

## Installation

### Safety Warning

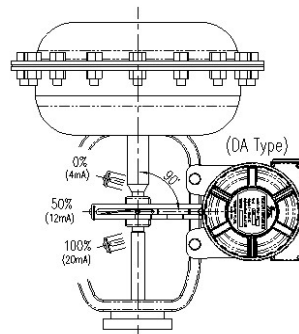
When installing the product, please make sure to read and follow safety instruction.

- Always wear safety equipments and follow safety procedures.
- Please shut down valve and actuator temporarily.
- In order to prevent shut down of total system, please utilize by-pass valve or similar and disassemble the valve which position transmitter will be installed.
- In explosive area, please make sure no explosive gas present at the installing area.

### SPTM-6VL Installation

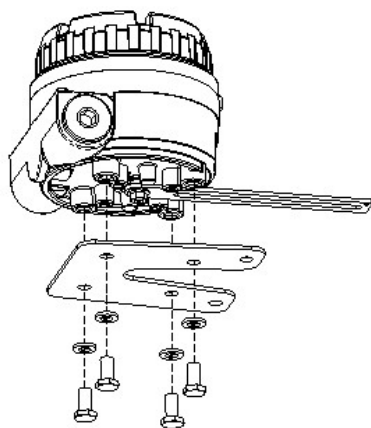
SPTM-6VL should be used in linear operating actuators that are spring return type diaphragm actuator, piston actuator with globe valve, or gate valve.

- ① Please refer to actuator and position transmitter dimensions to make proper bracket.  
Please consider following when making a bracket.
  - A. Feedback lever should be leveled at 50% of valve stroke.
  - B. 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.

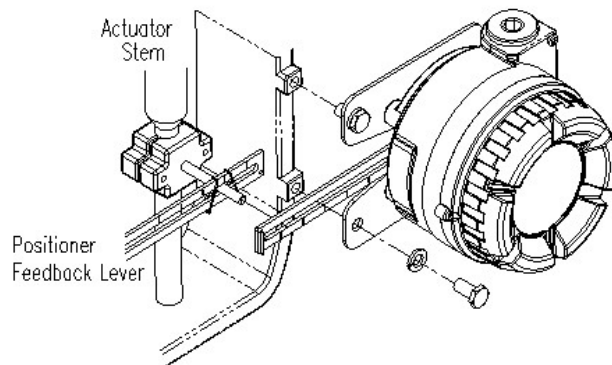


<Fig 1>

- ② Attach SPTM-6VL to the bracket, which was made in earlier step, by using bolts. <Fig 2>. Please refer to the backside of the product for size of the bolts. The standard size of bolt is M8 x 1.25P, and other bolt sizes are available. Please contact YTC sales department.



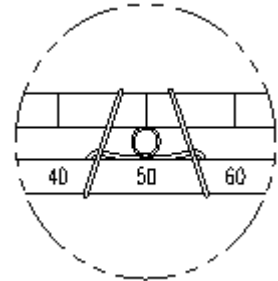
<Fig 2>



<Fig 3>

- ③ Attach SPTM-6VL (with bracket) to the actuator yoke – DO NOT TIGHTEN COMPLETELY.
- ④ Connect SPTM-6VL feedback lever to the actuator clamp. The gap on the feedback lever is 6.5mm. The connection bar thickness should be less than 6.3mm. <Fig 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. <Fig 4>



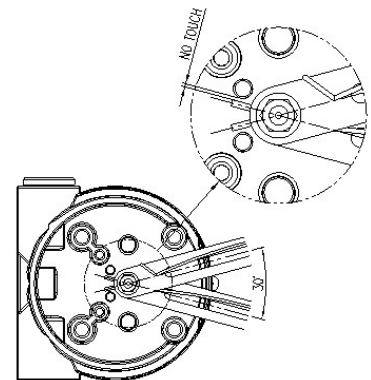
<Fig 4>

- ⑥ Insert connection bar into SPTM-6VL feedback lever. The connection bar should be inserted at the 50% point on the feedback lever, which would help to reduce hysteresis. <Fig 4>

- ⑦ Check the 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. <Fig 7> To adjust, move the bracket or the connection bar.

**Note**

After installing SPTM-6VL, operate the valve from 0% to 100% stroke by using air filter regulator on the actuator. Both at 0% and 100%, the feedback lever should no touch the lever stopper, which is located on the backside of SPTM-6VL. <Fig 5>. If the feedback lever touches the lever stopper, SPTM-6VL should be installed further away from the center of the yoke.

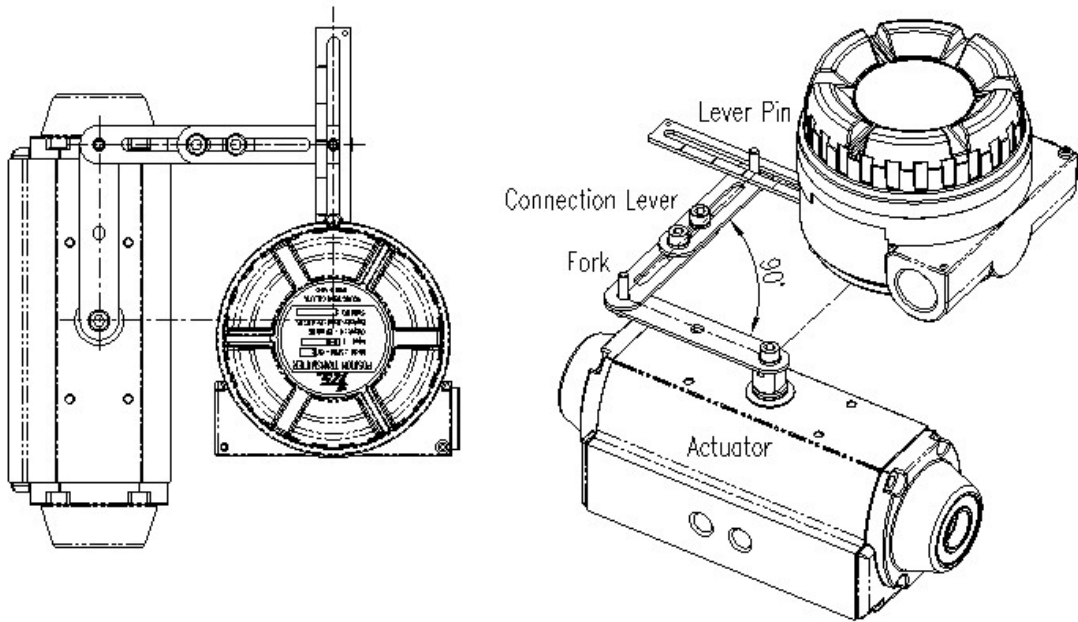


- ⑧ After the proper installation, tighten all of the bolts on the bracket, the feedback lever, and the connection bar.

SPTM-6VR Installation

SPTM-6VR should be used for rotary motion valve, that is ball valve, butterfly valve using rack and pinion, scotch yoke or complex type actuator, which its stem rotates 90 degrees.

- ① Before installing SPTM-6VR, please set the actuator as default position. For single acting type (spring return type), the actuator will automatically default itself when the air pressure shuts down. For double acting type (non-spring return type), the default position must be set manually according to the actuator’s specification.
- ② Please refer to the actuator and the position transmitter dimensions to make appropriate bracket. SPTM-6VR offers two types of lever – standard and NAMUR Please see <Figure 6> to make and install with appropriate bracket.



<Fig 6>

- ③ After appropriate bracket is produced, please install the assembled SPTM-5VR on the actuator, and fasten screws completely. <Figure 6>