# **Actuators**

## Pneumatic Actuators Electric Actuators

Parker Autoclave Engineers ball valves can be supplied with either pneumatic or electric operators for automated or remote operation.

Pneumatic and electric operators can be supplied with a variety of features and options. Operators are sized for each valve series to provide reliable and trouble free operation. Listed below are the operator features and available options.

## Ball Valve Actuator Features/Options:

## **Pneumatic Operators**

- Used for remote and automatic operation
- · Air-to-open/spring-to-close
- Air-to-close/spring-to-open
- Air-to-open and close (double acting)
- Limit switches or limit switches with visual indicators available
- High temperature option available.
- Stainless steel housing for corrosive applications available.
- Optional solenoid valve available
- · Standard anodized aluminum housing
- Optional epoxy coated housing available

### **Electric Operators**

- Interface with control systems for automated operation and monitoring
- 120 & 220 VAC, 50/60 Hz standard
- 24VDC
- Explosion proof available
- CE mark available











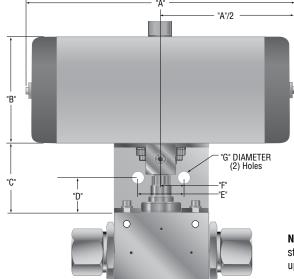
# Ball Valves - Actuators

## **Pneumatic Operated Ball Valves**

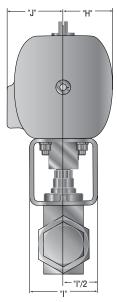
Add the suffix -AO, -AC or -AOC to the appropriate valve catalog number for a complete valve assembly

VALVE	- 1							MINIMUM REQUIRED			
SERIES									AIR PRESSURE		
	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"	"I"	"J"	
2B4-A0/AC	6.69	2.56	2.50	1.25	1.00	0.50	0.28	1.14	2.50	1.58	80 psi
	(169.92)	(65.02)	(63.50)	(31.75)	(25.40)	(12.70)	(7.11)	(28.95)	(63.50)	(40.13)	(5.51 bar)
2B6-A0/AC	9.84	3.94	3.00	1.50	1.50	0.75	0.34	1.87	3.00	2.24	80 psi
	(249.93)	(100.07)	(76.20)	(38.10)	(25.40)	(19.05)	(8.63)	(47.49)	(76.20_)	(56.89)	(5.51 bar)
2B8-A0/AC	11.65	4.57	3.00	1.50	2.00	1.00	0.53	2.17	3.00	2.48	80 psi
*	(259.91)	(116.07)	(76.20)	(38.10)	(50.80)	(25.40)	(13.46)	(55.11)	(76.20)	(62.99)	(5.51 bar)
3BD3-AO/AC	6.69	2.56	2.50	1.25	1.00	0.50	0.28	1.14	2.50	1.58	80 psi
	(169.92)	(65.02)	(63.50)	(31.75)	(25.40)	(12.70)	(7.11)	(28.95)	(63.50)	(40.13)	(5.51 bar)
3BD6-AO/AC	9.84	3.94	3.00	1.50	1.50	0.75	0.34	1.87	3.00	2.24	80 psi
*	(249.93)	(100.07)	(76.20)	(38.10)	(25.40)	(19.05)	(8.63)	(47.49)	(76.20_)	(56.89)	(5.51 bar)
3BD8-AO/AC	11.65	4.57	3.00	1.50	2.00	1.00	0.53	2.17	3.00	2.48	80 psi
	(259.91)	(116.07)	(76.20)	(38.10)	(50.80)	(25.40)	(13.46)	(55.11)	(76.20)	(62.99)	(5.51 bar)
2B4-A0C	6.69	2.56	2.50	1.25	1.00	0.50	0.28	1.14	2.50	1.58	80 psi
	(169.92)	(65.02)	(63.50)	(31.75)	(25.40)	(12.70)	(7.11)	(28.95)	(63.50)	(40.13)	(5.51 bar)
2B6-A0C	7.95	3.07	3.00	1.50	1.50	0.75	0.34	1.40	3.00	1.77	80 psi
	(201.93)	(77.97)	(76.20)	(38.10)	(38.10)	(19.05)	(8.63)	(35.56)	(76.20_)	(44.95)	(5.51 bar)
2B8-A0C	9.84	3.94	3.00	1.50	2.00	1.00	0.53	1.87	3.00	2.24	80 psi
	(249.91)	(100.07)	(76.20)	(38.10)	(50.80)	(25.40)	(13.46)	(47.49)	(76.20)	(56.89)	(5.51 bar)
3BD3-AOC	6.69	2.56	2.50	1.25	1.00	0.50	0.28	1.14	2.50	1.58	80 psi
	(169.92)	(65.02)	(63.50)	(31.75)	(25.40)	(12.70)	(7.11)	(28.95)	(63.50)	(40.13)	(5.51 bar)
3BD6-AOC	7.95	3.07	3.00	1.50	1.50	0.75	0.34	1.40	3.00	1.77	80 psi
	(201.93)	(77.97)	(76.20)	(38.10)	(25.40)	(19.05)	(8.63)	(35.56)	(76.20_)	(44.95)	(5.51 bar)
3BD8-AOC	9.84	3.94	3.00	1.50	2.00	1.00	0.53	1.87	3.00	2.24	80 psi
	(249.91)	(100.07)	(76.20)	(38.10)	(50.80)	(25.40)	(13.46)	(47.49)	(76.20)	(56.89)	(5.51 bar)

- NOTE: Maximum allowable air pressure is 150 psi (10.34)
  - 1/8" NPT female air connector (\*= 1/4" NPT)
  - AO: Air to open/spring to close
  - AC: Air to close/spring to open
  - AOC: Air to open/air to close (double acting)
- Actuators operating temperature: 0°F to 175°F (-17°C to 79°C)
- High temperature actuator option available, consult factory
- Stainless steel housing actuator models available, consult factory
- Actuators available with limit switches and visual indicators.
- Corrosion resistant anodized aluminum housing.
- Epoxy coated housing available.
- Solenoids availabe, direct or nipple mount.



