



Measure, Monitor and Control
For The Process Industries

V-Port Ball Valves

3 pieces Body Design

With ISO Mounting Pad

- Lever Operated
- Pneumatic Actuated with E/P Positioner
- Electric Actuated with Proportional Control Unit



AE BLV323V Ball Valve

(3 pcs Body Design, 30° V-Port)



Design

AE BLV323V Series full port ball valve has a three pieces valve body construction for easy installation and maintenance. It has a ball with 30° V-Shape precisely cut port offering a modified equal percentage flow characteristic. It is designed for a wide range of application and media in the process industry where modulating control is required.

The quarter turn operation for opening or closing of the valve is by hand lever, pneumatic actuator or electric actuator. The valve body is made from high quality stainless steel using precision investment cast technology. Safety features include blow out proof stem and lever with locking device.

The stem seal is constantly loaded by a set of disc spring to eliminate premature stem leakage and has integrated top flange in accordance to ISO5211 that allows easy mounting of actuator and limit switch box.

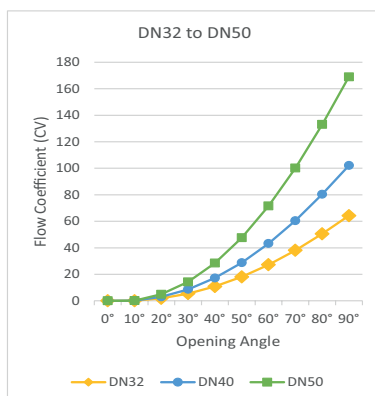
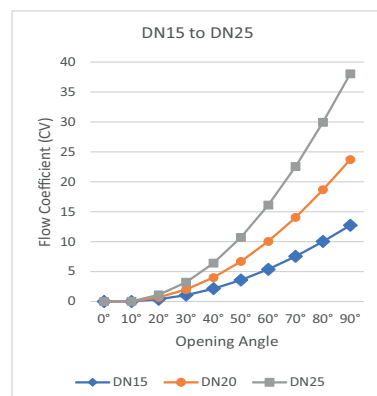
Specifications

Type	BLV323V
Design	Full Port 3 pcs body according to ANSI B16.34
Inspection and Test	According to API598
Size	DN15 to DN50 (1/2" to 2") (Bigger sizes on request)
Material	
Body	CF8M
End Cap	CF8M
Ball	SS316
Stem	SS316 (other material on request)
Seal Material	
Main Seat	PTFE or RPTFE
Body Seal	PTFE or RPTFE
Stem Seal	PTFE or RPTFE with FKM O-ring (MG 1241 (Steam), TFM 4215, TFM 1600, PEEK on request)

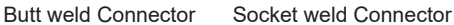
End Connections	Standard BSP (PT, NPT, Buttweld, Socketweld on request)
Media	Water, Oil, Gas, Mild Acid, Steam (with MG 1241 seat) and other media that is compatible to the body and seat/seal material
Media Temperature	-10°C to +120°C (PTFE Seat) -10°C to + 200°C (MG 1241 Seat) Up to 10 bar steam (MG 1241 Seat)
Pressure Rating	0 to 63 bar (1/4" to 2") 0 to 40 bar (2 1/2" to 4")
Operator	Lever with locking device
Option	Degreased, Anti-Static
Installation	As required
Automation	Integrated direct mounting top flange in accordance to ISO5211

Flow Coefficient (CV) - 30° V-Port

Size / Opening	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
DN15	0	0.01	0.37	1.07	2.14	3.58	5.38	7.53	10.02	12.72
DN20	0	0.02	0.69	2	3.99	6.67	10.03	14.04	18.66	23.69
DN25	0	0.03	1.11	3.21	6.4	10.7	16.09	22.53	29.94	38.02
DN32	0	0.05	1.88	5.44	10.82	18.08	27.19	38.08	50.6	64.26
DN40	0	0.09	3	8.64	17.2	28.74	43.22	60.51	80.42	102.12
DN50	0	0.15	4.96	14.31	28.48	47.58	71.54	100.17	133.12	169.03



