



Warning: Be aware of the pressure, temperature, media, and voltage requirements for your particular valve. These valves are designed to be *controlled* by air flow only. Other types of fluid may flow through the main valve.



Angle Valve Installation Guide

Note: Fluid can flow either way through the valve, but it is optimal to have flow enter from the higher port.

Warning: When tightening any connections to the valve, do not use the actuator as leverage. Doing so may damage the joint between the actuator and the valve.

Connection to fluid supply:

1. Connect the fluid supply and outlet to the lower ports.
2. Connect the controlling air supply to the ports on the actuator. For double acting valves, air supplied to the bottom port will open the valve, and top port will close the valve.

Operational Note: The pin on the top of the actuator acts as the position indicator for the valve. The pin pops up when the valve is open.

Air Actuated Ball Valve Installation Guide

Adjusting the valve's default position:

1. Remove the four bolts underneath the actuator.
2. Separate the actuator from the valve.
3. Rotate the valve to the desired default position.
4. Place the actuator back on the valve and screw everything back into place.

Connection to fluid supply:

1. Connect the main fluid supply ball valve to the primary source and primary outlet.
2. Connect the control supply to the actuator. If the actuator is double acting, air supplied to the right port will open the valve, and the air supplied to the left port will close the valve.

Connection to Position Indicator:

1. Remove the bolt and cap covering the slot at the top of the actuator.
2. Set the indicator to the default/current position and place it so that the key fits in the slot.
3. Tighten the screws on the bracket holding the indicator in place.

Adjustment:

The angle of the actuator can be adjusted if the actuator becomes misaligned during operation. To realign the actuator, adjust the two screws near the top of the actuator, above the air supply ports. Ensure that the screws are tightened down after adjustment.

Maintenance Guide

Note: This valve is designed to last for an extended time period. However, common maintenance is necessary. If a leak begins to develop on the valve body, please consult these common maintenance procedures for a solution.

Warning: When tightening any connections to the valve, do not use the actuator as leverage. Doing so may damage the joint between the actuator and the valve.

Tightening the seal between the valve and the actuator:

This valve does not have a dynamic seal (i.e. no spring), therefore as the valve ages, the seal between the valve and the actuator body must be periodically tightened manually.

1. Remove the four bolts underneath the actuator.
2. Separate the actuator from the valve.
3. Tighten the nut on the top of the valve body. See figure one for location.
4. Place the actuator back on the valve and screw everything back into place.

Tightening the seals between the valve and the inlet/outlet ports:

Leaks developing in the inlet/outlet ports are often caused by inconsistent tightening of the torque bolts on the valve body. If this occurs, make sure to use a consistent method of tightening these bolts to ensure consistent torque.

1. Remove the torque bolts and check for any debris or damage to the gaskets.
2. Use a torque wrench or other consistent method of tightening the torque bolts to reconnect the inlet and outlet ports.

Reference Figures:

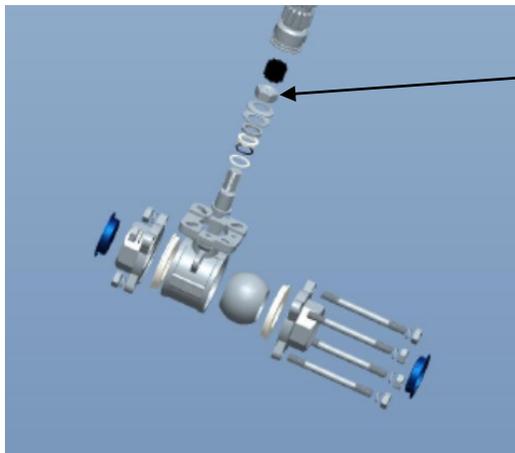


Figure 1: Exploded view of valve body with tightening nut indicated.

Tightening Nut

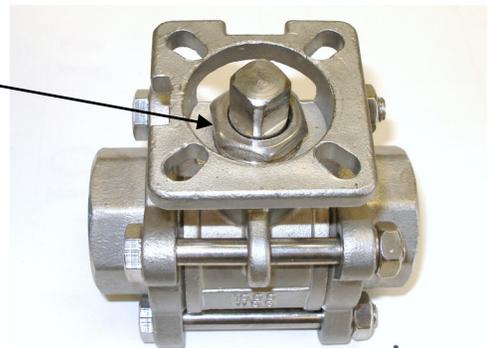


Figure 2: Valve Body without actuator with tightening nut indicated.

Torque Bolts (4x)

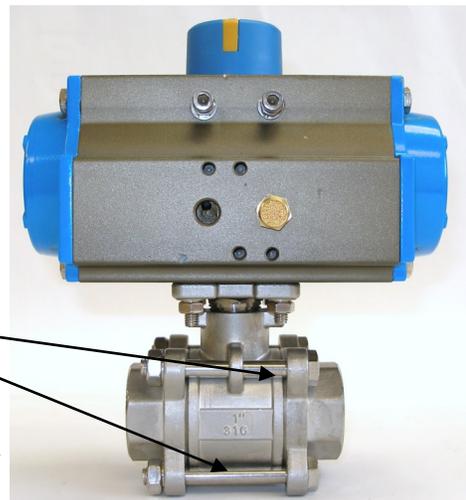


Figure 3: Model KS-1 with torque bolts indicated.