A Series Electric Actuators

The Chemline A Series Electric Actuator is a reversible rotary unit with output torques up to 2000 in.-lb. These actuators are ideal for Chemline butterfly valves up to 10" size, as well as all sizes of the Type 21 ISOLATOR True Union ball valves and HC Series High Capacity ball valves. The A Series actuator features a die cast aluminum housing with a thermally bonded epoxy powder coating, rated as a NEMA 4X enclosure. NEMA 7 and 9 enclosures are available. Consult Chemline.

A Series is one in a range of actuators specifically selected for Chemline Ball and Butterfly valves. Hardware kits are available for mounting of actuators in the field. Chemline also offers complete actuated valves, fully assembled and bench tested.

CHEMLINE Plastics Limited

Your Pipeline To Quality

for Chemline Ball Valves up to 6" and Butterfly Valves to 10"*

SERIES:	AA – 400 in.-lb. AB – 700 in.-lb. AC – 1,100 in.-lb. AD – 2,000 in.-lb.
VOLTAGES:	12, 24, 115 or 220 VAC, 12 or 24 VDC
ENCLOSURE:	Baked Hybrid Epoxy Coated Die Cast Aluminum NEMA 4X (7/9)

Beacon Position Indicator

Manual Override

Rugged and Reliable

Features

Large Selection of Options and Accessories

Approved by CSA (Canadian Standards Association)

Powerful Reversible Motors
- Minimum 75% duty cycle for high cycling applications

No Maintenance
- Permanently lubricated gear train
- Unit is designed for minimum life of 250,000 cycles

Standard Mounting Dimensions
- ISO mounting bolt circle

Beacon Visual Position Indicator and Declutchable Manual Override**



A Series on Type 21 ISOLATOR Ball Valve

A Series on Type 56 Butterfly Valve

* For 10" butterfly valves maximum allowable differential pressures is 50 psi.
**"D" size actuator has declutching hand wheel override.

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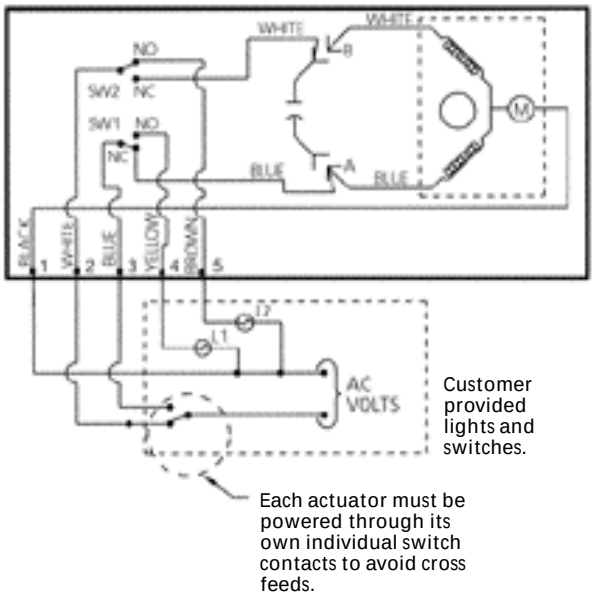
A Series Electric Actuators

SPECIFICATIONS

Model	Torques (in-lbs.)	115 VAC (1)		220 VAC (2)		12 VDC (3)		24 VDC (4)		12 VAC (5)		24 VAC (6)		Cycle Time/90° (sec.)	Weight (lbs.)
		Amp Draw	Duty Cycle	Amp Draw	Duty Cycle	Amp Draw	Duty Cycle	Amp Draw	Duty Cycle	Amp Draw	Duty Cycle	Amp Draw	Duty Cycle		
AAx	400	0.50	100%	0.80	75%	2.0	75%	4.0	75%	2.0	75%	3.0	75%	10	15.3
ABx	700	0.75	75%	0.80	50%	2.0	75%	4.0	75%	2.0	75%	3.0	75%	10	15.3
ACx	1100	0.50	100%	0.80	75%	2.0	75%	4.0	75%	2.0	75%	3.0	75%	25	15.5
ADx	2000	1.00	50%	0.80	50%	2.0	75%	4.0	75%	2.0	75%	3.0	75%	25	18.3

Current draw values are for actuators with rotors locked. Duty cycles are for ambient temperature (73°F).

AC WIRING



VALVE OPERATION

1. Black – Neutral

   To Open – Power to White (Terminal 2)

   To Close – Power to Blue (Terminal 3)

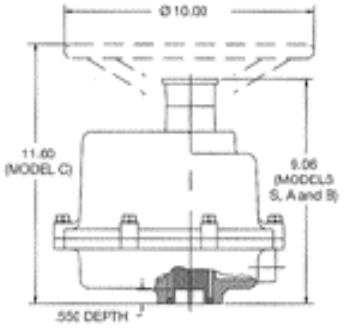
   L1 – Possible Customer Equipment

   L2 – Possible Customer Equipment

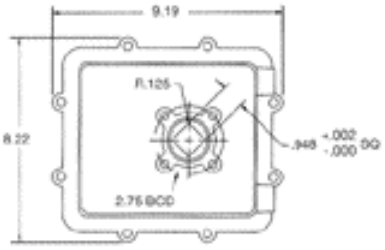
NOTES:

1. Actuator shown in counter clockwise extreme of travel, or 'open' position.
2. Motor has a thermal protector as shown by (M) in the diagram.

DIMENSIONS INCHES



Side View

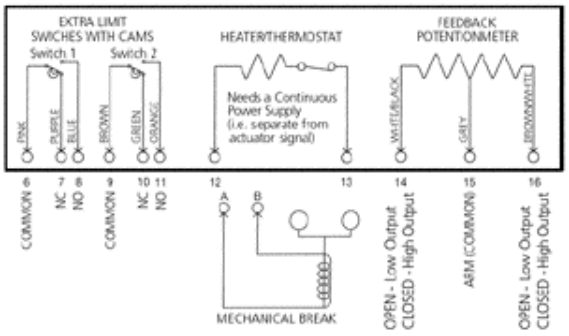


Bottom View

CONTROL ACCESSORIES

- **Extra Limit Switches** – For position feedback
- **Heater/Thermostat** – For outdoor or humid environments. Maintains internal temperature of actuator at 5°C (40°F).
- **3-Position Control** – For 3-way ball valves or dribble control on 2-way valves.
- **Positioner** – On-board control package accepts 4-20 mA input (or 0 to 10 VDC) input for proportional control.
- **4 to 20 mA Output Source** – A circuit board coupled with a feedback potentiometer allows a 4 to 20 mA output signal to be used with other equipment.
- **Failsafe Capability** – Backup battery pack or mechanical spring designs are available.
- **Feedback Potentiometer** – To feedback the precise valve position to a remote location,or to allow "jogging" control.
- **Cycle Length Control Module** – For extended cycle times, this control module can permit field adjustments of cycle times up to ten minutes.
- **Two-Wire Control** – For retrofitting solenoids or for direct wiring timers, level switches, etc.
- **Mechanical Brake** – To eliminate oscillation when seating butterfly valves or large ball valves.
- **Multi-Turn** – Used to operate diaphragms and gate valves electrically.
- **Bus System Capability** – Consult Chemline for more information.

ACCESSORIES WIRING



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