V-Port 15°, 60°, 90°
available on request



No.	Part	Material
1	Bolt	CF8M
2	End Cap	CF8M
3	Seat	PTFE or RPTFE
4	Body Gasket	PTFE
5	Thrust Washer	PTFE
6	Stem Packing	PTFE
7	Stem	SS316
8	Ball	SS316

Size	ØD	L	H	□U	ISO 5211	ØA1	ØA2	K	ØA3	ØA4	B	Weight (kg)
1/2	15	75	8.6	9	F03/F04	G1/2	21.71	12.7	15.9	22	40.5	0.65
3/4	20	80	9.6	9	F03/F04	G3/4	27.05	14.3	20.6	28	50.5	0.89
1	25.4	90	12.5	11	F04/F05	G1	33.78	15.9	25	35	56.5	1.23
1 1/4	31.8	110	12.6	11	F04/F05	G1 1/4	42.54	17.5	32	44	60	1.92
1 1/2	38.1	120	16.1	14	F05/F07	G1 1/2	48.64	19.1	40	50	77	2.96
2	50.8	140	16.8	14	F05/F07	G2	61.11	22.2	50.8	62	84	4.71

AE BLV323V Ball Valve

(3 pcs Body Design, 30° V-Port, Pneumatic Actuated with E/P Positioner)



Design

AE BLV323V ball valve can be pneumatic actuated for automatic process control application.

Pneumatic actuator is available in double acting (DA) or spring return (SR) version with E/P positioner.

The actuator can be mounted onto the valve directly or using mounting bracket in either normally open or normally closed position. Every valve is fully tested for alignment and proper functioning before delivery.

Specifications - Pneumatic Actuator

Function	Double Acting (DA) or Spring Return (SR)
Material	
Housing	Extruded aluminium alloy, hard anodized
End Cap	Pressure die cast aluminium alloy, epoxy coated
Pinion	Carbon steel, nickel plated
Piston	Cast aluminium / steel, hard anodized / Zinc galvanized
Cap Screw	Stainless steel
Spring	Spring steel, Dip Coated
Bearing and Guide	Engineering plastic
Travel Stop Cam	Alloy steel
Adjustment Screw	Stainless steel
Seal	NBR

Mounting Bracket	Aluminium, stainless steel, alloy steel
Operating Media	Dry or lubricated compressed air or non-corrosive gases
Supply Pressure	Min. 2 bar, Max. 8 bar
Operating Temperature	-20°C to +80°C (NBR) Lower or higher temperature version on request
Rotation	90°
Travel Adjustment	± 5°
Connection and Mounting	Namur, ISO5211 and DIN3337
Torque Output	3 Nm to 13024 Nm (DA) 4 Nm to 6584 Nm (SR)
Selection	Actuator is selected and matched in accordance to each process operating conditions and requirement to ensure proper functioning of the actuated valve

