

Electric Actuators and Accessories

EL - Series



EL-O-MATIC™


EMERSON™
Process Management

**Optimum Performance
Under the Most
Demanding On/Off
and Regulating Conditions**

**A Choice of Three Designs
for Small, Medium or
Large-Size Valves**

**Outstanding Features
to Meet Most In-Field
Operating Requirements**

**Highly Reliable,
Trouble-Free Operation
for the Most Demanding
Applications**

ELS, EL, and EL Extended Series Electric Actuators

From aggressive chemicals to use in hostile environments, electric actuators must provide optimum performance under the most demanding operating conditions.

EL-O-MATIC ELS, EL, and EL Extended Series Electric Actuators meet this challenge through a superior design that is field-

proven over a wide range of process applications and uses high quality, corrosion-resistant aluminium alloy, stainless steel, and bronze materials for internal components and housings.



ELS Series

ELS Series Electric Actuators are available in two (2) models, produce up to 25Nm (221 lbf-in) of torque and utilize a spur gear drive system effective for use with 2-way and 3-way ball valves. Standard operating features include cam operated limit switches from 0° to 270° of rotation and 50% duty rating.

EL Series

EL Series Electric Actuators are available in the seven (7) models with torque outputs to 800Nm (7080 lbf-in) and utilize a self-locking multiple reduction worm gear system for tight quarter turn positioning control. EL Series Actuators have a 30% duty cycle.

Standard, integrated features on all models include dome position indicator, manual override, heater, torque switches (except EL55), and mechanical travel stops.

EL Extended Series

EL Extended Series Electric Actuators are available in three (3) models, produce up to 2500Nm (22,125 lbf-in) of torque and are ideal for use with butterfly and larger type valves.

A self-locking worm gear system, lubed-for-life gear case, ball bearing motor, anti-condensation heater, precision adjustable limit switch cams, and hermetically enclosed mechanical position indicator result in an all-encompassing actuator that provides on/off valve positioning service, extra long life, low maintenance, and maximum corrosion resistance. These units feature a 30% duty cycle.



ELS Series

- Compact, lightweight, fully gasketed IP65 / NEMA 4 housing (500 hour salt spray tested)
- Spur gear system designed for 2-way and 3-way ball valves
- Split capacitor fan cooled ball bearing motor with integrated thermostatic overheat protection
- Sealed, maintenance-free gearbox with steel spur gear train and “double-D” universal output shaft
- Easily adjustable, cam actuated limit switches that cover up to 270° of rotation and provide outputs for position indication

EL Series

- Compact, lightweight durable and IP65 / NEMA 4 rated enclosure.
- Self-locking, multiple reduction worm gear system for tight, quarter turn positioning control
- Rugged, ball bearing motor with auto-reset thermal overload protector available in all common supply voltages
- Hand wheel override for manual valve operation
- Torque switches to protect valve seat from debris damage and provide reserve torque up to the rated maximum (except EL35/55)
- Cam operated limit switches for in-field adjustment of actuator stroke to valve (factory preset for nominal 90° stroke)
- Highly visible, domed valve position indicator
- Valve mounting interface according the ISO 5211 or DIN 3337 standard

EL Extended Series

- Durable, corrosion-resistant IP67/NEMA 4 rated aluminium enclosure
- Declutchable, easy-to-use spoked hand wheel override for manual operation
- Electromechanical torque regulator/limiter to protect valve seat from debris damage and provide reserve torque up to the rated maximum
- Integral motor centrifugal switch that removes the starting capacitor from the circuit when the motor reaches full speed and returns the capacitor to the circuit when the motor stops (EL2500 only)
- Optional IP68/ NEMA 6 submersible rating permits use in 1 meter (40”) of seawater for 24 hours
- Valve mounting interface according the ISO 5211 or DIN 3337 standard

Hazardous area versions

EL actuator sizes EL 55 to EL 2500 are available with ATEX Ex d or FM approval (XP, Class I, Div. 1).

- EU ATEX Directive, Flame proof version
Marking: II 2 G Ex d IIB T4 according EN60079-0 and EN60079-1 for use in Zone 1 and 2
- FM Explosion Proof version
Marking XP, Class I, Div. 1, Groups C/D

Options

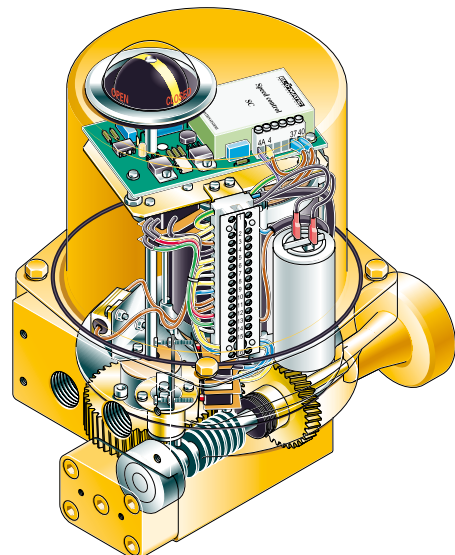
EL-O-Matic EL series electric actuators are not restricted to open/close applications, with the addition of one or more of the available kit options the requirements for fully-fledged control units can often be met. For instance in many cases the addition of a positioner will enable the actuator to be used for sophisticated control applications.

Below is a brief summary of the available options:

- Extra limit switches
- Speed control
- Potentiometers
- Position transmitters
- Positioners
- Local control station

These options may be added to factory built units, or supplied in kit form. When supplied as kits all parts are included together with a simple to follow installation sheet.

We would be happy to advise you concerning your particular requirements.



EL-O-MATIC actuators are manufactured to these worldwide standards as follows;

**Safety
Standards**



**Company Operations
Standards**

ISO – 9001 Quality Assurance

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