



# ELECTRO SERIES ACTUATED BALL VALVES

The Electro Actuated Ball Valve provides high quality, basic on-off electrical actuation at an economical price, with voltage options and special "2-wire" control available. This prepackaged combination is constructed with an all plastic NEMA 4X enclosure directly mounted to a PVC or CPVC valve body for lighter weight and a low profile design for minimal space requirements. All Electro Series Ball Valves are pressure rated to 235 psi and suitable for vacuum service. Available in IPS sizes 1/2" - 2", with socket, threaded, or flanged ends and choice of EPDM or Viton® O-ring seals.



## ELECTRO ACTUATED COMPACT BALL VALVE

Compact Electro Ball Valves are built around Spears® industrial grade Compact Ball Valve. This heavy bodied, sealed unit design is well suited for a multitude of general purpose, industrial, and OEM actuation needs.



## ELECTRO ACTUATED TRUE UNION BALL VALVE

The Electro True Union Ball Valve utilizes Spears® industrial grade True Union Ball Valve. This fully repairable, double union style allows easy in-line removal for servicing and is the valve of choice for many industrial and chemical processing applications.

### ELECTRO 50 & 100 ACTUATOR SPECIFICATIONS

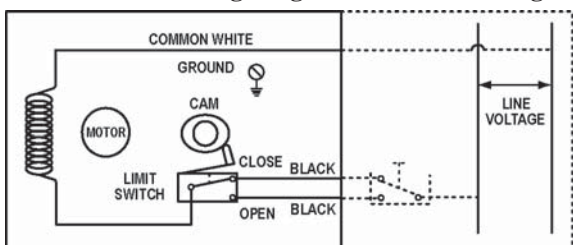
- Motor: Brushless, Non-Reversing, Shaded Pole, Thermally Protected
- Torque: ELECTRO-50 50 in./lbs. (1/2" - 1" Valves)  
ELECTRO-100 100 in./lbs. (1-1/4" - 2" Valves)
- Opening Time: 5 seconds
- Closing Time: 5 seconds
- Duty Cycle: 25% standard (optional 75% available)
- Limit Switch: Cam Operated, Omni Directional, SPDT
- Housing: NEMA 4X (Weatherproof, Corrosion Proof), High Impact Polypropylene, SS 316 Fasteners  
1/2" NPT Connection
- Indicator: Visual Open/Close - Standard
- Voltage: 115V standard (see Voltage Options)

- Optional "2-Wire" Control:  
Control switch setup operates as a solenoid valve. Valve opens when control switch is open 5-seconds and closes when control switch is closed 5-seconds. Uses 4-wire connection with 2 wires to line voltage and 2 wires to SPST control switch.

#### Voltage Options:

Voltage	Maximum Current Draw
12 VAC	2.40
24 VAC	2.50
115 VAC	.47
230 VAC	.58
12 VDC	.46
24 VDC	.46