Specifications - E/P Positioner

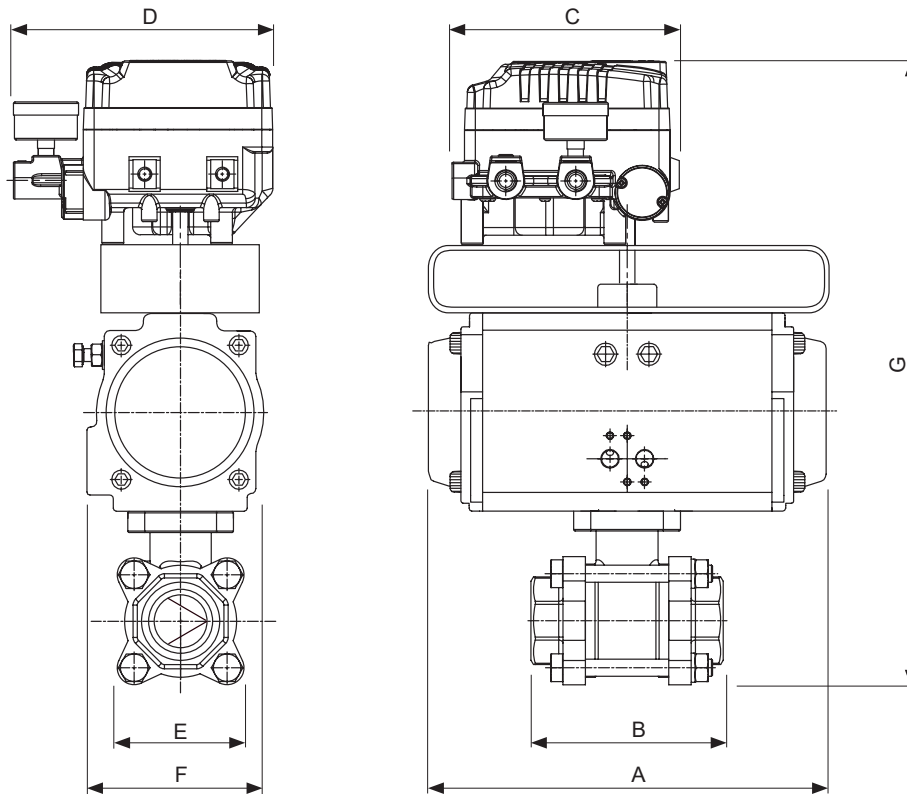
Input Signal	4 - 20mA DC
Impedance	250 ±15Ω
Supply Pressure	1.4 to 7 bar
Stroke	10 - 150mm (Linear Type) 0 - 90° (Rotary Type)
Air Connection	NPT1/4 (PT, G on request)
Gauge Connection	NPT1/8 (PT, G on request)
Conduit	NPT1/2 (G, PF, M20 on request)
Ingress Protection	IP66
Operating Temp	-20°C to 70°C
Linearity	±1% F.S. (Single Acting Version) ±2% F.S. (Double Acting Version)

Hysteresis	±1% F.S.
Sensitivity	±0.2% F.S. (Single Acting Version) ±0.5% F.S. (Double Acting Version)
Repeatability	±0.5% F.S.
Air Consumption	2.5 LPM (@ 1.4 bar)
Flow Capacity	80 LPM (@ 1.4 bar)
Material	Aluminum Diecasting
Options or Other Types Available On Request	
Ex-Proof Version, Full Stainless Steel Version, Smart Type with integrated PID, with Limit Switch Position Feedback, with Transmitter Position Feedback, Pneumatic-Pneumatic Type	

AE BLV323V Ball Valve

(3 pcs Body Design, 30° V-Port, Pneumatic Actuated with E/P Positioner)

Pneumatic Actuated Version Common Selection and Dimension (mm)



Function	Size	Pressure Range ¹⁾ (bar)	Actuator @ pilot air of 5 bar	Dimensions							Weight (kg)
				A	B	C	D	E	F	G ²⁾	
DA (Double Acting)	1/2"	0 to 10	AEJAT052DA	145	75	135	167	50	71	311	5.7
	3/4"	0 to 10	AEJAT052DA	145	80	135	167	52	71	323	5.9
	1"	0 to 10	AEJAT063DA	169	90	135	167	58	92	349	7.0
	1 1/4"	0 to 10	AEJAT075DA	201	110	135	167	71	94	370	8.6
	1 1/2"	0 to 10	AEJAT083DA	209	120	135	167	82	101	401	10.0
	2"	0 to 10	AEJAT092DA	242	140	135	167	95	109	423	13.2
SR (Spring Return)	1/2"	0 to 10	AEJAT052SR(11)	145	75	135	167	50	71	311	5.8
	3/4"	0 to 10	AEJAT063SR(11) ³⁾	169	80	135	167	52	92	390 ³⁾	7.0
	1"	0 to 10	AEJAT075SR(12)	201	90	135	167	58	94	360	8.2
	1 1/4"	0 to 10	AEJAT083SR(11)	209	110	135	167	71	101	379	9.5
	1 1/2"	0 to 10	AEJAT092SR(11)	242	120	135	167	82	109	409	12.0
	2"	0 to 10	AEJAT105SR(11)	275	140	135	167	95	123	440	15.7

¹⁾ Actuator selection serve as a guide and is based on clean lubricating operating media at pressure up to 10 bar. For other operating conditions, please consult us.

