



Zero Deadleg T Valve, pneumatically operated, stainless steel block material

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

Type 2732 can be combined with...



Type 8692/8693

Positioner / Process
Controller TopControl



Type 8694

Positioner
TopControl Basic



Type 8630

Positioner
TopControl



Type 8635

Positioner
SideControl



Type 8792/93

SideControl Remote
versions



Type 8030

Flow sensor

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

The Type 2732 can be actuated by the 8635 SideControl, SideControls 8792/93 Remote versions or the 8694/8692/8693/8630 TopControl forming a mechanical and functional unit and thus offering a complete control valve system. Using this control valve, continuous regulation tasks for fluids can be solved.

Technical data			
Orifice	DN 4-100		
Body materials	<ul style="list-style-type: none"> ▪ Stainless steel 1.4435 / 316 L ▪ Stainless steel 1.4435BN2 / ASME BPE Fe < 0.5% / C ≤ 0.03%		
Diaphragm materials	EPDM, PTFE/EPDM, advanced PTFE/EPDM, FKM		
Actuator materials	PPS, PA		
Pilot air ports	Stainless steel 1.4305		
Surface finish	Ra [µm]	Ra [µlnch]	Ra [Grit #]
	internal	internal	internal
mechanical polished	0.5	20	240
electro polished	0.4	16	280
Medium temperatures	EPDM, PTFE/EPDM, advanced PTFE/EPDM ¹⁾ FKM		
	-10 to +130°C (briefly up to +150°C for steam sterilisation)		
	-10 to +130°C		
Ambient temperature	Actuator size < 100 mm Actuator size 100-125 mm Actuator size ≥ 175 mm		
	+5° to +140°C		
	+5° to +90°C (briefly up to +140°C)		
	-10° to +50°C		
Control medium	Neutral gases; air		
Pilot pressure max.	max. 7 bar, see table on p. 2		
Port connections			
Weld end acc. to	EN ISO 1127 / ISO 4200, DIN 11850 Series 0 to 3, SMS 3008, ASME BPE, BS 4825		
Clamp acc. to	ISO 2852, ASME BPE, DIN 32676		
Installation for selfdraining operation	Actuator inclined 3 to 5° downwards		

¹⁾ Advanced PTFE/EPDM is recommended for sterilization cycle

Content



Valve specifications

Type 2732

Technical data & ordering info. p. 1-4



System Continuous Classic

Type 8802-DE

Ordering info. & technical data

Request for quotation

Type 8802-DE

p. 10-11

Technical data, continued

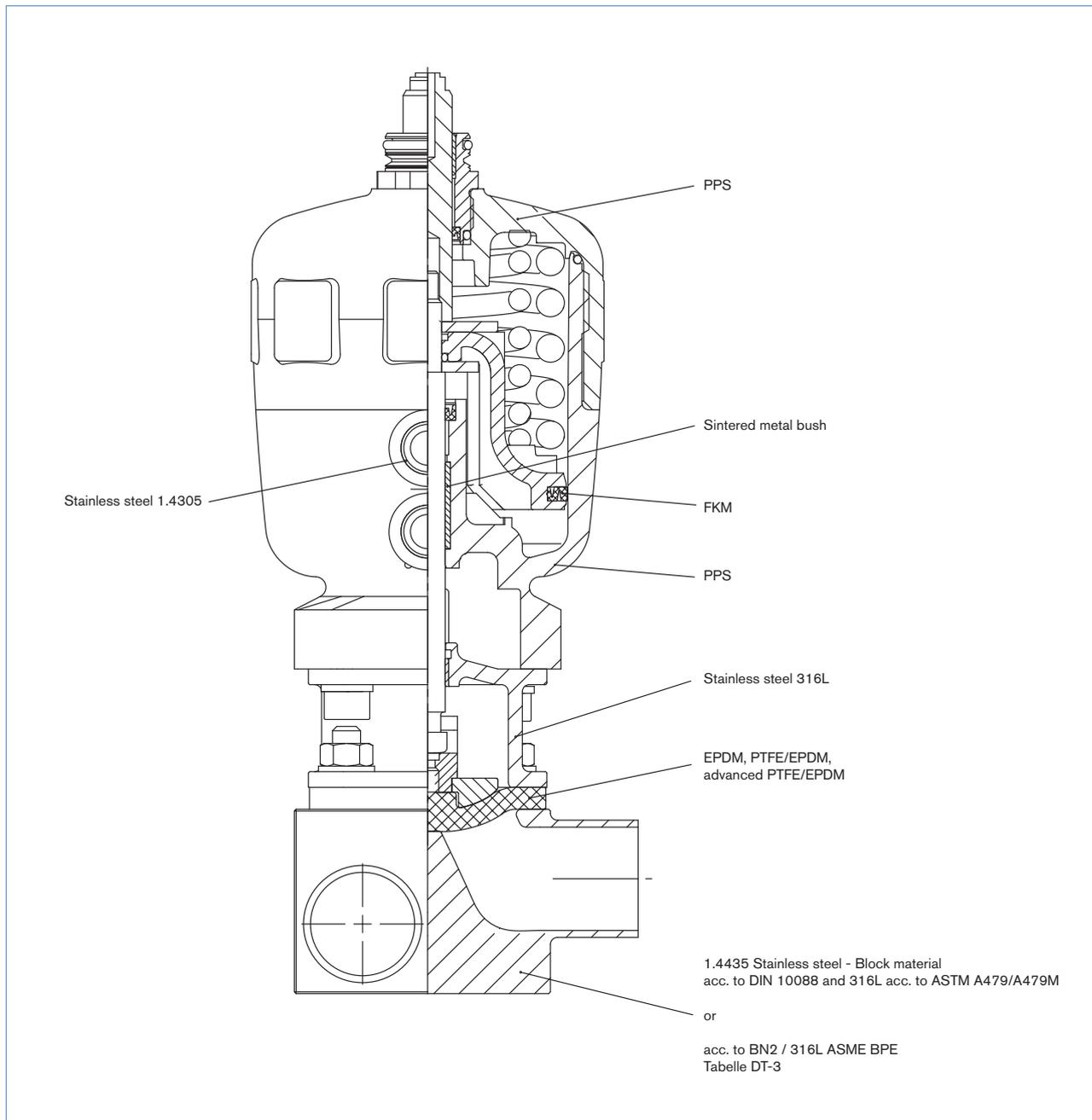
Orifice DN diaphragm [mm]	Actuator size Ø [mm]	Kv-value water [m³/h]	Pilot pressure [bar]	Max. operating pressure (medium) for seal material	
				EPDM, FKM [bar]	PTFE/EPDM, advanced PTFE/EPDM [bar]
15	80	4.5	5.0-7	10	10
20	80	7.5	5.0-7	10	10
25	80	12.0	5.5-7	10	7.5
40	100	30.0	5.5-7	6.5	6
	125	30.5	5.5-7	10	10
50	100	51.5	5.5-7	4.5	2.5
	125	51.5	5.5-7	8	7
80	225	160.0	5.0-6	10	10
100	225	235	5.0-6	8	4

