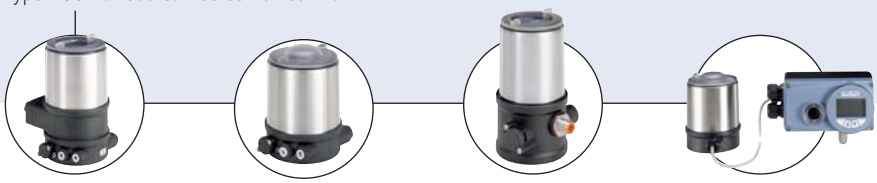
bürkert
FLUID CONTROL SYSTEMS

2/2-way Globe Control Valve with stainless steel design for media up to +185°C, DN 10-65

- Excellent control characteristics
- High cycle life
- Flow optimised body in stainless steel 316L
- Clean design for optimal use in hygienic environment
- Removable trim kit, 3 to 5 kvs value per port size

Type 2301 thread can be combined with…



Type 8692/8693
Positioner / Process Controller TopControl

Type 8694
Positioner TopControl Basic

Type 8696
Positioner TopControl Basic

Type 8792/93
SideControl Remote version

In line with Bürkert's philosophy for modular valves and sensors the construction of the 2301 globe valve fulfils tough criteria for process environments. Unrivalled cycle life and sealing integrity is guaranteed by the proven self adjusting spindle packing with V-seals.

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. Leakage class III, IV oder VI available.

The design enables the easy integration of automation modules whether they are digital electropneumatic positioner or process controller.

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

Technical data	
Port size (orifice)	DN 10 to 65 (DN 4-65)
Port connection Threaded ports acc. to Welded and flanged connections	 G, NPT, RC see separate datasheets
Body materials	Cast stainless steel 316L
Nominal pressure	PN25 (Body)
Actuator material Actuator Cover	 PPS Stainless steel 1.4561 (316Ti)
Plug sealing	PTFE/St.st. (PTFE/stainless steel) and St.st./St.st. (stainless steel/stainless steel)
Seat leakage IEC 534-4/EN 1349	Shut-off class III and IV for St.st./St.st. Shut-off class VI for PTFE/St.st. (see details in ordering chart)
Medium	neutral gases, water, alcohol, oils, fuel, hydraulic fluids, salt solution, alkali solutions, organic solvents, steam, optional fuel gas (EC Gas Appliances Directive 2009/142/EG)
Viscosity	max. 600 mm^2/s
Spindle packing	PTFE V-seals with spring compensation
Medium temperature	-10 to +185 °C (max. +130°C for PTFE/St.st. sealing recommended)
Ambient temperature	0 to +55 °C (when used with positioner or process controllers) 0 to +80 °C (remote version)
Control medium	Compressed air
Relevant pilot pressure for circuit function A	Orifice DN 10 bis 50 5.5 bis 7 bar Orifice DN 65 bis 100 5.6 bis 7 bar
Pilot air ports	Push-in connector for external ø 6 mm or 1/4" tube
Installation	As required, preferably with actuator upright

Content

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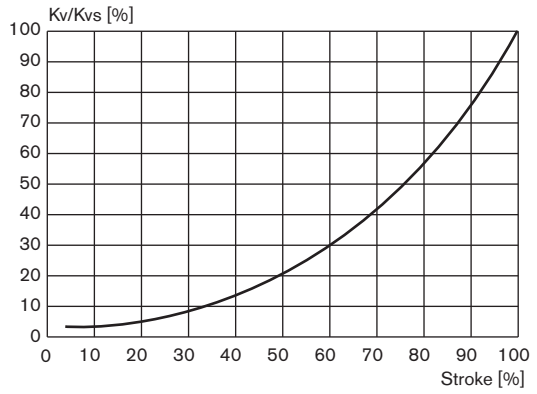
Technical data Type 2301 Globe Control Valve, continued

Kvs values

Port size		Actuator size	Orifice (seat) [mm]												
[mm]	[inch]	[mm]	04	06	08	10	15	20	25	32	40	50	65	80	100
10	3/8"	50-70	0.5	1.2	2.0	2.7	–	–	–	–	–	–			
15	1/2"	50-70	0.5	1.2	2.1	3.1	4.3	–	–	–	–	–			
20	3/4"	50-70	–	–	–	3.2	5.2	7.1	–	–	–	–			
25	1"	50-70-90	–	–	–	–	5.3	7.2	12.0	–	–	–			
32	1 1/4"	90	–	–	–	–	–	5.5	9.9	13.4	–	–			
		130	–	–	–	–	–	8	13	17.8	–	–			
40	1 1/2"	90	–	–	–	–	–	–	10.3	14.4	17.5	–			
		130	–	–	–	–	–	–	13.6	20.2	23.8	–			
50	2"	90	–	–	–	–	–	–	–	15.3	18	28			
		130	–	–	–	–	–	–	–	21.0	24.6	37.0			
65	2 1/2"	130	-	-	-	-	-	-	-	-	29	45	65	-	-

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 to DN65
- Linear plug for the orifices DN4 and DN6
- Flow characteristic runs within DIN EN 60534-2-4
- Theoretical control ratio (Kvs/Kvo):
  50:1 for the orifices DN8 to DN65
  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 EN 60534-2-4 is still complied with)

