



Type 2031 with weld end connection

Type 2031 with clamp connection

Type 2031 can be combined with...



**Accessory 1062**  
Electrical position feedback



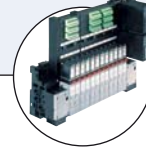
**Accessory**  
Stroke limitation



**Type 6012/6014P**  
Pilot valve



**Type 8631**  
TopControl On/Off





**Type 8640/8644**  
Valve block



**Type 8311**  
Pressure Sensor/Switch

## 2/2-way Diaphragm Valve, forged valve body, weld end and clamp connection, DN 8-100

- Hermetical separation of fluids from the operating mechanism by diaphragm
- Zero dead volume
- Various surface finishes
- Quality certifications  

The externally piloted diaphragm valve consists of a pneumatically operated piston actuator, a diaphragm and a 2-way valve housing made of forged stainless steel.

The standard material of the actuator is PPS. With its favourable flow characteristics and zero dead volume, the valve housing enables high flow capacities and a variety of applications to be realized.

### Applications

- Pharma
- Biotechnology
- Food industry

Technical data	
<b>Orifice</b>	DN 8-100
<b>Body materials</b>	Forged stainless steel 316 L/1.4435 / BN2 Fe < 0.5% / C ≤ 0.03%
<b>Actuator materials</b>	Actuator size ≥ 40-125mm Actuator size ≥ 175mm
	PPS PA polyamide
<b>Pilot air ports</b>	Stainless steel 1.4305
<b>Seal material</b>	EPDM, PTFE/EPDM (FKM on request)
<b>Media</b>	Neutral gases and liquids, high-purity, sterile, aggressive or abrasive fluids
<b>Viscosity</b>	up to viscous
<b>Surface finish</b>	(Average surface finish)
	internal mechanical polished Ra ≤ 0.5 µm
	internal electro polished Ra ≤ 0.4 µm
	internal mirror finished (other see ordering chart) Ra ≤ 0.25 µm
<b>Media temperature</b>	EPDM -10 to +130 °C Briefly up to +150°C for steam sterilisation
	PTFE/EPDM -10 to +130°C
<b>Ambient temperature</b>	Actuator size < 100mm Actuator size 100-125mm Actuator size ≥ 175mm
	+5 to +140°C +5 to +90°C / Briefly up to +140°C -10 to +50°C
<b>Control media</b>	Neutral gases; air
<b>Pilot pressure max.</b>	max. 7 bar, see table on p.2
<b>Port connections</b>	
<b>Weld end</b> acc. to	▪ EN ISO 1127/ISO 4200 ▪ DIN 11850 Serie 2 ▪ SMS 3008 ▪ ASME BPE ▪ BS 4825
<b>Clamp</b> acc. to	▪ ISO 2852 ▪ DIN 32676 ▪ ASME BPE
<b>Sterile threaded ends</b>	on request
<b>Installation</b>	As required, preferably with actuator in upright position

## Technical data

Port connection		Kv-value water [m <sup>3</sup> /h]	Actuator size Ø [mm]	Pilot pressure [bar]		Max. operating pressure for seal material [bar]		Weight [kg]
[mm]	[inch]			min.	max.	EPDM	PTFE/EPDM	
8	1/4"	1.0	40	5.0	7	10	10	0.4
10	3/8"	1.0	40	5.0	7	10	10	0.4
15	1/2"	4.0	50	5.0	7	8.5	5	0.7
		4.5	63	5.0	7	10	10	0.9
20	3/4"	7.0	63	5.5	7	10	5	1.3
		7.5	80	5.0	7	10	10	2.0
25	1"	12.0	63	5.0	7	3	–	1.6
			80	5.5	7	10	7.5	2.2
32	1 1/4"	30.0	100	5.5	7	6.5	6	4.2
		30.5	125	5.5	7	10	10	5.7
40	1 1/2"	30.0	100	5.5	7	6.5	6	4.2
		30.5	125	5.5	7	10	10	5.7
50	2"	51.5	100	5.5	7	4.5	2.5	5.9
			125	5.5	7	8	7	7.6
65	2 1/2"	160.0	125	5.5	7	8	7	7.6
			225	5.0	6	10	10	26.0
80	3"	160.0	225	5.0	6	10	10	26.0
100	4"	235.0	225	5.0	6	8	4	38.0

**Remark:**

For low operating pressures we recommend reduced spring versions

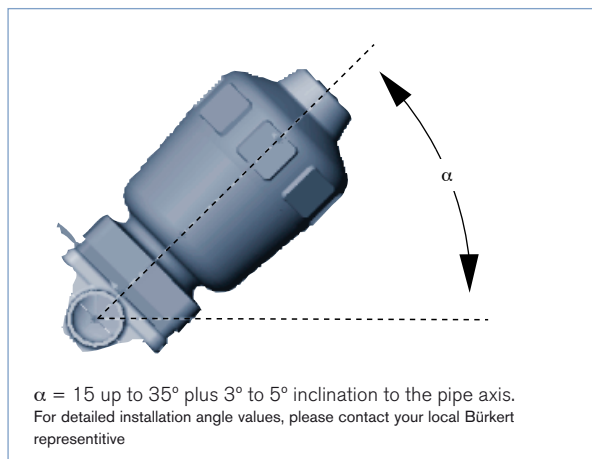
**Pressure values (bar)**

Gauge pressures with respect to the prevailing atmospheric pressure.

**Flow rate: Kv-value water (m<sup>3</sup>/h)**


Measured at +20°C, 1 bar pressure at valve inlet and free outlet.

