

OMEGA-FLO® “BLACK MUSHROOM” ANGLE SEAT VALVES

2-Way Piston-Operated Valves for Liquids, Gases, and Steam
½ to 2 NPT

SV-2000 Series



- ✓ Alternative to Complex Actuated Ball Valves
- ✓ Ideal for All Neutral and Some Aggressive Fluids
- ✓ Optical Position Indication Standard
- ✓ High Cycle Life, Very Cost Effective
- ✓ Available in Bronze or Stainless Steel Body
- ✓ Spring-Loaded, Double Stem Seal
- ✓ For Water, Steam, Compressed Air, Natural Gas, Oil, or Vacuum Service

APPLICATIONS

- ✓ Air Drying Equipment
- ✓ Industrial Compressors
- ✓ Sterilizers
- ✓ Pollution Control Equipment
- ✓ Autoclaves
- ✓ Bottling, CIP, and Laundry Equipment
- ✓ Textile Dyeing and Drying

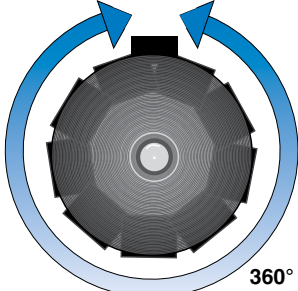
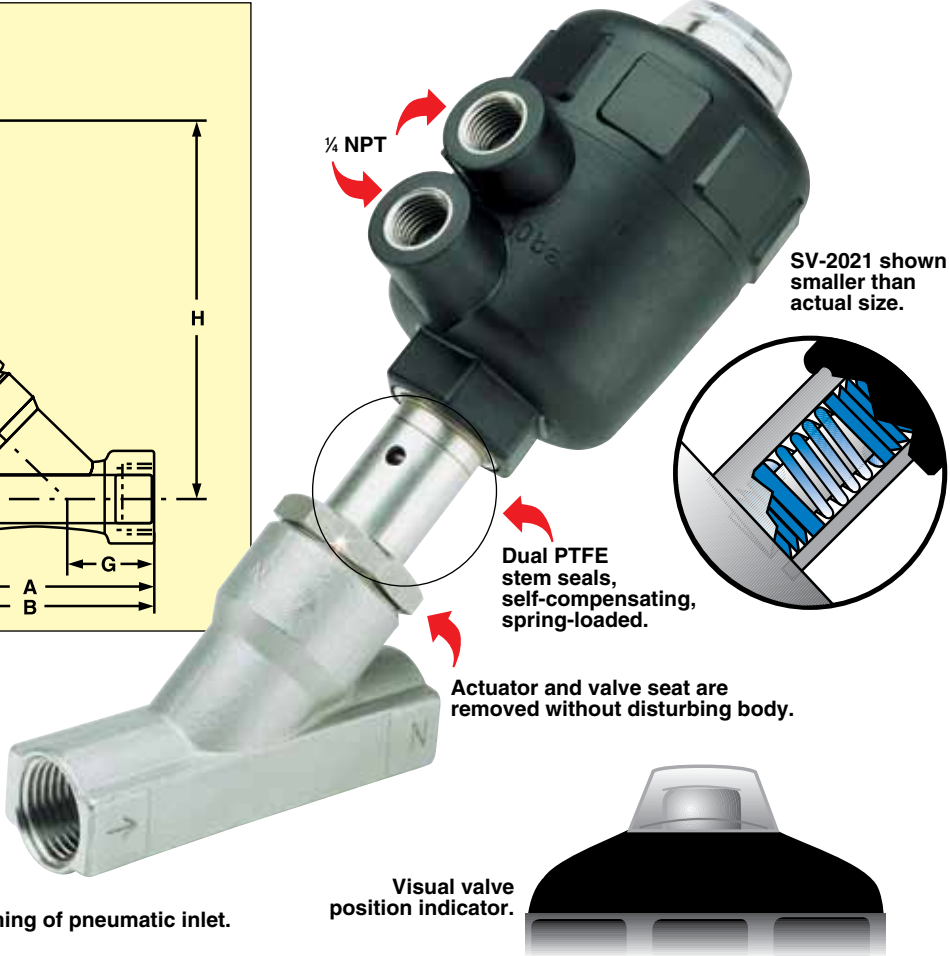
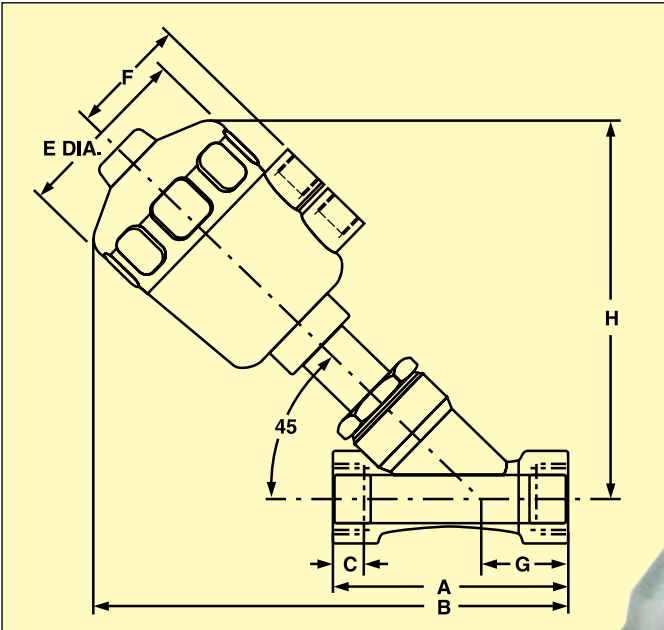
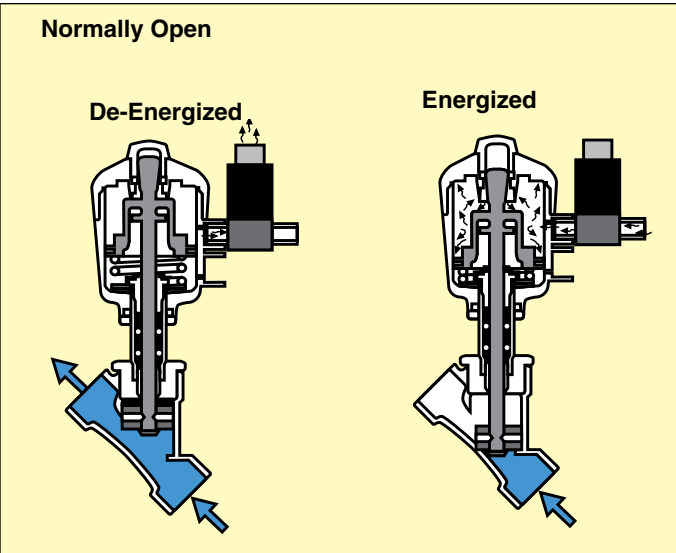
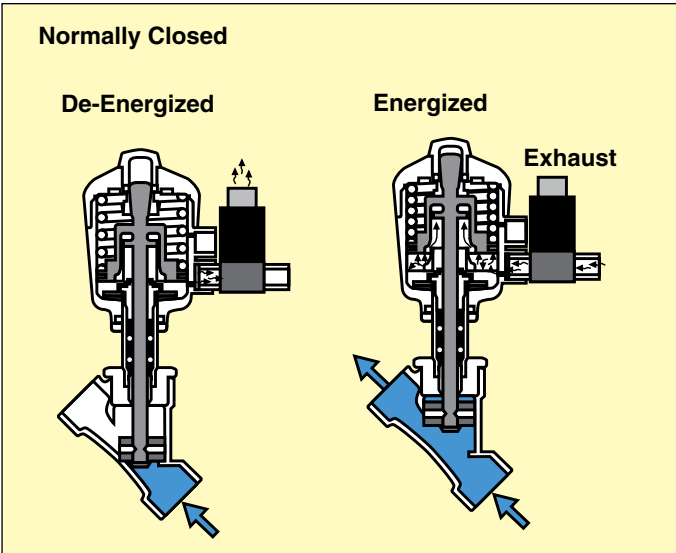
SV-2000 Series “black mushroom” angle seat valves are ideal for on/off fluid control applications in which an actuated ball valve might normally be used. These 2-way, externally piloted valves are operated by a single- or double-acting piston actuator. Sizes range from

½ to 2 NPT. The average life of SV-2000 valves is twice that of ball valves, and they are less expensive! In addition, their compact design makes them easier to use in OEM applications. Easy to install, they feature a rotatable actuator for selective positioning of the pneumatic pilot inlet port.



SV-2021

Standard features include visual position indicators, an articulated seat holder that ensures positive seating, and spring-loaded double PTFE seals that separate and isolate the process fluid. Maintenance is simple. During replacement of the seat seal, the valve body remains in the line. Servicing the actuator is safe and fast, since there is no pre-loaded spring tension on the housing.