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Technical data Type 2301 Globe Control Valve, continued

Kvs values [m³/h]

Port size (tube)		Orifice (seat)		Actuator size	Stroke [%]										
[mm]	[inch]	[mm]	[inch]	[mm]	5	10	20	30	40	50	60	70	80	90	100
10	3/8”	4	1/8”	50-70	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”	50-70	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”	50-70	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”	50-70	0.09	0.11	0.13	0.19	0.30	0.48	0.73	1.00	1.60	2.30	2.70
15	1/2”	4	1/8”	50-70	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”	50-70	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”	50-70	0.07	0.08	0.11	0.13	0.19	0.27	0.43	0.63	0.95	1.60	2.10
		10	3/8”	50-70	0.09	0.11	0.15	0.19	0.31	0.49	0.75	1.10	1.70	2.50	3.10
		15	1/2”	50-70	0.14	0.17	0.22	0.35	0.52	0.80	1.20	1.80	2.70	3.70	4.30
20	3/4”	10	3/8”	50-70-90	0.11	0.12	0.16	0.20	0.33	0.52	0.77	1.20	1.80	2.60	3.20
		15	1/2”	50-70-90	0.14	0.17	0.22	0.35	0.52	0.80	1.20	1.80	2.90	4.00	5.20
		20	3/4”	50-70-90	0.20	0.25	0.30	0.45	0.70	1.10	1.60	2.40	3.50	5.20	7.10
25	1”	15	1/2”	50-70	0.14	0.17	0.22	0.35	0.52	0.80	1.20	1.80	2.90	4.10	5.30
		20	3/4”	50-70	0.20	0.25	0.31	0.47	0.70	1.10	1.60	2.50	3.80	5.40	7.20
		25	1”	50-70	0.35	0.38	0.65	1.00	1.50	2.20	3.40	5.10	7.00	9.40	12.0
32	11/4”	20	3/4”	90	0.21	0.24	0.33	0.45	0.62	0.85	1.25	1.75	2.60	3.75	5.50
				130	0.22	0.25	0.35	0.50	0.75	1.10	1.60	2.50	3.80	5.80	8.00
		25	1”	90	0.38	0.45	0.65	0.95	1.35	1.95	2.85	4.00	5.55	7.40	9.90
				130	0.40	0.47	0.73	1.10	1.60	2.50	3.70	5.40	7.50	10.3	13.0
		32	1 1/4”	90	0.45	0.58	0.80	1.10	1.70	2.50	3.50	4.90	7.00	10.1	13.4
				130	0.48	0.60	0.85	1.30	2.10	3.10	4.50	6.80	10.2	14.0	17.8
40	11/2”	25	1”	90	0.38	0.48	0.70	0.95	1.40	2.00	2.95	4.10	5.75	7.90	10.3
				130	0.40	0.50	0.75	1.10	1.70	2.60	3.80	5.60	8.00	10.7	13.6
		32	1 1/4”	90	0.45	0.55	0.80	1.10	1.70	2.50	3.60	4.95	7.15	10.8	14.4
				130	0.48	0.60	0.85	1.30	2.10	3.20	4.60	6.90	11.0	15.0	20.2
		40	1 1/2”	90	0.55	0.67	1.00	1.50	2.25	3.15	4.50	6.50	9.50	13.6	17.5
				130	0.60	0.70	1.10	1.70	2.70	4.00	6.00	9.20	13.8	18.2	23.8
50	2”	32	1 1/4”	90	0.45	0.56	0.80	1.10	1.70	2.50	3.60	4.95	7.15	11.4	15.3
				130	0.48	0.60	0.90	1.30	2.10	3.20	4.60	6.90	11.6	16.0	21.0
		40	1 1/2”	90	0.57	0.68	0.90	1.45	2.10	3.15	4.50	6.40	9.50	13.8	18.0
				130	0.60	0.70	1.00	1.70	2.60	4.00	5.90	9.20	14.0	18.9	24.6
		50	2”	90	0.85	1.05	1.70	2.55	3.75	5.35	7.70	11.4	16.0	21.7	28.0
				130	0.90	1.10	1.90	2.90	4.50	6.80	10.5	15.5	22.0	29.3	37.0
65	2 1/2"	40	1 1/2"	130	0.65	0.75	1.1	1.8	2.8	4.3	6.5	10.4	16	22	29
		50	2"	130	1	1.2	2	3.1	4.8	6.7	9.7	16	24	35	45
		65	2 1/2"	130	1.6	2	3	5	8	13.5	22	33	45	56	65

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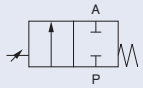
Ordering chart Type 2301 Globe Control Valve, flow direction below seat (for gases and liquid)

