

2/2-way Globe Control Valve with stainless steel design for media up to +185°C, DN 10-100



Type 2301 flange 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

- 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

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 100 (DN 4 to 100)
Port connection Flange connection acc. to Welded and threaded ports	DIN EN 1092-1, ANSI B 16 5, JIS 10K see separate datasheets
Body materials	Cast stainless steel 316L
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

Valve specifications	System Continuous ELEMENT	Request for quotation
Type 2301 Technical data & ordering info. p. 1-7	Type 8802-GD Ordering info. & technical data p. 8-13	Type 8802-GD p. 14

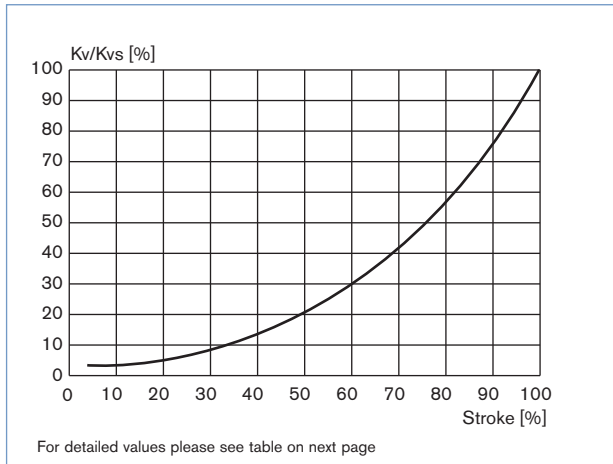


Technical data Type 2301 Globe Control Valve, continued

Kvs values

Port size (tube)		Actuator size [mm]	Orifice (seat) [mm]												
[mm]	[inch]		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	-	-
80	3"	130	-	-	-	-	-	-	-	-	-	45	73	100	-
100	4"	130	-	-	-	-	-	-	-	-	-	-	77	110	140

Flow curve and description



Remarks on the flow characteristic

- Equipercentile parabolic plug for the orifices DN8 to 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 to 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)

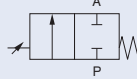
Technical data Type 2301 Globe Control Valve, continued

Kvs values [m³/h]

Port size (tube)		Orifice (seat)		Actuator size [mm]	Stroke [%]										
[mm]	[inch]	[mm]	[inch]		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	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	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	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"	50-70-90	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"	50-70-90	0.20	0.25	0.31	0.47	0.70	1.10	1.60	2.50	3.80	5.40	7.20
		25	1"	50-70-90	0.35	0.38	0.65	1.00	1.50	2.20	3.40	5.10	7.00	9.40	12.0
32	1 1/4"	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	1 1/2"	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
80	3"	50	2"	130	1	1.2	2	3.4	5.3	8.3	13	19	26	35	45
		65	2 1/2"	130	1.6	2	2.9	5	8.2	13	22	35	48	61	73
		80	3"	130	2.5	3.4	6.3	10.7	16	27	42.5	58	73	87	100
100	4"	65	2 1/2"	130	1.4	1.8	2.8	5	8.8	15	25	37	50	64	77
		80	3"	130	2.2	3.1	5.9	10.3	17.5	30	48	66	82	97	110
		100	4"	130	3.8	5.2	9.5	15	26	46.5	67.5	90	111	128	140

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

Flange connection acc. to DIN EN 1092-1, overall length FTF acc. to EN558 Series 1

