

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

8801 / 2100 / 2101

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



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

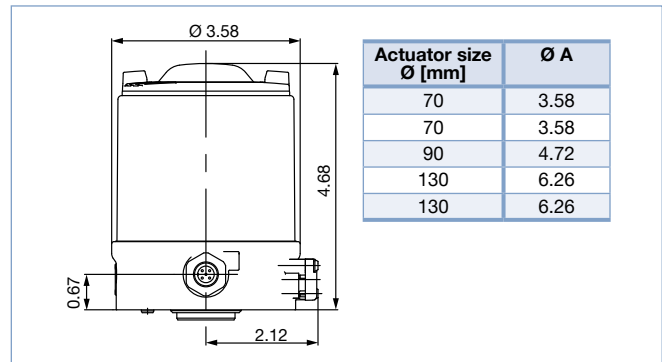
	2100 Angle Seat	2101 Globe
<b>Orifice</b>	0.5" (DN15) to 2.5" (DN65)	0.5" (DN15) to 4" (DN100)
<b>Medium temperature</b>	-10°C to +185°C; 14°F to 365°F	
<b>Ambient temperature</b>	-10°C to +60°C; 14°F to 140°F (push-in air ports) -10°C to +100°C; 14°F to 212°F (threaded air ports)	
<b>Body material</b>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

\*other options available

## 8691 Technical Data

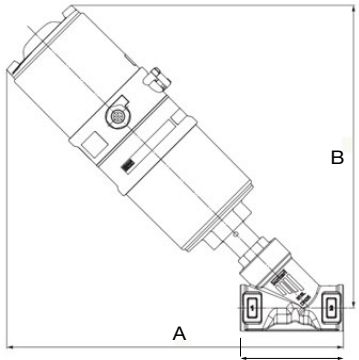
<b>Material</b>	
Body	0.5" (DN15) to 2.5" (DN65)
Cover	PC
Sealing	EPDM
<b>Control medium</b>	neutral gases, air, quality classes acc. to ISO 8573-1
Dust concentration	Class 7 (<40µm particle size)
Particle density	Class 5 (<10mg/m³)
Pressure condensation	Class 3 (<-20°C)
Oil concentration	Class X (<25mg/m³)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

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



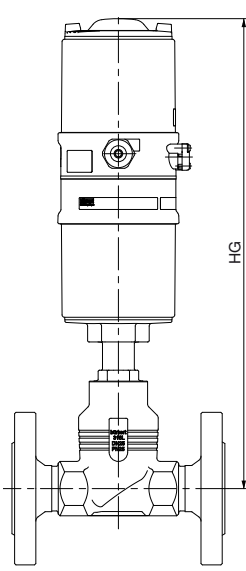
Dimensions [inch] (see datasheet for details)

**8801 NPT end**



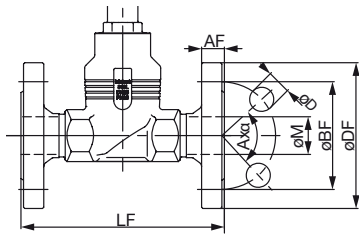
Connection	Actuator [mm]	A	B	C
1/2"	70	9.9	11.0	2.58
3/4"	70	10.2	11.4	2.95
1"	70	10.4	11.7	3.54
1 1/2"	130	14.0	15.4	4.72
2"	130	14.5	16.3	5.91
2 1/2"	130	15.1	17.3	7.28

**2101 flanged body**



Orifice		Actuator	HG
[mm]	[inch]	[mm]	[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**



























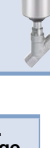
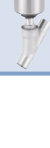



Port size (tube) [inch]	Actuator size [mm]	ØDF	LF	ØBF	AF	ØD	ØMF
1/2"	70	3.50	7.24	2.38	0.41	0.61	0.61
3/4"	70	3.89	7.24	2.75	0.50	0.61	0.81
1"	70	4.25	7.24	3.11	0.55	0.61	1.05
1-1/2"	90	5.00	8.74	3.88	0.68	0.61	1.05
2"	130	5.98	10.00	4.75	0.75	0.75	2.07
2 1/2"	130	7.00	10.86	5.50	0.87	0.75	2.48
3"	130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

8801 / 2100 / 2101

Ordering charts

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

Size	Actuator [mm]	Cv	Min. pilot pressure [PSI]	Max. pressure [PSI]	NPT	Tube	Clamp
<b>Flow from below the seat (liquids)</b>							
1/2"	70	5.8	73	363	 <a href="#">303 637</a>	 <a href="#">286 261</a>	 <a href="#">290 366</a>
3/4"	70	12.7	73	363	 <a href="#">302 452</a>	 <a href="#">274 542</a>	 <a href="#">302 523</a>
1"	70	20.8	73	232	 <a href="#">464 795</a>	 <a href="#">253 137</a>	 <a href="#">295 044</a>
1 1/2"	90	46.2	73	232	 <a href="#">307 516</a>	 <a href="#">302 457</a>	 <a href="#">302 526</a>
2"	130	71.7	73	232	 <a href="#">302 455</a>	 <a href="#">302 521</a>	 <a href="#">302 527</a>
2 1/2"	130	109.8	81	218	 <a href="#">302 456</a>	 <a href="#">302 522</a>	 <a href="#">302 529</a>
<b>Flow from above the seat (steam and other gases)</b>							
1/2"	70	5.9		232	 <a href="#">295 043</a>	 <a href="#">306 674</a>	
3/4"	70	13.87		232	 <a href="#">306 647</a>	 <a href="#">268 818</a>	
1"	70	21.96		232	 <a href="#">294 405</a>	 <a href="#">306 675</a>	
1 1/2"	90	46.34		232	 <a href="#">306 672</a>	 <a href="#">306 676</a>	
2"	90	63.58		232	 <a href="#">295 174</a>	 <a href="#">306 677</a>	
2 1/2"	90	98.26		232	 <a href="#">306 673</a>		

Valve System On/Off (2101 + 8691)

Size	Actuator [mm]	Min. pilot pressure [PSI]	Max. pressure [PSI]	Item no. ANSI Flange
<b>Flow direction below the seat (gases and liquids)</b>				
1/2"	70	70	362	<a href="#">305 469</a>
3/4"	70	70	290	<a href="#">305 470</a>
1"	70	70	232	<a href="#">261 751</a>
1 1/2"	90	72.5	232	<a href="#">305 472</a>
2"	130	72.5	232	<a href="#">305 473</a>
2 1/2"	130	82	232	<a href="#">305 474</a>
3"	130	82	145	<a href="#">305 475</a>
4"	130	82	87	<a href="#">305 477</a>

