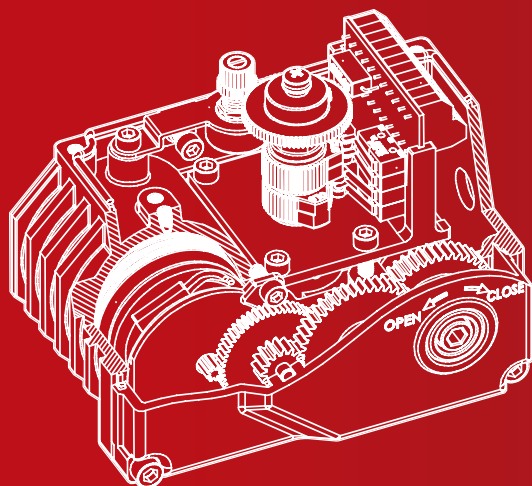




INSTALLATION, OPERATION, & MAINTENANCE GUIDE

ACTUATION

AE Series



MODEL
AE-700



IMPORTANT

For safe and proper operation, please read the enclosed installation, operation, and maintenance instructions prior to using any Jomar Valve product. Save this document for reference.

Only qualified personnel should undertake the procedures outlined in this document. Jomar Valve, its agents, representatives, and employees assume no liability for the use of these procedures. These procedures are offered as suggestions only.

Note that failure to follow the enclosed instructions may damage the product and/or void any applicable warranties.

Actuation

Electric Actuator, Double Acting, NEMA 4X, Manual Override

Model: AE-700

AE-700



IMPORTANT

Read the installation operation and maintenance instruction prior to using any Jomar Valve component. Failure to follow the instructions may damage the component and/or void the warranty.

After receiving actuator, check the following matters.

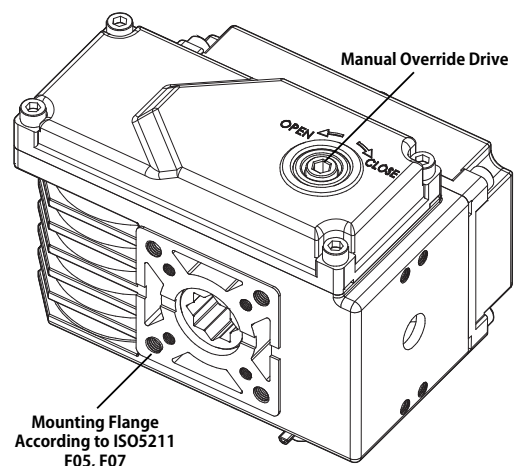
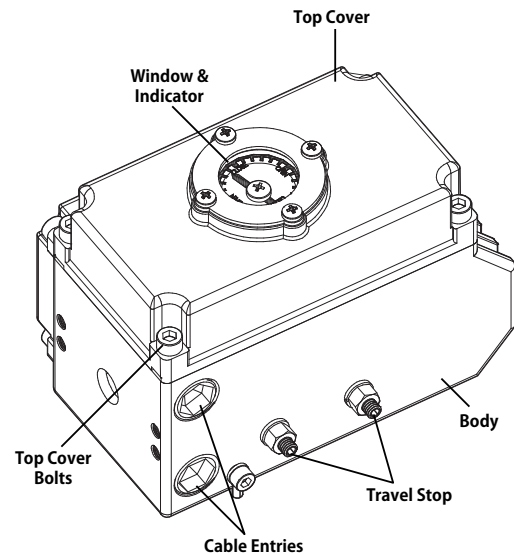
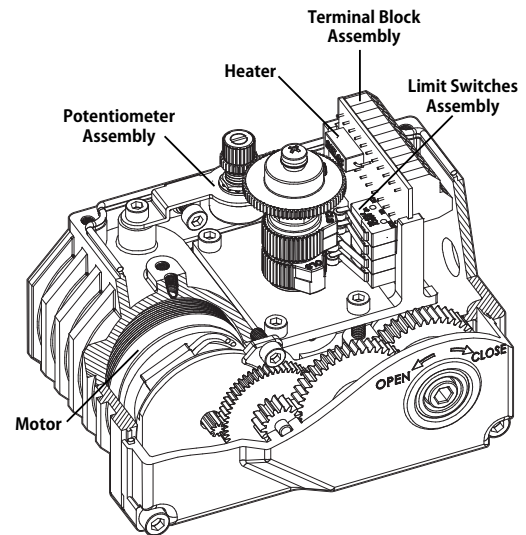
1. Individual test report, electrical wiring (inside of actuator) is provided together with actuator.
2. Visual check: Painting, indicator, etc.
3. Specification: Check the test report and name plate with your required specifications of the application.
4. Optional items: check if all optional items are correct.