Control function	Port size (tube) [mm]	Orifice (seat) [mm]	Actuator size Ø [mm]	Kvs-value [m ³ /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	4	50	0.5	16	-	VI	214 025	IV	
			70	0.5	16	-	VI	215 207	IV	
	6	50	50	1.2	16	-	VI	214 026	IV	
			70	1.2	16	-	VI	215 209	IV	
			70	2.0	16	213 984	VI	214 027	IV	
			70	2.0	16	213 985	VI	215 212	IV	
	8	50	50	2.0	16	213 988	VI	214 028	IV	
			70	2.7	16	213 989	VI	215 215	IV	
			70	2.7	16	-	VI	215 208	IV	
			70	0.5	16	-	VI	210 529	IV	
	15	6	50	1.2	16	-	VI	215 210	IV	
			70	1.2	16	-	VI	215 211	IV	
			50	2.1	16	213 986	VI	215 213	IV	
			70	2.1	16	213 987	VI	215 214	IV	
		10	50	3.1	16	213 990	VI	215 216	IV	
			70	3.1	16	213 991	VI	215 217	IV	
			50	4.3	16	204 930	VI	205 007	IV	
			70	4.3	16	204 932	VI	205 010	IV	
	20	10	50	3.2	16	213 992	VI	214 029	IV	
			70	3.2	16	210 530	VI	215 218	IV	
		15	50	5.2	16	222 630	VI	222 651	IV	
			70	5.2	16	213 993	VI	214 030	IV	
		20	50	7.1	10	204 933	VI	205 011	III	
			70	7.1	16	204 935	VI	205 012	IV	
	25	15	50	5.3	16	222 631	VI	222 652	IV	
			70	5.3	16	213 994	VI	214 031	IV	
			90	5.3	16	241 950	VI	242 166	IV	
		20	50	7.2	10	222 632	VI	222 653	III	
			70	7.2	16	213 995	VI	214 032	IV	
			90	7.2	16	241 954	VI	242169	IV	
		25	50	12.0	5	204 936	VI	205 013	III	
			70	12.0	12	204 937	VI	205 014	III	
	90		12.0	16	242 054	VI	229 421	IV		
	32	20	90	5.5	16	213 996	VI	214 033	IV	
			130	8.0	16	222 633	VI	222 654	IV	
		25	90	9.9	16	213 997	VI	210 446	IV	
			130	13.0	16	222 634	VI	222 655	IV	
	32	90	90	13.4	16	204 939	VI	205 016	IV	
			130	17.8	16	223 597	VI	223 598	IV	
		40	90	10.3	16	213 998	VI	214 034	IV	
			130	13.6	16	222 635	VI	222 656	IV	
	40	32	90	14.4	16	213 999	VI	214 035	IV	
			130	20.2	16	222 636	VI	222 657	IV	
		40	90	17.5	12	204 941	VI	205 018	III	
			130	23.8	16	219 791	VI	222 659	IV	
	50	32	90	15.3	16	214 000	VI	214 036	IV	
			130	21.0	16	222 637	VI	222 658	IV	
		40	90	18.0	12	214 001	VI	214 037	III	
			130	24.6	16	222 638	VI	222 660	IV	
	50	50	90	28.0	7	204 942	VI	205 019	III	
130			37.0	16	214 003	VI	214 039	IV		
65		40	130	29	16	214 002	VI	214 038	IV	
		50	130	45	16	214 005	VI	214 040	IV	
65	130	65	65	16	217 772	VI	219 618	IV		
		80	50	130	45	16	239 551	VI	239 587	IV
			65	130	73	16	239 545	VI	239 581	IV
80	130	80	100	10	239 540	VI	239 576	III		
		100	65	130	77	16	239 566	VI	239 603	IV
			80	130	110	10	239 561	VI	239 597	III
100	100	130	140	6	239 556	VI	239 592	III		

DTS 1000112693 EN Version: K validé printed: 10.04.2014 Status: RL (released | freigegeben |

i Further versions on request

Control function
B (normally open)

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

Flange connection acc. to ANSI B16.5, overall length FTF acc. to DIN 558 Series 37

Control function	Port size (tube)		Orifice (seat) [mm]	Actuator size Ø [mm]	Kvs-value [m ³ /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		
	[mm]	[inch]										
A 2/2-way valve, NC	15	1/2"	4	50	0,5	16	-	VI	214 041	IV		
				70	0,5	16	-	VI	215 219	IV		
			6	50	1,2	16	-	VI	214 042	IV		
				70	1,2	16	-	VI	215 220	IV		
			8	50	2,0	16	214 006	VI	214 043	IV		
				70	2,0	16	215 198	VI	215 221	IV		
			10	50	2,7	16	214 007	VI	214 044	IV		
				70	2,7	16	215 199	VI	215 222	IV		
			15	50	4,3	16	204 943	VI	205 020	IV		
				70	4,3	16	204 944	VI	205 021	IV		
			20	3/4"	10	50	3,2	16	214 008	VI	214 045	IV
						70	3,2	16	215 200	VI	215 223	IV
		15		50	5,2	16	463 901	VI	463 909	IV		
				70	5,2	16	214 009	VI	214 046	IV		
		20		50	7,1	10	204 945	VI	205 022	III		
				70	7,1	16	204 946	VI	205 023	IV		
		25	1"	15	50	5,3	16	463 902	VI	463 910	IV	
					70	5,3	16	214 010	VI	214 047	IV	
					90	5,3	16	242 057	VI	464 857	IV	
				20	50	7,2	10	463 903	VI	463 911	III	
					70	7,2	16	214 011	VI	214 048	IV	
					90	7,2	16	242 058	VI	464 858	IV	
			25	50	12,0	5	204 947	VI	205 024	III		
				70	12,0	12	204 948	VI	205 025	III		
				90	12,0	16	464 851	VI	464 367	IV		
			40	1 1/2"	25	90	10,3	16	214 012	VI	214 049	IV
						130	13,6	16	463 904	VI	463 912	IV
					32	90	14,4	16	215 201	VI	215 224	IV
		130				20,2	16	463 905	VI	463 913	IV	
		40		90	17,5	12	204 950	VI	205 027	III		
				130	23,8	16	463 907	VI	463 915	IV		
				50	90	15,3	16	201 202	VI	215 225	IV	
					130	21,0	16	463 906	VI	463 914	IV	
		50	2"	40	90	18,0	12	214 013	VI	214 050	III	
					130	24,6	16	463 908	VI	463 916	IV	
				50	90	28,0	7	204 951	VI	205 028	III	
			65	2 1/2"	130	37,0	16	214 015	VI	214 052	IV	
					40	130	29	16	239 539	VI	239 575	IV
					50	130	45	16	239 537	VI	239 573	IV
		80	3"	65	130	65	16	239 535	VI	239 572	IV	
				50	130	45	16	239 552	VI	239 588	IV	
				65	130	73	16	239 546	VI	239 582	IV	
		100	4"	80	130	100	10	239 541	VI	239 577	III	
				65	130	77	16	239 567	VI	239 604	IV	
				80	130	110	10	239 562	VI	239 598	III	
				100	130	140	6	239 557	VI	239 593	III	