²⁾ For Steam or high temperature application, a bracket of height min. 75mm will be used for assembly of actuator to ball valve.

³⁾ A aluminium bracket and adaptor is required for mounting of actuator to ball valve.

AE BLV323V Ball Valve

(3 pcs Body Design, 30° V-Port, Modulating Electric Actuated)



Design

AE BLV323V ball valve can be electric actuated for automatic process control application.

Electric actuator used has integrated proportional control unit for modulating control. Setting up of the electric actuator is make easy with push button and a large LCD display.

The actuator can be mounted onto the valve directly or using mounting bracket Every valve is fully tested for alignment and proper functioning before delivery.

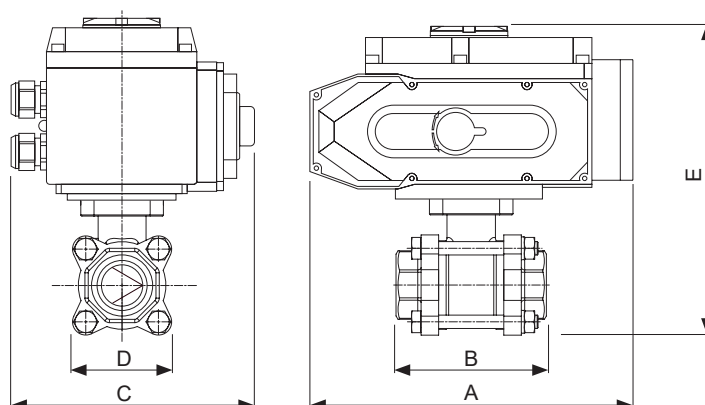
Specifications - Electric Actuator

Function	Modulating
Material	
Housing	Aluminium alloy, epoxy powder coated
Gear	Steel / aluminium bronze
Screws	Stainless steel
Indicator Cover	Polycarbonate
Shaft / Adaptor	Alloy steel
Seal	NBR
Lubrication	Aluminium based grease

Please refer to AEJMO Electric Actuator data sheet for other details

Technical Data	
Power Supply	24VDC, 220VAC
Aux Limit Switches	2 x SPST, 250VAC10A, each for Open and Close positions
Stall Protection	internal overheating thermal protection, open @ 120°C / close @ 97°C (± 5°C)*
Conduit Entry	2 x M18
Operating Temp	-20°C to +70°C
Ambient Humidity	Max. 90% RH
Input Signal	4 ... 20mA (1 ... 5VDC, 1....10VDC on request)
Output Signal	4 ... 20mA (1 ... 5VDC, 1....10VDC on request)