PRECAUTION

Selection of the valve and actuator: Review all specifications of valve and actuator carefully before making the selection and reserve about 30% torque of the actuator for the safety purpose.

1. Before necessary setting such as limit switch, do not make actuator work either fully open or fully closed position.
2. After electrical wiring, make sure to secure the sealing of cable entries.
3. Be careful, especially at temperature, humidity, vibration, voltage drop.
4. Storage: Keep actuator dry, clean and cool.
5. Trouble: Refer to the enclosed trouble shooting, but do not dismantle the actuator without consulting with factory.

If repair or maintenance is required, check the model, electrical condition, serial number and current situation to inform the factory.



SIZING AND MOUNTING

AE Series actuators are suitable for the direct mount on ISO standard flanged valve and damper, and with proper mounting bracket and adapter, ITQ can be mounted on any type of quarter-turn equipment.

Mounting

Basically there is no limitation in orientation of mounting of actuator on valve, but in the vertical pipeline, cable conduit of actuator is recommended to be oriented toward ground in order to avoid water flow in through cable entry. When actuator is mounted on the valve, following procedure is recommended.

1. Watching the indicator, put actuator at fully closed position (Clockwise).
2. Valve stem must be properly machined to match the female drive shaft of actuator (17mm double square).
3. Close the valve and mount actuator on the valve (Some amount of lubrication oil can be used for easier adaption).
4. Both mounting holes of the actuator and valve flange must be properly aligned each other. If both are not properly aligned, make actuator move by manual in order for making both aligned well.

SETTING

Required Tools for Setting

Allen Wrench 1 set (M6, Metric)

NOTE: Operating actuator manually while power is engaged to actuator can cause damage to the actuator

Manual Operation

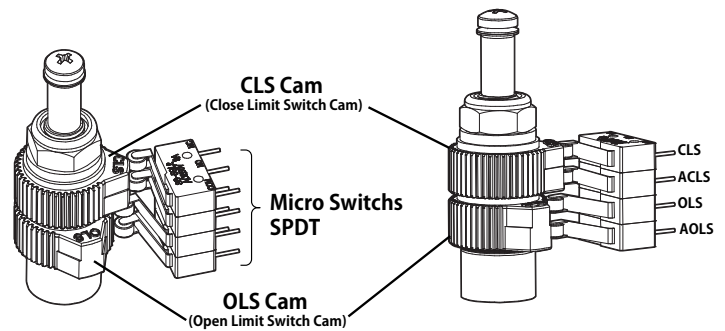
1. Manual drive shaft located at side of actuator housing (M6 Wrench).
2. Clockwise direction is close, Counter-clockwise is open.
3. From fully close position to fully open position requires about 7 turns.
4. Set the limit switches (full close/open) by the manual operation; do not pass the limit ranges of the full close/open.

Limit Switch Setting

Set the actuator at the fully close position, watching indicator of actuator or valve disc.

- Turning the Close cam until the cam activates the lever of the limit switch and makes "click" sound two times.

NOTE: Proceed with same instructions for the open position



ELECTRIC WIRING

Before Wiring

1. Cable entries are machined with 2-M20X1.5 and sealed by plug before delivery.
2. Keep the plug as it is if user doesn't use both cable entries.
3. Make sure to seal the entries by using rubber or metallic packing after wiring, so that water or other foreign material may not come in.
4. If suitable cable connection is not used for wiring, factory will not guarantee the performance.

Electrical Wiring

1. Check if the electrical specification like as power, wiring, etc. are correct.
2. Wiring diagram is to be supplied together with the actuator (in plastic bag or inside of top cover).
3. Make sure to supply the electric power to the heater to keep inside of the actuator clean and dry for anti-condensation.
4. Make sure to check if wiring to the terminal is strong enough.
5. Make sure that one relay operates one actuator only (cannot operate two or more actuators).
6. Make sure to clean inside of the actuator and no foreign material is inside.

MAINTENANCE

Lubrication

Lubrication is already done by factory and there is generally no need to refill it again. But in places such as very dry conditions below R.H 15% or temperatures higher than 140°F, it is required to do lubrication once two year.

Regular Operation and Maintenance

Electrical power should always be supplied to actuator, and operating actuator once a week is recommended. In order to use the actuator for a long time, regular maintenance once a year is required. Please check operating condition, corrosion, painting, etc.

Others

Should you have any further queries, contact us by phone at 586.268.1220, email us at csr@jomar.com or visit our website: www.jomarvalve.com.