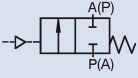
## Installation for self-draining operation



## Ordering chart for valves (other versions on request)

Body with weld end acc. EN ISO 1127/ISO 4200



	Port connection		External-Ø [mm]	Kv-value water [m³/h]	Actuator size Ø [mm]	Pilot pressure [bar]	Max. operating pressure [bar]	Item no. per surface finish internal/external					
	[mm]	[inch]						Mechanical polished, Ra ≤ 0.5/6.3 µm	Electro polished, Ra ≤ 0.4/3.2 µm	Mechanical polished, Ra ≤ 0.5/1.6 µm	Electro polished, Ra ≤ 0.4/0.8 µm	Mirror finished, Ra ≤ 0.25/0.25 µm	
 <p><b>Control function A</b> 2/2-way, NC by spring return</p>	<b>Acc. EN ISO 1127/ISO 4200, diaphragm material EPDM</b>												
	8	1/4"	13.5	1.0	40	5.0-7	10	444 968	444 969	444 970	444 971	444 972	
	10	3/8"	17.2	1.0	40	5.0-7	10	444 973	444 974	444 975	444 976	444 977	
	15	1/2"	21.3	4.0	50	5.0-7	8.5	444 978	444 979	444 980	444 981	444 982	
				4.5	63	5.0-7	10	-	-	154 098	154 116	-	
	20	3/4"	26.9	7.0	63	5.5-7	10	444 983	444 984	444 985	444 986	444 987	
				7.5	80	5.0-7	10	-	-	154 102	154 120	-	
	25	1"	33.7	12.0	63	5.0-7	3	-	-	154 104	154 122	-	
					80	5.5-7	10	444 988	444 989	444 990	444 991	444 992	
	32	1 1/4"	42.4	30.0	100	5.5-7	6.5	449 843	550 287	555 017	555 018	555 019	
	40	1 1/2"	48.3	30.0	100	5.5-7	6.5	444 993	444 994	444 995	444 996	444 997	
				30.5	125	5.5-7	10	-	-	154 108	154 126	-	
	50	2"	60.3	51.5	100	5.5-7	4.5	-	-	154 110	154 128	-	
					125	5.5-7	8	444 998	444 999	445 000	445 001	445 002	
	65	2 1/2"	76.1	160.0	225	5.0-6	10	551 161	551 400	551 401	551 402	551 403	
	80	3"	88.9	160.0	225	5.0-6	10	551 404	551 405	551 406	551 407	551 408	
	100	4"	114.3	235.0	225	5.0-6	8	-	-	551 382	551 383	551 384	
	<b>Acc. EN ISO 1127/ISO 4200, diaphragm material PTFE/EPDM</b>												
	8	1/4"	13.5	1.0	40	5.0-7	10	445 003	445 004	445 005	445 006	445 007	
	10	3/8"	17.2	1.0	40	5.0-7	10	445 008	445 009	445 010	445 011	445 012	
15	1/2"	21.3	4.0	50	5.0-7	5	-	-	154 096	154 114	-		
			4.5	63	5.0-7	10	445 013	445 014	445 015	445 016	445 017		
20	3/4"	26.9	7.0	63	5.5-7	5	-	-	154 100	154 118	-		
			7.5	80	5.0-7	10	445 018	445 019	445 020	445 021	445 022		
25	1"	33.7	12.0	80	5.5-7	7.5	445 023	445 024	445 025	444 149	445 026		
32	1 1/4"	42.4	30.5	125	5.5-7	10	555 020	555 021	555 022	550 753	555 023		
40	1 1/2"	48.3	30.0	100	5.5-7	6	-	-	154 106	154 124	-		
			30.5	125	5.5-7	10	445 027	445 028	445 029	445 030	445 031		
50	2"	60.3	51.5	100	5.5-7	2.5	-	-	154 112	154 130	-		
				125	5.5-7	7	445 032	445 033	445 034	445 035	445 036		
65	2 1/2"	76.1	160.0	225	5.0-6	10	551 429	550 692	551 431	551 432	551 433		
80	3"	88.9	160.0	225	5.0-6	10	551 119	550 693	551 120	551 437	551 438		
100	4"	114.3	235.0	225	5.0-6	4	-	-	551 392	551 393	551 394		


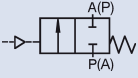
Port connection size equals the orifice diaphragm size except for port connection 32 mm and 65 mm. At port connection 32 mm the orifice diaphragm size equals 40 mm. At port connection 65 mm the orifice diaphragm size equals 80 mm.