DTS 1000112693 EN Version: K validé printed: 10.04.2014 Status: RL (released | freigegeben |

i Further versions on request

Control function
B (normally open)

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

Flange connection acc. to JIS 10K, overall length FTF acc. to EN558 Series 10

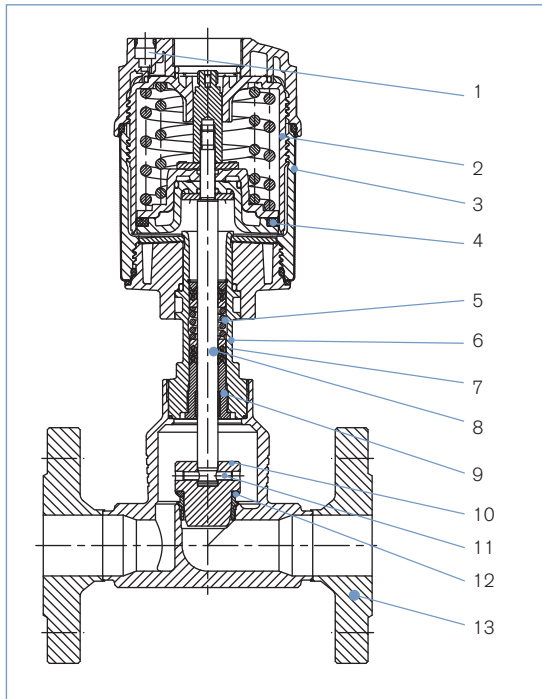
Control function	Port size (tube) [mm]	Orifice (seat) [mm]	Actuator size Ø [mm]	Kvs-value [m ³ /h]	Operating pressure up to +185°C [bar]	Item no. plug sealing PTFE/ St. st.	Leakage class	Item no. plug sealing St. st./ St. st.	Leakage class	
A 2/2-way valve, NC	15	4	50	0,5	16	-	VI	214 054	IV	
			70	0,5	16	-	VI	215 226	IV	
		6	50	1,2	16	-	VI	214 055	IV	
			70	1,2	16	-	VI	215 227	IV	
		8	50	2,1	16	214 017	VI	213 200	IV	
			70	2,1	16	215 203	VI	215 228	IV	
		10	50	3,1	16	214 018	VI	214 056	IV	
			70	3,1	16	213 913	VI	213 911	IV	
		15	50	4,3	16	204 952	VI	205 029	IV	
			70	4,3	16	204 953	VI	205 030	IV	
		20	10	50	3,2	16	214 019	VI	214 057	IV
				70	3,2	16	215 204	VI	215 229	IV
	15		50	5,2	16	222 639	VI	222 661	IV	
			70	5,2	16	213 936	VI	213 933	IV	
	20		50	7,1	10	204 954	VI	205 031	III	
			70	7,1	16	204 955	VI	205 032	IV	
	25	15	50	5,3	16	222 640	VI	222 662	IV	
			70	5,3	16	214 020	VI	214 059	IV	
			90	5,3	16	242 163	VI	242 197	IV	
		20	50	7,2	10	222 641	VI	222 663	III	
			70	7,2	16	213 930	VI	213 914	IV	
			90	7,2	16	242 164	VI	242 198	IV	
	25	50	12,0	5	204 956	VI	205 033	III		
		70	12,0	12	204 957	VI	205 034	III		
		90	12,0	16	242 165	VI	242 199	IV		
	32	20	90	5,5	16	215 205	VI	215 230	IV	
			130	8,0	16	222 642	VI	222 664	IV	
		25	90	9,9	16	213 939	VI	213 937	IV	
			130	13,0	16	222 643	VI	222 665	IV	
		32	90	13,4	16	213 177	VI	213 178	IV	
			130	17,8	16	222 645	VI	222 667	IV	
	40	25	90	10,3	16	214 021	VI	214 060	IV	
			130	13,6	16	222 644	VI	222 666	IV	
		32	90	14,4	16	213 932	VI	213 931	IV	
			130	20,2	16	222 647	VI	222 668	IV	
		40	90	17,5	12	204 959	VI	205 037	III	
			130	23,8	16	222 649	VI	222 670	IV	
	50	32	90	15,3	16	215 206	VI	215 231	IV	
			130	21,0	16	222 648	VI	222 669	IV	
		40	90	18,0	12	213 941	VI	213 940	III	
			130	24,6	16	222 650	VI	222 671	IV	
		50	90	28,0	7	204 960	VI	205 038	III	
			130	37,0	16	214 023	VI	214 062	IV	
	65	40	130	29	16	214 022	VI	214 061	IV	
		50	130	45	16	214 024	VI	214 063	IV	
		65	130	65	16	219 617	VI	219 620	IV	
	80	50	130	45	16	239 553	VI	239 589	IV	
		65	130	73	16	239 547	VI	239 584	IV	
80		130	100	10	239 542	VI	239 578	III		
100	65	130	77	16	239 568	VI	239 605	IV		
	80	130	110	10	239 563	VI	239 599	III		
	100	130	140	6	239 558	VI	239 594	III		

