bürkert
FLUID CONTROL SYSTEMS

2/2-way Globe Control Valve, weld end connection, DN 10-100

- Classic design with interchangeable trims, 3 to 5 Kvs-value per connection port
- Excellent control characteristic
- Ultra compact design
- Face-to-face optimised for Orbital welding
- High operative safety

Type 2712 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 2712 system has been specifically engineered for reliable control in applications where control accuracy is paramount. The 2712 is made from an all stainless steel valve body combined with Burkert's classic pneumatic actuator. Each globe valve body can be fitted with three to five sizes of trim sets. These parabolic trims provide a reliable and repeatable characteristic to vary the flow. The control cones are available in either stainless steel or with a durable PTFE seal for tight shut-off. When actuated by the 8635 SideControl, SideControls 8792/93 Remote versions or the 8694/8692/8693/ 8630 TopControl it forms a unique control valve system which can be operated as either a simple accurate positioner or an autotune PID process controller for flow, temperature or pressure.

Proven Applications

- Fine chemical pressure and flow control
- High accuracy test bench equipment
- Food, beverage and pharmaceutical CIP/ SIP and auxiliary processes with steam
- Pharmaceutical Sterilizers
- Precision distillation apparatus
- Sterile Packaging Machinery

Technical data	
Materials	
Body	Cast stainless steel 316L (conform to 1.4409)
Actuator	PA polyamide (PPS on request)
Sealing	St.st./St.st. (stainless steel/stainless steel) PTFE/St.st. (PTFE/stainless steel)
Seat leakage IEC 534-4/EN 1349	Shut-off class IV for St.st./St.st. Shut-off class VI for PTFE/St.st.
Process media gases and liquids (vacuum version on request)	For neutral gases, water, alcohols, oils, fuels, hydraulic liquids, salt solutions, lyes, organic solvents, steam (10 bar(abs)/+180°C)
Viscosity	max. 600 mm²/s
Packing gland	PTFE V-rings (silicone grease) with spring compensation
Nominal pressure	PN 25 (body)
Temperatures	
Fluid	-10°C to +180°C[1] (max. +130°C for PTFE/St.st. sealing recommended)
Ambient	-10°C to +60°C[1] Actuators 80 to 125 -10°C to +50°C Actuators 175 and 225
Control media	Compressed air
Pilot pressure	5.5 to 7 bar Actuators 80 to 125 5 to 6 bar Actuators 175 and 225
Pilot air ports	G 1/4 stainless steel (St.st.)
Flow direction	Below seat
Interchangeable seat	Different Kvs-values per port size, see table p. 2
Control ratio (Kvs/KvO)	50:1 25:1 for orifice DN6 10:1 for orifice DN4

[1] high temperature on request

continued on next page

Content

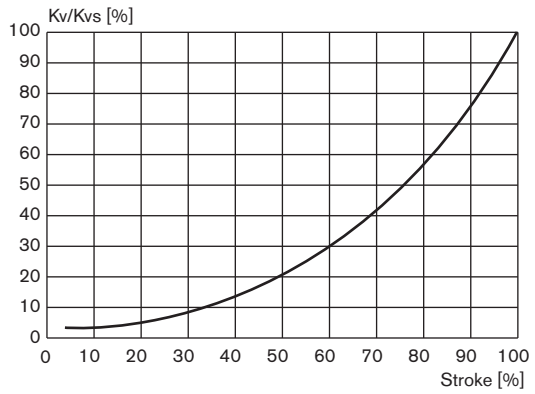
Technical data, continued

Technical data		
Port connections		
Weld end	ISO	EN ISO 1127 / ISO 4200
	DIN	DIN 11850 Series 2
	OD	BS 4825 part 1
	ASME	ASME BPE
on request	JIS	JIS 3459 or 3447
Mounting position		Any, preferably upright

Kvs values

Port size (tube)		Actuator size	Orifice DN (seat) [mm]												
ISO, DIN	BS, ASME														
[mm]	[inch]	[mm]	04	06	08	10	15	20	25	32	40	50	65	80	100
10	1/2"	80	0.5	1.2	2.0	2.7	–	–	–	–	–	–	–	–	–
15	3/4"	80	0.5	1.2	2.1	3.1	4.3	–	–	–	–	–	–	–	–
20	1"	80	–	–	–	3.2	5.2	7.1	–	–	–	–	–	–	–
25	–	80	–	–	–	–	5.3	7.2	12.0	–	–	–	–	–	–
32	1 1/2"	100	–	–	–	–	–	8.0	13.0	17.8	–	–	–	–	–
40	2"	100	–	–	–	–	–	–	13.6	20.2	23.8	–	–	–	–
50	2 1/2"	125	–	–	–	–	–	–	–	21.0	24.6	37.0	–	–	–
65	3"	125	–	–	–	–	–	–	–	–	17.5	26.0	52.0	–	–
		175	–	–	–	–	–	–	–	–	25.5	39.5	62.0	–	–
80	–	225	–	–	–	–	–	–	–	–	–	42.0	70.0	100	–
100	4"	225	–	–	–	–	–	–	–	–	–	–	75.0	115	140

Flow curve and description



For detailed values please see table on next page

Remarks on the flow characteristic

- Equipercentile parabolic plug for the orifices DN8...DN100
- Linear plug for the orifices DN4 and DN6
- Flow characteristic runs within DIN/IEC 534-2-4
- Theoretical control ratio (Kvs/Kvo):
  50:1 for the orifices DN8...DN100
  25:1 for the orifice DN6
  10:1 for the orifice DN4
- KVR value at 5% of stroke for DN > 10 mm
  KVR value at 10% of stroke for DN ≤ 10 mm

(KVR value = smallest Kv value at which the gradient tolerance to DIN/IEC 534-2-4 is still complied with)

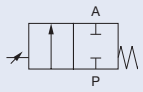
Technical data, continued

Kvs values [m³/h]

