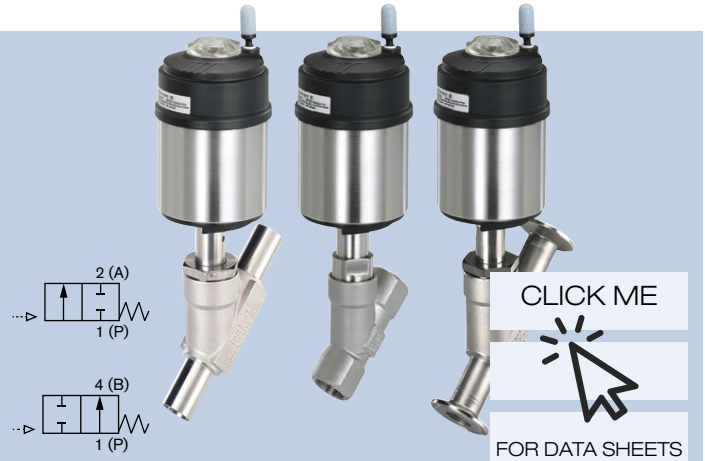


On-Off Pneumatically Operated 2/2-way ELEMENT Angle Valve

2100

NPT 1/2" - NPT 2 1/2"

- Perfect for clean applications
- Wide range of accessories
- Compressed air recycling control function with ELEMENT control tops
- With flow direction below or above seat
- High flow rates
- High cycle life



2100 ELEMENT angle seat valves are designed for unmatched life cycle performance. Shown on this page in a normally closed configuration, with underseat flow for liquids, these valves exhibit live loaded packing with all of the advantages of the ELEMENT platform: Intelligent, Integrated and Beautiful.

Technical Data

Pressure range	See Ordering Chart
Viscosity	max. 600 mm ² /s
Temperature media	14 °F to 365 °F (-10 °C to +185 °C)
Ambient temperature	32 °F to 131 °F (0 °C to +55 °C) (with integrated control) 32 °F to 140 °F (0 °C to +60 °C) (connector hose air supply) 32 °F to 212 °F (0 °C to +100 °C) (threaded piping)
Body material	316L stainless steel
Seal material	PTFE
Medium	Water, alcohol, oils, fuels, hydraulic fluids, salt solution, alkali solutions, organic solvents, steam, optional fuel gas, (EC Gas Appliances Directive 2009/142/EG)
Actuator material	Actuator PPS Cover stainless steel 1.4561 (316Ti)
Control medium	Neutral gases, air
Max. pilot pressure	max. 145 PSI; actuator size 130 mm, 101 PSI
Pilot air ports	Threaded ports G1/8 stainless steel
Port connection	Threaded, weld end, clamp
Spindle packing	PTFE seal with spring compensation
Safe position	Normally closed, normally open

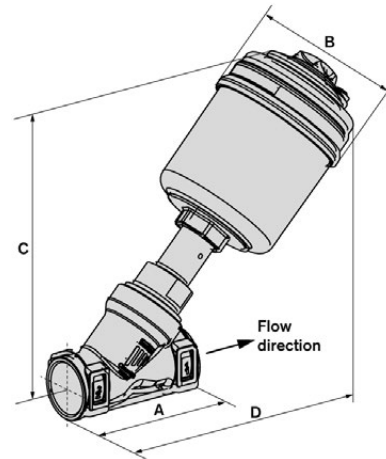
Ordering Chart

Stainless Steel 316L, NPT Threaded					
Size	Orifice [mm]	Actuator [mm]	Pressure [PSI]	Cv	Item no.
1/2"	15	50	362	5.6	213644
1/2"	15	70	362	5.8	213645
3/4"	20	70	290	12.7	213646
1"	25	70	232	20.8	213647
1 1/4"	32	70	123	31.2	213648
1 1/4"	32	90	232	32.4	213649
1 1/2"	40	70	87	44.0	213650
1 1/2"	40	90	232	46.3	213651
2"	50	90	145	63.6	188641
2"	50	130	232	71.7	188642
2 1/2"	65	90	73	98.3	239457
2 1/2"	65	130	232	109.9	239473

Envelope Dimensions [inch] (see datasheet for details)