DTS 1000112693 EN Version: K validé printed: 10.04.2014 Status: RL (released | freigegeben |

i Further versions on request

Control function
B (normally open)

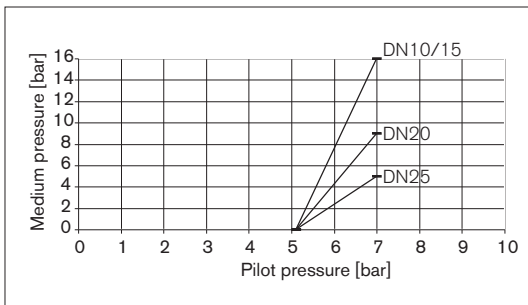
Materials Type 2301 Globe Control Valve



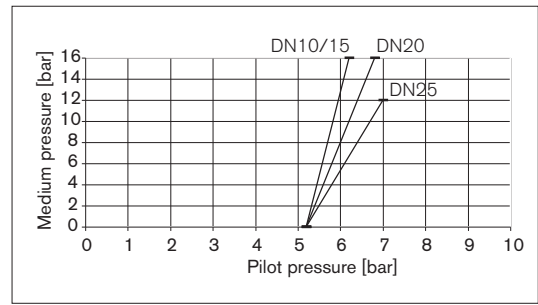
- | | |
|-------------------------------|--|
| 1 Pilot air ports | Push-in connector PP |
| 2 Actuator | PPS |
| 3 Cover | Stainless steel 1.4561 (316Ti) |
| 4 Piston seal | FKM |
| 5 Spring | Stainless steel 1.4310 |
| 6 Tube | Stainless steel 1.4401 (316) / 1.4404 (316L) |
| 7 Spindle packing | PTFE |
| 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)

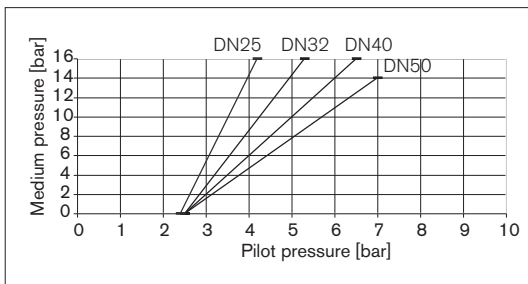
Actuator Ø 50



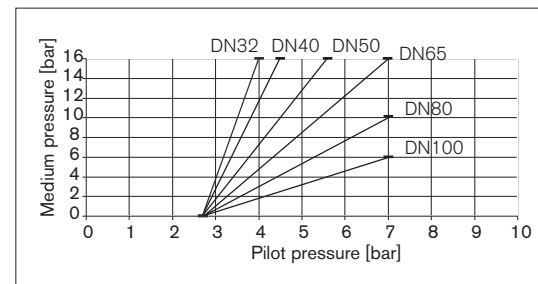
Actuator Ø 70



Actuator Ø 90



Actuator Ø 130



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 \varnothing 70/90/130 mm) or a digital electropneumatic Positioner **Type 8696** (for valve actuator size \varnothing 50 mm) (see next page and separate datasheets). For the configuration of further valve systems please use the "Request for quotation" on p. 14

[go to page](#)

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

Ordering the valve system Continuous ELEMENT Type 8802-GD

Globe control valve Type 2301



Positioner



Positioner
Type 8692



Process
Controller
Type 8693



Positioner Basic
Type 8694

**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

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 \varnothing 70/90/130) mm or a digital electropneumatic Positioner **Type 8696** (for valve actuator size \varnothing 50 mm) (see below and separate datasheets). For the configuration of further valve systems please use the "Request for quotation" on p. 14 [go to page](#)

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

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
 \varnothing 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