**i Further versions on request**

**> Additional**  
Versions with reduced spring force

## Ordering chart for valves (other versions on request)

## Body with weld end acc. DIN 11850 Series 2

	Port connection		External-Ø [mm]	Kv-value water [m³/h]	Actuator size Ø [mm]	Pilot pressure [bar]	Max. operating pressure [bar]	Item no. per surface finish internal/external					
	[mm]	[inch]						Mechanical polished, Ra ≤ 0.5/6.3 µm	Electro polished, Ra ≤ 0.4/3.2 µm	Mechanical polished, Ra ≤ 0.5/1.6 µm	Electro polished, Ra ≤ 0.4/0.8 µm	Mirror finished, Ra ≤ 0.25/0.25 µm	
 <b>Control function A</b> 2/2-way, NC by spring return	<b>Acc. DIN 11850 Series 2, diaphragm material EPDM</b>												
	10	3/8"	13.0	1.0	40	5.0-7	10	445 107	445 108	445 109	445 110	445 111	
	15	1/2"	19.0	4.0	50	5.0-7	8.5	445 112	445 113	445 114	445 115	445 116	
				4.5	63	5.0-7	10	-	-	154 099	154 117	-	
	20	3/4"	23.0	7.0	63	5.5-7	10	445 117	445 118	445 119	445 120	445 121	
				7.5	80	5.0-7	10	-	-	154 103	154 121	-	
	25	1"	29.0	12.0	63	5.0-7	3	-	-	154 105	154 123	-	
					80	5.5-7	10	445 122	445 123	445 124	445 125	445 126	
	32	1 1/4"	35.0	30.0	100	5.5-7	6.5	554 972	449 907	554 973	554 974	554 975	
	40	1 1/2"	41.0	30.0	100	5.5-7	6.5	445 127	445 128	445 129	445 130	445 131	
				30.5	125	5.5-7	10	-	-	154 109	154 127	-	
	50	2"	53.0	51.5	100	5.5-7	4.5	-	-	154 111	154 129	-	
					125	5.5-7	8	445 132	445 133	445 134	445 135	445 136	
	65	2 1/2"	70.0	160.0	225	5.0-6	10	551 414	551 415	551 416	551 417	551 418	
	80	3"	85.0	160.0	225	5.0-6	10	551 419	551 420	551 421	551 422	551 423	
	100	4"	104.0	235.0	225	5.0-6	8	-	-	551 388	551 389	551 390	
	<b>Acc. DIN 11850 Series 2, diaphragm material PTFE/EPDM</b>												
	10	3/8"	13.0	1.0	40	5.0-7	10	445 137	445 138	445 139	445 140	445 141	
	15	1/2"	19.0	4.0	50	5.0-7	5	-	-	154 097	154 115	-	
				4.5	63	5.0-7	10	445 142	445 143	445 144	445 145	445 146	
20	3/4"	23.0	7.0	63	5.5-7	5	-	-	154 101	154 119	-		
			7.5	80	5.0-7	10	445 147	445 148	445 149	445 150	445 151		
25	1"	29.0	12.0	80	5.5-7	7.5	445 152	445 153	445 154	445 155	445 156		
32	1 1/4"	35.0	30.5	125	5.5-7	10	554 976	554 977	554 978	554 979	554 980		
40	1 1/2"	41.0	30.0	100	5.5-7	6	-	-	154 107	154 125	-		
			30.5	125	5.5-7	10	445 157	445 158	445 159	445 160	445 161		
50	2"	53.0	51.5	100	5.5-7	2.5	-	-	154 113	154 131	-		
				125	5.5-7	7	445 162	445 163	445 164	445 165	445 166		
65	2 1/2"	70.0	160.0	225	5.0-6	10	551 444	551 445	551 446	551 447	551 448		
80	3"	85.0	160.0	225	5.0-6	10	551 449	551 450	551 451	551 452	551 453		
100	4"	104.0	235.0	225	5.0-6	4	-	-	551 397	551 398	551 399		


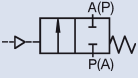
Port connection size equals the orifice diaphragm size except for port connection 32 mm and 65 mm. At port connection 32 mm the orifice diaphragm size equals 40 mm. At port connection 65 mm the orifice diaphragm size equals 80 mm.

**i** Further versions on request

**>** Additional  
Versions with reduced spring force

## Ordering chart for valves (other versions on request)

Body with weld end acc. SMS 3008 and BS 4825

	Port connection		External-Ø [mm]	Kv-value water [m³/h]	Actuator size Ø [mm]	Pilot pressure [bar]	Max. operating pressure [bar]	Item no. per surface finish internal/external				
	[mm]	[inch]						Mechanical polished, Ra ≤ 0.5/6.3 µm	Electro polished, Ra ≤ 0.4/3.2 µm	Mechanical polished, Ra ≤ 0.5/1.6 µm	Electro polished, Ra ≤ 0.4/0.8 µm	Mirror finished, Ra ≤ 0.25/0.25 µm
 <p><b>Control function A</b> 2/2-way, NC by spring return</p>	<b>Acc. SMS 3008, diaphragm material EPDM</b>											
	25	1"	25.0	12.0	80	5.5-7	10	445 167	445 168	445 169	445 170	445 171
	40	1 1/2"	38.0	30.0	100	5.5-7	6.5	445 172	445 173	445 174	445 175	445 176
	50	2"	51.0	51.5	125	5.5-7	8	445 177	445 178	445 179	445 180	445 181
	65	2 1/2"	63.5	51.5	125	5.5-7	8	550 734	551 381	449 807	551 362	551 366
	80	3"	76.1	160.0	225	5.0-6	10	551 409	551 410	551 411	551 412	551 413
	100	4"	101.6	235.0	225	5.0-6	8	-	-	449 809	551 386	550 279
	<b>Acc. SMS 3008, diaphragm material PTFE/EPDM</b>											
	25	1"	25.0	12.0	80	5.5-7	7.5	445 182	445 183	445 184	445 185	445 186
	40	1 1/2"	38.0	30.0	125	5.5-7	10	445 187	445 188	445 189	445 190	445 191
	50	2"	51.0	51.5	125	5.5-7	7	445 192	445 193	445 194	445 195	445 196
	65	2 1/2"	63.5	51.5	125	5.5-7	7	449 521	551 332	551 469	551 470	551 471
	80	3"	76.1	160.0	225	5.0-6	10	449 522	551 440	551 441	551 442	551 443
	100	4"	101.6	235.0	225	5.0-6	4	-	-	449 523	551 395	551 396
	<b>Acc. BS 4825, diaphragm material EPDM</b>											
	8	1/4"	6.35	1.0	40	5.0-7	10	445 037	445 038	445 039	445 040	445 041
	10	3/8"	9.53	1.0	40	5.0-7	10	445 042	445 043	445 044	445 045	445 046
	15	1/2"	12.70	4.0	50	5.0-7	8.5	447 886	447 887	447 888	447 889	447 890
	20	3/4"	19.05	7.0	63	5.5-7	10	447 891	447 892	447 893	447 894	447 895
	65	2 1/2"	63.5	51.5	125	5.5-7	8	550 734	551 381	449 807	551 362	551 366
	80	3"	76.1	160.0	225	5.0-6	10	551 409	551 410	551 411	551 412	551 413
	100	4"	101.6	235.0	225	5.0-6	8	-	-	449 809	551 386	550 279
	<b>Acc. BS 4825, diaphragm material PTFE/EPDM</b>											
	8	1/4"	6.35	1.0	40	5.0-7	10	445 072	445 073	445 074	445 075	445 076
	10	3/8"	9.53	1.0	40	5.0-7	10	445 077	445 078	445 079	445 080	445 081
	15	1/2"	12.70	4.0	63	5.5-7	5	447 905	447 906	447 907	447 908	447 909
	20	3/4"	19.05	7.0	80	5.5-7	10	447 910	447 911	447 912	447 913	447 914
	65	2 1/2"	63.5	51.5	125	5.5-7	7	449 521	551 332	551 469	551 470	551 471
80	3"	76.1	160.0	225	5.0-6	10	449 522	551 440	551 441	551 442	551 443	
100	4"	101.6	235.0	225	5.0-6	4	-	-	449 523	551 395	551 396	


