

CLARK SOLUTIONS

Model 83 Electrically Actuated Ball Valves

3/8" to 2" PVC or CPVC, 5 Second Cycle Time

DESCRIPTION

All model 83 open/close electrically actuated ball valves sizes 3/8" thru 2" have direct mounted unidirectional 90° turn actuators (115 Vac & 220 Vac, 12/24 AC & DC are reversing). The actuators are weatherproof (NEMA 4X), have a green lead for grounding, and all wire leads protrude from a 1/2" NPT conduit port.

The valves are a one-piece, compact design, non-union type. O-rings are EPDM, seats are PTFE with EPDM backing cushions. PVC conforms to ASTM D1784 Cell Classification 12454-A, and CPVC conforms to ASTM D1784 Cell Classification 23567-A.

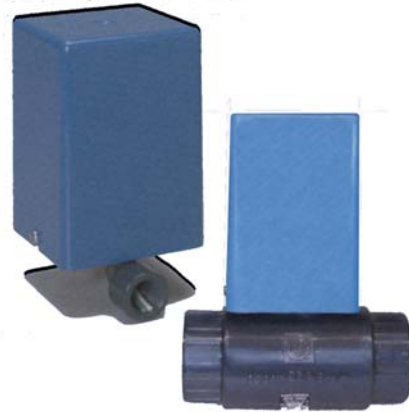
The valves are rated 150 psi at 70°F.

SPECIFICATIONS

GENERAL

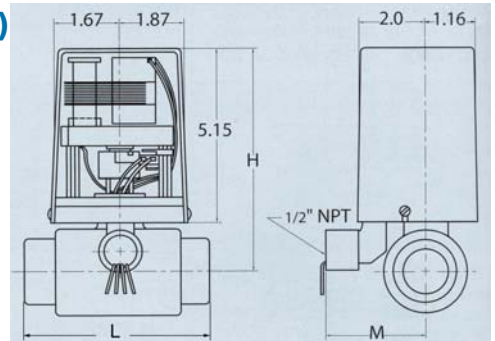
Motor Type: Unidirectional, Single phase
 Voltage: 120 Vac, 50/60 Hz (15 VDC, 24 VDC, 12 VAC, 24 VAC & 220 VAC optional)
 Current Draw: 2.2 Amps
 Torque: 120 in-lbs
 Switch: One SPDT (15 Amp rating)
 Housing: Corrosion/weather proof NEMA 4X
 Nominal Sizes: 3/8", 1/2", 3/4", 1", 1 1/4" 1 1/2", 2"
 Connections: Socket: 3/8", 1/2", 3/4", 1", 1 1/4" 1 1/2", 2" ASTM schedule 40
 Threaded: 3/8", 1/2", 3/4", 1", 1 1/4" 1 1/2", 2" NPT
 Ambient Temp. Range Actuator: 150 °F

Fluid Temp. Range: 30 to 120°F
 Valve Bodies, Ball, End Connector & Stem: PVC or CPVC
 Valve Seats: PTFE backed with EPDM
 Seals: EPDM



DIMENSIONS (INCHES)

Size (inches)	L	H	M	Cv	Wt (lbs)
3/8	3.35	5.84	2.75	7.7	1.75
1/2	3.82	5.84	2.75	14	1.75
3/4	4.06	6.24	2.75	29	2.00
1	4.45	6.25	2.75	47	2.50
1 1/4	5.00	-	-	72	-
1 1/2	5.94	6.33	2.75	140	3.00
2	6.97	6.65	2.75	185	4.00



Voltage	Current (Amps)	Cycle Time (Seconds)	Duty Cycle (%)
115 VAC	2.10	5	25
220 VAC	0.60	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

ORDERING INFORMATION

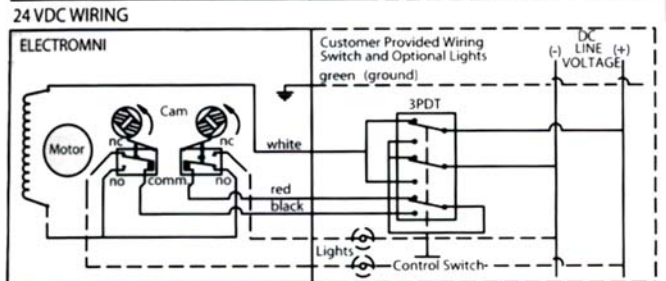
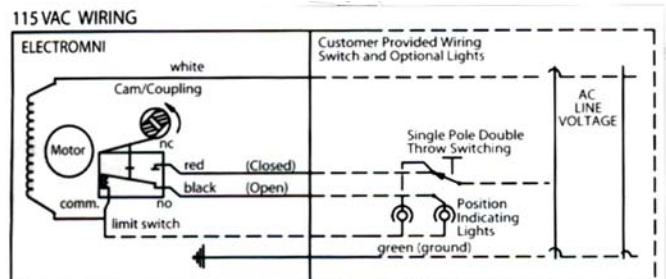
ORDER NUMBER (SEE TABLE)

83-A-B-C

EXAMPLE: 83-005-2016-2103100

A= Size	B= Body Material & Connection Type	C= Options
003= 3/8"		-- None
005= 1/2"		2101000= 2 Position Indicating Lights ¹
007= 3/4"	2015= PVC Socket Type	2102001= 2-Wire Control ¹
010= 1"	2016= PVC Threaded Type	2103100= Extra Limit Switch ¹
012= 1 1/4"	2017= CPVC Socket Type	2104749= 12 VDC Actuator
015= 1 1/2"	2018= CPVC Threaded Type	2104750= 24 VDC Actuator
020= 2"		2104751= 12 VAC Actuator
		2104752= 24 VAC Actuator
		2104753= 220 VAC Actuator
		¹ Must be factory installed.

WIRING



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