G threaded connection

Control function	Port size (tube) (mm)	Port size (tube) (inch)	Orifice (seat) (mm)	Actuator size Ø [mm]	Kvs-value [m³/h]	Operating pressure up to +185°C [bar]	Item no. plug sealing PTFE/ St. st.	Leakage class	Item no. plug sealing St. st./ St. st.	Leakage class
A  2/2-way valve, NC	10	3/8"	4	50	0.5	16	–	VI	209 067	IV
				70	0.5	16	–	VI	215 238	IV
			6	50	1.2	16	–	VI	215 239	IV
				70	1.2	16	–	VI	215 240	IV
			8	50	2.0	16	215 232	VI	213 006	IV
				70	2.0	16	215 233	VI	215 242	IV
			10	50	2.7	16	215 234	VI	215 244	IV
				70	2.7	16	215 235	VI	215 245	IV
	15	1/2"	4	50	0.5	16	–	VI	208 876	IV
				70	0.5	16	–	VI	208 843	IV
			6	50	1.2	16	–	VI	208 513	IV
				70	1.2	16	–	VI	215 241	IV
			8	50	2.1	16	214 064	VI	209 071	IV
				70	2.1	16	212 964	VI	215 243	IV
			10	50	3.1	16	214 065	VI	202 406	IV
				70	3.1	16	215 236	VI	215 246	IV
			15	50	4.3	16	212 253	VI	214 079	IV
				70	4.3	16	206 432	VI	213 955	IV
	20	3/4"	10	50	3.2	16	214 066	VI	214 078	IV
				70	3.2	16	215 237	VI	215 247	IV
			15	50	5.2	16	222 672	VI	222 683	IV
				70	5.2	16	214 067	VI	215 248	IV
			20	50	7.1	10	205 349	VI	214 080	III
				70	7.1	16	206 584	VI	211 239	IV
	25	1"	15	50	5.3	16	222 673	VI	222 684	IV
				70	5.3	16	206 588	VI	210 460	IV
				90	5.3	16	242 200	VI	242 205	IV
			20	50	7.2	10	222 675	VI	222 685	III
				70	7.2	16	206 586	VI	210 721	IV
				90	7.2	16	242 201	VI	242 206	IV
			25	50	12.0	5	214 069	VI	214 082	III
				70	12.0	12	189 145	VI	210 485	III
				90	12.0	16	242 203	VI	242 207	IV
	32	1 1/4"	20	90	5,5	16	214 068	VI	214 081	IV
				130	8,0	16	222 676	VI	222 686	IV
			25	90	9,9	16	214 070	VI	210 407	IV
				130	13,0	16	222 677	VI	222 687	IV
			32	90	13,4	16	210 097	VI	210 458	IV
				130	17,8	16	223 599	VI	223 600	IV
	40	1 1/2"	25	90	10,3	16	214 071	VI	214 083	IV
				130	13,6	16	222 678	VI	222 688	IV
			32	90	14,4	16	214 072	VI	214 084	IV
				130	20,2	16	222 679	VI	222 689	IV
			40	90	17,5	12	210 098	VI	207 800	III
				130	23,8	16	222 681	VI	222 691	IV
	50	2"	32	90	15,3	16	214 073	VI	214 085	IV
				130	21,0	16	222 680	VI	222 690	IV
			40	90	18,0	12	214 074	VI	214 086	III
				130	24,6	16	222 682	VI	222 692	IV
			50	90	28,0	7	210 099	VI	203 693	III
				130	37,0	16	214 076	VI	214 088	IV
	65	2 1/2"	40	130	29	16 (15*)	214 075	VI	214 087	IV
			50		45	16 (15*)	214 077	VI	214 089	IV
			65		65	16 (15*)	219 621	VI	219 622	IV

* acc. to the Pressure Equipment Directive 97/23 / EC for compressible fluids in Group 1 (hazardous gases and vapors in accordance with Article 3, Section 1.3, letter a, first dash)

Further versions on request

Control function
B (normally open)

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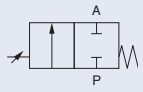
Ordering chart Type 2301 Globe Control Valve, flow direction below seat
(for gases and liquid), continued