Dimensions shown for threaded version for others please see datasheet

Pilot air ports for 6/4 mm tubing

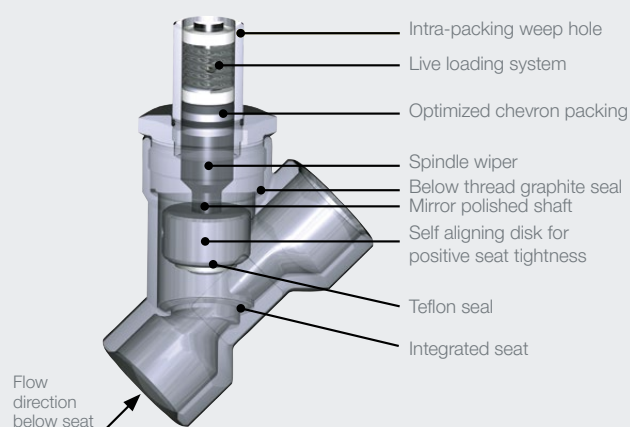
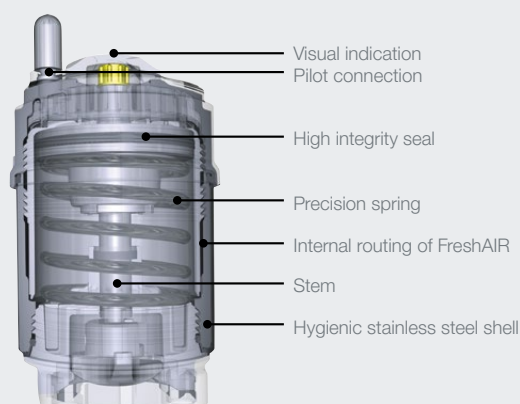


Port connection	Actuator [mm]	A	B	C	D
NPT 1/2"	50	2.55	2.53	6.22	7.28
NPT 1/2"	70	2.55	3.58	6.81	7.91
NPT 3/4"	50	2.95	2.53	6.53	7.67
NPT 3/4"	70	2.95	3.58	7.12	8.30
NPT 1"	50	3.54	2.53	6.77	8.03
NPT 1"	70	3.54	3.58	7.36	8.66
NPT 1 1/4"	70	4.33	3.58	7.67	9.25
NPT 1 1/4"	90	4.33	4.72	9.44	10.90
NPT 1 1/2"	70	4.72	3.58	7.75	9.29
NPT 1 1/2"	90	4.72	4.72	9.52	10.94
NPT 2"	70	5.90	3.58	8.42	10.31
NPT 2"	90	5.90	4.72	10.03	11.85
NPT 2"	130	5.90	6.25	12.04	13.81

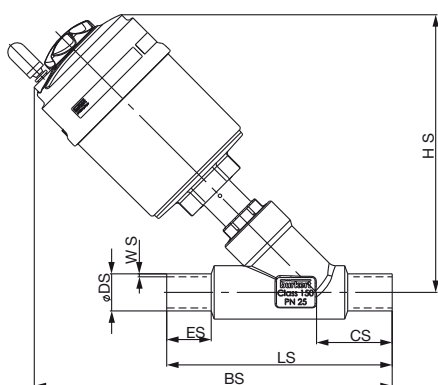
Options

- Double acting
- Solenoid pilot valves
- Vacuum version
- Feedback switches

Sectional Drawings

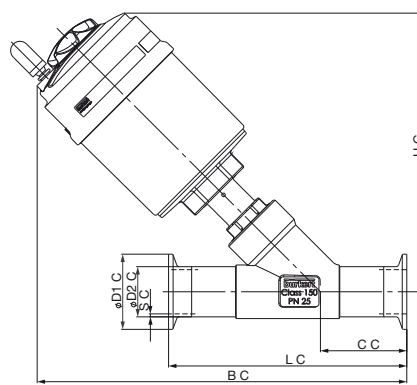


Dimensions [inch] (see datasheet for further details)



Weld End OD Tube

Size	HS	BS	CS	LS	ES	ØDS	WS
1/2"	6.42 7.01	8.35 8.98	1.81	5.32	1.18	0.5	0.06
3/4"	7.32	9.49	2.05	5.71	1.18	0.75	0.06
1"	7.40	9.53	2.01	5.98	1.18	1.00	0.06
1-1/2"	7.91 9.65	10.39 12.09	2.36	7.17	1.18	1.50	0.06
2"	10.28 12.28	12.83 14.80	2.52	8.27	1.18	2.00	0.06
2-1/2"	10.75 12.76	12.99 14.96	2.20	9.06	1.02	2.50	0.06
3"	10.59	12.99	2.20	12.99	1.02	3	0.06