NOTE: Operators 90° rotations standard. 180° options available upon request.





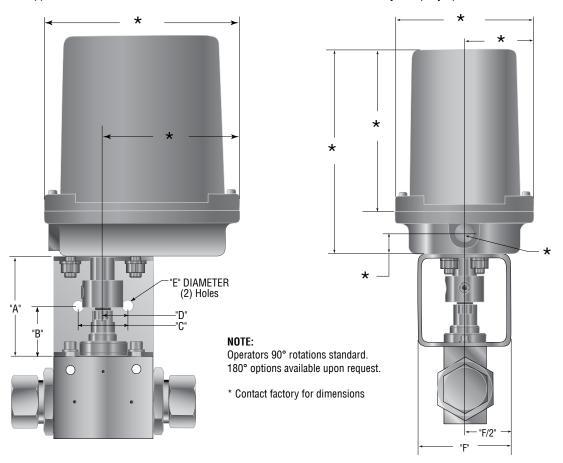
## **Electric Operated Ball Valves**

Add the suffix -E01, -E02 or -E03 to the appropriate valve catalog number for a complete valve assembly

VALVE		DIMENS	VOLTAGE					
SERIES								
	"A"	"B"	"C"	"D"	"E"	"F"		
2B4-E01	2.50	1.25	1.00	0.50	0.28	2.50	120 VAC	50/60 Hz
2B4-E02	(63.50)	(31.75)	(25.40)	(12.70)	(7.11)	(63.50)	240 VAC	30/00 112
2B6-E01	3.00	1.50	1.50	0.75	0.34	3.00	120 VAC	50/60 Hz
2B6-E02	(76.20)	(38.10)	(38.10)	(19.05)	(8.63)	(76.20)	240 VAC	30/00 112
3BD3-E01	2.50	1.25	1.00	0.50	0.28	2.50	120 VAC	50/60 Hz
3BD3-E02	(63.50)	(31.75)	(25.40)	(12.70)	(7.11)	(63.50)	240 VAC	30/00 112
3BD6-E01	3.00	1.50	1.50	0.75	0.34	3.00	120 VAC	F0/60 II=
3BD6-E02	(76.20)	(38.10)	(38.10)	(19.05)	(8.63)	(76.20)	240 VAC	50/60 Hz
2B4-E03	2.50	1.25	1.00	0.50	0.28	2.50	24 VDC	
	(63.50)	(31.75)	(25.40)	(12.70)	(7.11)	(63.50)		
2B6-E03	3.00	1.50	1.50	0.75	0.34	3.00	24 VDC	
	(76.20)	(38.10)	(38.10)	(19.05)	(8.63)	(76.20)		
3BD3-E03	2.50	1.25	1.00	0.50	0.28	2.50	24 VDC	
	(63.50)	(31.75)	(25.40)	(12.70)	(7.11)	(63.50)		
3BD6-E03	3.00	1.50	1.50	0.75	0.34	3.00	24 VDC	
	(76.20)	(38.10)	(38.10)	(19.05)	(8.63)	(76.20)		

- NOTE: E01: Electric 120 VAC
  - EO2: Electric 220 VAC
  - EO3: Electric 24 VDC
  - CSA approved for NEMA 4 & 4X

- For other voltages consult factory
  Actuator operating temperature: 0°F to 160°F (-17°C to 71°C)
  Corrosive resistant Zytel housing
- · Consult factory for epoxy option





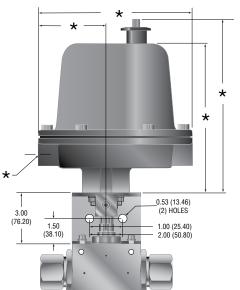
## **Electric Operated Ball Valves**

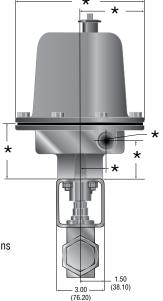
Add the suffix -E01, -E02 or -E03 to the appropriate valve catalog number for a complete valve assembly

VALVE	VOLTAGE	VALVE	VOLTAGE	
SERIES	50/60 HZ	SERIES		
2B8-E01	120 VAC	2B8-E03	24 VDC	
3BD8-E01	120 VAC	3BD8-E03	24 VDC	
2B8-E02	220 VAC	2B8-E03	24 VDC	
3BD8-E02	220 VAC	3BD8-E03	24 VDC	

#### NOTE:

- EO1: Electric 120 VAC
- E02: Electric 220 VAC
- E03: Electric 24 VDC
- · Explosion proof
- Actuator operating temperature: 0°F to 160°F (-17°C to 71°C)
- · Powder coated aluminum housing
- · CE marked
- UL listed & CSA approved for NEMA 4, 4x, 7 & 9
- · For other voltages consult factory





#### NOTE:

\* Contact factory for dimensions

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#### **Instrumentation Products Division**

Autoclave Engineers Operation 8325 Hessinger Drive Erie, Pennsylvania 16509-4679 USA PH: 814-860-5700 FAX: 814-860-5811 www.autoclave.com



Parker Hannifin Manufacturing Ltd.
Instrumentation Products Division, Europe
Industrial Estate Whitemill
Wexford, Republic of Ireland
PH: 353 53 914 1566
FAX: 353 53 914 1582

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