



Series
BV3-3A

Automated Ball Valve - 3A Three-Piece SS

Electric and Pneumatic Actuators

Electric-3A								
A	1/2"	3/4"	1"	1-1/2"	2"	2-1/2"	3"	4"
B	7.84	8.00	8.76	13.04*	13.39*	14.06*	15.36*	18.39*
C	4.00	4.00	4.25	7.00	7.00	7.00	7.00	10.00
D	3.50	3.98	4.49	5.51	6.14	7.76	9.02	9.49
E	5.60	5.60	6.80	7.00	7.00	7.00	7.00	10.00
F	2.30	2.30	2.43	2.38	2.38	2.38	2.38	6.75
ACT.	U11, V11	U12, V12	U12, V12	U14, V14	U15, V15	U17, V17	U18, V18	U19, V19

*Includes de clutchable manual override

Pneumatic Double Acting-3A								
A	1/2"	3/4"	1"	1-1/2"	2"	2-1/2"	3"	4"
B	6.02	7.15	7.31	9.76	10.07	11.31	12.17	13.07
C	1.77	2.80	2.80	3.72	3.72	4.17	4.84	5.39
D	3.50	3.98	4.49	5.51	6.14	7.76	9.02	9.49
E	4.33	5.49	5.49	8.15	8.15	9.35	10.69	12.91
ACT.	DA1	DA2	DA2	DA4	DA4	DA6	DA7	DA7

Pneumatic Spring Return-3A								
A	1/2"	3/4"	1"	1-1/2"	2"	2-1/2"	3"	4"
B	6.98	7.59	8.75	10.72	11.03	11.81	13.35	14.79
C	2.80	3.17	3.17	4.84	4.84	5.39	5.39	7.36
D	3.50	3.98	4.49	5.51	6.14	7.76	9.02	9.49
E	5.49	6.38	6.38	10.69	10.69	12.91	12.91	20.55
ACT.	SR2	SR3	SR3	SR6	SR7	SR9	SR9	SR9

BV3-3A Series Automated Ball Valves

- Designed to meet 3A sanitary standards.
- Ideal sanitary ball valve for food, beverage, semi-conductor, or pharmaceutical applications.
- 240 grit bore polish.
- 3-piece stainless steel investment cast body.
- Cavity filled design.

Series BV3-3A ball valves meet 3A sanitary standards and feature tri-clamp ends for easy line removal. This three-piece sanitary ball valve is ideal for use in food, beverage, semi-conductor, or pharmaceutical applications. The cavity filled and full bore designs aid to reduce product entrapment, and provide consistent flow characteristics.

The BV3-3A Series is an economical automated valve packaged with either an electric or pneumatic actuator. Electrically actuated models have a standard weatherproof, NEMA 4 enclosure, powered by a 115 VAC supply, and are available in either two-position or proportional control. The two position actuators use the 115 VAC input to drive the valve open or closed, while the modulating actuator accepts a 4 to 20 mA input for infinite valve positioning. Actuator features a visual indicator, manual override, thermal overload protection, and permanently lubricated gears.

The pneumatic double acting actuator uses an air supply to drive the valve open and closed. The actuator has two supply ports with one driving the valve open and the other driving the valve closed. Spring return pneumatic actuators use the air supply to open the valve and internally loaded springs return the valve to the closed position. Also available is the SV3 solenoid valve to electrically switch the air supply pressure between the air supply ports for opening and closing the valve. Actuators are constructed of anodized and epoxy coated aluminum for years of corrosion free service.

OPTIONS

Explosion Proof Electric Actuators
-add "-EX" to model number

Optional Electric Actuator Supply Voltages

-Contact factory for model number change

Solenoid Valve- See Model SV3

SPECIFICATIONS

Body: 3-piece.
Line Size: 1/2" to 4".
End Connections: Tri-Clamp (liner meets BS 4825, part 3).
Pressure Limit: 1/2" to 2": 1000 psi (69 bar) WOG. 2-1/2" to 4": 800 psi (55 bar) WOG.
Wetted Materials: Body, Ball, End Caps: CF8M Stainless Steel. Stem: 316 Stainless Steel. Seats, Body Seal, Thrust Washer, Packing: TFE.
Temperature Limit: -40 to 450°F (-40 to 232°C) CWP.
Other Materials: 304 Stainless Steel, Vinyl.
Agency Approvals: Meets 3A.

