

Installation

Safety Warning

When installing positioner, please ensure to read and follow safety instruction.

- All input and supply pressure to valve, actuator, and other related devices must be turned off.
- Use bypass valve or other equipment to avoid entire system "shut down."
- Make sure there is no remaining pressure in the actuator.

Tools for installation

- ① Hexagonal wrench
- ② Screw drivers (+) & (-)
- ③ Spanners for hexagonal-head bolts

YT-1000L installation

YT-1000L should be installed on linear motion valve such as globe valve or gate valve using spring return type diaphragm or piston actuator. Before installation, be sure to check for following installation components.

- ① YT-1000L main body
- ② Feedback lever and lever spring
- ③ Flange nut (bottom side of YT-1000L)
- ④ 4 pcs. of hexagon head bolts (M8 X 1.25P)
- ⑤ 4 pcs. of M8 plate washer

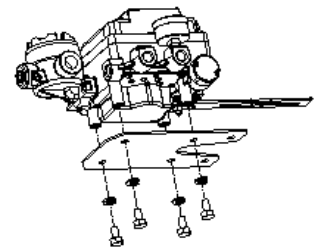
Installation Steps

(1) Proper bracket must be made in order to attach positioner on the actuator yoke.

Please consider following when making a bracket.

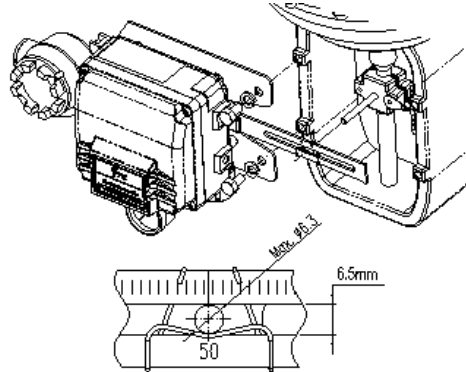
- ① Feedback lever should be leveled at 50% of valve stroke. (Refer to Step 7)
- ② Feedback lever connection bar of actuator clamp should be installed at the position that the valve stroke and numbers which indicated on the feedback lever must be fitted. (Refer to Step 8)

(2) Attach YT-1000L to the bracket, which was produced in earlier step, by using bolts. <Figure 2> Please refer to backside of the product for size of bolts. The standard size of bolt is M8 X 1.25P, and other bolt sizes are available. Please contact YTC sales department.



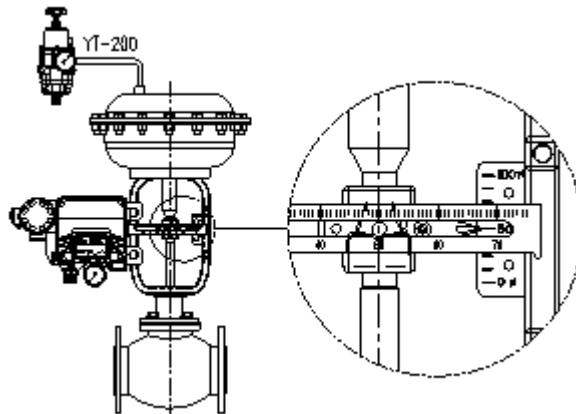
<Figure 2>

- (3) Attach YT-1000L (with bracket) to the actuator yoke - DO NOT TIGHTEN COMPLETELY.
- (4) Connect YT-1000L feedback lever to the actuator clamp. The gap on the YT-1000L feedback lever is 6.5mm. The connection bar thickness should be less than 6.3mm. <Figure 3>



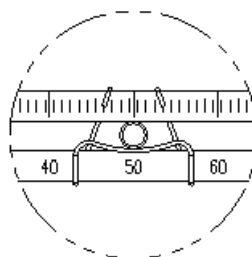
<Figure 3>

- (5) Connect air filter regulator to the actuator temporarily. Set supply pressure of the regulator in order to position the actuator clamp at 50% of valve stroke. <Figure 4>



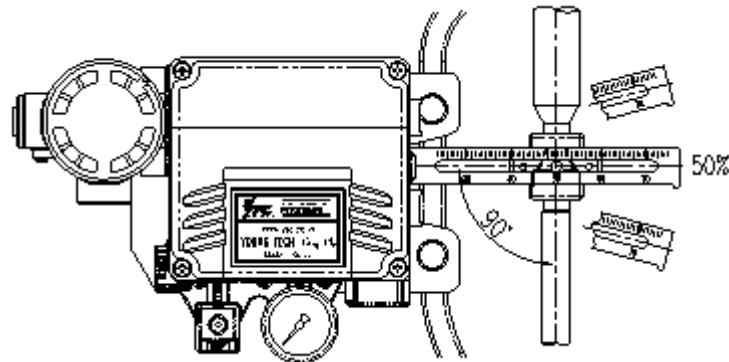
<Figure 4>

- (6) Insert connection bar into the YT-1000L feedback lever. The connection bar should be inserted at the 50% point on the feedback lever, which would help to reduce hysteresis. <Figure 5>



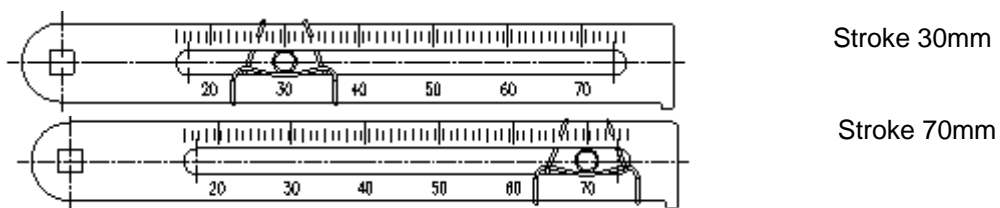
<Figure 5>

(7) If connection bar does not point at 50% point, then adjust bracket or feedback link bar position. Failure to position at 50% would lower the linearity of the positioner. <Figure 6>



<Figure 6>

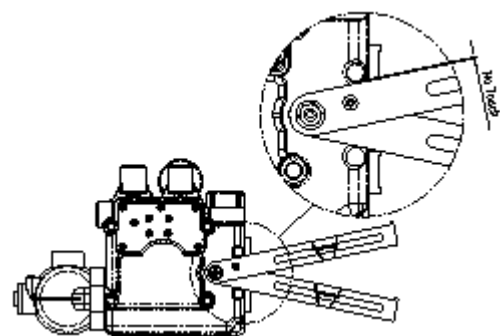
(8) Check valve stroke. The stroke numbers are indicated on the feedback lever. Position connection bar at the number on the feedback lever according to the valve stroke. <Figure 7> To adjust, move the bracket or connection bar.



<Figure 7>

Note

After installing YT-1000L, operate the valve from 0% to 100% stroke by using air filter regulator on the actuator. Both of 0% and 100%, the feedback lever should not touch the lever stopper, which is located on the backside of YT-1000L. <Figure 8> If the feedback lever touches the lever stopper, YT-1000L should be installed further away from the center of the yoke.



<Figure 8>

(9) After the proper installation, tighten all of the bolts on the bracket, the feedback lever, and the connection bar.