Port size (tube)			Orifice (seat)		Actuator size	Stroke [%]										
ISO, DIN		BS, ASME														
[mm]	[inch]	[inch]	[mm]	[inch]	[mm]	5	10	20	30	40	50	60	70	80	90	100
10	3/8"	1/2"	4	1/8"	80	0.04	0.05	0.10	0.16	0.22	0.27	0.32	0.36	0.40	0.44	0.50
			6	3/16"	80	0.05	0.12	0.32	0.48	0.62	0.76	0.88	0.98	1.07	1.13	1.20
			8	1/4"	80	0.06	0.07	0.09	0.12	0.18	0.26	0.42	0.61	0.92	1.50	2.00
			10	3/8"	80	0.09	0.11	0.13	0.19	0.30	0.48	0.73	1.00	1.60	2.3	2.7
15	1/2"	3/4"	4	1/8"	80	0.04	0.05	0.10	0.16	0.22	0.27	0.32	0.36	0.40	0.44	0.50
			6	3/16"	80	0.05	0.12	0.32	0.48	0.62	0.76	0.88	0.98	1.07	1.13	1.20
			8	1/4"	80	0.07	0.08	0.11	0.13	0.19	0.27	0.43	0.63	0.95	1.60	2.1
			10	3/8"	80	0.09	0.11	0.15	0.19	0.31	0.49	0.75	1.10	1.70	2.5	3.1
			15	1/2"	80	0.14	0.17	0.22	0.35	0.52	0.80	1.20	1.80	2.7	3.7	4.3
20	3/4"	1"	10	3/8"	80	0.11	0.12	0.16	0.20	0.33	0.52	0.77	1.20	1.8	2.6	3.2
			15	1/2"	80	0.14	0.17	0.22	0.35	0.52	0.80	1.20	1.80	2.9	4.0	5.2
			20	3/4"	80	0.20	0.25	0.30	0.45	0.70	1.10	1.60	2.4	3.5	5.2	7.1
25	1"	–	15	1/2"	80	0.14	0.17	0.22	0.35	0.52	0.80	1.20	1.80	2.9	4.1	5.3
			20	3/4"	80	0.20	0.25	0.31	0.47	0.70	1.10	1.60	2.5	3.8	5.4	7.2
			25	1"	80	0.35	0.38	0.65	1.00	1.50	2.2	3.4	5.1	7.0	9.4	12.0
32	1 1/4"	1 1/2"	20	3/4"	100	0.22	0.25	0.35	0.50	0.75	1.10	1.60	2.5	3.8	5.8	8.0
			25	1"	100	0.40	0.47	0.73	1.10	1.60	2.5	3.7	5.4	7.5	10.3	13.0
			32	1 1/4"	100	0.48	0.60	0.85	1.30	2.1	3.1	4.5	6.8	10.2	14.0	17.8
40	1 1/2"	2"	25	1"	100	0.40	0.50	0.75	1.10	1.70	2.6	3.8	5.6	8.0	10.7	13.6
			32	1 1/4"	100	0.48	0.60	0.85	1.30	2.1	3.2	4.6	6.9	11.0	15.0	20.2
			40	1 1/2"	100	0.60	0.70	1.10	1.70	2.7	4.0	6.0	9.2	13.8	18.2	23.8
50	2"	2 1/2"	32	1 1/4"	125	0.48	0.60	0.90	1.30	2.1	3.2	4.6	6.9	11.6	16.0	21.0
			40	1 1/2"	125	0.60	0.70	1.00	1.70	2.6	4.0	5.9	9.2	14.0	18.9	24.6
			50	2"	125	0.90	1.10	1.90	2.9	4.5	6.8	10.5	15.5	22.0	29.3	37.0
65	2 1/2"	3"	40	1 1/2"	125	0.45	0.65	0.95	1.30	1.90	2.8	4.00	5.50	7.8	11.7	17.5
			50	2"	125	0.70	1.00	1.60	2.4	3.5	4.9	6.90	9.80	14.1	19.9	26.0
			65	2 1/2"	125	0.80	1.30	2.1	3.2	5.5	9.1	14.7	24.5	37.6	45.6	52.0
			40	1 1/2"	175	0.45	0.55	0.85	1.30	2.0	3.1	4.60	6.80	10.7	17.2	25.5
			50	2"	175	0.75	0.90	1.50	2.3	3.5	4.9	7.1	11.0	17.5	26.0	39.5
			65	2 1/2"	175	1.10	1.40	2.1	3.2	4.9	8.0	12.0	18.5	31.5	46.5	62.0
80	3"	–	50	2"	225	0.85	1.00	1.50	2.3	3.5	5.0	7.1	10.5	16.0	25.0	42.0
			65	2 1/2"	225	1.40	1.70	2.5	3.8	5.7	8.2	12.2	19.5	32.5	50.0	70.0
			80	3"	225	2.1	2.6	4.2	7.0	10.5	16.0	25.0	40.0	60.0	83.0	100
100	4"	4"	65	2 1/2"	225	1.40	1.70	2.6	3.8	5.7	8.3	12.6	20.0	32.0	51.0	75.0
			80	3"	225	2.1	2.6	4.3	7.0	11.0	17.0	26.5	44.0	65.0	89.0	115
			100	4"	225	3.2	3.9	5.7	9.0	13.5	20.5	32.0	51.0	83.0	118	140

Ordering chart for Globe valve (without positioner)