Process Controller SideControl Type 8793



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

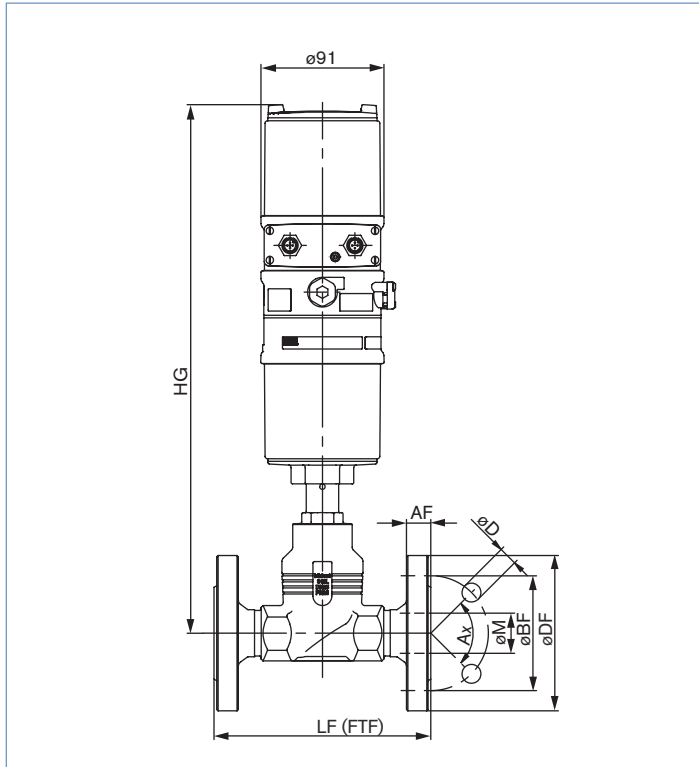


The new generation of integrated positioners for combination with small actuators from the process valve series Type 23xx/2103 is specially designed for the requirements of hygienic process environments. The operation and selection of the software functions close tight function, inversion of the operating 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

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]



DIN EN 1092, JIS 10K

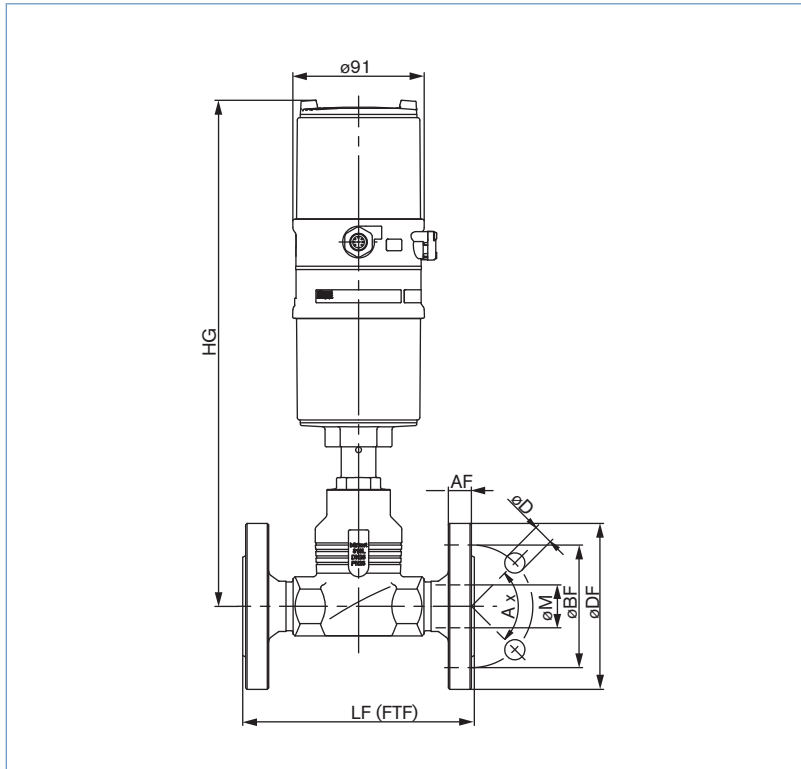
Port size (tube) [mm]	Actuator size [mm]	HG	DIN EN 1092 FTF acc. to EN558 Series 1						JIS 10K FTF acc. to EN558 Series 10					
			ØDF	LF	ØBF	AF	ØD	ØM	ØDF	LF	ØBF	AF	ØD	ØM
10	70	383	90	130	60	16	14	13.6	-	-	-	-	-	-
15	70	383	95	130	65	16	14	18.1	95	108	70	12	15	18.1
20	70	389	105	150	75	18	14	23.7	100	117	75	14	15	23.7
25	70	392	115	160	85	18	14	29.7	125	127	90	14	19	29.7
	90	445	115	160	85	18	14	29.7	125	127	90	14	19	29.7
32	90	473	140	180	100	18	18	38.4	135	140	100	16	19	38.4
	130	525	140	180	100	18	18	38.4	135	140	100	16	19	38.4
40	90	478	150	200	110	18	18	44.3	140	165	105	16	19	44.3
	130	530	150	200	110	18	18	44.3	140	165	105	16	19	44.3
50	90	484	165	230	125	20	18	56.3	155	203	120	16	19	56.3
	130	536	165	230	125	20	18	56.3	155	203	120	16	19	56.3
65	130	590	185	290	145	22	18	66	175	216	140	18	19	72
80	130	598	200	310	160	24	18	81	185	241	150	18	19	84
100	130	608	235	350	190	24	22	100	210	292	175	18	19	109

