Valworx

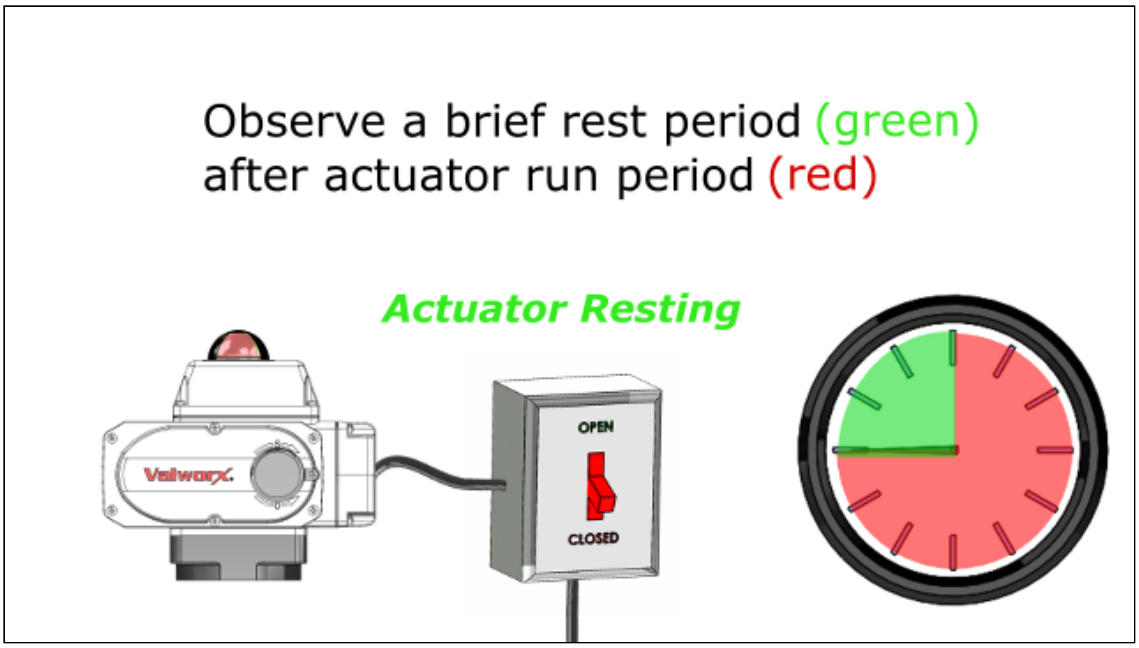
ProTips

Duty Cycle

- **Electric motors** have a specified amount of time they may run continuously before requiring a rest period to prevent possible damage to the motor. This amount of time is referred to as the Duty Cycle, and can be represented by a percentage.
- All Valworx electric actuators are intermittent duty, meaning these motors are not intended for continuous movement.
- Valworx pneumatic actuators and accessories are continuous duty, i.e. 100% duty cycle.
- It is important to understand how a Duty Cycle rating would apply to an installed actuator while selecting the right components for an application - primarily to ensure the longest possible lifespan for your product.

Electric On-Off Actuators

Valworx Electric actuators are intermittent duty, meaning they can work at a constant load, but require a rest period with no movement to cool down to ambient temperature. For example, the actuator in the following diagram has a 75% duty cycle, thus the motor may be rotating in either direction for a maximum of 75% of a minute, i.e. 45 seconds. After which, 15 seconds of rest must be observed, represented by the **red** crescent on the clock.



- **Valworx On-Off** actuators refer to electric actuators that run open/closed with the flip of a switch. With this type of actuator, the motor is at rest until the user or PLC changes the position of the actuator by energizing the open or closed pins.
- Valworx actuators are designed to be continuously powered, to ensure a thermostatically controlled anti-condensation heater can turn on and off as needed to help prevent the formation of condensation under the motor cover.

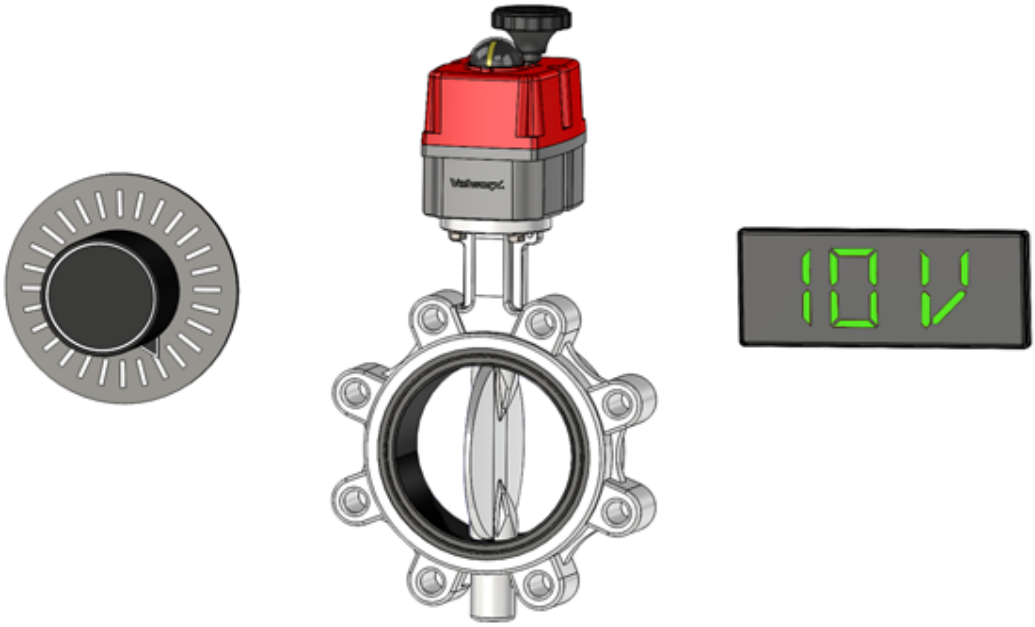
We offer several different models of electric actuator, each with its own individual duty cycle listing, which may be found on the actuator label, its Data Sheet, or Product Page under the actuator specifications.