Body with weld end connection acc. DIN 11850 Series 2, flow below seat

Control function	Port size (tube) [mm]	Orifice DN (seat) [mm]	Connection DS x WS [mm]	Actuator size Ø [mm]	Operating pressure ≤ +180°C [bar]	Item no. seal system St.st./St.st.*	Item no. seal system PTFE/St.st.*
A  2/2-way, NC by spring return	10	4	13.0 x 1.5	80	16.0	146 650	–
		6	13.0 x 1.5	80	16.0	156 256	–
		8	13.0 x 1.5	80	16.0	146 673	146 959
		10	13.0 x 1.5	80	16.0	146 695	146 983
	15	4	19.0 x 1.5	80	16.0	146 661	–
		6	19.0 x 1.5	80	16.0	156 263	–
		8	19.0 x 1.5	80	16.0	146 683	146 971
		10	19.0 x 1.5	80	16.0	146 707	146 995
		15	19.0 x 1.5	80	16.0	146 735	147 023
	20	10	23.0 x 1.5	80	16.0	146 721	147 009
		15	23.0 x 1.5	80	16.0	146 749	147 037
		20	23.0 x 1.5	80	16.0	146 777	147 065
	25	15	29.0 x 1.5	80	16.0	146 763	147 051
		20	29.0 x 1.5	80	16.0	146 791	147 079
		25	29.0 x 1.5	80	16.0	145 664	147 105
	32	20	35.0 x 1.5	100	16.0	146 805	147 093
		25	35.0 x 1.5	100	16.0	146 829	147 119
		32	35.0 x 1.5	100	16.0	146 855	147 145
	40	25	41.0 x 1.5	100	16.0	146 841	147 131
		32	41.0 x 1.5	100	16.0	146 867	147 156
		40	41.0 x 1.5	100	16.0	146 895	147 187
	50	32	53.0 x 1.5	125	16.0	146 881	147 170
		40	53.0 x 1.5	125	16.0	146 909	147 201
		50	53.0 x 1.5	125	16.0	145 665	147 215
	65	40	70.0 x 2.0	125	15.0	155 750	155 971
		50	70.0 x 2.0	125	15.0	155 788	156 008
		65	70.0 x 2.0	125	10.0	155 845	156 069
		40	70.0 x 2.0	175	15.0	155 770	155 990
		50	70.0 x 2.0	175	15.0	155 809	156 027
		65	70.0 x 2.0	175	15.0	155 867	156 090
	80	50	85.0 x 2.0	225	12.5	155 829	156 044
		65	85.0 x 2.0	225	12.5	155 886	156 106
		80	85.0 x 2.0	225	12.5	155 920	156 140
	100	65	104.0 x 2.0	225	10.0	155 803	156 121
		80	104.0 x 2.0	225	10.0	155 937	156 155
		100	104.0 x 2.0	225	10.0	155 953	156 172

*seal system: • St.st./St.st.: plug stainless steel/seat stainless steel
• PTFE/St.st.: (soft sealing) plug PTFE/seat stainless steel

Further versions on request

Pressure
Valves with port size 65-100 mm for an operating pressure up to 16 bar

Port connection
Acc. to JIS 3459 or 3447

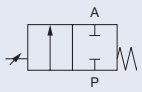
Material
Actuator: PPS for actuator sizes 80-125 mm

Control function
B (NO) normally open by spring return

Mediums temperature
Valves for mediums temperature up to +200°C or down to -40°C

Ordering chart for Globe valve (without positioner)

Body with weld end connection acc. BS 4825 part 1, flow below seat

Control function	Port size (tube) [inch]	Orifice DN (seat) [mm]	Orifice DN (seat) [inch]	Connection DS x WS [mm]	Actuator size Ø [mm]	Operating pressure ≤ +180°C [bar]	Item no. seal system St.st./St.st. *	Item no. seal system PTFE/St.st.*
A  2/2-way, NC by spring return	1/2"	4	1/8"	12.70 x 1.2	80	16.0	461 601	-
		6	3/16"	12.70 x 1.2	80	16.0	157 592	-
		8	1/4"	12.70 x 1.2	80	16.0	146 708	146 996
		10	3/8"	12.70 x 1.2	80	16.0	146 736	147 024
	3/4"	8	1/4"	19.05 x 1.2	80	16.0	146 722	147 010
		10	3/8"	19.05 x 1.2	80	16.0	146 750	147 038
		15	1/2"	19.05 x 1.2	80	16.0	146 778	147 066
	1"	10	3/8"	25.40 x 1.6	80	16.0	146 764	147 052
		15	1/2"	25.40 x 1.6	80	16.0	146 792	147 080
		20	3/4"	25.40 x 1.6	80	16.0	146 816	147 106
	1 1/2"	20	3/4"	38.10 x 1.6	100	16.0	146 842	147 132
		25	1"	38.10 x 1.6	100	16.0	146 868	147 157
		32	1 1/4"	38.10 x 1.6	100	16.0	146 896	147 188
	2"	25	1"	50.80 x 1.6	100	16.0	146 882	147 171
		32	1 1/4"	50.80 x 1.6	100	16.0	146 910	147 202
		40	1 1/2"	50.80 x 1.6	100	16.0	146 922	147 216
	2 1/2"	32	1 1/4"	63.50 x 1.6	125	16.0	461 951	461 952
		40	1 1/2"	63.50 x 1.6	125	16.0	155 751	155 972
		50	2"	63.50 x 1.6	125	16.0	155 789	156 009
	3"	40	1 1/2"	76.20 x 1.6	125	15.0	155 752	155 973
		50	2"	76.20 x 1.6	125	15.0	155 790	156 010
		65	2 1/2"	76.20 x 1.6	125	10.0	155 847	156 072
		40	1 1/2"	76.20 x 1.6	175	15.0	155 771	155 991
		50	2"	76.20 x 1.6	175	15.0	155 810	156 028
		65	2 1/2"	76.20 x 1.6	175	15.0	155 868	155 278
	4"	65	2 1/2"	101.60 x 2.0	225	10.0	155 904	156 122
		80	3"	101.60 x 2.0	225	10.0	155 938	156 156
		100	4"	101.60 x 2.0	225	10.0	155 954	156 173

*seal system: • St.st./St.st.: plug stainless steel/seat stainless steel
• PTFE/St.st.: (soft sealing) plug PTFE/seat stainless stee

Further versions on request

Port connection
Acc. to JIS 3459 or 3447

Material
Actuator: PPS for actuator sizes 80-125 mm

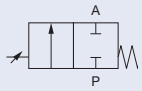
Pressure
Valves with port size 3" and 4" for operating pressure up to 16 bar

Control function
B (NO) normally open by spring return

Mediums temperature
Valves for mediums temperature up to +200°C or down to -40°C

Ordering chart for Globe valve (without positioner)