Approvals/certifications

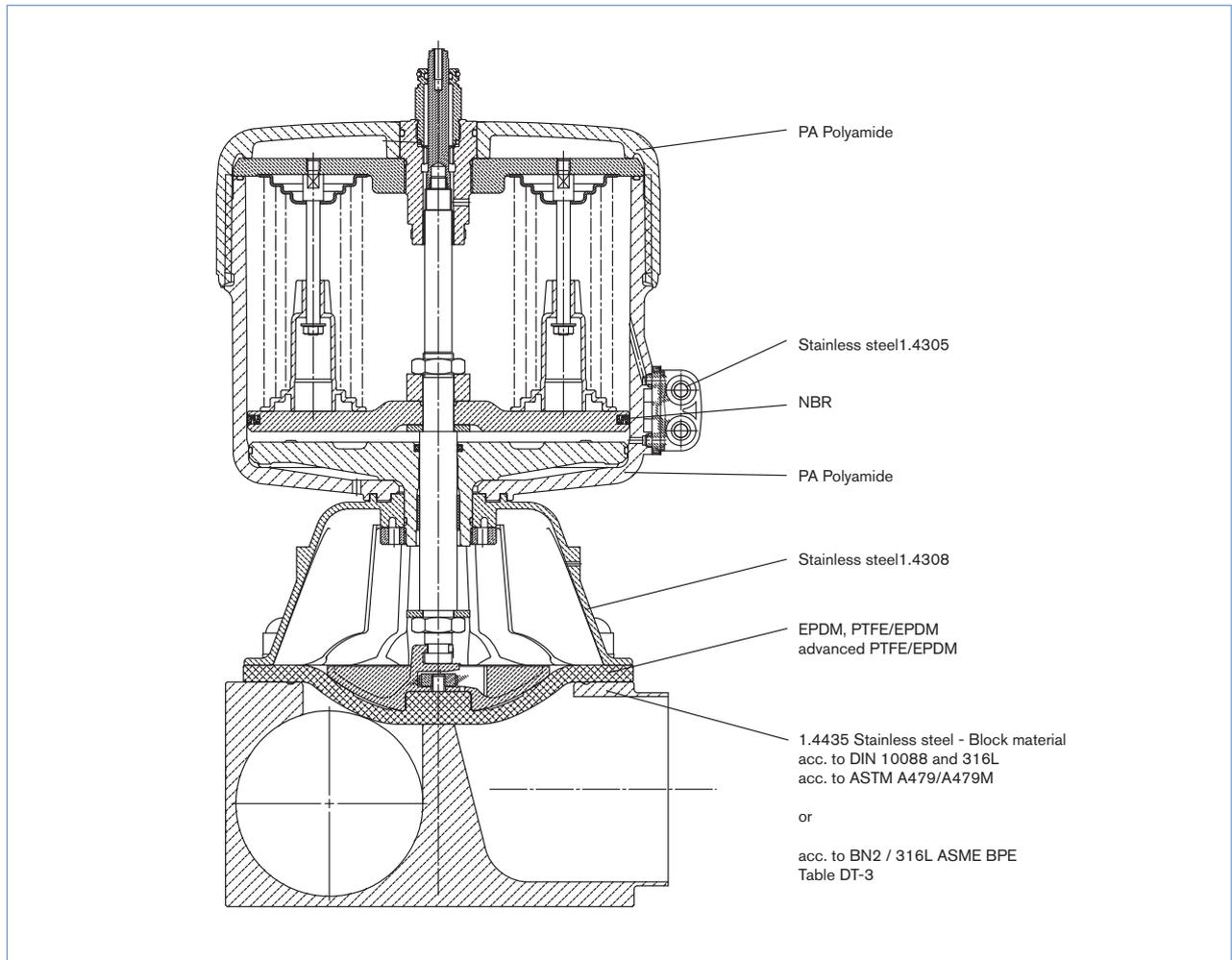
- Certification of Conformity for Raw Material EN-ISO 10204 3.1
- Attestation of compliance with the order EN-ISO 10204 2.1
- Test report EN-ISO 10204 2.2
- 3A Certification on request
- Certification of Conformity for Pickling and Electropolishing Processes
- Certification of Conformity for the Surface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