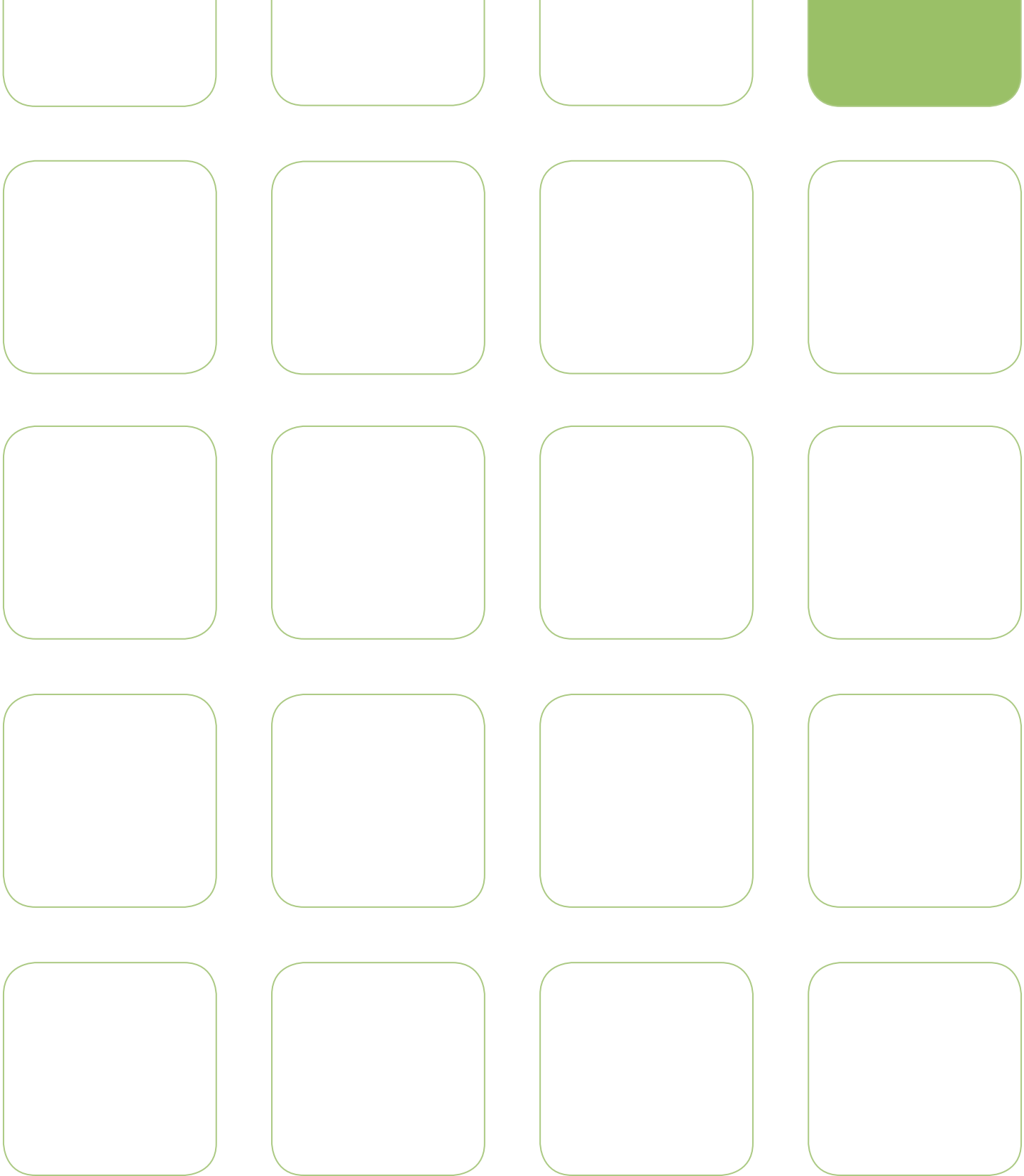
Electric Actuated Version Common Selection and Dimension (mm)



Function	Size (mm)	Pressure Range ¹⁾ (bar)	Actuator	Dimensions					Weight (kg)
				A	B	C	D	E	
Bi-Stable	1/2"	0 to 10	AEJMOA-005	211	75	121	50	191	5.2
	3/4"	0 to 10	AEJMOA-005	211	80	121	52	202	5.4
	1"	0 to 10	AEJMOA-005	211	90	121	58	211	5.8
	1 1/4"	0 to 10	AEJMOA-005	211	110	121	71	221	6.5
	1 1/2"	0 to 10	AEJMOA-005	211	120	121	82	243	7.5
	2"	0 to 10	AEJMOA-010	238	140	145	95	259	10.8

¹⁾ Actuator selection serve as a guide and is based on clean lubricating operating media at pressure up to 10 bar. For other operating conditions, please consult us.

²⁾ For Steam or high temperature application, a bracket of height min. 75mm will be used for assembly of actuator to ball valve.



Singapore Office
Anderson Eurotech Singapore Pte Ltd
2, Gambas Crescent, #08-35,
Nordcom II, Singapore 757044
☎️ +65 66944233
sales@andersoneurotech.com
www.andersoneurotech.com