NPT threaded connection

Control function	Port size (tube) (mm)	Port size (tube) (inch)	Orifice (seat) (mm)	Actuator size Ø [mm]	Kvs-value [m³/h]	Operating pressure up to +185°C [bar]	Item no. plug sealing PTFE/ St. st.	Leakage class	Item no. plug sealing St. st./ St. st.	Leakage class
A  2/2-way valve, NC	10	3/8"	4	50	0.5	16	–	VI	220 883	IV
				70	0.5	16	–	VI	220 447	IV
			6	50	1.2	16	–	VI	220 449	IV
				70	1.2	16	–	VI	220 450	IV
			8	50	2.0	16	220 417	VI	220 885	IV
				70	2.0	16	220 418	VI	220 453	IV
			10	50	2.7	16	220 420	VI	220 456	IV
				70	2.7	16	220 421	VI	220 457	IV
	15	1/2"	4	50	0.5	16	–	VI	220 448	IV
				70	0.5	16	–	VI	220 884	IV
			6	50	1.2	16	–	VI	220 451	IV
				70	1.2	16	–	VI	220 452	IV
			8	50	2.1	16	220 419	VI	220 454	IV
				70	2.1	16	220 881	VI	220 455	IV
			10	50	3.1	16	220 422	VI	220 458	IV
				70	3.1	16	220 423	VI	220 459	IV
			15	50	4.3	16	220 426	VI	220 462	IV
				70	4.3	16	220 882	VI	220 886	IV
	20	3/4"	10	50	3.2	16	220 424	VI	220 460	IV
				70	3.2	16	220 425	VI	220 461	IV
			15	50	5.2	16	463 917	VI	463 927	IV
				70	5.2	16	220 427	VI	220 463	IV
			20	50	7.1	10	220 429	VI	220 465	III
				70	7.1	16	220 430	VI	220 466	IV
	25	1"	15	50	5.3	16	463 918	VI	463 928	IV
				70	5.3	16	220 428	VI	220 464	IV
				90	5.3	16	464 862	VI	464 865	IV
			20	50	7.2	10	463 919	VI	463 929	III
				70	7.2	16	220 431	VI	220 467	IV
				90	7.2	16	464 863	VI	464 866	IV
			25	50	12.0	5	220 433	VI	220 469	III
				70	12.0	12	220 434	VI	220 470	III
				90	12.0	16	464 864	VI	464 867	IV
	32	1 1/4"	20	90	5,5	16	220 432	VI	220 468	IV
				130	8,0	16	463 920	VI	463 930	IV
			25	90	9,9	16	220 435	VI	220 471	IV
				130	13,0	16	463 921	VI	463 931	IV
			32	90	13,4	16	220 437	VI	220 473	IV
				130	17,8	16	463 956	VI	463 957	IV
	40	1 1/2"	25	90	10,3	16	220 436	VI	220 472	IV
				130	13,6	16	463 922	VI	463 932	IV
			32	90	14,4	16	220 438	VI	220 474	IV
				130	20,2	16	463 923	VI	463 933	IV
			40	90	17,5	12	220 440	VI	220 476	III
				130	23,8	16	463 925	VI	463 935	IV
	50	2"	32	90	15,3	16	220 439	VI	220 475	IV
				130	21,0	16	463 924	VI	463 934	IV
			40	90	18,0	12	220 441	VI	220 477	III
				130	24,6	16	463 926	VI	463 936	IV
			50	90	28,0	7	220 443	VI	220 479	III
				130	37,0	16	220 444	VI	220 480	IV
	65	2 1/2"	40	130	29	16 (15*)	239 538	VI	239 574	IV
			50	130	45	16 (15*)	239 536	VI	239 620	IV
			65	130	65	16 (15*)	239 534	VI	239 571	IV

* acc. to the Pressure Equipment Directive 97/23 / EC for compressible fluids in Group 1 (hazardous gases and vapors in accordance with Article 3, Section 1.3, letter a, first dash)

i Further versions on request

Control function
B (normally open)

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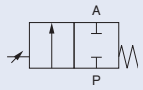
Ordering chart Type 2301 Globe Control Valve, flow direction below seat
(for gases and liquid), continued

RC threaded connection

Control function	Port size (tube) (mm)	Port size (tube) (inch)	Orifice (seat) (mm)	Actuator size Ø [mm]	Kvs-value [m³/h]	Operating pressure up to +185°C [bar]	Item no. plug sealing PTFE/ St. st.	Leakage class	Item no. plug sealing St. st./ St. st.	Leakage class
A  2/2-way valve, NC	10	3/8"	4	50	0.5	16	–	VI	220 890	IV
				70	0.5	16	–	VI	220 513	IV
			6	50	1.2	16	–	VI	220 515	IV
				70	1.2	16	–	VI	220 516	IV
			8	50	2.0	16	220 483	VI	220 893	IV
				70	2.0	16	220 484	VI	220 519	IV
			10	50	2.7	16	220 486	VI	220 522	IV
				70	2.7	16	220 487	VI	220 523	IV
	15	1/2"	4	50	0.5	16	–	VI	220 514	IV
				70	0.5	16	–	VI	220 891	IV
			6	50	1.2	16	–	VI	220 517	IV
				70	1.2	16	–	VI	220 518	IV
			8	50	2.1	16	220 485	VI	220 520	IV
				70	2.1	16	220 888	VI	220 521	IV
			10	50	3.1	16	220 488	VI	220 524	IV
				70	3.1	16	220 489	VI	220 525	IV
			15	50	4.3	16	220 492	VI	220 528	IV
				70	4.3	16	220 889	VI	220 894	IV
	20	3/4"	10	50	3.2	16	220 490	VI	220 526	IV
				70	3.2	16	220 491	VI	220 527	IV
			15	50	5.2	16	222 736	VI	222 756	IV
				70	5.2	16	220 493	VI	220 529	IV
			20	50	7.1	10	220 495	VI	220 531	III
				70	7.1	16	220 496	VI	220 532	IV
	25	1"	15	50	5.3	16	222 737	VI	222 757	IV
				70	5.3	16	220 494	VI	220 530	IV
				90	5.3	16	242 255	VI	242 378	IV
			20	50	7.2	10	222 738	VI	222 758	III
				70	7.2	16	220 497	VI	220 533	IV
				90	7.2	16	242 256	VI	242 379	IV
			25	50	12.0	5	220 499	VI	220 535	III
				70	12.0	12	220 500	VI	220 536	III
				90	12.0	16	242 257	VI	242 380	IV
	32	1 1/4"	20	90	5,5	16	220 498	VI	220 534	IV
				130	8,0	16	222 739	VI	222 759	IV
			25	90	9,9	16	220 501	VI	220 537	IV
				130	13,0	16	222 740	VI	222 777	IV
			32	90	13,4	16	220 503	VI	220 539	IV
				130	17,8	16	223 605	VI	223 606	IV
	40	1 1/2"	25	90	10,3	16	220 502	VI	220 538	IV
				130	13,6	16	222 741	VI	222 761	IV
			32	90	14,4	16	220 504	VI	220 540	IV
				130	20,2	16	222 742	VI	222 763	IV
			40	90	17,5	12	220 506	VI	220 542	III
				130	23,8	16	222 767	VI	222 765	IV
	50	2"	32	90	15,3	16	220 505	VI	220 541	IV
				130	21,0	16	222 762	VI	222 764	IV
			40	90	18,0	12	220 507	VI	220 543	III
				130	24,6	16	222 768	VI	222 766	IV
			50	90	28,0	7	220 509	VI	220 545	III
				130	37,0	16	220 510	VI	220 546	IV
	65	2 1/2"	40	130	29	16 (15*)	220 508	VI	220 544	IV
			50	130	45	16 (15*)	220 511	VI	220 547	IV
			65	130	65	16 (15*)	220 512	VI	220 548	IV

