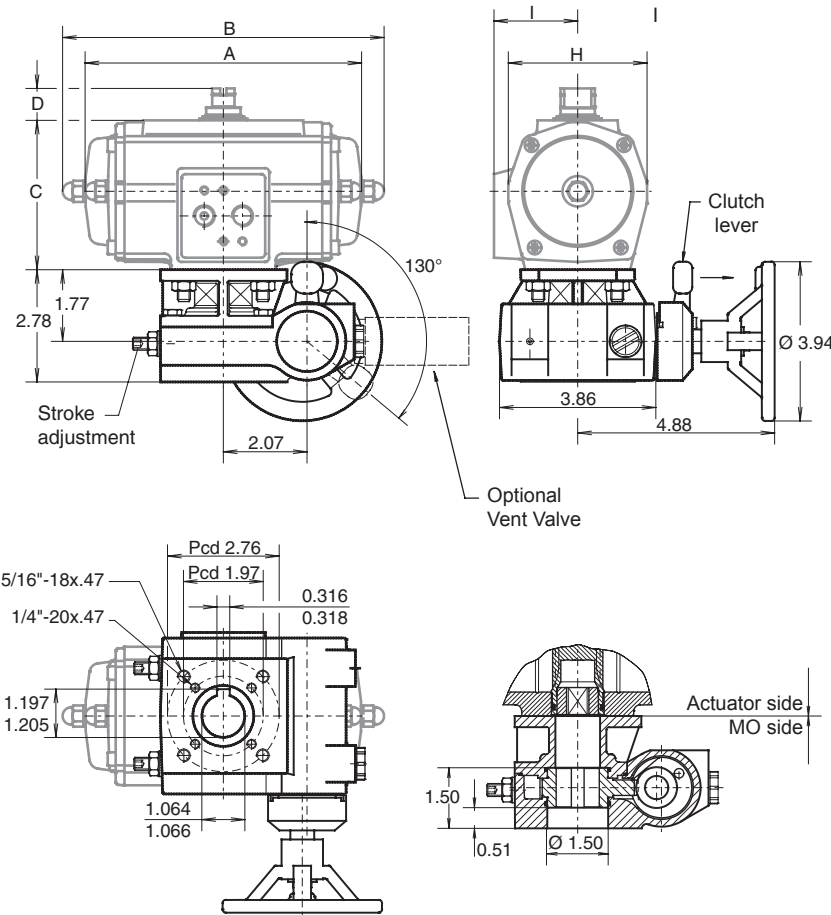


# Data sheet

Sheet No.: A3.402.1 Rev. A  
Date: November 2009

## EL-O-MATIC ACTUATOR WITH MANUAL OVERRIDE

MO-10



| Dimensions in inches | E25  | E40  | E65  |
|----------------------|------|------|------|
| <b>A ED</b>          | 6.26 | 7.09 | 7.83 |
| <b>B ES</b>          | 6.77 | 8.03 | 9.80 |
| <b>C</b>             | 3.15 | 3.66 | 4.13 |
| <b>D</b>             | 0.79 | 0.79 | 0.79 |
| <b>H</b>             | 2.91 | 3.38 | 3.86 |
| <b>I</b>             | 1.81 | 2.09 | 2.26 |

### Description

The El-O-Matic MO Series declutchable gear operators offer simple and reliable manual positioning of valves, dampers and other quarter-turn devices when overriding, existing pneumatic or hydraulic rotary actuators. All El-O-Matic MO-units are suitable for indoor and outdoor use and combine rugged construction, light weight and modular design to provide the most efficient and cost effective solution to a full range of manual override requirements.

The self-locking worm gear design means safe and easy operation, positive manual positioning and extremely long life.

The El-O-Matic override can be adapted to any quarter-turn actuator and may even be installed in the field on existing valves.

### Operation

To engage manual operation, first pull out the spring loaded clutch lever, then rotate the clutch lever clockwise until the clutch lever re-engages. Anticlockwise lever movement disengages manual operation and returns the system to automatic operation.

**Note:** When under manual control, the valve remains locked in the last set position.

### Stroke adjustment

The MO gearbox is equipped with two stroke adjustment bolts. These must be set for accurate valve positioning and to avoid damage to the actuator or valve spindle during manual operation. The limit stops on actuators are redundant in combination with MO-gearboxes. For stroke angle less than 80° please consult our engineering department.

### Identification

For basic override : MO-10  
For complete assemblies : E25+MO-10

### Assembly codes

A - Standard  
B - Reversed operation: handwheel on the other side (factory option)

### Specification

|                   |                                       |           |                                 |
|-------------------|---------------------------------------|-----------|---------------------------------|
| Body              | : Cast aluminum                       | Movement  | : 0° - 90°                      |
| Gear quadrant     | : Aluminum bronze                     | Finish    | : Two part polyurethane coating |
| Worm shaft        | : High grade aluminum / hard anodized | Weight    | : 3.3 lb                        |
| Temperature       | : -4°F to +176°F                      | Fasteners | : Stainless steel               |
| Stroke adjustment | : +5° and -5° at each end             |           |                                 |

### Input / Output

|                 |                    |             |
|-----------------|--------------------|-------------|
| At rim          | No. of turns       | : 9.5       |
|                 | Max. input force   | : 18.43 lb  |
| At output shaft | Max. output torque | : 885 in.lb |

### Optional

Electric position indication and vent valves (A3.403)

**EL-O-MATIC™**

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Updated data sheets can be obtained from our website [www.El-O-Matic.com](http://www.El-O-Matic.com) or from your nearest Valve Automation Center **USA:** +1 281 477 4100 **Europe:** +31 74 256 10 10 **Asia-Pacific:** +65 6501 4600

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