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

Materials



Materials



Example of available diaphragm materials

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



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

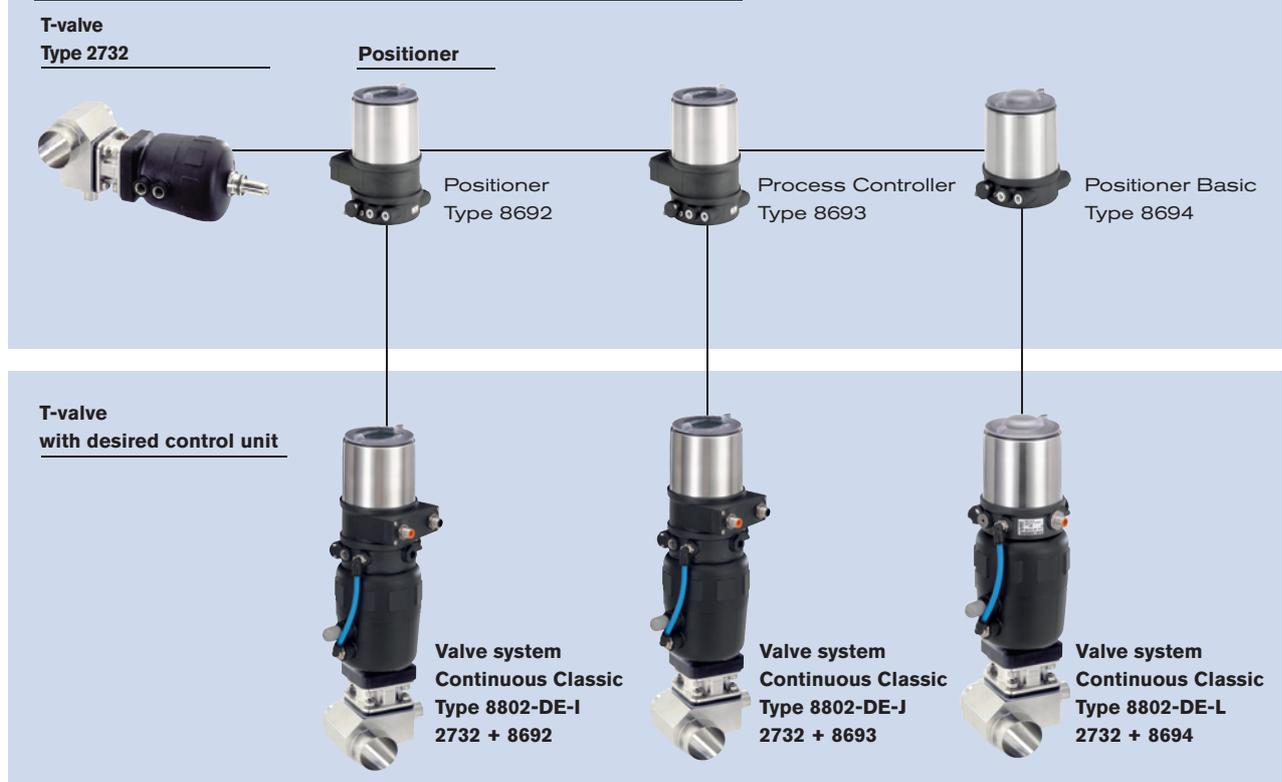
Ordering information for valve system Continuous Classic Type 8802-DE

A valve system Continuous Classic Type 8802-DE consists of an T-valve Type 2732 and a digital electropneumatic Positioner Type 8692, a digital electropneumatic Process Controller Type 8693, a digital electropneumatic Positioner Basic Type 8694 (below) or a valve actuation system TopControl Type 8630, SideControl Type 8635 or an electropneumatic positioner Type 8792/8793 (next page) (see separate datasheets).

For the configuration of further valve systems please use the "Request for quotation" on p. 11&12 [go to page](#)

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

Ordering the valve system Continuous Classic Type 8802-DE



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

Positioner TopControl Type 8692 [More info.](#)

Process Controller TopControl Type 8693 [More info.](#)

PROFIBUS DPV1 DeviceNet™ Ex

The new generation of integrated positioners/process controllers for combination with actuators from the process valve series Type 23xx/2103 is specially designed for the requirements of hygienic process environments. The easy handling and the selection of additional software functions are done either on a big graphic display with backlight and keypad or via a PC interface. A contact-free analogue position sensor registers the valve position without deterioration. Single-acting or double-acting actuators are controlled via the integral positioner system. With Type 8693, the process controller function is superimposed on the position control loop. Profibus DPV1 and DeviceNet communication interfaces are available as options.