ANSI B 16.5, FTF acc. to EN558 Series 37

Port size (tube) [inch]	Actuator size [mm]	HG	ØDF	LF	ØBF	AF	ØD	ØM
1/2"	70	383	89	184	60.5	11.2	15.7	15.7
3/4"	70	389	99	184	69.9	12.7	15.7	20.8
1"	70	392	108	184	79.2	14.2	15.7	26.7
	90	445	108	184	79.2	14.2	15.7	26.7
1 1/2"	90	478	127	222	98.6	17.5	15.7	40.9
	130	530	127	222	98.6	17.5	15.7	40.9
2"	90	484	152	254	120.7	19.1	19.1	52.6
	130	536	152	254	120.7	19.1	19.1	52.6
2 1/2"	130	590	178	276	139.7	22.3	19.1	63
3"	130	598	190	298	152.5	23.9	19.1	78
4"	130	608	229	352	190.5	23.9	19.1	102

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

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



DIN EN 1092, JIS 10K

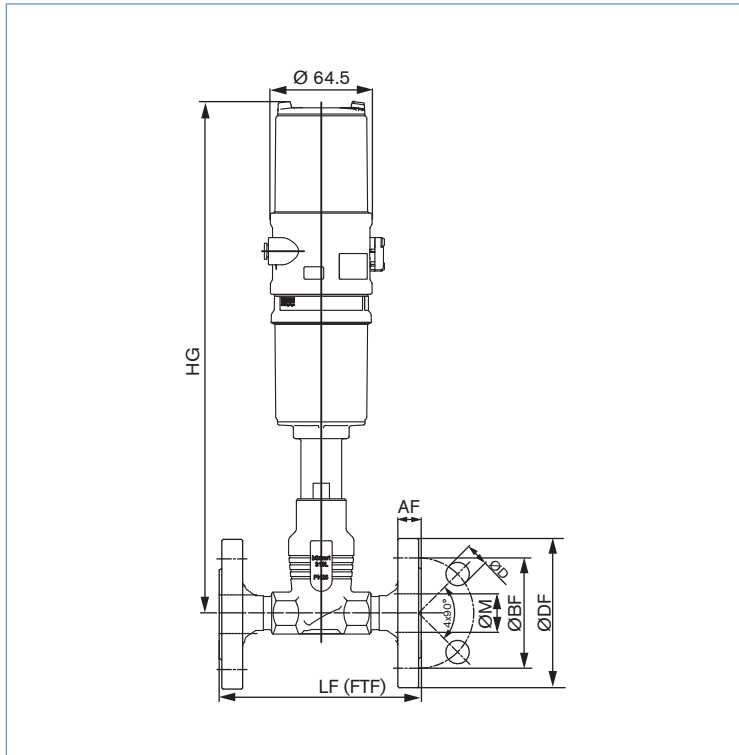
Port size (tube) [mm]	Actuator size [mm]	HG	DIN EN 1092 FTF acc. to EN558 Series 1						JIS 10K FTF acc. to EN558 Series 10					
			ØDF	LF	ØBF	AF	ØD	ØM	ØDF	LF	ØBF	AF	ØD	ØM
10	70	342	90	130	60	16	14	13.6	-	-	-	-	-	-
15	70	342	95	130	65	16	14	18.1	95	108	70	12	15	18.1
20	70	348	105	150	75	18	14	23.7	100	117	75	14	15	23.7
25	70	351	115	160	85	18	14	29.7	125	127	90	14	19	29.7
	90	404	115	160	85	18	14	29.7	125	127	90	14	19	29.7
32	90	432	140	180	100	18	18	38.4	135	140	100	16	19	38.4
	130	484	140	180	100	18	18	38.4	135	140	100	16	19	38.4
40	90	437	150	200	110	18	18	44.3	140	165	105	16	19	44.3
	130	489	150	200	110	18	18	44.3	140	165	105	16	19	44.3
50	90	443	165	230	125	20	18	56.3	155	203	120	16	19	56.3
	130	495	165	230	125	20	18	56.3	155	203	120	16	19	56.3
65	130	549	185	290	145	22	18	66	175	216	140	18	19	72
80	130	557	200	310	160	24	18	81	185	241	150	18	19	84
100	130	567	235	350	190	24	22	100	210	292	175	18	19	109

ANSI B 16.5, FTF acc. to EN558 Series 37

Port size (tube) [inch]	Actuator size [mm]	HG	ØDF	LF	ØBF	AF	ØD	ØM
1/2"	70	342	89	184	60.5	11.2	15.7	15.7
3/4"	70	348	99	184	69.9	12.7	15.7	20.8
1"	70	351	108	184	79.2	14.2	15.7	26.7
	90	404	108	184	79.2	14.2	15.7	26.7
1 1/2"	90	437	127	222	98.6	17.5	15.7	40.9
	130	489	127	222	98.6	17.5	15.7	40.9
2"	90	443	152	254	120.7	19.1	19.1	52.6
	130	495	152	254	120.7	19.1	19.1	52.6
2 1/2"	130	549	178	276	139.7	22.3	19.1	63
3"	130	557	190	298	152.5	23.9	19.1	78
4"	130	567	229	352	190.5	23.9	19.1	102

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]