* acc. to the Pressure Equipment Directive 97/23 / EC for compressible fluids in Group 1 (hazardous gases and vapors in accordance with Article 3, Section 1.3, letter a, first dash)

i Further versions on request

Control function
B (normally open)

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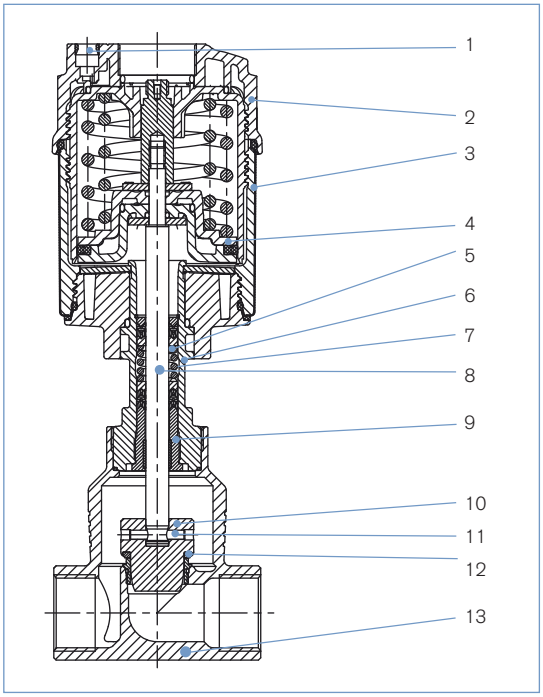
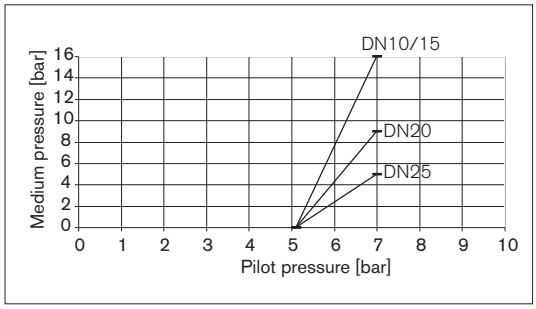
Materials Type 2301 Globe Control Valve



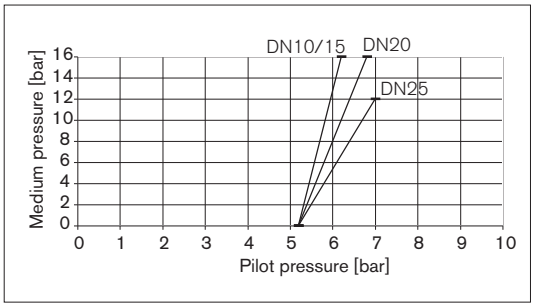
1	**Pilot air ports**	Push-in connector PP
2	**Actuator**	PPS
3	**Cover**	Stainless steel 1.4561 (316Ti)
4	**Piston seal**	FKM
5	**Spring**	Stainless steel 1.4310
6	**Tube**	Stainless steel 1.4401 (316) / 1.4404 (316L)
7	**Spindle packing**	PTFE
8	**Spindle**	Stainless steel 1.4401 (316) / 1.4404 (316L)
9	**Spindle guidance**	Stainless steel 1.4404 (316L)
10	**Plug**	Stainless steel 1.4571
11	**Spring straight pin**	Stainless steel 1.4310
12	**Plug seal**	Stainless steel 1.4571 / PTFE disc for soft seat sealing
13	**Valve body**	Cast stainless steel 316L

Pressure Charts with control function B (normally open, NO)

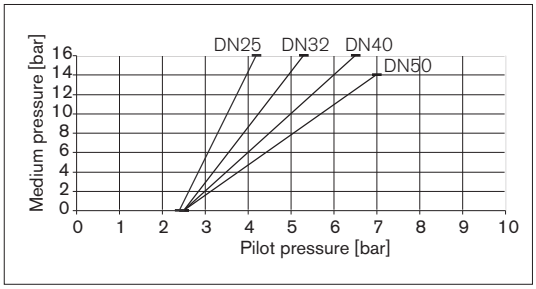
Actuator Ø 50



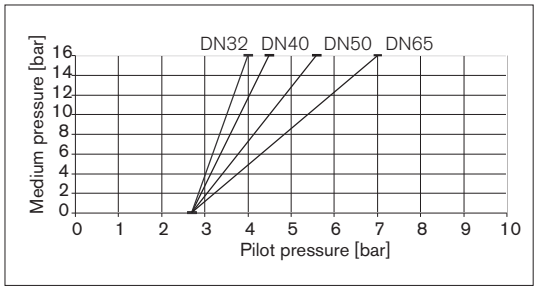
Actuator Ø 70



Actuator Ø 90



Actuator Ø 130



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Ordering information for valve system Continuous ELEMENT Type 8802-GD

