

JFER Modulating type

1. Connect the actuator to the power supply, and input a control signal to turn the actuator at full open position. After the actuator is in full opened place, observe whether the valve is in a fully open state. As shown in the figure below, the valve is not fully open.



2. Turn off the power, turn the open mechanical limit jackscrew

outwards for 1~2 turns (Mechanical limit jackscrew: left open and right

close) as shown in the figure beolw.



3. Turn the actuator in the opening direction (counterclockwise) with

a hex wrench to make the valve in full open position.



4. Loosen the cam fixing nut in the actuator, adjust the yellow cam counterclockwise to trigger limit switch (there are two audible sounds)andkeeptheredcamstationary(yellow=open), asshowninthe figure below:







5. After adjusting the yellow cam, tighten the cam fixing nut.

6. Turn the mechanical limit jack screw inward until the jacking screw is jammed, then turn the jack screw outward for one circle, and then tighten the nut inward to keep the jack screw stationary. As shown below:





7. Turn on the power for the actuator and input a control signal to make the valve at full close position. After the actuator is in full closed place, observe whether the valve is in a fully closed state. As shown in the figure below, the valve is not fully closed.



8. Turn off the power, turn the close mechanical limit jackscrew outwardsfor1~2turns(Mechanical limit jackscrew:left open and right close) as shown in the figure beolw:





9. Turn the actuator in the closing direction (clockwise) with a hex wrench to make the valve in full close position, as shown in the figure below:



10.Loosen the cam fixing nut in the actuator, adjust the red cam clockwise to trigger limit switch (there are two audible sounds)and keep the yellow cam stationary (red=close), as shown in the figure below:







11.After adjusting the red cam, tighten the cam fixing nut.

12. Turn the mechanical limit jack screw inward until the jacking screw is jammed, then turn the jack screw outward for one circle, and then tighten the nut inward to keep the jack screw stationary. As shown below:





13.When the actuator is in the full closed position, pull out the connector with 5 wires inserted on the module, and use a multimeter to measure the resistance between the black wire and the red wire.Pull the potentiometer in the actuator out to separate the two gears, as shown in the following figure:



Then manually rotate the gear under the potentiometer to let the

multimeter display between $50-70\Omega$.





14.Insert the connector back into the module, turn on the power for the actuator, and input a control signal to make the actuator have a certain opening, that is, let the opening of the actuator be between 20% and80%.Then press and hold the black button of the module for about 3 seconds until the digital tube displays "y", then release the button to enter one-key calibration. As shown below:



After the calibration is completed, input a control signal to make the valve switch back and forth once, and observe whether the valve is open and closed in place. If it is not adjusted correctly, use the above method to adjust again.

After the adjustment is completed, the indicator plate of the actuator is closed in place and the vertical indicator is as shown in the figure below:





The open position is a horizontal indication as shown in the figure below:



If the position of the indicator plate is not vertical and horizontal, use a screwdriver to unscrew the roundhead Phillips screw, manually rotate the indicator plate to adjust and then tighten the screw.



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