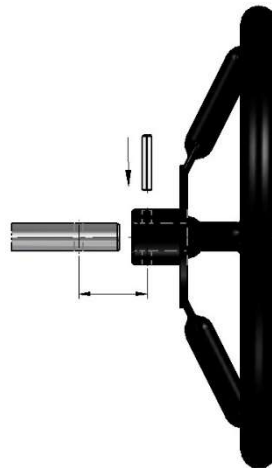


## INSTALLATION MANUAL

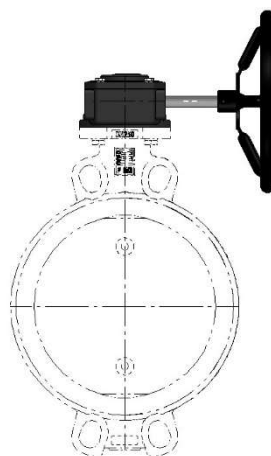
### Step.

1. Alfa Gears will deliver the gearbox in full closed position, make sure the setscrews at the back are loosely tightened.
2. We recommend to mount the handwheel on the input shaft before it will be assemble to the valve.
3. Mounting the handwheel and insert the roll pin as mentioned on below figure 1.



**Figure 1.**

4. Check if the bolt circle of the flanges (of the gearbox and valve) coincide, Also make sure that the stem and bore of the gearbox correctly match the valve .
5. Make sure that the valve is in correct closed position, if not close the valve before continuing this process.
6. Check if the gearbox is in full closed position. This you could check by turning the handwheel clockwise double check this to see if the position indicator of the gearbox is pointing to full closed position.
7. When stud bolts are been used for fixing the gearbox to the valve, it is recommended to screw them in the bottom flange of the gearbox before mounting the gearbox on the valve.
8. It is preferable to use a gasket of liquid seal to prevent moist of water to ingress.
9. Always make sure that you use A4 or A2 fasteners.
10. Mount the valve perpendicular to the valve (see figure 2.)



**Figure 2.**

11. Fix the gearbox to the valve and tighten the correct studs and nuts with washers or bolts
12. Open and close the valve by turning the handwheel counter clockwise and clockwise to close again to make sure that the gearbox is correctly tightened on the valve
13. Close the valve completely , by turning the handwheel clockwise.
14. Carefully remove the plastic caps from the setscrews.
15. When the fully closed position cannot be achieved, loosen the *Setscrew-Close* (see figure 3.)
16. by turning them counter clockwise. Continue turning the handwheel until valve is totally closed.
17. Screw the *Setscrew- Close* back in to the gearbox (by turning clockwise) until its tight (blocked). Secure the Setscrew-Close with the nut and place the plastic cap back on the screw.
18. Open the valve by turning the handwheel counter clock wise.
19. When opening the valve complete (90°) is not possible, loosen the *Setscrew-Open* (see figure 3.) by turning it counter clockwise. Continue turning the handwheel until the valve is completely opened.
20. Screw the *Setscrew-Open* back into the gearbox (by turning clockwise) until tight (blocked). Secure then the *Setscrew-Open* with the nut and then place the plastic cap back.
21. Now the adjustment of the Alfa Gears gearbox is completed.