Body with weld end connection acc. ASME BPE, flow below seat

Control function	Port size (tube) [inch]	Orifice DN (seat) [mm]	Orifice DN (seat) [inch]	Connection DS x WS [mm]	Actuator size Ø [mm]	Operating pressure ≤ +180°C [bar]	Item no. seal system St.st./St.st.*	Item no. seal system PTFE/St.st.*
A  2/2-way, NC by spring return	1/2"	4	1/8"	12.70 x 1.6	80	16.0	461 608	–
		6	3/16"	12.70 x 1.6	80	16.0	461 609	–
		8	1/4"	12.70 x 1.6	80	16.0	151 863	151 853
		10	3/8"	12.70 x 1.6	80	16.0	151 864	151 854
	3/4"	8	1/4"	19.05 x 1.6	80	16.0	151 865	151 855
		10	3/8"	19.05 x 1.6	80	16.0	151 866	151 856
		15	1/2"	19.05 x 1.6	80	16.0	151 867	151 857
	1"	10	3/8"	25.40 x 1.6	80	16.0	146 764	147 052
		15	1/2"	25.40 x 1.6	80	16.0	146 792	147 080
		20	3/4"	25.40 x 1.6	80	16.0	146 816	147 106
	1 1/2"	20	3/4"	38.10 x 1.6	100	16.0	146 842	147 132
		25	1"	38.10 x 1.6	100	16.0	146 868	147 157
		32	1 1/4"	38.10 x 1.6	100	16.0	146 896	147 188
	2"	25	1"	50.80 x 1.6	100	16.0	146 882	147 171
		32	1 1/4"	50.80 x 1.6	100	16.0	146 910	147 202
		40	1 1/2"	50.80 x 1.6	100	16.0	146 922	147 216
	2 1/2"	32	1 1/4"	63.50 x 1.6	125	16.0	461 951	461 952
		40	1 1/2"	63.50 x 1.6	125	16.0	155 751	155 972
		50	2"	63.50 x 1.6	125	16.0	155 789	156 009
	3"	40	1 1/2"	76.20 x 1.6	125	15.0	155 752	155 973
		50	2"	76.20 x 1.6	125	15.0	155 790	156 010
		65	2 1/2"	76.20 x 1.6	125	10.0	155 847	156 072
		40	1 1/2"	76.20 x 1.6	175	15.0	155 771	155 991
		50	2"	76.20 x 1.6	175	15.0	155 810	156 028
		65	2 1/2"	76.20 x 1.6	175	15.0	155 868	155 278
	4"	65	2 1/2"	101.60 x 2.0	225	10.0	155 904	156 122
		80	3"	101.60 x 2.0	225	10.0	155 938	156 156
		100	4"	101.60 x 2.0	225	10.0	155 954	156 173

*seal system: • St.st./St.st.: plug stainless steel/seat stainless steel
• PTFE/St.st.: (soft sealing) plug PTFE/seat stainless steel

Further versions on request

Port connection
Acc. to JIS 3459 or 3447

Material
Actuator: PPS for actuator sizes 80-125 mm

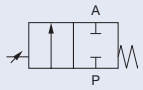
Pressure
Valves with port size 3" and 4" for operating pressure up to 16 bar

Control function
B (NO) normally open by spring return

Mediums temperature
Valves for mediums temperature up to +200°C or down to -40°C

Ordering chart for Globe valve (without positioner)

Body with weld end connection acc. EN ISO 1127 / ISO 4200, flow below seat

Control function	Port size (tube) [mm]	Orifice DN (seat) [mm]	Connection DS x WS [mm]	Actuator size Ø [mm]	Operating pressure ≤ +180°C [bar]	Item no. seal system St.st./ St.st.*	Item no. seal system PTFE/ St.st.*
A  2/2-way, NC by spring return	10	4	17.2 x 1.6	80	16.0	146 649	–
		6	17.2 x 1.6	80	16.0	156 255	–
		8	17.2 x 1.6	80	16.0	146 672	146 958
		10	17.2 x 1.6	80	16.0	146 694	146 982
	15	4	21.3 x 1.6	80	16.0	146 660	–
		6	21.3 x 1.6	80	16.0	156 262	–
		8	21.3 x 1.6	80	16.0	145 832	146 970
		10	21.3 x 1.6	80	16.0	146 706	146 994
		15	21.3 x 1.6	80	16.0	146 734	147 022
	20	10	26.9 x 1.6	80	16.0	146 720	147 008
		15	26.9 x 1.6	80	16.0	146 748	147 036
		20	26.9 x 1.6	80	16.0	146 776	147 064
	25	15	33.7 x 2.0	80	16.0	146 762	147 050
		20	33.7 x 2.0	80	16.0	146 790	147 078
		25	33.7 x 2.0	80	16.0	146 016	147 104
	32	20	42.4 x 2.0	100	16.0	146 804	147 092
		25	42.4 x 2.0	100	16.0	146 828	147 118
		32	42.4 x 2.0	100	16.0	146 854	147 144
	40	25	48.3 x 2.0	100	16.0	146 840	147 130
		32	48.3 x 2.0	100	16.0	146 866	147 155
		40	48.3 x 2.0	100	16.0	146 894	147 183
	50	32	60.3 x 2.0	125	16.0	146 880	147 169
		40	60.3 x 2.0	125	16.0	146 908	147 200
		50	60.3 x 2.0	125	16.0	146 921	147 214
	65	40	76.1 x 2.3	125	15.0	155 749	155 970
		50	76.1 x 2.3	125	15.0	155 787	156 007
		65	76.1 x 2.3	125	10.0	155 844	153 591
		40	76.1 x 2.3	175	15.0	155 769	155 303
		50	76.1 x 2.3	175	15.0	155 808	155 302
		65	76.1 x 2.3	175	15.0	155 866	155 301
	80	50	88.9 x 2.3	225	12.5	155 828	155 306
		65	88.9 x 2.3	225	12.5	155 885	155 305
		80	88.9 x 2.3	225	12.5	155 919	155 304
	100	65	114.3 x 2.6	225	10.0	155 901	155 309
		80	114.3 x 2.6	225	10.0	155 936	155 308
		100	114.3 x 2.6	225	10.0	155 952	155 307

*seal system: • St.st./St.st.: plug stainless steel/seat stainless steel
• PTFE/St.st.: (soft sealing) plug PTFE/seat stainless steel

Further versions on request

Pressure
Valves with port size 65-100 mm for an operating pressure up to 16 bar

Port connection
Acc. to JIS 3459 or 3447

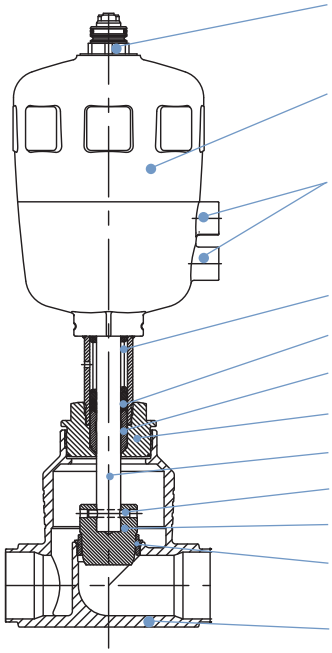
Material
Actuator: PPS for actuator sizes 80-125 mm