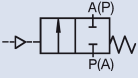
Port connection size equals the orifice diaphragm size except for port connection 65 mm. At port connection 65 mm the orifice diaphragm size equals 50 mm

**i Further versions on request**

**> Additional**  
Versions with reduced spring force

## Ordering chart for valves (other versions on request)

## Body with weld end acc. ASME BPE

	Port connection		External-Ø [mm]	Kv-value water [m³/h]	Actuator size Ø [mm]	Pilot pressure [bar]	Max. operating pressure [bar]	Item no. per surface finish internal/external				
	[mm]	[inch]						Mechanical polished, Ra ≤ 0.5/6.3 µm	Electro polished, Ra ≤ 0.4/3.2 µm	Mechanical polished, Ra ≤ 0.5/1.6 µm	Electro polished, Ra ≤ 0.4/0.8 µm	Mirror finished, Ra ≤ 0.25/0.25 µm
 <b>Control function A</b> 2/2-way, NC by spring return	<b>Acc. ASME BPE, diaphragm material EPDM</b>											
	8	1/4"	6.35	1.0	40	5.0-7	10	448 273	447 896	447 897	447 898	447 899
	10	3/8"	9.53	1.0	40	5.0-7	10	447 900	447 901	447 902	447 903	447 904
	15	1/2"	12.70	4.0	50	5.0-7	8.5	445 047	445 048	445 049	445 050	445 051
	20	3/4"	19.05	7.0	63	5.5-7	10	445 052	445 053	445 054	445 055	445 056
	25	1"	25.40	12.0	80	5.5-7	10	445 057	445 058	445 059	445 060	445 061
	40	1 1/2"	38.10	30.0	100	5.5-7	6.5	445 062	445 063	445 064	445 065	445 066
	50	2"	50.80	51.5	125	5.5-7	8	445 067	445 068	445 069	445 070	445 071
	65	2 1/2"	63.5	51.5	125	5.5-7	8	550 734	551 381	449 807	551 362	551 366
	80	3"	76.1	160.0	225	5.0-6	10	551 409	551 410	551 411	551 412	551 413
	100	4"	101.6	235.0	225	5.0-6	8	-	-	449 809	551 386	550 279
	<b>Acc. ASME BPE, diaphragm material PTFE/EPDM</b>											
	8	1/4"	6.35	1.0	40	5.0-7	10	447 915	447 916	447 917	447 918	447 919
	10	3/8"	9.53	1.0	40	5.0-7	10	447 920	447 921	447 922	447 923	447 924
	15	1/2"	12.70	4.0	63	5.0-7	10	445 082	445 083	445 084	445 085	445 086
	20	3/4"	19.05	7.0	80	5.5-7	10	445 087	445 088	445 089	445 090	445 091
	25	1"	25.40	12.0	80	5.5-7	7.5	445 092	445 093	445 094	445 095	445 096
	40	1 1/2"	38.10	30.0	125	5.5-7	10	445 097	445 098	445 099	445 100	445 100
	50	2"	50.80	51.5	125	5.5-7	7	445 102	445 103	445 104	445 105	445 106
	65	2 1/2"	63.5	51.5	125	5.5-7	7	449 521	551 332	551 469	551 470	551 471
80	3"	76.1	160.0	225	5.0-6	10	449 522	551 440	551 441	551 442	551 443	
100	4"	101.6	235.0	225	5.0-6	4	-	-	449 523	551 395	551 396	


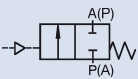
Port connection size equals the orifice diaphragm size except for port connection 65 mm. At port connection 65 mm the orifice diaphragm size equals 50 mm

**i Further versions on request**

**> Additional**  
Versions with reduced spring force

## Ordering chart for valves (other versions on request)


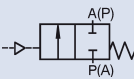
Body with clamp acc. ISO 2852 - SMS 3017 and DIN 32676

