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

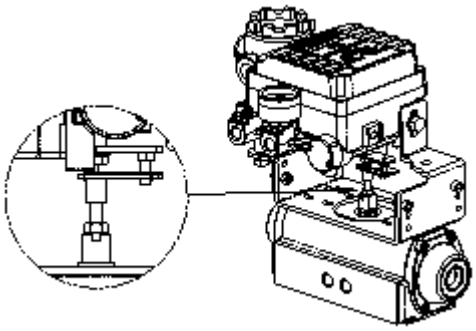
① Hexagonal wrench
② Screw drivers (+) & (-)
③ Spanners for hexagonal-head bolts

YT-1000R installation

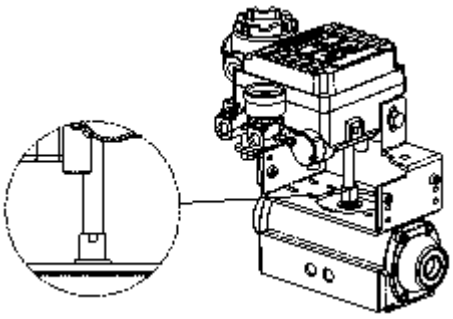
YT-1000R should be installed on rotary motion valve such as ball valve or butterfly valve using spring return type diaphragm or piston actuator. Before installation, be sure to check for following installation components.

① YT-1000R 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



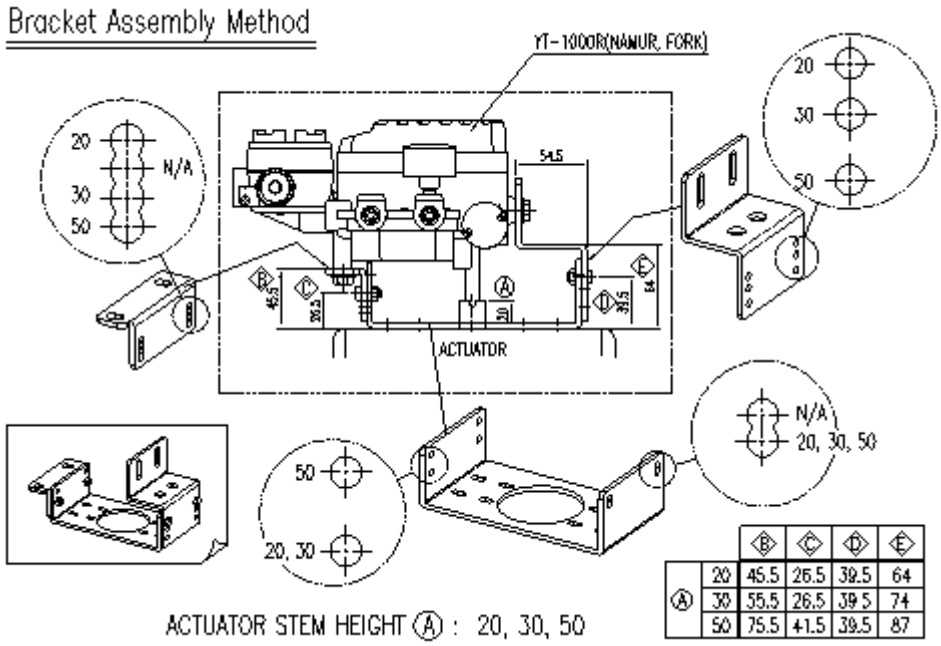
<Figure 2: Using Fork Type Lever>



<Figure 3: Using NAMUR Shaft>

Using Brackets to Install

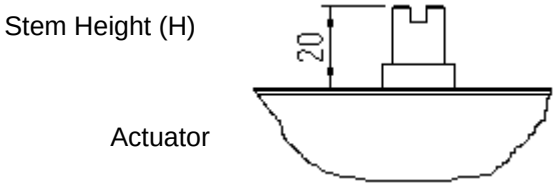
YT-1000R is provided with standard bracket. This bracket contains three parts, and brackets can be used for both fork type lever and NAMUR Shaft.



Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ
20	45.5	26.5	39.5	64
30	55.5	26.5	39.5	74
50	75.5	41.5	39.5	87

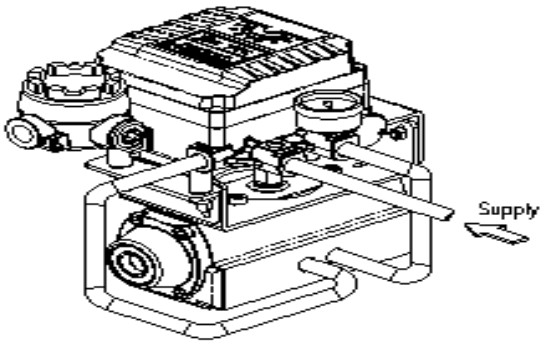
<Figure 4: Assembly Method by stem height "H">

(1) In general, the height of an actuator (H) is 20, 30, or 50mm. Please check using acutator stem height and assemble bracket according to <Figure 4>.