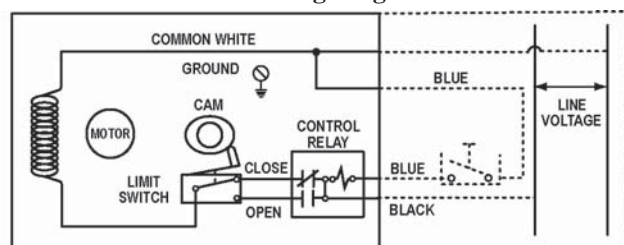
Standard Wiring Diagram 115 VAC Wiring



ELECTRO WIRING

EXTERNAL WIRING

"2-Wire" Control Wiring Diagram



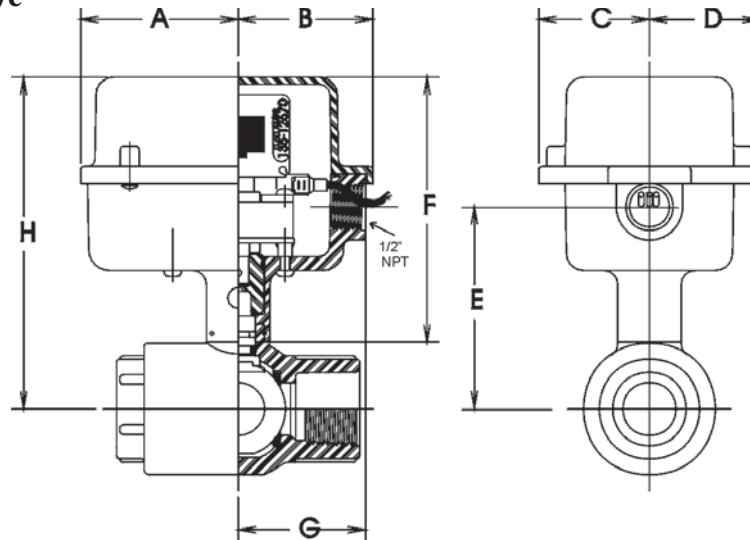
ELECTRO WIRING

EXTERNAL WIRING

# ELECTRO SERIES ACTUATED BALL VALVES



## Compact Ball Valve



**Actuated Compact Ball Valve Dimensions**

Valve Size	A	B	C	D	E	F	G	H
1/2	2-13/16	2-19/32	2	2	3-1/32	5-17/32	2-7/16	6-15/32
3/4	2-13/16	2-1/2	2	2	3-17/32	5-7/8	2-11/32	6-15/16
1	2-19/32	2-23/32	2	2	3-11/16	5-29/32	2-3/16	7-3/16
1-1/4	3-19/32	2-17/32	2	2	4-27/32	5-3/4	2-3/8	7-7/32
1-1/2	3-9/16	2-9/16	2	2	4-21/32	5-27/32	2-5/16	7-1/2
2	3-9/16	2-19/32	2	2	5-13/32	6-5/32	3-9/16	8-1/4

**Valve:** PVC or CPVC Industrial Grade Valve,  
 Non-Repairable Sealed Unit  
 PTFE Seats  
 EPDM or Viton® O-rings  
 Socket, Threaded or Flanged End Connection  
 Vacuum Service Rated  
 Pressure rated to 235 psi water @ 73° F  
 (Flanged to 150 psi)

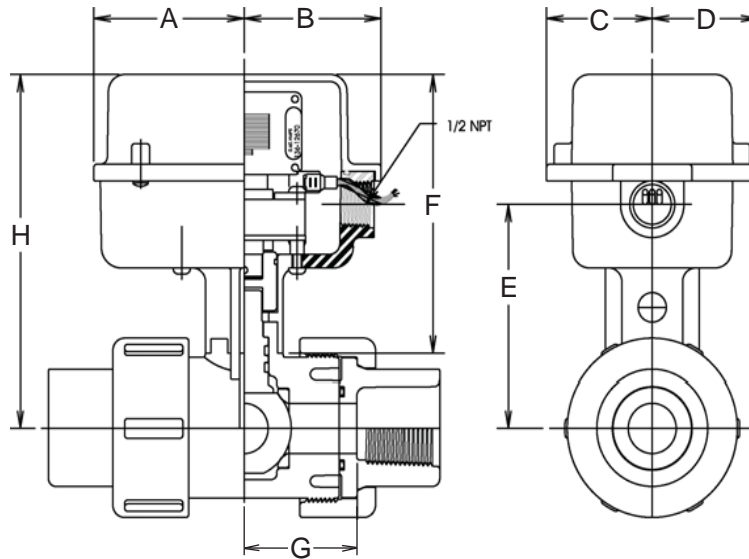
### Sample Engineering Specification

All actuated ball valves shall be PVC or CPVC construction with direct mount electric actuator. Valve shall be compact sealed unit type, pressure rated to 235 psi @ 73° F (150 psi for flanged), with PTFE seats, Safe-T-Shear® Stem, EPDM or Viton® O-rings, and socket, threaded or flanged end connections. Actuator shall be direct mount, with brushless non-reversing quarter turn motors and built in visual open/close position indicator. Actuator housing shall be weather proof and corrosion proof (NEMA 4X) with type 316 stainless steel fasteners, as manufactured by Spears® Manufacturing Company.



# ELECTRO SERIES ACTUATED BALL VALVES

## True Union Ball Valve



**Actuated True Union Ball Valve Dimensions**

Valve Size	A	B	C	D	E	F	G	H
1/2	2-13/16	2-1/2	2	2	3-1/32	5-15/32	2-11/32	6-15/32
3/4	2-13/16	2-1/2	2	2	3-3/8	5-19/32	2-11/32	6-13/16
1	2-13/16	2-1/2	2	2	3-21/32	5-19/32	2-11/32	7-1/16
1-1/4	3-13/32	2-17/32	2	2	4-13/32	5-15/32	2-13/32	7-1/4
1-1/2	3-13/32	2-17/32	2	2	4-21/32	5-1/2	2-13/32	7-1/2
2	3-13/32	2-17/32	2	2	5-1/2	5-27/32	2-13/32	8-11/32

**Valve:** PVC or CPVC Industrial Grade Valve  
 Double Union Style with Blocked Seal Carrier  
 Fully Repairable & Adjustable  
 PTFE Seats  
 EPDM or Viton® O-rings  
 Socket, Threaded or Flanged End Connection  
 Vacuum Service Rated  
 Pressure rated to 235 psi water @ 73° F  
 (Flanged to 150 psi)

### Sample Engineering Specification

All actuated ball valves shall be PVC or CPVC construction with direct mount electric actuator. Valve shall be True Union type, pressure rated to 235 psi @ 73° F (150 psi for flanged), with buttress threaded union nuts, PTFE seats, Safe-T-Shear® Stem, EPDM or Viton® O-rings, and socket, threaded or flanged end connections. Actuator shall be direct mount, with brushless non-reversing quarter turn motors and built in visual open/close position indicator. Actuator housing shall be weather proof and corrosion proof (NEMA 4X) with type 316 stainless steel fasteners, as manufactured by Spears® Manufacturing Company.