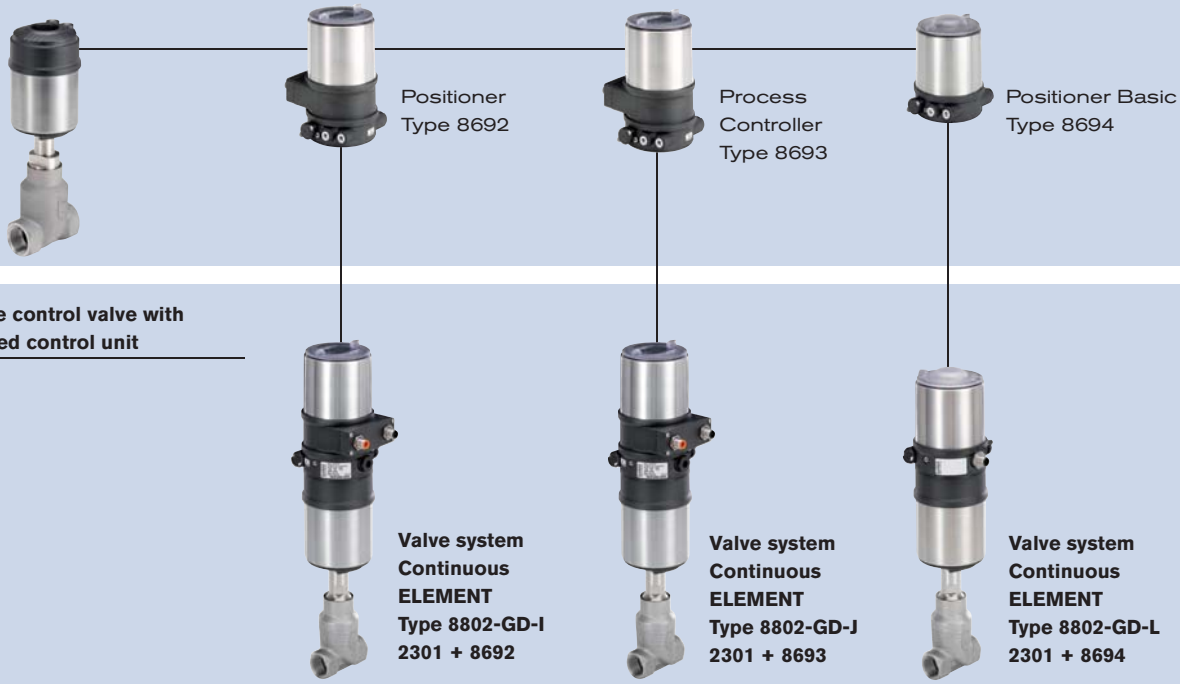
A **valve system Continuous ELEMENT Type 8802-GD** consists of a **globe control valve Type 2301** and a digital electropneumatic Positioner **Type 8692**, a digital electropneumatic Process Controller **Type 8693,** a digital electropneumatic Positioner Basic **Type 8694** (below), an electropneumatic Positioner **Type 8792/8793** (for valve actuator sizes ø 70/90/130 mm) or a digital electropneumatic Positioner **Type 8696** (for valve actuator size ø 50 mm) (see next page and separate datasheets). For the configuration of further valve systems please use the "Request for quotation" on p. 12

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

go to page

Ordering the valve system Continuous ELEMENT Type 8802-GD

Globe control valve Type 2301 **Positioner**



Globe control valve with desired control unit

Valve system Continuous ELEMENT Type 8802-GD-I 2301 + 8692

Valve system Continuous ELEMENT Type 8802-GD-J 2301 + 8693

Valve system Continuous ELEMENT Type 8802-GD-L 2301 + 8694

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 analog 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

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 positioner 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

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Ordering information for valve system Continuous ELEMENT Type 8802-GD, continued

A **valve system Continuous ELEMENT Type 8802-GD** consists of a **globe control valve Type 2301** and a digital electropneumatic Positioner **Type 8692**, a digital electropneumatic Process Controller **Type 8693,** a digital electropneumatic Positioner Basic **Type 8694** (previous page), an electropneumatic Positioner **Type 8792/8793** (for valve actuator sizes ø 70/90/130) mm or a digital electropneumatic Positioner **Type 8696 (**for valve actuator size ø 50 mm) (see below and separate datasheets). For the configuration of further valve systems please use the "Request for quotation" on p. 12

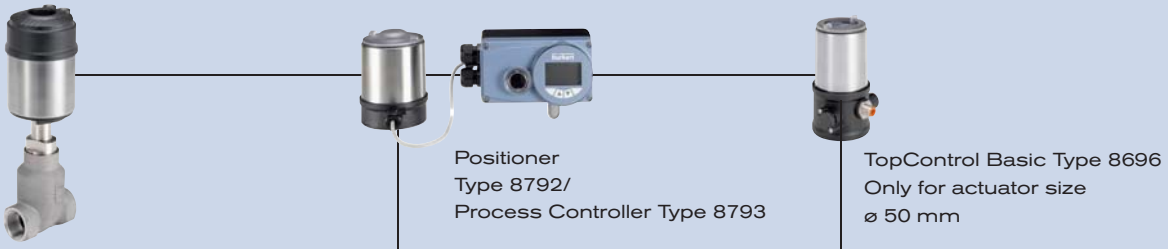
You order two components and receive a complete assembled and certified valve.