Clamp

Size	HC	BC	CC	LC	Ø D1C	Ø D2C	SC
1/2"	6.42 7.01	8.46 9.09	1.93	5.12	1.00	0.50	0.6
3/4"	7.32	9.69	2.22	5.91	1.00	0.75	0.6
1"	7.40	9.80	2.28	6.30	2.00	1.00	0.6
1-1/2"	7.91 9.65	9.57 12.44	2.72	7.87	2.00	1.50	0.6
2"	10.28 12.28	13.39 15.31	3.05	9.06	2.52	2.00	0.6
2-1/2"	10.28 12.28	13.39 15.31	3.31	11.26	2.52	2.50	0.6

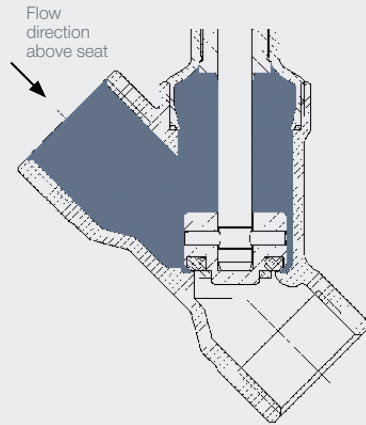
Ordering Charts

Stainless Steel 316L, Weld end acc. to ASME BPE

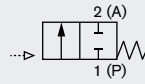
Size	Orifice [mm]	Actuator [mm]	Pressure [PSI]	Cv	Item no.
1/2"	15	50	362	5.6	187077
1/2"	15	70	362	5.8	188726
3/4"	20	70	290	12.7	188727
1"	25	70	232	20.8	188728
1 1/2"	40	70	87	44.0	188729
1 1/2"	40	90	232	46.3	188730
2"	50	90	145	63.6	188731
2"	50	130	232	71.7	188732
2 1/2"	65	90	73	98.3	239461
2 1/2"	65	130	232	109.9	239478
3"	65	130	232	111.2	385194

Stainless Steel 316L, Clamp acc. to ASME BPE

Size	Orifice [mm]	Actuator [mm]	Pressure [PSI]	Cv	Item no.
1/2"	15	50	362	5.6	187103
1/2"	15	70	362	5.8	188806
3/4"	20	70	290	12.7	188807
1"	25	70	232	20.8	188808
1 1/2"	40	70	87	44.0	188809
1 1/2"	40	90	232	46.3	188810
2"	50	90	145	63.6	188811
2"	50	130	232	71.1	188812
2 1/2"	65	90	73	98.3	293842
2 1/2"	65	130	232	109.9	329535



Control function A



Pneumatically operated on/off valve, normally closed by spring force, flow direction above seat

Attention!

Valves with flow above the seat are only usable for compressible medium. There is danger of waterhammer!

Ordering Charts

Stainless Steel 316L, NPT Threaded					
Size	Orifice [mm]	Actuator [mm]	Pressure [PSI]	Cv	Item no.
1/2"	15	50	232	5.6	213652
1/2"	15	70	232	5.8	213653
3/4"	20	70	232	12.7	213655
1"	25	70	232	20.8	213657
1 1/4"	32	70	232	31.2	213658
1 1/2"	40	70	232	44.0	213659
1 1/2"	40	90	232	46.3	213660
2"	50	70	174	60.2	188649
2"	50	90	232	63.6	188650
2 1/2"	65	90	116	98.3	463893
Stainless Steel 316L, Weld end acc. to ASME BPE					
Size	Orifice [mm]	Actuator [mm]	Pressure [PSI]	Cv	Item no.
1/2"	15	50	232	5.6	187078
1/2"	15	70	232	5.8	188733
3/4"	20	70	232	12.7	188734
1"	25	70	232	20.8	188735
1 1/2"	40	70	232	44.0	188736
1 1/2"	40	90	232	46.3	188737
2"	50	70	174	60.2	188738
2"	50	90	232	63.6	188739
2 1/2"	65	90	116	98.3	467543
Stainless Steel 316L, Clamp acc. to ASME BPE					
Size	Orifice [mm]	Actuator [mm]	Pressure [PSI]	Cv	Item no.
1/2"	15	50	232	5.6	187104
1/2"	15	70	232	5.8	188813
3/4"	20	70	232	12.7	188814
1"	25	70	232	20.8	188815
1 1/2"	40	70	232	44.0	188816
1 1/2"	40	90	232	46.3	188817
2"	50	70	174	60.2	188818
2"	50	90	232	63.6	188819