Control function
B (NO) normally open by spring return

Mediums temperature
Valves for mediums temperature up to +200°C or down to -40°C

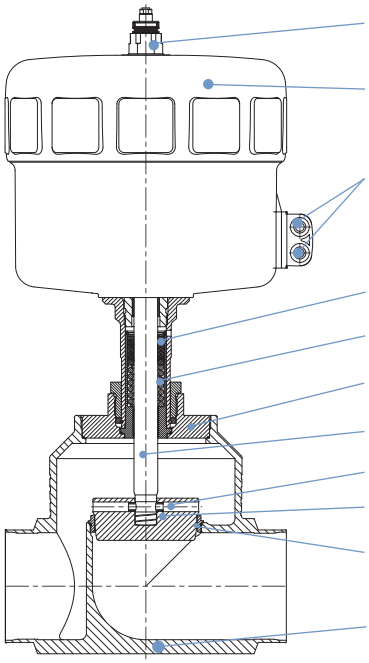
Materials

DN 10-65 (actuator sizes 80 to 125 mm)



Adapter:	Stainless steel 1.4305
Actuator:	PA polyamide (PPS on request)
Pilot air ports:	Stainless steel 1.4305
Spring:	Stainless steel 1.4568
V-seals:	PTFE
Wiper:	PTFE
Nipple:	Stainless steel 1.4401
Spindle:	Stainless steel 1.4401
Pin:	Stainless steel 1.4310
Plug:	Stainless steel 1.4571 (+PTFE disc for soft seat sealing)
Valve seat:	Stainless steel 1.4571
Valve body:	Cast stainless steel 316L

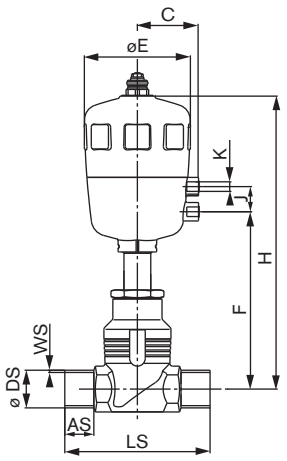
DN 65-100 (actuator sizes 175 and 225 mm)



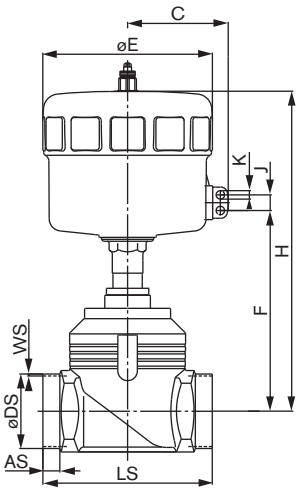
Adapter:	Stainless steel 1.4305
Actuator:	PA polyamide
Pilot air ports:	Stainless steel 1.4305
V-seals:	PTFE
Spring:	Stainless steel 1.4568
Nipple:	Stainless steel 1.4404
Spindle:	Stainless steel 1.4401
Pin:	Stainless steel 1.4310
Plug:	Stainless steel 1.4571 (+PTFE disc for soft seat sealing)
Valve seat:	Stainless steel 1.4571
Valve body:	Cast stainless steel 316L

Dimensions [mm]

Port size 10-65



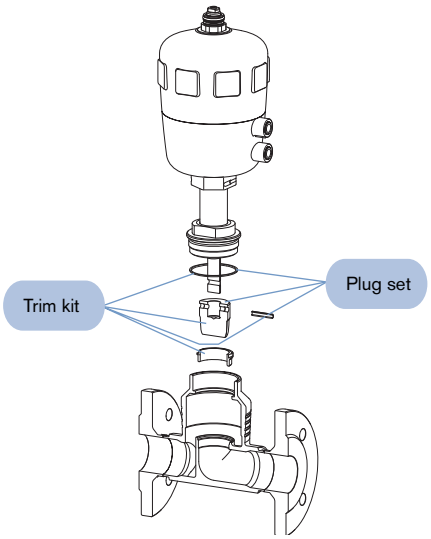
Port size 65-100



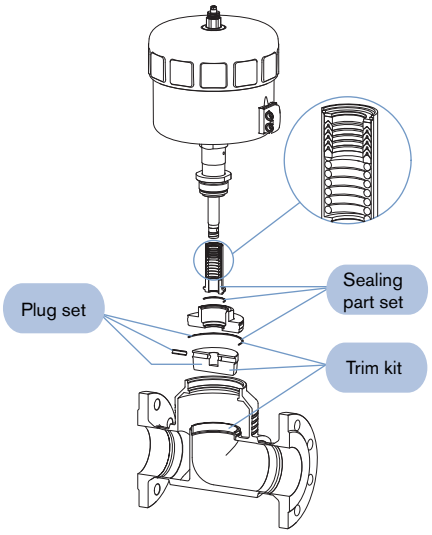
Port size			Actu-ator size									EN ISO 1127 / ISO 4200		DIN 11850 Series 2		BS 4825		ASME BPE	
[mm]	[inch]	BS, ASME [inch]	[mm]	C	E	F	H	K	J	AS	LS	DS	WS	DS	WS	DS	WS	DS	WS
10	3/8”	1/2”	80	60	101	166	264	G 1/4	24	20	90	17.2	1.6	13.0	1.5	–	–	–	–
15	1/2”	3/4”	80	60	101	166	264	G 1/4	24	20	90	21.3	1.6	19.0	1.5	12.7	1.2	12.7	1.6
20	3/4”	1”	80	60	101	160	259	G 1/4	24	20	100	26.9	1.6	23.0	1.5	19.0	1.2	19.0	1.6
25	1”	–	80	60	101	164	262	G 1/4	24	26	130	33.7	2.0	29.0	1.5	25.4	1.6	25.4	1.6
32	1 1/4”	1 1/2”	100	73	127	208	346	G 1/4	30	26	140	42.4	2.0	35.0	1.5	38.1	1.6	38.1	1.6
40	1”	2”	100	73	127	214	351	G 1/4	30	26	150	48.3	2.0	41.0	1.5	50.8	1.6	50.8	1.6
50	2”	2 1/2”	125	86	153	225	388	G 1/4	30	26	175	60.3	2.0	53.0	1.5	63.5	1.6	63.5	1.6
65	2 1/2”	3”	125	86	153	254	417	G 1/4	30	26	210	76.1	2.3	70.0	2.0	76.2	1.6	76.2	1.6
			175	130	211	289	479	G 1/4	24	26	210	76.1	2.3	70.0	2.0	76.2	1.6	76.2	1.6
80	3”	–	225	155	261	299	482	G 1/4	24	26	230	88.9	2.3	85.0	2.0	–	–	–	–
100	4”	4”	225	155	261	309	492	G 1/4	24	26	260	114.3	2.6	104.0	2.0	101.6	2.0	101.6	2.0