DIN EN 1092, JIS 10K

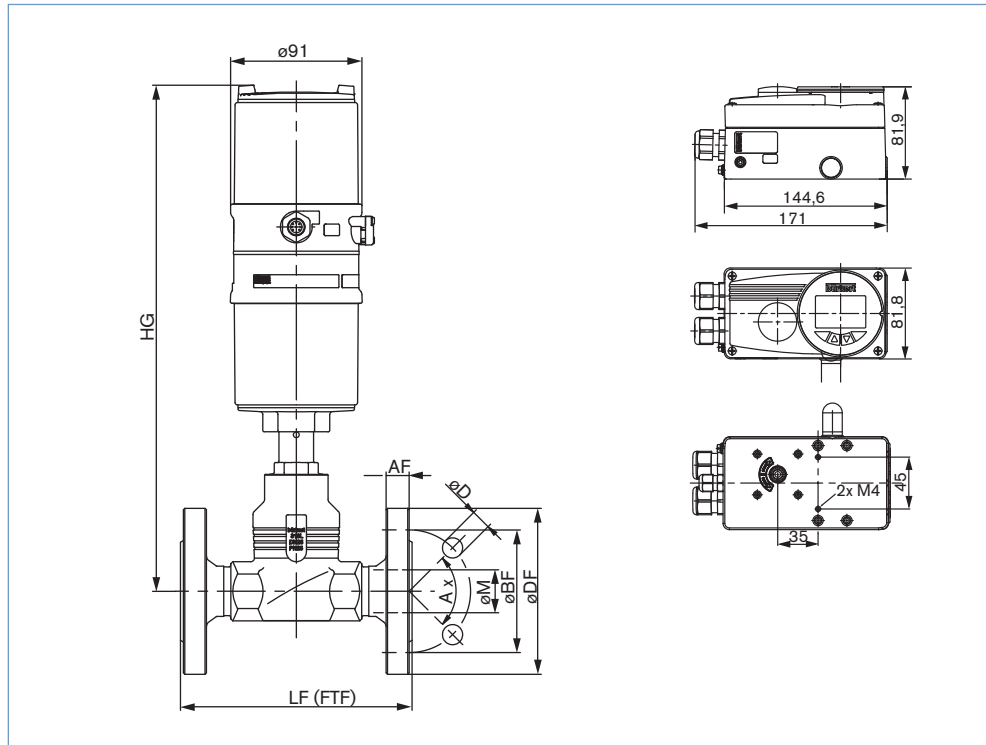
Port size (tube) [mm]	Actuator size [mm]	HG	DIN EN 1092 FTF acc. to EN558 Series 1						JIS 10K FTF acc. to EN558 Series 10					
			ØDF	LF	ØBF	AF	ØD	ØM	ØDF	LF	ØBF	AF	ØD	ØM
10	50	329	90	130	60	16	14	13.6	-	-	-	-	-	-
15	50	329	95	130	65	16	14	18.1	95	108	70	12	15	18.1
20	50	335	105	150	75	18	14	23.7	100	117	75	14	15	23.7
25	50	342	115	160	85	18	14	29.7	125	127	90	14	19	29.7

ANSI B 16.5, FTF acc. to EN558 Series 37

Port size (tube) [inch]	Actuator size [mm]	HG	ØDF	LF	ØBF	AF	ØD	ØM
1/2"	50	329	89	184	60.5	11.2	15.7	15.7
3/4"	50	335	99	184	69.9	12.7	15.7	20.8
1"	50	342	108	184	79.2	14.2	15.7	26.7

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

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]



DIN EN 1092, JIS 10K

Port size (tube) [mm]	Actuator size [mm]	HG	DIN EN 1092 FTF acc. to EN558 Series 1						JIS 10K FTF acc. to EN558 Series 10					
			ØDF	LF	ØBF	AF	ØD	ØM	ØDF	LF	ØBF	AF	ØD	ØM
10	70	342	90	130	60	16	14	13.6	-	-	-	-	-	-
15	70	342	95	130	65	16	14	18.1	95	108	70	12	15	18.1
20	70	348	105	150	75	18	14	23.7	100	117	75	14	15	23.7
25	70	351	115	160	85	18	14	29.7	125	127	90	14	19	29.7
	90	404	115	160	85	18	14	29.7	125	127	90	14	19	29.7
32	90	432	140	180	100	18	18	38.4	135	140	100	16	19	38.4
	130	484	140	180	100	18	18	38.4	135	140	100	16	19	38.4
40	90	437	150	200	110	18	18	44.3	140	165	105	16	19	44.3
	130	489	150	200	110	18	18	44.3	140	165	105	16	19	44.3
50	90	443	165	230	125	20	18	56.3	155	203	120	16	19	56.3
	130	495	165	230	125	20	18	56.3	155	203	120	16	19	56.3
65	130	549	185	290	145	22	18	66	175	216	140	18	19	72
80	130	557	200	310	160	24	18	81	185	241	150	18	19	84
100	130	567	235	350	190	24	22	100	210	292	175	18	19	109