	Port connection		External-Ø [mm]	Kv-value water [m³/h]	Actuator size Ø [mm]	Pilot pressure [bar]	Max. operating pressure [bar]	Item no. per surface finish internal/external				
	[mm]	[inch]						Mechanical polished, Ra ≤ 0.5/6.3 µm	Electro polished, Ra ≤ 0.4/3.2 µm	Mechanical polished, Ra ≤ 0.5/1.6 µm	Electro polished, Ra ≤ 0.4/0.8 µm	Mirror finished, Ra ≤ 0.25/0.25 µm
 <b>Control function A</b> 2/2-way, NC by spring return	<b>Acc. ISO 2852 - SMS 3017, diaphragm material EPDM</b>											
	25	1"	22.6	12.0	63	5.0-7	3	-	-	154 132	154 146	-
					80	5.5-7	10	445 387	445 388	445 389	445 390	445 391
	40	1 1/2"	35.6	30.0	100	5.5-7	6.5	445 392	445 393	445 394	445 395	445 396
					125	5.5-7	10	-	-	154 134	154 148	-
	50	2"	48.6	51.5	100	5.5-7	4.5	-	-	154 135	154 149	-
					125	5.5-7	8	445 397	445 398	445 399	445 400	445 401
	<b>Acc. ISO 2852 - SMS 3017, diaphragm material PTFE/EPDM</b>											
	25	1"	22.6	12.0	80	5.5-7	7.5	445 402	445 403	445 404	445 405	445 406
					100	5.5-7	6	-	-	154 133	154 147	-
	40	1 1/2"	35.6	30.0	125	5.5-7	10	445 407	445 408	445 409	445 410	445 411
					100	5.5-7	2.5	-	-	154 136	154 150	-
50	2"	48.6	51.5	125	5.5-7	7	445 412	445 413	445 414	445 415	445 416	
				<b>Acc. DIN 32676, diaphragm material EPDM</b>								
15	1/2"	16.0	4.0	50	5.0-7	8.5	445 336	445 337	445 338	445 339	445 340	
				63	5.0-7	10	-	-	154 138	154 152	-	
20	3/4"	20.0	7.0	63	5.5-7	10	445 341	445 342	445 343	445 344	445 345	
				80	5.0-7	10	-	-	154 140	154 154	-	
25	1"	26.0	12.0	63	5.0-7	3	-	-	154 141	154 155	-	
				80	5.5-7	10	445 346	445 347	445 348	445 349	445 350	
40	1 1/2"	38.0	30.0	100	5.5-7	6.5	445 351	445 352	445 353	445 354	445 355	
				125	5.5-7	10	-	-	154 143	154 157	-	
50	2"	50.0	51.5	100	5.5-7	4.5	-	-	154 144	154 158	-	
				125	5.5-7	8	445 356	445 357	445 358	445 359	445 360	
<b>Acc. DIN 32676, diaphragm material PTFE/EPDM</b>												
15	1/2"	16.0	4.0	50	5.0-7	5	-	-	154 137	154 151	-	
				63	5.0-7	10	445 361	445 362	445 363	445 364	445 365	
20	3/4"	20.0	7.0	63	5.5-7	5	-	-	154 139	154 153	-	
				80	5.0-7	10	445 366	445 367	445 368	445 369	445 370	
25	1"	26.0	12.0	80	5.5-7	7.5	445 371	445 372	445 373	445 374	445 375	
40	1 1/2"	38.0	30.0	100	5.5-7	6	-	-	154 142	154 156	-	
				125	5.5-7	10	445 376	445 377	445 378	445 379	445 380	
50	2"	50.0	51.5	100	5.5-7	2.5	-	-	154 145	154 159	-	
				125	5.5-7	7	445 381	445 382	445 383	445 384	445 385	

**i Further versions on request****> Additional**  
Versions with reduced spring force

Ordering chart for valves (other versions on request)

Body with clamp acc. ASME BPE, short and long connection

	Port connection		External-Ø [mm]	Kv-value water [m³/h]	Actuator size Ø [mm]	Pilot pressure [bar]	Max. operating pressure [bar]	Item no. per surface finish internal/external				
	[mm]	[inch]						Mechanical polished, Ra ≤ 0.5/6.3 µm	Electro polished, Ra ≤ 0.4/3.2 µm	Mechanical polished, Ra ≤ 0.5/1.6 µm	Electro polished, Ra ≤ 0.4/0.8 µm	Mirror finished, Ra ≤ 0.25/0.25 µm
 <p><b>Control function A</b> 2/2-way, NC by spring return</p>	<b>Acc. ASME BPE short connection, diaphragm material EPDM</b>											
	8	1/4"	25.0	1.0	40	5.0-7	10	445 266	445 267	445 268	445 269	445 270
	10	3/8"	25.0	1.0	40	5.0-7	10	445 271	445 272	445 273	445 274	445 275
	15	1/2"	25.0	4.0	50	5.0-7	8.5	445 276	445 277	445 278	445 279	445 280
	20	3/4"	25.0	7.0	63	5.5-7	10	445 281	445 282	445 283	445 284	445 285
	25	1"	50.5	12.0	80	5.5-7	10	445 286	445 287	445 288	445 289	445 290
	40	1 1/2"	50.5	30.0	100	5.5-7	6.5	445 291	445 292	445 293	445 294	445 295
	50	2"	64.0	51.5	125	5.5-7	8	445 296	445 297	445 298	445 299	445 300
	65	2 1/2"	77.5	51.5	125	5.5-7	8	551 465	551 466	551 464	551 467	551 468
	80	3"	91.0	160.0	225	5.0-6	10	551 424	551 425	551 426	551 427	551 428
	<b>Acc. ASME BPE short connection, diaphragm material PTFE/EPDM</b>											
	8	1/4"	25.0	1.0	40	5.0-7	10	445 301	445 302	445 303	445 304	445 305
	10	3/8"	25.0	1.0	40	5.0-7	10	445 306	445 307	445 308	445 309	445 310
	15	1/2"	25.0	4.0	63	5.0-7	10	445 311	445 312	445 313	445 314	445 315
	20	3/4"	25.0	7.0	80	5.5-7	10	445 316	445 317	445 318	445 319	445 320
	25	1"	50.5	12.0	80	5.5-7	7.5	445 321	445 322	445 323	445 324	445 325
	40	1 1/2"	50.5	30.0	125	5.5-7	10	445 326	445 327	445 328	445 329	445 330
	50	2"	64.0	51.5	125	5.5-7	7	445 331	445 332	445 333	445 334	445 335
	65	2 1/2"	77.5	51.5	125	5.5-7	7	551 473	551 474	551 472	551 475	551 476
	80	3"	91.0	160.0	225	5.0-6	10	551 156	551 157	551 158	551 159	551 160
	<b>Acc. ASME BPE long connection, diaphragm material EPDM</b>											
	8	1/4"	25.0	1.0	40	5.0-7	10	445 197	445 198	445 199	445 200	445 201
	15	1/2"	25.0	4.0	50	5.0-7	8.5	445 207	445 208	445 209	445 210	445 211
	20	3/4"	25.0	7.0	63	5.5-7	10	445 212	445 213	445 214	444 151	445 215
	25	1"	50.5	12.0	80	5.5-7	10	445 216	445 217	445 218	445 219	445 220
	40	1 1/2"	50.5	30.0	100	5.5-7	6.5	445 221	445 222	445 223	445 224	445 225
	50	2"	64.0	51.5	125	5.5-7	8	445 226	445 227	445 228	445 229	445 230
	<b>Acc. ASME BPE long connection, diaphragm material PTFE/EPDM</b>											
	8	1/4"	25.0	1.0	40	5.0-7	10	445 231	445 232	445 233	445 234	445 235
	15	1/2"	25.0	4.0	63	5.0-7	10	445 241	445 242	445 243	445 244	445 245
	20	3/4"	25.0	7.0	80	5.5-7	10	445 246	445 247	445 248	445 249	445 250
	25	1"	50.5	12.0	80	5.5-7	7.5	445 251	445 252	445 253	445 254	445 255
40	1 1/2"	50.5	30.0	125	5.5-7	10	445 256	445 257	445 258	445 259	445 260	
50	2"	64.0	51.5	125	5.5-7	7	445 261	445 262	445 263	445 264	445 265	

Port connection size equals the orifice diaphragm size except for port connection 65 mm. At port connection 65 mm the orifice diaphragm size equals 50 mm.