Spare parts for Type 2712 – DN 10-100 (on request)

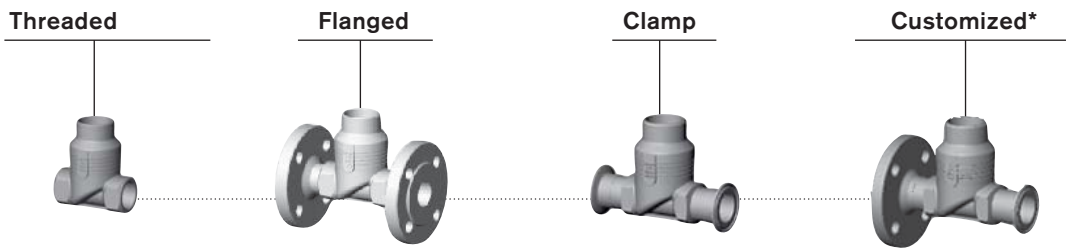
Port size 10-65 in combination with actuator size 80 to 125 mm



Port size 65-100 in combination with actuator size 175 and 225 mm



Further process connections



- G
- NPT
- RC

- DIN 2634
- ASME B16.5
- JIS B2238

- ISO 2852
- SMS 3017
- DIN 32676
- BS 4825

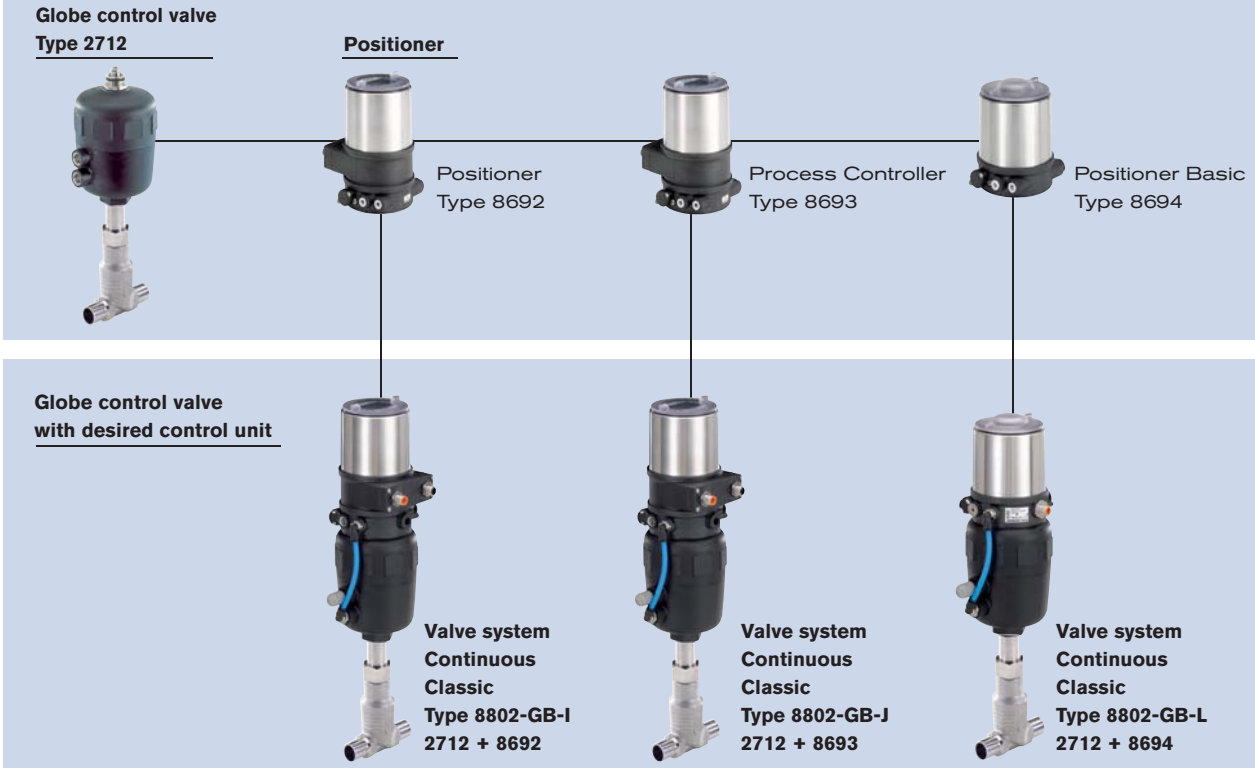
*e.g. one side with flange, other side clamp

bürkert

Ordering information for valve system Continuous Classic Type 8802-GB

A **valve system Continuous Classic Type 8802-GB** consists of an **globe control valve Type 2712** 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. 16 go to page
You order two components and receive a complete assembled and certified valve.

Ordering the valve system Continuous Classic Type 8802-GB



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 DeviceNet™

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 back-lighting 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.

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-GB, continued

A **valve system Continuous Classic Type 8802-GB** consists of an **globe control valve Type 2712** 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. 16 go to page
You order two components and receive a complete assembled and certified valve.