Duty Cycle Percentage	Actual Time
60%	36 seconds
70%	42 seconds
75%	45 seconds

Shop for Electric On-Off Actuators

Electric DPS & EPS (Positioning) Actuators

Positioning actuators are intended for end-users that need the ability to control valve flow, in between the constraints of a fully open/closed valve.
EPS come pre-installed, DPS is an additional accessory.

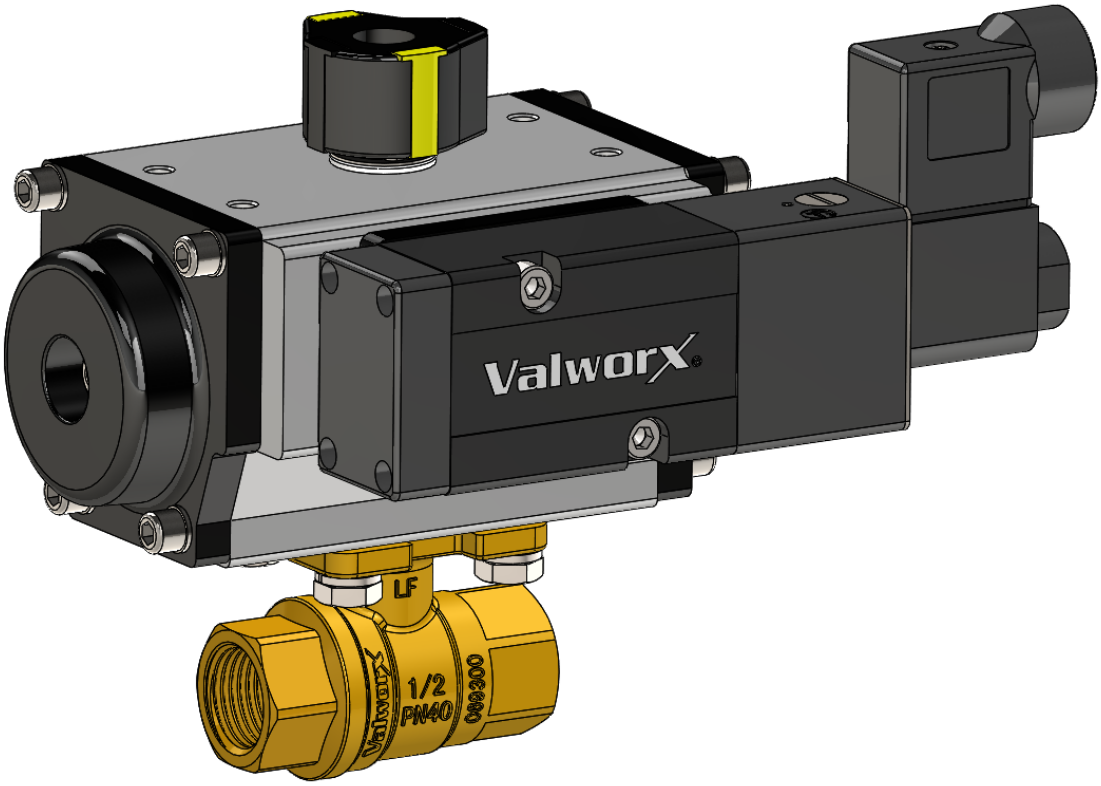


- **Valworx EPS/DPS** actuators refer to electric actuators that can be modulated between open and closed via a control signal. With this type of actuator, the duty cycle printed on the actuator label must still be observed. The motor is at rest until the user or PLC changes the position of the actuator by altering the control signal input.

Shop for DPS Accessories **Shop for EPS Actuators**

Direct Mount Solenoid Valves

Solenoid valves are used to electrically pilot air actuated valves. These solenoid valves do not contain a motor, but instead feature a magnetic coil that is energized and de-energized to control the movement of air through the valve.



- **Valworx Direct Mount Solenoid Valves** are designed for continuous service or 100% duty cycle.
- **Valworx Pneumatic Actuators** feature a rugged rack and pinion design, and are also designed for continuous service, with 100% duty cycle and have been tested to 1 million cycles.

Shop for Solenoid Valves **Shop for Air Actuators**

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