**i Further versions on request**

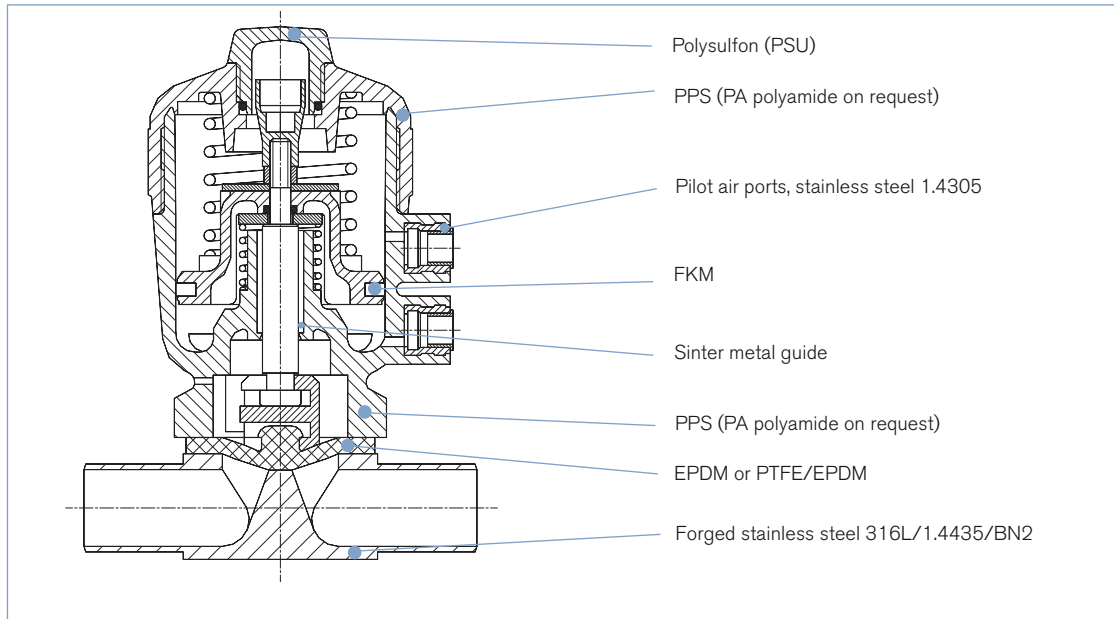
**> Additional**  
Versions with reduced spring force

DTS 1000010981 EN Version: M Status: RL (released | freigegeben | validé) printed: 14.01.2009

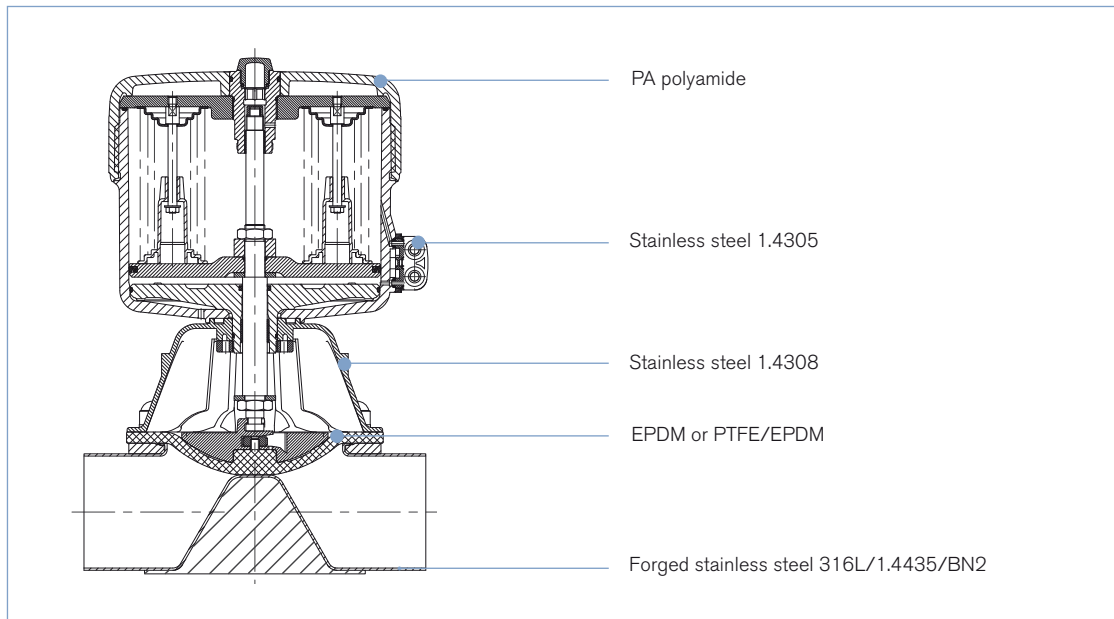


## Materials

### DN 8-50



### DN 65-100



## Approvals

### Suitable for foodstuffs / sterile applications



- The composition of the EPDM and PTFE/EPDM diaphragms corresponds to the *Code of Federal Regulations*, published by the *FDA* (Food and Drug Administration, USA).
- The EPDM diaphragms correspond to the *KTW-Recommendation* (Plastics in the Drinking Water Sector). A Manufacturer's Declaration will be supplied on request.