ACTUATORS

Electric
Power Requirements: 115 VAC, 60 Hz, single phase. Optional 220 VAC, 24 VAC, 12 VDC, 24 VDC.
Power Consumption (Locked Rotor Current): Two position: U11: 0.55A; U12 & U14: 0.75A; U15 & U17: 1.10A; U18: 2.60A; U19: 2.90A.
Modulating: V11: 0.55A; V12 & V14: 0.75A; V15 & V17: 1.10A; V18: 2.60A; V19: 2.90A
Cycle Time (per 90°): Two position: U11: 2.5 seconds; U12: 5 sec; U14: 10 sec; U15: 15 sec; U17: 30 sec; U18: 12 sec; U19: 14 sec.
Modulating: V11: 5 seconds; V12: 10 sec; V14: 20 sec; V15: 30 sec; V17: 60 sec; V18: 24 sec; V19: 28 sec.
Duty Cycle: U11: 75%; U12, U14, U15, & U17: 25%; U18 & U19: 100%.
Modulating: 75%.

Enclosure Rating: NEMA 4. Optional NEMA 7.
Housing Material: Aluminum with thermal bonding polyester powder finish.
Temperature Limit: -40 to 150°F (-40 to 65°C).
Electrical Connection: 1/2" to 2-1/2": 1/2" NPT; 3" & 4": 3/4" NPT.
Modulating Input: 4 to 20 mA.
Standard Features: Manual override, thermal overload protection, permanently lubricated gears, and position indicator except modulating units.

Pneumatic "DA" and "SR" Series
Type: DA Series is double acting and SR Series is spring return (rack and pinion).
Normal Supply Pressure: 80 psi (5.5 bar).
Maximum Supply Pressure: 120 psi (8 bar).
Air Connections: DA/SR1 to 5: 1/8" female NPT, all other sizes: 1/4" female NPT.
Air Consumption (per stroke): DA1: 1.71 in³; DA2: 9.34 in³; DA4: 20.5 in³; DA6: 66.76 in³; DA7: 103.74 in³; SR2: 7.69 in³; SR3: 14.22 in³; SR6: 54.37 in³; SR7: 85.43 in³; SR9: 215.11 in³.
Cycle Time (90°): DA1: .03 sec; DA2: .04 sec; DA4: .12 sec; DA6: .27 sec; DA7: .47 sec; SR2: .09 sec; SR3: .14 sec; SR6: .46 sec; SR7: .78 sec; SR9: 1.34 sec.
Housing Material: Anodized aluminum body and epoxy coated aluminum end caps.
Temperature Limit: -4 to 180°F (-20 to 85°C).
Accessory Mounting: NAMUR standard.
Standard Features: Position indicator.

Size	Cv	Double Acting Pneumatic	Spring Return Pneumatic	Two Position Electric	Modulating Electric
		Model	Model	Model	Model
1/2"	14	BV3DA102TC-3A	BV3SR202TC-3A	BV3U1102TC-3A	BV3V1102TC-3A
3/4"	45	BV3DA203TC-3A	BV3SR303TC-3A	BV3U1203TC-3A	BV3V1203TC-3A
1"	81	BV3DA204TC-3A	BV3SR304TC-3A	BV3U1204TC-3A	BV3V1204TC-3A
1-1/2"	215	BV3DA406TC-3A	BV3SR606TC-3A	BV3U1406TC-3A	BV3V1406TC-3A
2"	410	BV3DA407TC-3A	BV3SR707TC-3A	BV3U1507TC-3A	BV3V1507TC-3A
2-1/2"	618	BV3DA608TC-3A	BV3SR908TC-3A	BV3U1708TC-3A	BV3V1708TC-3A
3"	940	BV3DA709TC-3A	BV3SR909TC-3A	BV3U1809TC-3A	BV3V1809TC-3A
4"	1840	BV3DA710TC-3A	BV3SR910TC-3A	BV3U1910TC-3A	BV3V1910TC-3A

Note: All spring return actuators are factory standard as spring (fail) close.