Main customer benefits:

- Compact design of the valve system with integrated positioner/process controller meets the demands for plant washdown environments through the selection of materials, external seals and integrated control air supply to the actuator
- Extremely simple commissioning and operation thanks to the backlighting of the graphics display and proven multilingual software structure
- Automatic parameterisation of the positioner and process controller using the TUNE functions
- Field bus communication via Profibus DPV1 or DeviceNet
- Air intake filter enhances the process valve system availability
- Simple and reliable actuator adaption
- Explosion-proof models for zone 2/22

Positioner TopControl Basic Type 8694 [More info.](#)

AS Ex

The new generation of integrated positioners for combination with actuators from the process valve series Type 23xx/2103 is specially designed for the requirements of hygienic process environments. The operation and selection of the software functions close tight function, inversion of the operating direction of the setpoint signal, characteristic curves selection and switching manual/automatic operation are effected via push-buttons and DIP switches or via the PC interface. The position setpoint is set using the standard signal 4 - 20 mA. In addition, the enable can be controlled via the binary input and an optional position feedback can be integrated. The positioner, Type 8694, registers the valve position without deterioration through a contact-free analogue position sensor. Single-acting or double-acting actuators are controlled via the integral positioner system. An AS-Interface communication interface is available as an option.

Main customer benefits:

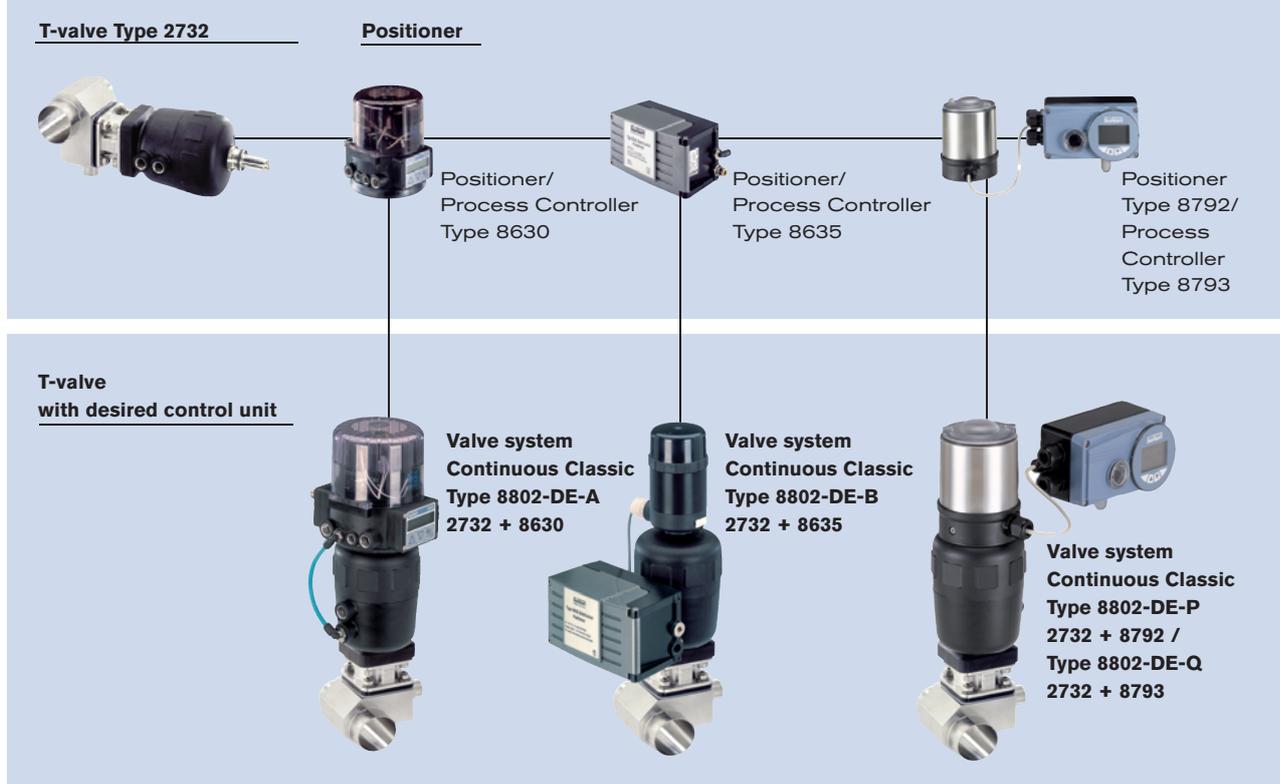
- Compact design of the valve system with integrated positioner meets the demands for plant washdown environments through the selection of materials, external seals and integrated control air supply to the actuator
- Automatic parameterisation of the process controller using the Process TUNE function
- Field bus communication via optional AS-Interface
- Air intake filter enhances the process valve system availability
- Simple and reliable actuator adaption allowing additional actuators of the process valve series, Type 20xx or actuators from other manufacturers to be used
- Explosion-proof models for zone 2/22

Ordering information for valve system Continuous Classic Type 8802-DE, continued

A valve system Continuous Classic Type 8802-DE consists of an T-valve Type 2732 and a digital electropneumatic Positioner Type 8692, a digital electropneumatic Process Controller Type 8693, a digital electropneumatic Positioner Basic Type 8694 (previous page) or a valve actuation system TopControl Type 8630, SideControl Type 8635 or an electropneumatic positioner Type 8792/8793 (below) (see separate datasheets). For the configuration of further valve systems please use the "Request for quotation" on p. 11&12 [go to page](#)

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

Ordering the valve system Continuous Classic Type 8802-DE



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

TopControl Type 8630 [More info.](#)



0/4-20 mA
0-5/10 V

PROFIBUS
DeviceNet™



The Type 8630 is an electro-pneumatic positioner for usage with pneumatically operated process valves. The compact design with integrated position encoder and LCD display was developed for demanding applications of the process industry.