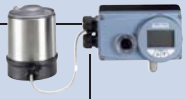
Ordering the valve system Continuous Classic Type 8802-GB

Globe control valve Type 2712

Positioner

Positioner/ Process Controller Type 8630

Positioner/ Process Controller Type 8635



Positioner Type 8792/ Process Controller Type 8793

Globe control valve with desired control unit

Valve system Continuous Classic Type 8802-GB-A 2712 + 8630

Valve system Continuous Classic Type 8802-GB-B 2712 + 8635

Valve system Continuous Classic Type 8802-GB-P 2712 + 8792 / Type 8802-GB-Q 2712 + 8793

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

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

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.

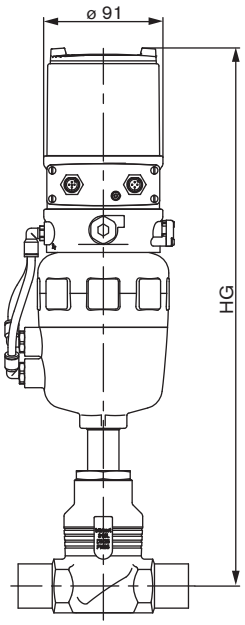
Process Controller SideControl Type 8793 More info.

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

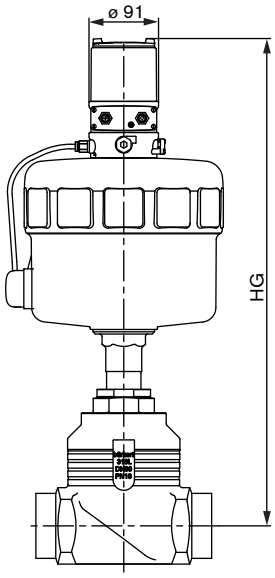
Dimensions for valve system Continuous Classic Type 8802-GB [mm]

Dimensions valve system Continuous Classic Type 8802-GB-I with positioner TopControl Type 8692 and 8802-GB-J with process controller TopControl Type 8693 [mm]

DN 10-65



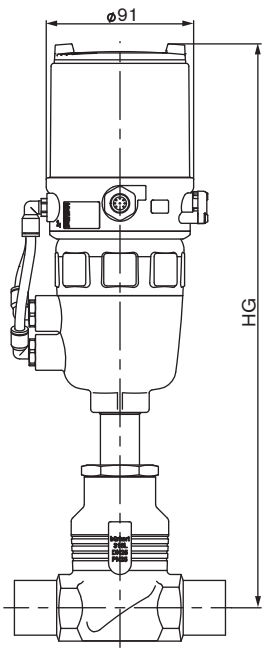
DN 65-100



Port size ISO, DIN [mm]	Port size ISO, DIN [inch]	Port size BS, ASME [inch]	Actuator size ø [mm]	HG [mm]
10	3/8"	1/2"	80	414
15	1/2"	3/4"	80	414
20	3/4"	1"	80	409
25	1"	–	80	412
32	1 1/4"	1 1/2"	100	496
40	1"	2"	100	501
50	2"	2 1/2"	125	538
65	2 1/2"	3"	125	567
	2 1/2"	3"	175	634
80	3"	–	225	637
100	4"	4"	225	647

Further dimensions see p. 13

Dimensions valve system Continuous Classic Type 8802-GB-L with positioner TopControl Basic Type 8694 [mm]



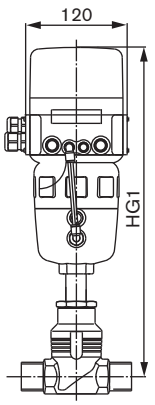
Port size ISO, DIN [mm]	Port size ISO, DIN [inch]	Port size BS, ASME [inch]	Actuator size ø [mm]	HG [mm]
10	3/8"	1/2"	80	373
15	1/2"	3/4"	80	373
20	3/4"	1"	80	368
25	1"	–	80	371
32	1 1/4"	1 1/2"	100	455
40	1"	2"	100	460
50	2"	2 1/2"	125	497
65	2 1/2"	3"	125	526
			175	558
80	3"	–	225	591
100	4"	4"	225	601

Further dimensions see p. 13

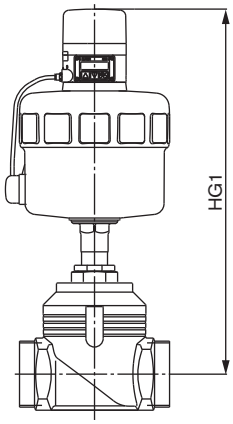
Dimensions for valve system Continuous Classic Type 8802-GB [mm], continued

Dimensions valve system Continuous Classic Type 8802-GB-A with positioner TopControl Type 8630 [mm]

DN 10-65



DN 65-100

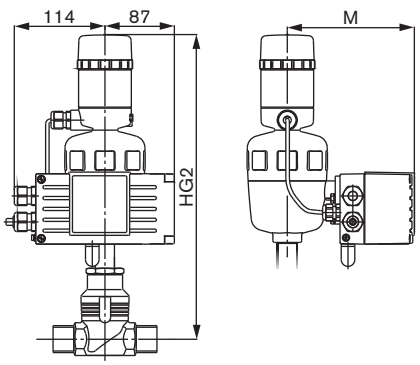


Port size ISO, DIN [mm]	Port size ISO, DIN [inch]	Port size BS, ASME [inch]	Actuator size ø [mm]	HG1 [mm]
10	3/8"	1/2"	80	391
15	1/2"	3/4"	80	391
20	3/4"	1"	80	386
25	1"	–	80	389
32	1 1/4"	1 1/2"	100	476
40	1"	2"	100	481
50	2"	2 1/2"	125	518
65	2 1/2"	3"	125	547
	2 1/2"	3"	175	621
80	3"	–	225	624
100	4"	4"	225	634

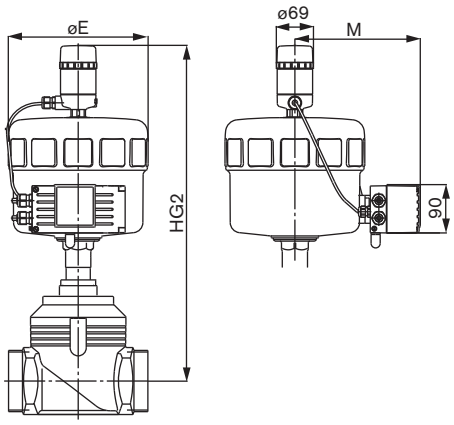
Further dimensions see p. 13

Dimensions valve system Continuous Classic 8802-GB-B with positioner SideControl Type 8635 [mm]