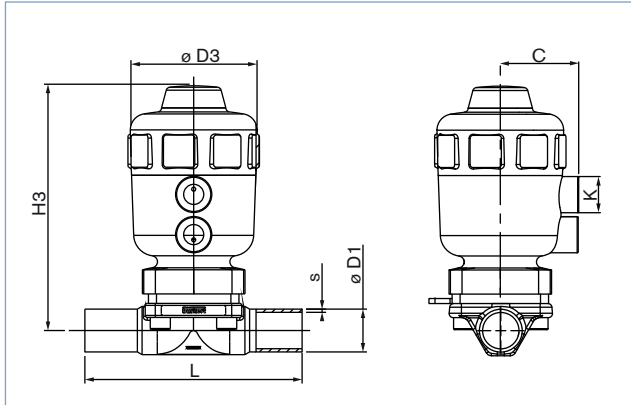


- The diaphragm valves are 3-A approved (3-A Sanitary Standards Symbol Administrative Council)

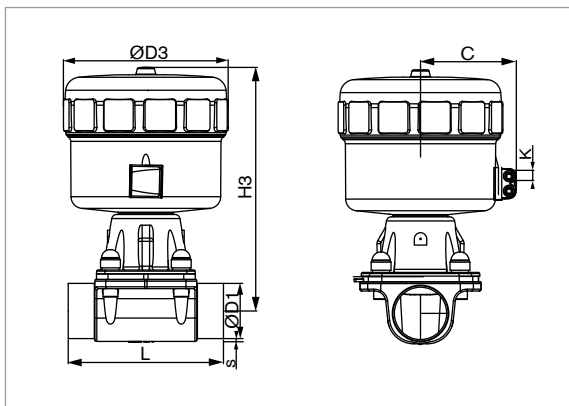
Dimensions [mm]

Body with weld end

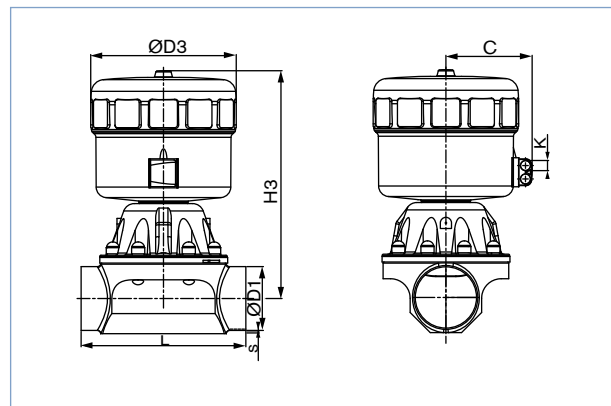
DN 8-50



DN 65-80



DN 100



Dimensions acc. to EN ISO 1127/ISO 4200, DIN 11850 S2 and SMS 3008 [mm]

Port connection [mm]	[inch]	Actuator size Ø	C	K	L	H3	ØD3	EN ISO 1127/ ISO 4200			DIN 11850 S2		SMS 3008	
								ØD1	s	ØD1	s	ØD1	s	
8	1/4"	40	34	G 1/8	90.0	85.0	53.0	13.5	1.6	-	-	-	-	
10	3/8"	40	34	G 1/8	90.0	85.0	53.0	17.2	1.6	13.0	1.5	-	-	
15	1/2"	50	39	G 1/4	110.0	121.0	64.0	21.3	1.6	19.0	1.5	-	-	
		63	52	G 1/4	110.0	138.0	80.0	21.3	1.6	23.0	1.5	-	-	
20	3/4"	63	52	G 1/4	119.0	148.0	80.0	26.9	1.6	23.0	1.5	-	-	
		80	60	G 1/4	119.0	174.0	101.0	26.9	1.6	23.0	1.5	-	-	
25	1"	63	52	G 1/4	129.0	157.0	80.0	33.7	2.0	29.0	1.5	25.0	1.2	
		80	60	G 1/4	129.0	177.0	101.0	33.7	2.0	29.0	1.5	25.0	1.2	
32	1 1/4"	100	73	G 1/4	161.0	233.0	127.0	42.4	2.0	35.0	1.5	38.0	1.2	
		125	86	G 1/4	161.0	272.0	153.0	42.4	2.0	35.0	1.5	38.0	1.2	
40	1 1/2"	100	73	G 1/4	161.0	233.0	127.0	48.3	2.0	41.0	1.5	38.0	1.2	
		125	86	G 1/4	161.0	272.0	153.0	48.3	2.0	41.0	1.5	38.0	1.2	
50	2"	100	73	G 1/4	192.0	244.0	127.0	60.3	2.0	53.0	1.5	51.0	1.2	
		125	86	G 1/4	192.0	278.0	153.0	60.3	2.0	53.0	1.5	51.0	1.2	
65	2 1/2"	125	86	G 1/4	190.0	278.0	153.0	76.1	2.0	70.0	2.0	63.5	1.6	
		225	155	G 1/4	250.0	394.0	261.0	76.1	2.0	70.0	2.0	-	-	
80	3"	225	155	G 1/4	250.0	394.0	261.0	88.9	2.3	85.0	2.0	76.15	1.6	
100	4"	225	155	G 1/4	295.0	409.0	261.0	114.3	2.3	104.0	2.0	101.6	2.0	

## Dimensions [mm]

Body with weld end, *cont.*

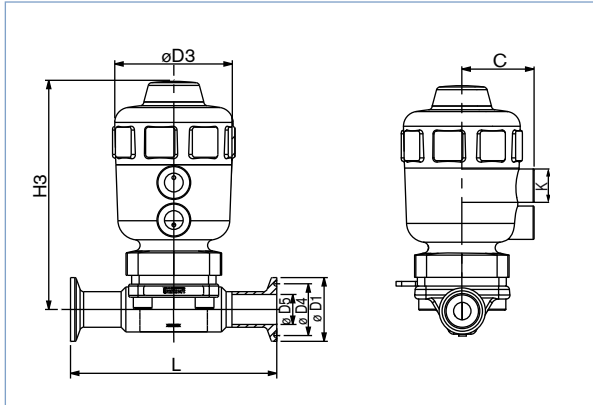
Dimensions acc. to BS 4825 and ASME BPE [mm]