Main customer benefits are:

- Time saving algorithms for temperature, flow and pressure PID parameters through ProcessTUNE function.
- Quick and simple menu driven parameterization through keyboard
- Field bus communication via Profibus DPV1 or DeviceNet
- Fits seamlessly to Bürkert's process valve systems
- Break resistant housing
- Suitable for hazardous locations per zone 2 and 22

SideControl Type 8635, 2-wire, intrinsically safe [More info.](#)



4-20 mA

PROFIBUS
DeviceNet™



Type 8635 is a digital electro-pneumatic positioner with an optional, integrated process controller for precise control requirements. The compact design with integrated position encoder and LCD display was developed for demanding applications of the process industry.

Main customer benefits are:

- Time saving algorithms for temperature, flow and pressure PID parameters through ProcessTUNE function.
- Quick and simple menu driven parameterization through keyboard or Profibus PA
- Remote setpoint adjustment via a 4-20 mA signal
- Adaptation according to IEC534-6 for lift and swivel drives
- Rugged anodised aluminium housing
- Suitable for hazardous locations per zone 1, zone 21 or zone 2 and 22

Positioner SideControl Type 8792 [More info.](#)

Process Controller SideControl Type 8793 [More info.](#)



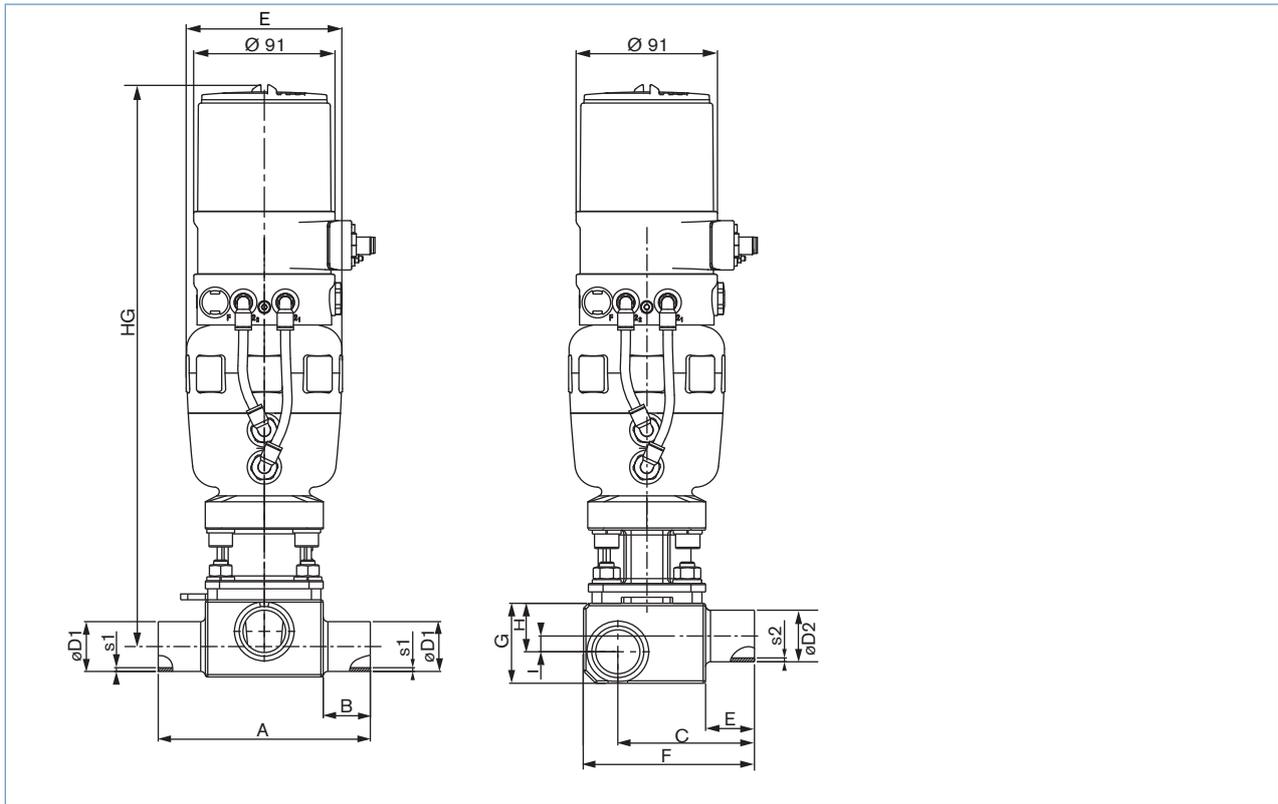
PROFIBUS
DeviceNet™



Type 8792/8793 is a digital electro-pneumatic positioner with an optional, integrated process controller (8793) for precise control requirements. The compact design with integrated position encoder and LCD display was developed for demanding applications of the process industry. A Profibus DPV1 communication interface is available as an option. Main customer benefits are:

- Time saving algorithms for temperature, flow and pressure PID parameters through ProcessTUNE function.
- Quick and simple menu driven parameterization through keyboard or Profibus DPV1 PA
- Adaption acc. to IEC534-6 and VDI/VDE 3845 for lift and swivel drives or as a Remote version together with Bürkert process valves
- Rugged anodised aluminium housing
- Suitable for hazardous locations per zone 2/22