DN 10-65



DN 65-100

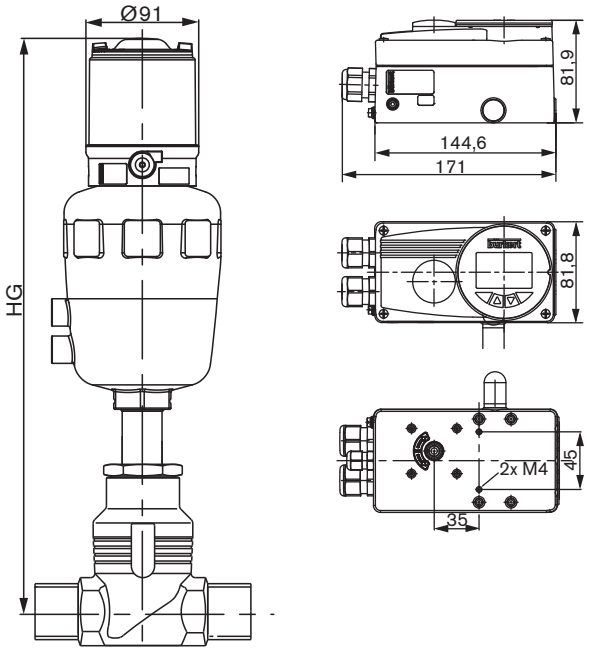


Port size ISO, DIN [mm]	Port size ISO, DIN [inch]	Port size BS, ASME [inch]	Actuator size ø [mm]	HG2 [mm]	M [mm]	øE [mm]
10	3/8"	1/2"	80	384	159	101
15	1/2"	3/4"	80	384	159	101
20	3/4"	1"	80	379	159	101
25	1"	–	80	382	159	101
32	1 1/4"	1 1/2"	100	469	172	127
40	1"	2"	100	474	172	127
50	2"	2 1/2"	125	511	185	153
65	2 1/2"	3"	125	540	185	153
	2 1/2"	3"	175	613	209	211
80	3"	–	225	617	234	261
100	4"	4"	225	626	234	261

Further dimensions see p. 13

Dimensions for valve system Continuous Classic Type 8802-GB [mm], continued

Dimensions valve system Continuous Classic Type 8802-GB-P with Positioner SideControl Remote Type 8792 and Type 8802-GB-Q with Process Controller SideControl Remote Type 8793 [mm]



Port size ISO, DIN [mm]	Port size ISO, DIN [inch]	Port size BS, ASME [inch]	Actuator size ø [mm]	HG [mm]
10	3/8"	1/2"	80	376
15	3/8"	1/2"	80	376
20	1/2"	3/4"	80	371
25	3/4"	1"	80	374
32	1"	–	100	458
40	1 1/4"	1 1/2"	100	463
50	1"	2"	125	500
65	2"	2 1/2"	125	529
	2 1/2"	3"	175	591
80	3"	–	225	609
100	4"	4"	225	604

Further dimensions see p. 13

bürkert

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

Valve system Continuous Classic Type 8802-GB - 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

Pipeline DN PN
Pipe material
■ **Process medium**
■ **Type of media** ☐ Liquid ☐ Steam ☐ Gas

	min	standard	max	unit
■ **Flow rate (Q, Q_N, W)** [1]				
■ **Temperature at valve inlet**				
■ **Absolute pressure at valve inlet P1**				
■ **Absolute pressure at valve outlet P2**				

[1] standard unit: Liquid Q = m³/h; Steam W = kg/h; Gas Qn = nm³/h

Valve features

Actuator material ☐ PA ☐ PPS
Body material ☐ Cast stainless steel
Seat sealing material ☐ St.st./St.st. ☐ PTFE/St.st.
Nominal pressure PN
Nominal size DN
Type of connection ☐ Welded ☐ Flanged ☐ Socket union ☐ Internal thread ☐ External thread ☐ Clamp
Standard connection ☐ ISO ☐ DIN ☐ ANSI ☐ JIS ☐ Other
Function ☐ NC[2] ☐ NO [2]
Pilot pressure min. max.
Please specify item no. if known:

[2] NC: normally closed by spring action; NO: normally open by spring action

continued next page

Reset form

bürkert

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

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 ø 6 mm or 1/4"
☐ Thread G 1/8"

Electrical connection
☐ Cable gland ☐ Multipol connection

Feedback
☐ 4-20 mA

Please specify item no. if known:

☐ **Positioner TopControl Type 8630 -** 3-wire More info.

Power supply 24 VDC

Communication
Setpoint / feedback analogue signal or via BUS
☐ Profibus DP
☐ DeviceNet

☐ **Positioner version**
Input 0/4 - 20 mA / 0-5/10 V
Feedback
☐ 4 - 20 mA *or/and* ☐ Binary

☐ **PID Controller version** [3]
Input measuring signal
4 - 20 mA / Pt100 / Frequency

Inductive proximity switch
☐ 1 ☐ 2

Please specify item no. if known:

☐ **Positioner SideControl Type 8635 -** 2-wire More info.

☐ **Standard**
☐ **ATEX/FM Zone 1**
☐ **Zone 2/22**

Power supply 24 VDC
via setpoint or BUS

Communication
Setpoint / feedback analogue signal
or via BUS ☐ Profibus PA

☐ **Positioner version**
Input 4 - 20 mA
Feedback
☐ 4 - 20 mA *or/and* ☐ Binary

☐ **PID Controller version** [3]
Input measuring signal
4 - 20 mA

Inductive proximity switch
☐ 1 ☐ 2

Please specify item no. if known:

☐ **Positioner SideControl Remote Type 8792** More info.

☐ **Process Controller SideControl Remote Type 8793** More info.

Power supply 24 VDC

Communication
☐ Without
☐ Profibus DPV1

Feedback
☐ Analogue feedback + 2 binary outputs
☐ 2 binary outputs

Electrical connection
☐ Cable gland ☐ Multipol connection

Please specify item no. if known:

[3] same setpoint for input and feedback signal as for Positioner version

Reset form