12 Multipole connection Without	
Digital Communication PROFIBUS DP-V1 DeviceNet EtherNet/IP PROFINET Bürkert Systembus (bùS) ^{1.)} Modbus TCP Without		Approvals ATEX cat. 3GD, IECEx Without	
Analogue feedback 0/4...20 mA 0/4...20 mA + 2 binary outputs		Digital outputs and diagnostics Yes No	

1.) Based on CANopen

For actuator size $\varnothing 70/\varnothing 90/\varnothing 130$ mm

For actuator size $\varnothing 50$ mm



Positioner TopControl BASIC Type 8694 ▶		Positioner TopControl BASIC Type 8696 ▶	
	<ul style="list-style-type: none"> Status LED and DIP switches Tune-function for automatic start-up Positioning system for single-acting actuators Field bus communication 		<ul style="list-style-type: none"> Status LED and DIP switches Tune-function for automatic start-up Positioning system for single-acting actuators
Pneumatic function Single-acting		Electrical connection Cable gland ^{1.)} M12 Multipole connection Without	
Digital Communication AS-Interface ^{1.)} IO-Link Bürkert Systembus (bùS) ^{2.)} Without		Approvals ATEX cat. 3GD, IECEx Without	
Analogue feedback Yes No			

1.) Only available for Type 8694. Not available for Type 8696.

2.) Based on CANopen



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Positioner / process controller SideControl Remote for control valves of the ELEMENT series

For actuator size $\varnothing 70/\varnothing 90/\varnothing 130$ mm			
Process Controller SideControl Type 8793 with Remote sensor Type 8798		Positioner SideControl Type 8792 with Remote sensor Type 8798	
	<ul style="list-style-type: none"> Intelligent digital positioners and process controllers with integrated PID controller Lighted graphic display with membrane keypad Tune-function for automatic start-up, linearization and optimization of process characteristics Field bus communication Diagnostic functions 		<ul style="list-style-type: none"> Digital positioner without sensor input Lighted graphic display with membrane keypad Tune function for automatic start-up Field bus communication Diagnostic functions
Pneumatic function		Electrical connection	
Single-acting	Single- and double-acting	Cable gland ^{1.)}	M12 Multipole connection
Digital communication		Approvals	
PROFIBUS DP-V1	DeviceNet	EtherNet/IP	ATEX cat. 3GD, IECEx
PROFINET	Bürkert Systembus (büS) ^{2.)}		Without
Modbus TCP	Without		
Analogue feedback		Digital outputs and diagnostics	
0/4...20 mA	0/4...20 mA + 2 binary outputs	Yes	No
0/5...10 V	0/5...20 V + 2 binary outputs		

1.) With a cable gland the selection of a fieldbus communication PROFIBUS, EtherNet etc. is not possible. Only variants with M12 Multipole are offered as standard for fieldbus communication.

2.) Based on CANopen

For actuator size $\varnothing 70/\varnothing 90/\varnothing 130$ mm			
Positioner SideControl BASIC Type 8791 with Remote sensor Type 8798		Positioner SideControl BASIC IP20 Type 8791 with Remote sensor Type 8798	
	<ul style="list-style-type: none"> „simple positioner“ Universal positioning system for single and double acting actuators Tune function for automatic start-up Field bus communication 		<ul style="list-style-type: none"> „simple positioner“ Universal positioning system for single and double acting actuators Tune function for automatic start-up Switchgear cabinet assembly
Pneumatic function		Electrical connection	
Single-acting (actuator size $\varnothing 70/90$)	Single- and double-acting (actuator size $\varnothing 130$)	Cable gland ^{1.)}	M12 Multipole connection
Digital communication		Approvals	
AS-Interface ^{2.)} :		ATEX cat. 3GD, IECEx ^{2.)}	Without
Analogue profile S-7.3.4 (only set point)			
Analogue profile S-7.A.5 (set point and feedback)			
IO-Link	Bürkert Systembus (büS) ^{3.)}	Without	
Analogue feedback			
0/4...20 mA	No		

1.) With a cable gland, the selection of a fieldbus communication AS-Interface is not possible. For fieldbus communication, only variants with M12 Multipole are offered as standard.

2.) Only available for Positioner SideControl BASIC Type 8791. Not available for Positioner SideControl BASIC IP20 Type 8791.

3.) Based on CANopen, IO-Link and büS not available for IP20 Type 8791

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