

Electric Actuators

Specifications

Series 83: Motor Type - Unidirectional,
 Single phase
 Size - A83 1/2" - 2" valves
 Torque - 120 in-lbs
 Voltage - 120 Vac, 50/60 Hz
 Amp Draw - 2.1 Amps
 Temp - Ambient Temp - 150 °F
 Switches - One single pole, Double
 throw (15 Amp rating)
 Corrosion/Weather proof -
 NEMA 4X

Standard Features (Sizes 1/2" – 2")

- PVC or CPVC Omni valve (or other Asahi ball valves and multiport ball valves up to 2")
- 2-part PTFE seats with EPDM backing
- Available in threaded and socket models
- 115 Vac single phase thermally protected
- 2.2 amps unidirectional 1/4-turn motor
- 5 second cycle time
- Actuator housing of high impact ABS, NEMA 4X. weatherproof

Options

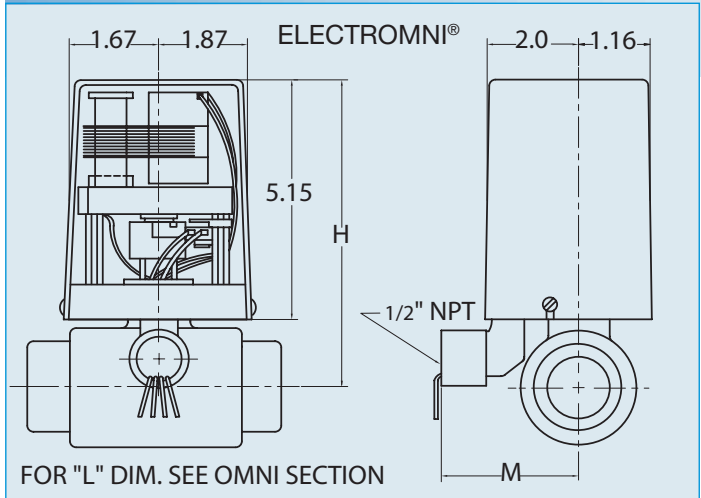
- Other voltages (see table)
- Extra limit switch (SPDT) for sequencing with other equipment or remote indicator lights, built into base, displaying OPEN or Closed position
- 2-wire control which can be used for retrofitting solenoids (must provide constant voltage) or for direct-wiring timers, level switches, etc.

Sample Specification

All open/close electrically actuated ball valves sizes 3/8" thru 2" shall have direct mounted unidirectional 90° turn actuators (115 Vac & 220 Vac, 12/24 AC & DC shall be reversing). Actuator shall be weatherproof (Nema 4X), have a green lead for grounding, and all wire leads protruding from 1/2" NPT conduit entry for customer hook-up. All valves shall be OMNI® ball valves, size 3/8"– 2", and shall be of one-piece, compact design, non-union type. All O-rings shall be EPDM or FKM with PTFE seats. Seats must have elastomeric backing cushions of the same material as the valve seals. PVC conforming to ASTM D1784 Cell Classification 12454-A, and CPVC conforming to ASTM D1784 Cell Classification 23567-A. Valve shall be rated 150 psi at 70° F, as manufactured by Asahi-America, Inc.



Electromni®



Wt./Dimensions Voltage

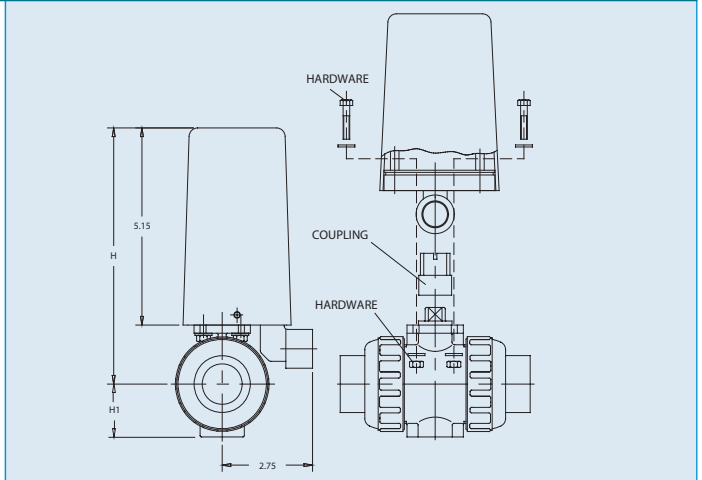
NOMINAL SIZE	WT. (LBS.)	H	M
3/8	1.75	5.84	2.75
1/2	1.75	5.84	2.75
3/4	2.00	6.24	2.75
1	2.50	6.25	2.75
1 1/2	3.00	6.33	2.75
2	4.00	6.65	2.75