Dimensions: mm (inch)

Function	NO/NC Units			Normally Closed (NC) Units				Normally Open (NO) Units			
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	1 1/4"	1 1/2"	2"	2 1/2"
A	85 (3.35)	95 (3.74)	105 (4.13)	120 (4.72)	130 (5.12)	150 (5.90)	185 (7.28)	120 (4.72)	230 (5.12)	150 (5.90)	185 (7.28)
B	173 (6.81)	178 (7.01)	212(8.35)	255 (10.04)	301 (11.85)	346 (13.62)	372 (14.64)	226 (8.90)	250 (9.84)	270 (10.63)	296 (11.65)
C	12 (0.47)	12 (0.47)	14 (0.55)	16 (0.63)	18 (0.71)	20 (0.79)	22 (0.87)	16 (0.63)	18 (0.71)	20 (0.79)	22 (0.87)
E	64 (2.52)	64 (2.52)	80 (3.15)	101 (3.98)	127 (5.00)	153 (6.02)	153 (6.02)	80 (3.15)	101 (3.98)	101 (3.98)	101 (3.98)
F	44 (1.73)	44 (1.73)	52 (2.05)	60 (2.36)	73 (2.87)	86 (3.38)	86 (3.38)	52 (2.05)	60 (2.36)	60 (2.36)	60 (2.36)
G	33 (1.30)	36 (1.42)	39 (1.53)	41 (1.61)	41 (1.61)	45 (1.77)	57 (2.24)	41 (1.61)	41 (1.61)	45 (1.77)	57 (2.24)
H	137 (5.39)	145 (5.71)	173 (6.81)	210 (8.27)	260 (10.24)	301 (11.85)	315 (12.40)	186 (7.32)	213 (8.38)	225 (8.86)	239 (9.41)
Actuator ø	50.8 (2.0)	50.8(2.0)	63.5 (2.5)	78.7 (3.1)	99 (3.9)	124.5(4.9)	124.5 (4.9)	3.5 (2.5)	78.7 (3.1)	78.7(3.1)	78.7 (3.1)

SPECIFICATIONS

Materials

Valve Body: Bronze or 316 SS

Flange and Spindle: 316 SS

Seat Seal: PTFE

Gland Packing: PTFE and FKM

O-rings with spring compensation
Springs: Piston return, gland packing compensator

Actuator Housing: Polyimide

Pilot Fluid: Air, neutral gases

Pilot Connections: 1/4"

Minimum Control Pressure:

See ordering matrix

Maximum Control Pressure: 140 psi

Temperature

Ambient: -10 to 60°C (14 to 140°F)

Fluid: -10 to 180°C (14 to 356°F)



SV-1601A shown larger than actual size.

Recommended Pilot Valves, visit omega.com/sv1600

Model No.	Description	Body Material	Port Size	Orifice Size	Coil Voltage
SV-1601A	3-way, internally valve with epoxy piloted poppet encapsulated coil and Buna seals	Plastic	1/4"	1/4"	0.97 Cv

To Order

Stainless Steel

Model No.	Port Size (NPT)	Cv	Maximum Operating Pressure/ Differential Pressure (psi)	Control Function	Actuator Size mm (inch)	Min Control Pressure, psi (NC Only)	Wt. kg (lb)
SV-2001	1/2	4.9	230	NC	50 (1.97)	55	0.8 (1.8)
SV-2002	1/2	4.9	230	NO	50 (1.97)		0.8 (1.8)
SV-2003	3/4	9.3	115	NC	50 (1.97)		1.0 (2.1)
SV-2005	1	22.1	140	NC	63 (2.48)	65	1.8 (4.0)
SV-2011	2	64.1	170	NC	125 (4.92)		10.2 (22.5)

Bronze

SV-2021	1/2	4.9	230	NC	50 (1.97)	55	0.8 (1.8)
SV-2025	1	22.1	140	NC	63 (2.48)	65	1.8 (4.0)
SV-2027	1 1/4	32.0	205	NC	80 (3.15)		2.5 (6.8)
SV-2031	2	64.1	170	NC	125 (4.92)		10.2 (22.5)

Comes complete with operator's manual.

Ordering Example: SV-2025, bronze valve, 1 NPT, 22.1 Cv, 140 maximum operating pressure, NC operation.