Port connection		Actuator size Ø	C	K	L	H3	ØD3	BS 4825		ASME BPE	
[mm]	[inch]							ØD1	s	ØD1	s
8	1/4"	40	34	G 1/8	78.0	85.0	53.0	6.35	1.2	6.35	0.89
10	3/8"	40	34	G 1/8	89.0	85.0	53.0	9.53	1.2	9.53	0.89
15	1/2"	50	39	G 1/4	108.0	121.0	64.0	12.70	1.2	12.70	1.65
		63	52	G 1/4	108.0	138.0	80.0	12.70	1.2	12.70	1.65
20	3/4"	63	52	G 1/4	117.0	148.0	80.0	19.05	1.2	19.05	1.65
		80	60	G 1/4	117.0	174.0	101.0	19.05	1.2	19.05	1.65
25	1"	63	52	G 1/4	127.0	157.0	80.0	25.40	1.65	25.40	1.65
		80	60	G 1/4	127.0	177.0	101.0	25.40	1.65	25.40	1.65
40	1 1/2"	100	73	G 1/4	159.0	233.0	127.0	38.10	1.65	38.10	1.65
		125	86	G 1/4	159.0	272.0	153.0	38.10	1.65	38.10	1.65
50	2"	100	73	G 1/4	190.0	244.0	127.0	50.80	1.65	50.80	1.65
		125	86	G 1/4	190.0	278.0	153.0	50.80	1.65	50.80	1.65
65	2 1/2"	125	86	G 1/4	190.0	278.0	153.0	–	–	63.5	1.65
80	3"	225	155	G 1/4	250.0	394.0	261.0	–	–	76.15	1.65
100	4"	225	155	G 1/4	295.0	409.0	261.0	–	–	101.6	2.0

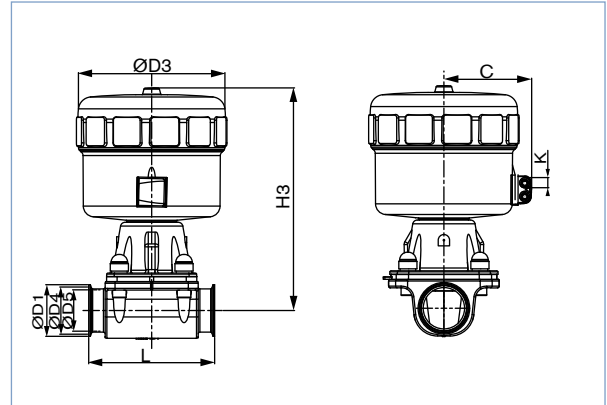
Dimensions [mm]

Body with clamp connection

DN 8-50



DN 65-80



Dimensions acc. to ISO 2852 and DIN 32676 [mm]

Port connection [mm]	[inch]	Actuator size			L	H3	ØD3	ØD1	ØD4	ISO 2852	DIN 32676
		Ø	C	K						ØD5	ØD5
15	1/2"	50	39	G 1/8	110.0	121.0	64.0	34.0	27.5	-	16.0
		63	52	G 1/4	110.0	138.0	80.0	34.0	27.5	-	16.0
20	3/4"	63	52	G 1/4	119.0	148.0	80.0	34.0	27.5	-	20.0
		80	60	G 1/4	119.0	174.0	101.0	34.0	27.5	-	20.0
25	1"	63	52	G 1/4	129.0	157.0	80.0	50.5	43.5	22.6	26.0
		80	60	G 1/4	129.0	177.0	101.0	50.5	43.5	22.6	26.0
40	1 1/2"	100	73	G 1/4	161.0	233.0	127.0	50.5	43.5	35.6	38.0
		125	86	G 1/4	161.0	272.0	153.0	50.5	43.5	35.6	38.0
50	2"	100	73	G 1/4	192.0	244.0	127.0	64.0	56.5	48.6	50.0
		125	86	G 1/4	192.0	278.0	153.0	64.0	56.5	48.6	50.0

Dimensions acc. to ASME BPE long connection and short connection [mm]

Port connection [mm]	[inch]	Actuator size			Long conn.	Short conn.	H3	ØD3	ØD1	ØD4	ØD5
		Ø	C	K	L	L					
8	1/4"	40	34	G 1/8	78.0	64.5	85.0	53.0	25.0	20.22	4.57
10	3/8"	40	34	G 1/8	89.0	89.0	85.0	53.0	25.0	20.22	7.75
15	1/2"	50	39	G 1/4	108.0	89.0	121.0	64.0	25.0	20.22	9.40
		63	52	G 1/4	108.0	89.0	138.0	80.0	25.0	20.22	9.40
20	3/4"	63	52	G 1/4	117.0	102.0	148.0	80.0	25.0	20.22	15.75
		80	60	G 1/4	117.0	102.0	174.0	101.0	25.0	20.22	15.75
25	1"	63	52	G 1/4	127.0	114.0	157.0	80.0	50.5	43.5	22.20
		80	60	G 1/4	127.0	114.0	177.0	101.0	50.5	43.5	22.20
40	1 1/2"	100	73	G 1/4	159.0	140.0	233.0	127.0	50.5	43.5	34.90
		125	86	G 1/4	159.0	140.0	272.0	153.0	50.5	43.5	34.90
50	2"	100	73	G 1/4	190.0	159.0	244.0	127.0	64.0	56.5	47.60
		125	86	G 1/4	190.0	159.0	278.0	153.0	64.0	56.5	47.60
65	2 1/2"	125	86	G 1/4	-	190.0	278.0	153.0	77.5	70.5	60.2
80	3"	225	155	G 1/4	-	222.0	394.0	261.0	91.0	83.5	72.9

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

[www.burkert.com](http://www.burkert.com)

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

Subject to alteration.  
© Christian Bürkert GmbH & Co. KG

0901/9\_EU-en\_00891678