<Figure 5: Measuring Stem Height (H)>

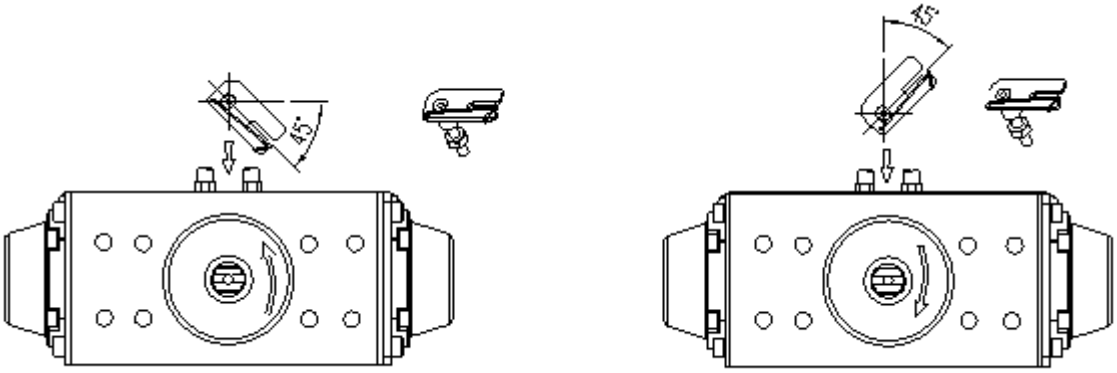
(2) Attach bracketed YT-1000R to the actuator by using hexagon-headed and wrench bolts. Size of the bracket hole is 6mm. When tightening bolts, use spring washer or similar for firm attachment to the actuator, so YT-1000R will not shake by vibration or any other impact. The direction of bracket is different by the operating condition, but normally, the positioner is installed as shown in <Figure6>.



<Figure 6>

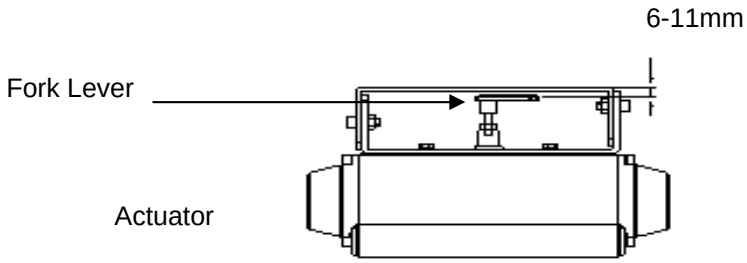
(3) Set rotation position of the actuator stem at zero point, "0%". For a single type of actuator, it is easy to check zero point, because the actuator stem is positioned at zero point when there is no supply pressure. If double acting actuator is used, check actuator stem's rotation direction (clockwise or counter-clockwise) by supplying pressure.

(4) Install the fork lever as shown in <Figure 7> after setting actuator stem at zero point. Check the direction of the actuator stem - clockwise or counter-clockwise. Installation angle of the fork lever should be 45 degrees based on the linear shaft. For NAMUR shaft, the angle does not matter.



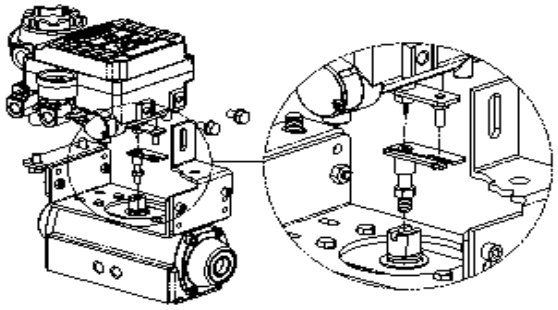
<Figure 7>

(5) After setting fork lever position, lock nuts which are assembled on the bottom of the fork lever. Make sure to set upper height of the fork lever between 6-11mm, which is lower than upper bracket height. <Figure 8>



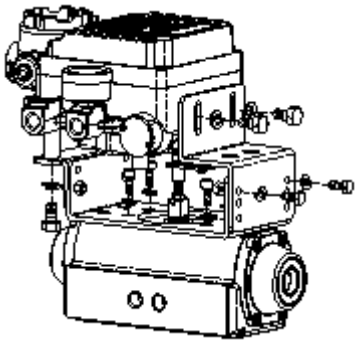
<Figure 8>

(6) Attach YT-1000R to the bracket. Fix the clamping pin on the main shaft's center of YT-1000R and insert connection bar into the fork lever slot, so it can be locked to the fork lever spring. This sets the alignment of the main shaft of YT-1000R and center of the actuator stem. Bad alignment of the main shaft and the actuator stem lowers YT-1000R's durability, because too much force will be on the main shaft of YT-1000R. <Figure 9>



<Figure 9>

(7) Tighten YT-1000R base and the bracket with hexagon-headed bolts and plate washer. It is recommended to tighten four bolts after checking YT-1000R's position. <Figure 10>



<Figure 10>