Body dimensions [mm] (for dimension of HG see page 9)



Weld end acc. to EN ISO 1127 / ISO 4200

Orifice	Actuator size Ø	øD1	s1	øD2	s2	A	B	C	E	F	G	H	I
15	80	13.5	1.6	13.5	1.6	93.0	20	52.05	20	70	27	17	4.5
		17.2	1.6	13.5	1.6	93.0	20	53.90	20	70	31	18	4.5
		21.3	1.6	21.3	1.6	93.0	20	55.95	20	71	35	21	6.5
		26.9	1.6	21.3	1.6	103.0	25	58.75	20	78	42	25	11.5
		33.7	2.0	21.3	1.6	103.0	25	62.75	20	82	47	28	14.5
		42.4	2.0	21.3	1.6	103.0	25	67.10	20	91	56	32	18.5
		48.3	2.0	13.5	1.6	103.0	25	69.05	20	97	61	34	20.5
		48.3	2.0	21.3	1.6	103.0	25	69.05	20	97	63	35	21.5
		60.3	2.0	13.5	1.6	113.0	30	76.05	20	109	71	38	24.5
		60.3	2.0	21.3	1.6	113.0	30	76.05	20	109	72	38	24.5
20	80	26.9	1.6	26.9	1.6	114.0	25	70.25	25	88	42	24	6.0
		33.7	2.0	26.9	1.6	114.0	25	73.25	25	94	48	28	10.0
		42.4	2.0	26.9	1.6	114.0	25	78.60	25	102	57	33	15.0
		48.3	2.0	26.9	1.6	114.0	25	80.55	25	108	63	35	17.0
		60.3	2.0	26.9	1.6	124.0	30	86.55	25	121	74	40	22.0
		76.1	2.0	26.9	1.6	124.0	30	94.45	25	136	86	45	27.0
25	80	33.7	2.0	33.7	2.0	124.5	25	78.55	25	98	53	33	13.0
		42.4	2.0	33.7	2.0	124.5	25	82.90	25	107	62	38	18.0
		76.1	2.0	33.7	2.0	134.5	30	99.75	25	142	94	52	32.0
40	125	42.4	2.0	42.4	2.0	152.0	25	97.00	25	122	62	37	8.4
		48.3	2.0	48.3	2.0	152.0	25	99.95	25	128	68	41	12.4
		60.3	2.0	48.3	2.0	162.0	30	105.95	25	140	82	48	19.4
		76.1	2.0	48.3	2.0	162.0	30	113.85	25	155	97	55	26.4
50	125	60.3	2.0	60.3	2.0	188.0	30	120.15	30	154	82	48	12.5
		76.1	2.0	60.3	2.0	188.0	30	128.05	30	172	100	56	20.5
		88.9	2.3	60.3	2.0	188.0	30	134.15	30	183	110	61	25.5

Body dimensions [mm] (continued)

Weld end acc. to ASME BPE

Orifice	Actuator size Ø	øD1	s1	øD2	s2	A	B	C	E	F	G	H	I
15	80	12.70	1.65	12.70	1.65	93.0	20	51.60	20	70	27	13.5	0.0
		19.05	1.65	12.70	1.65	103.0	20	54.78	20	70	31	18.5	5.0
		25.40	1.65	12.70	1.65	103.0	20	57.95	20	75	40	24	10.5
		38.10	1.65	12.70	1.65	103.0	25	64.30	20	88	54	31	17.5
		50.80	1.65	12.70	1.65	113.0	30	71.65	20	100	64	35	21.5
		63.50	1.65	12.70	1.65	113.0	30	78.80	20	113	73	38	24.5
20	80	76.20	1.65	12.70	1.65	113.0	30	84.35	20	125	85	44	30.5
		19.05	1.65	19.05	1.65	114.0	25	66.28	25	85	36	18	0.0
		25.40	1.65	19.05	1.65	114.0	25	69.45	25	90	40	24	6.0
		38.10	1.65	19.05	1.65	114.0	25	75.80	25	98	53	31	13.0
		50.80	1.65	19.05	1.65	124.0	30	82.15	25	111	66	37	19.0
		63.50	1.65	19.05	1.65	124.0	30	88.50	25	123	75	40	22.0
25	80	76.20	1.65	19.05	1.65	124.0	30	94.85	25	137	87	45	27.0
		25.40	1.65	25.40	1.65	124.5	25	74.75	25	95	42	26	6.0
		38.10	1.65	25.40	1.65	124.5	25	81.10	25	103	58	36	16.0
		50.80	1.65	25.40	1.65	134.5	30	87.45	25	120	75	44	24.0
		63.50	1.65	25.40	1.65	134.5	30	93.80	25	130	83	48	28.0
		76.20	1.65	25.40	1.65	134.5	30	100.15	25	142	94	52	32.0
40	125	38.10	1.65	38.10	1.65	152.0	25	95.20	25	121	58	35	6.4
		50.80	1.65	38.10	1.65	162.0	30	101.55	25	131	72	43	14.4
50	125	50.80	1.65	50.80	1.65	188.0	30	115.75	30	145	71	42	6.5
		63.50	1.65	63.50	1.65	188.0	30	122.10	30	158	86	50	14.5