go to page

Ordering the valve system Continuous ELEMENT Type 8802-GD

Globe control valve Type 2301

Positioner



Positioner
Type 8792/
Process Controller Type 8793

TopControl Basic Type 8696
Only for actuator size
ø 50 mm

Globe control valve with desired control unit

Valve system
Continuous ELEMENT
Type 8802-GD-P
2301 + 8792 /
Type 8802-GD-Q
2301 + 8793

Valve system
Continuous ELEMENT
Type 8802-GD-M
2301 + 8696

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 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

TopControl Basic Type 8696 Mehr Infos

The new generation of integrated positioners for combination with small 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 8696, , registers the valve end position without deterioration through a contact-free analogue position sensor. Single-acting actuators are controlled via the integral positioner system.
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 positioner using the TUNE function
- Simple and reliable actuator adaption

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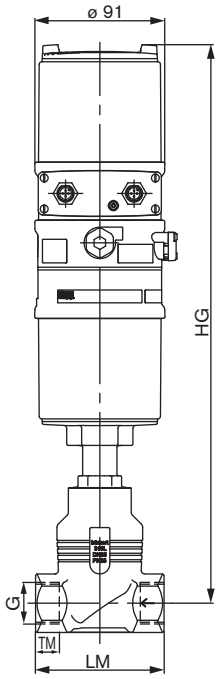
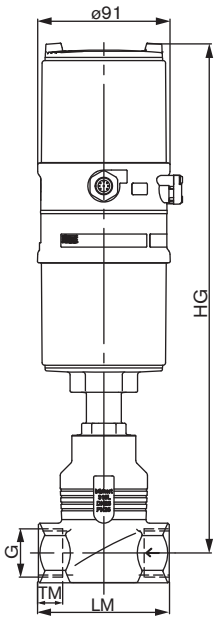
Dimensions for valve system Continuous ELEMENT Type 8802-GD [mm]

Dimensions valve system Continuous ELEMENT Type 8802-GD-I with positioner TopControl Type 8692 or 8802-GD-J with process controller TopControl Type 8693 [mm]



Port size (tube)	G			Actuator size			TM		
[mm]	G	NPT	RC	[mm]	LM	HG	G	NPT	RC
10	G 3/8"	NPT 3/8"	RC 3/8"	70	65	383	12	10.3	10.1
15	G 1/2"	NPT 1/2"	RC 1/2"	70	65	383	14	13.7	13.2
20	G 3/4"	NPT 3/4"	RC 3/4"	70	75	389	16	14	14.5
25	G 1"	NPT 1"	RC 1"	70	90	392	18	16.8	16.8
				90	90	445	18	16.8	16.8
32	G 1 1/4"	NPT 1 1/4"	RC 1 1/4"	90	110	473	20	17.3	19.1
				130	110	525	20	17.3	19.1
40	G 1 1/2"	NPT 1 1/2"	RC 1 1/2"	90	120	478	22	17.3	19.1
				130	120	530	22	17.3	19.1
50	G 2"	NPT 2"	RC 2"	90	150	484	24	17.6	23.4
				130	150	536	24	17.6	23.4
65	2 1/2"	2 1/2"	2 1/2"	130	185	590	26	23.7	26.7

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



Port size (tube)	G			Actuator size			TM		
[mm]	G	NPT	RC	[mm]	LM	HG	G	NPT	RC
10	G 3/8"	NPT 3/8"	RC 3/8"	70	65	383	12	10.3	10.1
15	G 1/2"	NPT 1/2"	RC 1/2"	70	65	342	14	13.7	13.2
20	G 3/4"	NPT 3/4"	RC 3/4"	70	75	348	16	14	14.5
25	G 1"	NPT 1"	RC 1"	70	90	351	18	16.8	16.8
				90	90	404	18	16.8	16.8
32	G 1 1/4"	NPT 1 1/4"	RC 1 1/4"	90	110	432	20	17.3	19.1
				130	110	484	20	17.3	19.1
40	G 1 1/2"	NPT 1 1/2"	RC 1 1/2"	90	120	437	22	17.3	19.1
				130	120	489	22	17.3	19.1
50	G 2"	NPT 2"	RC 2"	90	150	443	24	17.6	23.4
				130	150	495	24	17.6	23.4
65	2 1/2"	2 1/2"	2 1/2"	130	185	549	26	23.7	26.7

