Angle Seat Valve System for on/off Control and Globe Valve System for on/off Control

- Long service life
- Easy integration of automation units with ELEMENT
- Stainless steel housing
- Suitable for 10 bar(g)/145 PSI steam

CLICK ME

FOR DATA SHEET

The design of the System Type 8801 On/Off ELEMENT enables the easy integration of automation units whether they are electrical/optical position feedback, pneumatic control units or an optional integrated fieldbus interface. The fully integrated system with valve and automation system has a compact and smooth design, integrated pneumatic lines, IP65/67/NEMA4X protection class and superior chemical resistance.

2100 - In line with Burkert's philosophy for modular valves and sensors the construction of the 2100 angle-seat valve fulfills tough criteria for process environments. Unrivalled cycle life and sealing integrity is guaranteed by the proven self adjusting spindle packing with V-seals.

2101 - The globe valve Type 2101 is specially optimized for decentralized process automation and fulfills tough criteria for process environments. The design enables the easy integration of automation units whether they are electrical/optical position feedback, pneumatic control units or an integrated fieldbus interface. Unrivalled service life and sealing integrity is guaranteed by the proven self-adjusting spindle packing with chevron seals.

8691 - The Control Head Type 8691 is optimized for integrated mounting on the 21XX process valve series. The registration of the valve end position is done through a contact-free analog position sensor, which automatically recognizes and saves the valve end position through the Teach function when starting up. The integrated pilot valve controls single acting actuators and provides two position feedback via two PNP transistors.

Technical Data

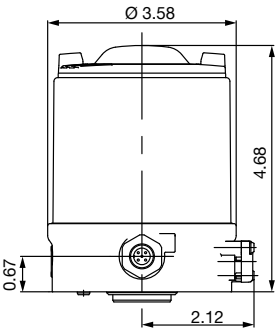
	2100 Angle Seat	2101 Globe
Orifice	0.5" (DN15) to 2.5" (DN65)	0.5" (DN15) to 4" (DN100)
Medium temperature	-10°C to +185°C; 14°F to 365°F	
High temp. option	(CF38) up to 446F (230C)	
Ambient temperature	-10ºC to +60ºC; 14°F to 140°F (push-in air ports) -10ºC to +100ºC; 14°F to 212°F (threaded air ports)	
Body material	316L stainless steel	
Sealing material	PTFE	
Actuator material		
Actuator	PPS	
Cover	Stainless steel 1.4561 (316Ti)	
Control medium	Instrument air at 75-100 PSI	
Flow direction	Under seat anti water-hammer/ above seat for steam and gases	
Port connection	2100 NPT/OD Tube/Clamp and 2301ANSI Flanged*	
Safe position	Normally closed	

*other options available

8691 Technical Data

Material	
Body	0.5" (DN15) to 2.5" (DN65)
Cover	PC
Sealing	EPDM
Control medium	neutral gases, air, quality classes acc. to ISO 8573-1
Dust concentration	Class 7 (<40µm particle size)
Particle density	Class 5 (<10mg/m³)
Pressure condensation	Class 3 (<-20°C)
Oil concentration	Class X (<25mg/m³)
Supply pressure	43.5-101.5 PSI
Pilot air ports	316L stainless steel
Seal material	PTFE
Position feedback	Analogue position sensor (contact-free) with teach function; switchport (PNP)
Ambient temperature	
with pilot valve	14°F to 131°F; -10°C to 55°C
Protection type	IP65 and IP67 according to EN 60529, Type 4X
Approvals	cULus Cert. No 238179

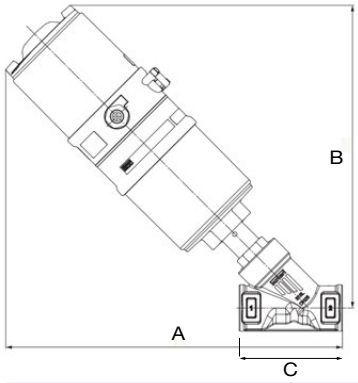
8691 Dimensions [inch] (see datasheet for more details)



