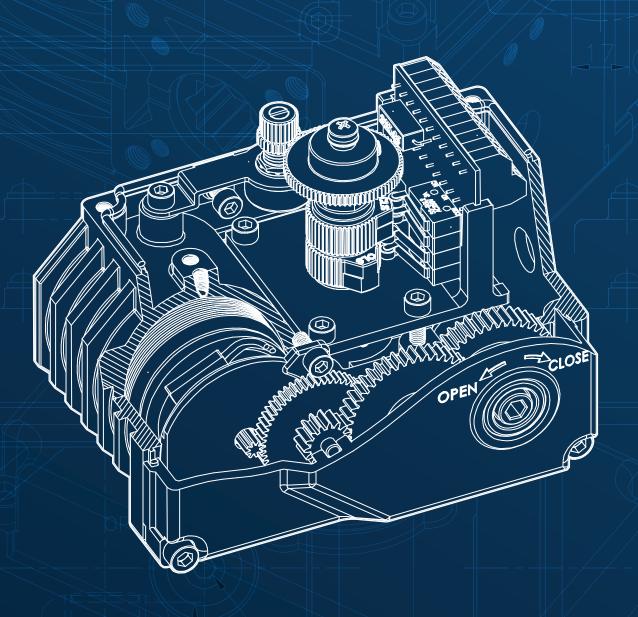
# AE-700 Installation Operation & Maintenance Instructions







### **IMPORTANT**

Please 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, please 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.

# **Pre-caution**

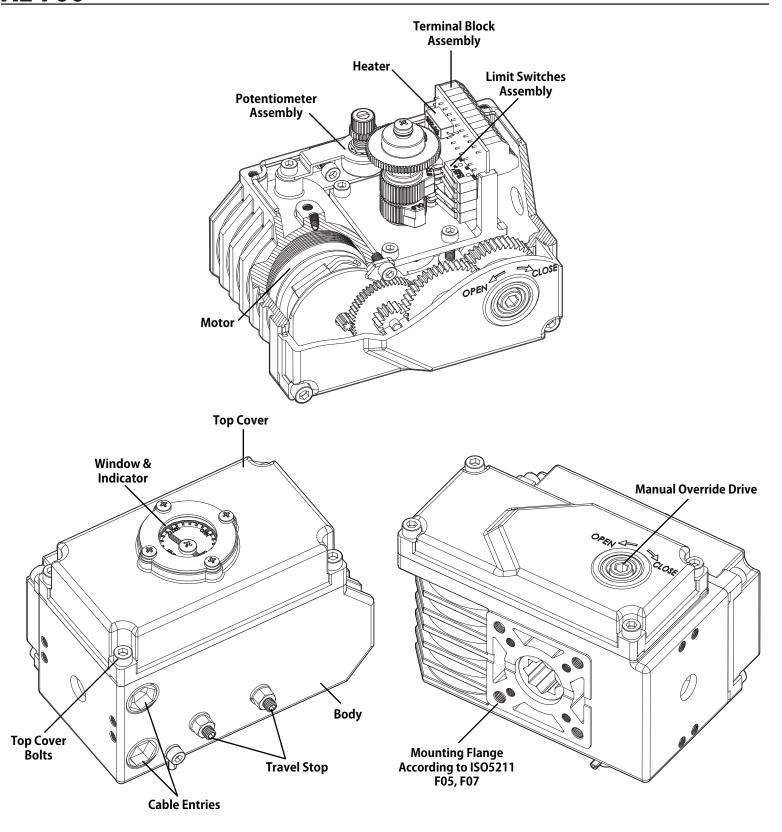
Selection of the valve and actuator: Review all specifications of valve and actuator carefully before making the selection and reserve about 30% torque of the actuator for the safety purpose.

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

If repair or maintenance is required, please check the model, electrical condition, serial Number and current situation to inform to 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. Please set the limit switches (full close/open) by the manual operation not to pass the limit ranges of the full Close and Open.

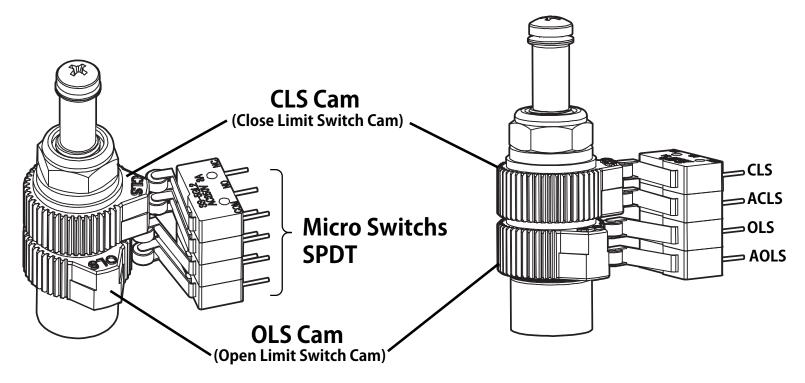
### **Limit switch setting**

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

• Turning the Close cam until the cam activate the lever of the limit switch and make sound "Click" two times.

NOTE: Do the same way for the open position





# **Electric Wiring**

# **Before Wiring**

- 1. Cable entries are machined with 2-M20X1.5 and sealed by Plug before delivery.
- 2. Please remain the plug as it is if user doesn't use both cable entries.
- 3. Please 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 won't guaranty 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 (Can't operate two or more actuators).
- 6. Make sure to clean inside of the actuator and no foreign material inside.



# **Maintenance**

### Lubrication

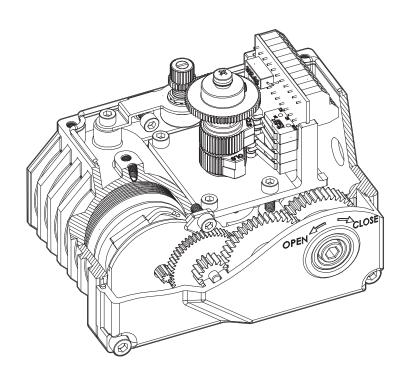
Lubrication is already done by factory and generally no need to refill it again. But in the places such as very dry condition below R.H 15% or high temperature higher than 140°F, it is required to do lubrication once two year.

### **Regular operation and Maintenance**

Electrical power always should 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, please contact us by phone at (586) 268-1220, email us at csr@jomar.com or visit our website www.jomarvalve.com





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