Weld end acc. to DIN 11850 Series 0 and 2

Series 0													
25	80	28.0	1.5	28.0	1.5	124.5	25	76.2	25	95	46	29	9.0
		52.0	1.5	28.0	1.5	134.5	30	88.2	25	117	71	42	22.0
40	125	28.0	1.5	34.0	1.5	152.0	25	90.3	25	122	58	32	3.4
		52.0	1.5	34.0	1.5	162.0	30	102.3	25	132	75	45	16.4
50	125	52.0	1.5	52.0	1.5	188.0	30	116.5	30	147	73	43	7.5
Series 2													
15	80	19.0	1.5	19.0	1.5	93.0	20	54.9	20	70	33	20	6.5
		23.0	1.5	19.0	1.5	103.0	20	56.9	20	72	37	22.5	8.5
		35.0	1.5	19.0	1.5	103.0	25	62.9	20	84	50	29	14.5
		41.0	1.5	19.0	1.5	103.0	25	65.9	20	91	56	32	18.5
20	80	23.0	1.5	23.0	1.5	114.0	25	68.4	25	88	42	21	3.0
		35.0	1.5	23.0	1.5	114.0	25	74.4	25	95	50	29	11.0
		41.0	1.5	23.0	1.5	114.0	25	77.4	25	101	56	32	14.0
25	80	29.0	1.5	29.0	1.5	124.5	25	76.7	25	98	48	30	10.0
40	125	41.0	1.5	41.0	1.5	152.0	25	96.8	25	121	62	37	8.4
50	125	53.0	1.5	53.0	1.5	188.0	30	117.0	30	147	74	44	8.5

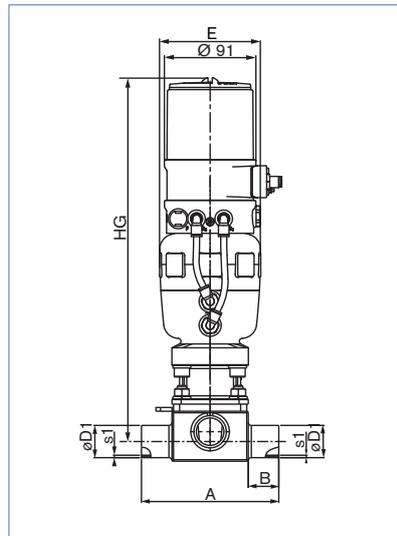
Weld end acc. to SMS 3008

25	80	25.0	1.2	25.0	1.2	124.5	25	75.0	25	95	43	27	7.0
		38.0	1.2	25.0	1.2	124.5	25	81.5	25	105	59	36	16.0
		51.0	1.2	25.0	1.2	134.5	30	88.0	25	118	72	42	22.0
40	125	38.0	1.2	38.0	1.2	152.0	25	95.6	25	121	58	35	6.4
		51.0	1.2	38.0	1.2	162.0	30	102.1	25	131	73	44	15.4
50	125	51.0	1.2	51.0	1.2	188.0	30	116.3	30	147	73	43	7.5

Dimensions [mm]

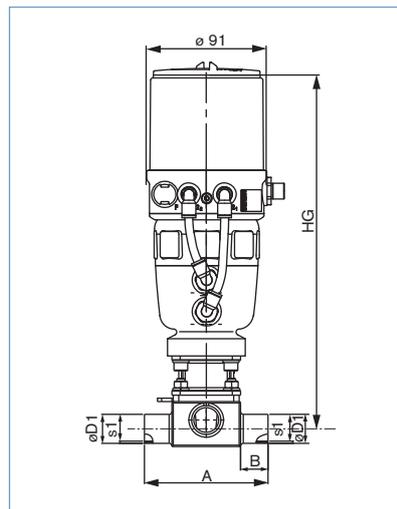
Type 8802-DE-I with 8692 and 8802-DE-J with 8693

DN	ANTG	HG with Type 2732
15	80	316
20	80	329
25	80	330
40	125	420
50	125	425



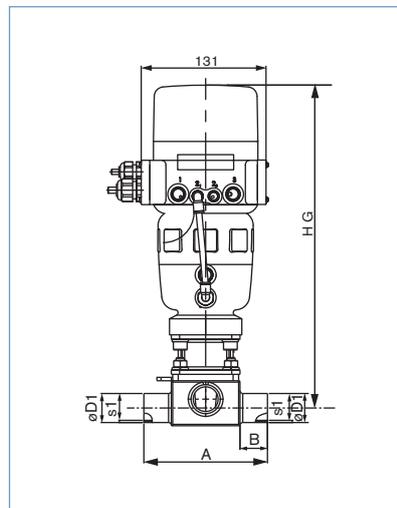
Type 8802-DE-L with 8694

DN	ANTG	HG with Type 2732
15	80	276
20	80	286
25	80	287
40	125	378
50	125	383



Type 8802-DE-A with 8630

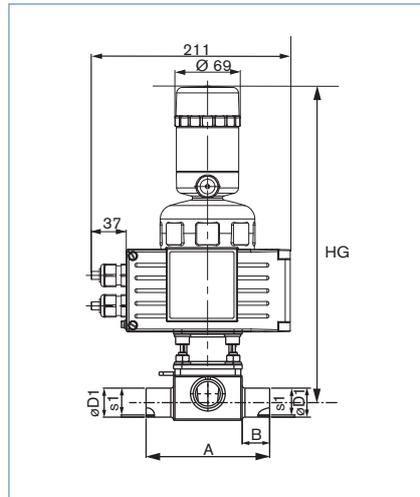
DN	ANTG	HG with Type 2732
15	80	294
20	80	305
25	80	306
40	125	401
50	125	404