Actuator size Ø [mm]	Ø A
70	3.58
70	3.58
90	4.72
130	6.26
130	6.26

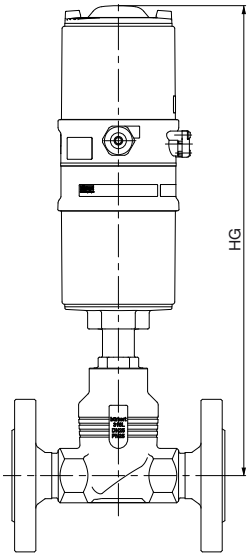
Dimensions [inch] (see datasheet for details)

8801 NPT end



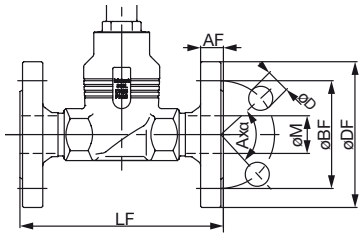
Connection	Actuator [mm]	A	B	C
1/2"	70	9.9	11.0	2.58
3/4"	70	10.2	11.4	2.95
1"	70	10.4	11.7	3.54
1 1/2"	130	14.0	15.4	4.72
2"	130	14.5	16.3	5.91
2 1/2"	130	15.1	17.3	7.28

2101 flanged body



Orifice [mm]	Orifice [inch]	Actuator [mm]	HG [inch]
15	1/2"	70	13.622
20	3/4"	70	13.858
25	1"	70	13.976
40	1 1/2"	90	17.362
50	2"	130	19.646
65	2 1/2"	130	20.787
80	3"	130	22.087
100	4"	130	22.48

2101 flanged body



Port size (tube) [inch]	Actuator size [mm]	Actuator [mm] ØDF	LF	ØBF	AF	ØD	ØMF
1/2	70	3.50	7.24	2.38	0.41	0.61	0.61
3/4	70	3.89	7.24	2.75	0.50	0.61	0.81
1	70	4.25	7.24	3.11	0.55	0.61	1.05
1-1/2	90	5.00	8.74	3.88	0.68	0.61	1.05
2	130	5.98	10.00	4.75	0.75	0.75	2.07
2 1/2	130	7.00	10.86	5.50	0.87	0.75	2.48
3	130	7.48	11.73	6.00	0.94	0.75	3.07
4	130	9.01	13.85	7.50	0.94	0.75	4.01

Ordering charts

Angle Seat-Valve System On/Off (2100 + 8691)

Size	Actuator [mm]	Cv	Min. pilot pressure [PSI]	Max. pressure [PSI]	NPT	Tube	Clamp
Flow from below the seat (liquids)							
1/2"	70	5.8	73	363	20056996	20063366	20063693
3"4"	70	12.7	73	363	20063370	20056993	20063694
1"	70	20.8	73	232	20063381	20063365	20056994
1 1/2"	90	46.2	73	232	20063380	20063372	20063375
2"	130	71.7	73	232	20063371	20063373	20063376
2 1/2"	130	109.8	81	218	20063676	20063374	20063698
Flow from above the seat (steam and other gases)							
1/2"	70	5.9		232	20063369	20063704	
3"4"	70	13.87		232	20063701	20063705	
1"	70	21.96		232	20063702	20063707	
1 1/2"	90	46.34		232	20063379	20063709	
2"	90	63.58		232	20061939	20063710	
2 1/2"	90	98.26		232	20063703		

Valve System On/Off (2101 + 8691)

Size	Actuator [mm]	Min. pilot pressure [PSI]	Max. pressure [PSI]	Item no. ANSI Flange
Flow direction below the seat (gases and liquids)				
1/2"	70	70	362	20063377
3/4"	70	70	290	20063711
1"	70	70	232	20063712
1 1/2"	90	72.5	232	20063713
2"	130	72.5	232	20063714
2 1/2"	130	82	232	20063378
3"	130	82	145	20063715
4"	130	82	87	20063716