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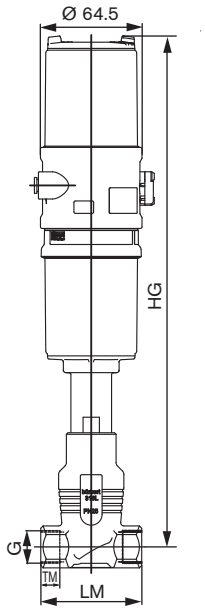
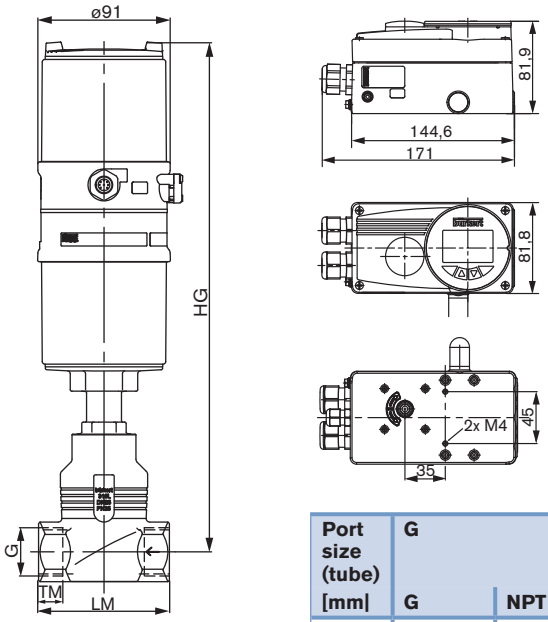
Dimensions for valve system Continuous ELEMENT Type 8802-GD [mm], continued

Dimensions valve system Continuous ELEMENT Type 8802-GD-M with control head Type 8696 [mm]



Port size (tube)	G			Actuator size			TM		
[mm]	G	NPT	RC	[mm]	LM	HG	G	NPT	RC
10	G 3/8"	NPT 3/8"	RC 3/8"	50	65	329	12	10.3	10.1
15	G 1/2"	NPT 1/2"	RC 1/2"	50	65	329	14	13.7	13.2
20	G 3/4"	NPT 3/4"	RC 3/4"	50	75	335	16	14	14.5
25	G 1"	NPT 1"	RC 1"	50	90	342	18	16.8	16.8

Dimensions valve system Continuous ELEMENT Type 8802-GD-P with positioner SideControl Remote Type 8792 and Type 8802-GD-Q with Process Controller SideControl Remote Type 8793 [mm]



Port size (tube)	G			Actuator size			TM		
[mm]	G	NPT	RC	[mm]	LM	HG	G	NPT	RC
10	G 3/8"	NPT 3/8"	RC 3/8"	50	65	329	12	10.3	10.1
15	G 1/2"	NPT 1/2"	RC 1/2"	70	65	342	14	13.7	13.2
20	G 3/4"	NPT 3/4"	RC 3/4"	70	75	348	16	14	14.5
25	G 1"	NPT 1"	RC 1"	70	90	351	18	16.8	16.8
				90	90	404	18	16.8	16.8
32	G 1 1/4"	NPT 1 1/4"	RC 1 1/4"	90	110	432	20	17.3	19.1
				130	110	484	20	17.3	19.1
40	G 1 1/2"	NPT 1 1/2"	RC 1 1/2"	90	120	437	22	17.3	19.1
				130	120	489	22	17.3	19.1
50	G 2"	NPT 2"	RC 2"	90	150	443	24	17.6	23.4
				130	150	495	24	17.6	23.4
65	2 1/2"	2 1/2"	2 1/2"	130	185	549	26	23.7	26.7

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

Valve system Continuous ELEMENT Type 8802-GD - 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 medium**	☐ Liquid	☐ Steam	☐ Gas		
	min	standard	max	unit	
■ **Flow rate (Q, Q_N, W)** [1]					
■ **Temperature at valve inlet T1**					
■ **Absolute pressure at valve inlet P1**					
■ **Absolute pressure at valve outlet P2**					
Steam pressure Pv					
Kinematic viscosity (ν)		mm^2/s or cSt			
Dynamic viscosity (η)		mPa.s or cP			
Standard density		Kg/m^3			
Max. sound level accepted		dB (A)			

[1] standard unit: Liquid Q = m^3/h; Steam W = kg/h; Gas Q_N = Nm^3/h

Valve features

Plug seal material	☐ PTFE/Stainless steel	☐ Stainless steel/Stainless steel		
Nominal pressure	PN			
Orifice	DN			
Type of connection	☐ Flanged	☐ Threaded	☐ Welded	☐ Clamp
Standard connection	☐ ISO	☐ DIN	☐ Other	
Control function	☐ NC[1]	☐ NO [1]		

Please specify item no. if known):

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

Comments

* To find your nearest Bürkert facility, click on the orange box → www.burkert.com

Reset

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Valve system Continuous ELEMENT Type 8802-YG - Request for quotation, continued

Control unit features

For actuator sizes 70/90/130 mm

☐ **Positioner TopControl Type 8692** Mehr Infos

☐ **Process Controller TopControl Type 8693** Mehr Infos

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:

☐ **Positioner TopControl Basic Type 8694** Mehr Infos

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 SideControl Remote Type 8792** Mehr Infos

☐ **Process Controller SideControl Remote Typ 8793** Mehr Infos

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:

For actuator size 50 mm

☐ **Positioner TopControl Basic Typ 8696** Mehr Infos

Pneumatic function
☐ Single-acting

Pilot air ports
☐ Push-in connector external ø 6 mm or 1/4"
☐ Thread G 1/8"

Feedback
☐ 4-20 mA

Please specify item no. if known:

Reset

In case of special application conditions, please consult for advice.

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