Dimensions [mm]

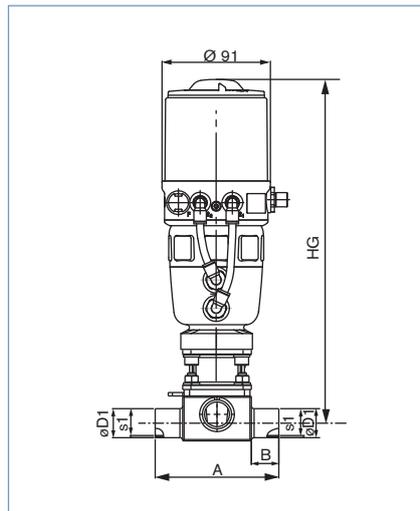
Type 8802-DE-B with 8635

DN	ANTG	HG with Type 2732
15	80	278
20	80	283
25	80	284
40	125	378
50	125	383



Type 8802-DE-P with 8792 and 8802-DE-Q with 8793

DN	ANTG	HG with Type 2732
15	80	279
20	80	289
25	80	290
40	125	381
50	125	386



Note

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

Valve system Continuous Classic Type 8802-DE - Request for quotation

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

Company	Contact person
Customer no.	Department
Address	Tel./Fax
Postcode/town	E-Mail

= mandatory fields to fill out

Quantity

Required delivery date

Operating data

Pipe dimensions

Main tube $\varnothing D1 \times s1$

Outlet tube $\varnothing D2 \times s2$

Clamp main tube

Clamp outlet

Pipe material

Surface finish Ra int.

Process medium

Type of media

Liquid Steam Gas

Flow rate (Q, Q_N, W) ¹⁾

nominal unit

Temperature at valve inlet T1

Absolute pressure at valve inlet P1

Absolute pressure at valve outlet P2

Steam pressure Pv

¹⁾ standard unit:
Liquid Q = m³/h;
Steam W = kg/h;
Gas Q_N = Nm³/h

Valve features

Specification key

automatically transferred from last page

go to page

Control unit features

Positioner TopControl Type 8692

More info.

Process Controller TopControl Type 8693

More info.

Positioner TopControl Basic Type 8694

More info.

Pneumatic function

Single-acting Double-acting

Communication

Profibus DeviceNet

Electrical connection

Cable gland Multipol connection

Feedback

4-20 mA 4-20 mA + 2 binary outputs

Initiator

Initiator

Please specify item no. if known:

Pneumatic function

Single-acting

Pilot air ports

Push-in connector external $\varnothing 6 \text{ mm or } 1/4''$

Thread G 1/8"

Electrical connection

Cable gland Multipol connection

Feedback

4-20 mA

Please specify item no. if known:

Continued on next page

* To find your nearest Bürkert office, click on the orange box →

www.burkert.com

Valve system Continuous Classic Type 8802-DE - Request for quotation, continued

<input type="checkbox"/> Positioner TopControl <small>More info.</small> Type 8630 - 3-wire	<input type="checkbox"/> Positioner SideControl <small>More info.</small> Type 8635 - 2-wire	<input type="checkbox"/> Positioner SideControl Remote <small>More info.</small> Type 8792 <input type="checkbox"/> Process Controller SideControl <small>More info.</small> Remote Type 8793
<p>Power supply 24 VDC</p> <p>Communication Setpoint / feedback analogue signal or via BUS <input type="checkbox"/> Profibus DP <input type="checkbox"/> DeviceNet</p> <p><input type="checkbox"/> Positioner version Input 0/4 - 20 mA / 0-5/10 V Feedback <input type="checkbox"/> 4 - 20 mA <i>or/and</i> <input type="checkbox"/> Binary</p> <p><input type="checkbox"/> PID Controller version³⁾ Input measuring signal 4 - 20 mA / Pt100 / Frequency</p> <p>Inductive proximity switch <input type="checkbox"/> 1 <input type="checkbox"/> 2</p> <p>Please specify item no. if known: <input type="text"/></p>	<p><input type="checkbox"/> Standard <input type="checkbox"/> ATEX/FM Zone 1 <input type="checkbox"/> Zone 2/22</p> <p>Power supply 24 VDC via setpoint or BUS</p> <p>Communication Setpoint / feedback analogue signal or via BUS <input type="checkbox"/> Profibus PA</p> <p><input type="checkbox"/> Positioner version Input 4 - 20 mA Feedback <input type="checkbox"/> 4 - 20 mA <i>or/and</i> <input type="checkbox"/> Binary</p> <p><input type="checkbox"/> PID Controller version³⁾ Input measuring signal 4 - 20 mA</p> <p>Inductive proximity switch <input type="checkbox"/> 1 <input type="checkbox"/> 2</p> <p>Please specify item no. if known: <input type="text"/></p>	<p>Power supply 24 VDC</p> <p>Communication <input type="checkbox"/> Without <input type="checkbox"/> Profibus DPV1</p> <p>Feedback <input type="checkbox"/> Analogue feedback + 2 binary outputs <input type="checkbox"/> 2 binary outputs</p> <p>Electrical connection <input type="checkbox"/> Cable gland <input type="checkbox"/> Multipol connection</p> <p>Please specify item no. if known: <input type="text"/></p>

³⁾ same setpoint for input and feedback signal as for Positioner version

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 - USP certificate

Comment / sketch

DTS 1000140454 EN Version: D Status: RL (released | freigegeben | valide) printed: 19.01.2015