ANSI B 16.5, FTF acc. to EN558 Series 37

Port size (tube) [inch]	Actuator size [mm]	HG	ØDF	LF	ØBF	AF	ØD	ØM
1/2"	70	342	89	184	60.5	11.2	15.7	15.7
3/4"	70	348	99	184	69.9	12.7	15.7	20.8
1"	70	351	108	184	79.2	14.2	15.7	26.7
	90	404	108	184	79.2	14.2	15.7	26.7
1 1/2"	90	437	127	222	98.6	17.5	15.7	40.9
	130	489	127	222	98.6	17.5	15.7	40.9
2"	90	443	152	254	120.7	19.1	19.1	52.6
	130	495	152	254	120.7	19.1	19.1	52.6
2 1/2"	130	549	178	276	139.7	22.3	19.1	63
3"	130	557	190	298	152.5	23.9	19.1	78
4"	130	567	229	352	190.5	23.9	19.1	102

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	<input type="text"/>	PN	<input type="text"/>
Pipe material	<input type="text"/>			
<input type="checkbox"/> Process medium	<input type="text"/>			
<input type="checkbox"/> Type of medium	<input type="checkbox"/> Liquid	<input type="checkbox"/> Steam	<input type="checkbox"/> Gas	
<input type="checkbox"/> Flow rate (Q, Q _N , W) ¹⁾	min	standard	max	unit
<input type="checkbox"/> Temperature at valve inlet T1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/> Absolute pressure at valve inlet P1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/> Absolute pressure at valve outlet P2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Steam pressure P _v	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Kinematic viscosity (ν)	<input type="text"/>	mm ² /s or cSt		
Dynamic viscosity (η)	<input type="text"/>	mPa.s or cP		
Standard density	<input type="text"/>	Kg/m ³		
Max. sound level accepted	<input type="text"/>	dB (A)		

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

Valve features

Plug seal material	<input type="checkbox"/> PTFE/Stainless steel	<input type="checkbox"/> Stainless steel/Stainless steel		
Nominal pressure	PN	<input type="text"/>		
Orifice	DN	<input type="text"/>		
Type of connection	<input type="checkbox"/> Flanged	<input type="checkbox"/> Threaded	<input type="checkbox"/> Welded	<input type="checkbox"/> Clamp
Standard connection	<input type="checkbox"/> ISO	<input type="checkbox"/> DIN	<input type="checkbox"/> Other	<input type="text"/>
Control function	<input type="checkbox"/> NC ¹⁾	<input type="checkbox"/> NO ¹⁾		
Please specify item no. if known):	<input type="text"/>			







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

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

Control unit features		
For actuator sizes 70/90/130 mm		
<input type="checkbox"/> Positioner TopControl Type 8692  <input type="checkbox"/> Process Controller TopControl Type 8693 	<input type="checkbox"/> Positioner TopControl Basic Type 8694 	<input type="checkbox"/> Positioner SideControl Remote Type 8792  <input type="checkbox"/> Process Controller SideControl Remote Typ 8793 
<p>Pneumatic function</p> <input type="checkbox"/> Single-acting <input type="checkbox"/> Double-acting <p>Communication</p> <input type="checkbox"/> Profibus <input type="checkbox"/> DeviceNet <p>Electrical connection</p> <input type="checkbox"/> Cable gland <input type="checkbox"/> Multipol connection <p>Feedback</p> <input type="checkbox"/> 4-20 mA <input type="checkbox"/> 4-20 mA + 2 binary outputs <p>Initiator</p> <input type="checkbox"/> Initiator <p>Please specify item no. if known: <input type="text"/></p>	<p>Pneumatic function</p> <input type="checkbox"/> Single-acting <p>Pilot air ports</p> <input type="checkbox"/> Push-in connector external ø 6 mm or 1/4" <input type="checkbox"/> Thread G 1/8" <p>Electrical connection</p> <input type="checkbox"/> Cable gland <input type="checkbox"/> Multipol connection <p>Feedback</p> <input type="checkbox"/> 4-20 mA <p>Please specify item no. if known: <input type="text"/></p>	<p>Power supply 24 VDC</p> <p>Communication</p> <input type="checkbox"/> Without <input type="checkbox"/> Profibus DPV1 <p>Feedback</p> <input type="checkbox"/> Analogue feedback + 2 binary outputs <input type="checkbox"/> 2 binary outputs <p>Electrical connection</p> <input type="checkbox"/> Cable gland <input type="checkbox"/> Multipol connection <p>Please specify item no. if known: <input type="text"/></p>
For actuator size 50 mm		
<input type="checkbox"/> Positioner TopControl Basic Typ 8696 		
<p>Pneumatic function</p> <input type="checkbox"/> Single-acting <p>Pilot air ports</p> <input type="checkbox"/> Push-in connector external ø 6 mm or 1/4" <input type="checkbox"/> Thread G 1/8" <p>Feedback</p> <input type="checkbox"/> 4-20 mA <p>Please specify item no. if known: <input type="text"/></p>		

DTS 1000112693 EN Version: K validé printed: 10.04.2014 Status: RL (released | freigegeben |