Voltage	Current Draw (amps)	Cycle Time (sec)	Duty Cycle (%)
115 Vac	2.10	5	25
220 Vac	.60	5	25
12 Vac	2.25	5	75
24 Vac	4.00	5	75
12 Vdc	2.00	5	75
24 Vdc	3.50	5	75

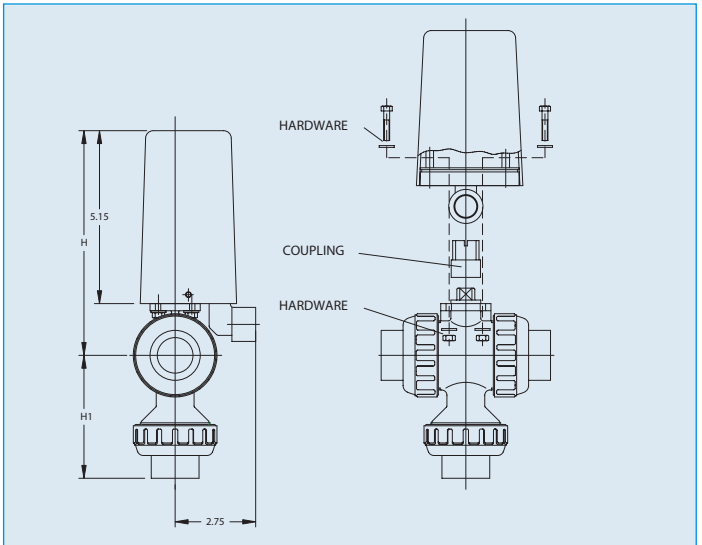
Electrically Actuated Ball Valves



Series 83 on Type 21 Ball Valve

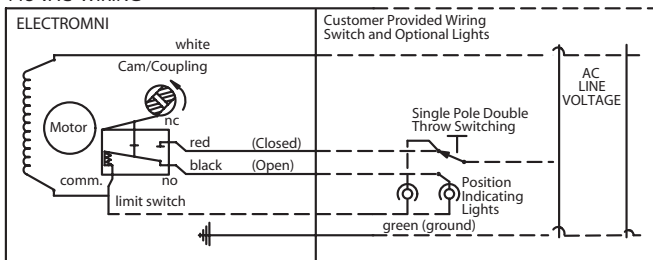


Series 83 on Multiport Ball Valve

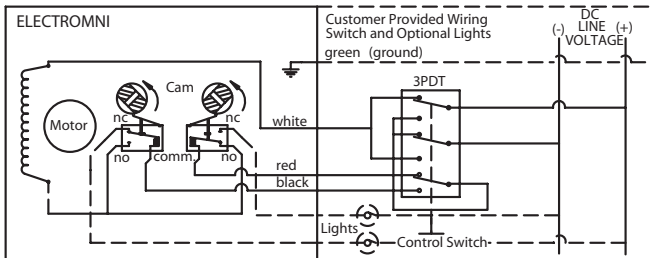


Wiring

115 VAC WIRING



24 VDC WIRING



TO CLOSE: NEG. TO WHITE POS. TO BLACK
TO OPEN: POS. TO WHITE NEG. TO RED

Dimensions (IN.)

SERIES 83 ON TYPE 21 (1/2"-2")

NOMINAL SIZE		H	H1*
INCHES	mm		
1/2	15	6.33	3.08
3/4	20	6.59	3.56
1	25	6.86	4.32
1 1/2	40	7.55	5.71
2	50	8.00	6.66

*PVC/CPVC Socket End FOR FEATURES OF SERIES 83 ACTUATOR, SEE PAGE 16.

Dimensions (IN.)

SERIES 83 ON MULTIPORT (1/2"-2")

NOMINAL SIZE		H	H1*
INCHES	mm		
1/2	15	6.33	3.08
3/4	20	6.59	3.56
1	25	6.86	4.32
1 1/2	40	7.55	5.71
2	50	8.00	6.66

*PVC/CPVC Socket End FOR FEATURES OF SERIES 83 ACTUATOR, SEE PAGE 16.