



USER INSTRUCTIONS

Automax Valves Field Mounting Kit

AUTO-49 01 – (01/14)

Installation Operation Maintenance

Introduction:

Flowserve custom designs our Field Mounting Kits (FMKs) to each actuator and valve application. This assures proper fit and function. Special consideration is given to valve maintainability and proper actuator-valve alignment.

Our FMKs feature rugged steel construction with baked on epoxy powder coating for corrosion resistance. Each kit includes the necessary hardware (bolts, nuts, lockwashers, etc.) to make the valve automation task easier.

Required Tools:

To simplify the job of automating valves, the following tools are recommended;

- Combination wrenches for each bolt or nut size included in the kit (two of the appropriate size may be required for bracket-to-valve bolting)
- Pneumatic connection with air supply set within operating range of actuator
- Combination wrench for travel stop bolt lock nuts
- Allen wrench for travel stop bolt adjustment

Precautions:

Pay close attention to the following precautions when mounting an actuator to a valve:

- Wear safety glasses. Compressed air can damage eyes or blow particles into eyes.
- Use extreme caution when cycling your valve with the actuator. Severe injury may result if fingers, hands or limbs are inside the valve's waterway.
- Use caution when stroking actuator. Bleeding air or inadvertent movement can cause injury.
- Read this entire procedure before installing FMK.



Installation Procedure:

1. Begin by carefully reading all installation and maintenance instructions included with the valve and actuator. Pay particular attention to requirements for packing adjustment, closure member adjustment (i.e., plug valves), or stem grounding (i.e., lined or sleeved valves). Failure to utilize proper valve stem grounding can cause static electricity buildup and discharge within valve waterway.
2. Remove any closure member travel stop mechanism from valve. Automax actuators feature both clockwise and counter-clockwise travel stops (SNA250/300 have one outward travel direction only), which are preferred when pneumatically operating valve. Use of valve-mounted travel stops can result in premature actuator wear or may loosen packing adjustment mechanisms. For butterfly valves with waterway stops, adjust the "open" actuator travel stop bolt so the disk is slightly off the waterway stop.
3. Assure actuator fail mode and stroke direction matches desired valve fail mode and stroke direction. Make necessary adjustments to actuator fail mode and stroke direction (refer to actuator instructions for procedures). Common practice is for actuator body to be installed parallel to the valve waterway.
4. Attach bracket to valve using fasteners included with the FMK. Tighten bolts finger-tight only at this time.
5. Place coupling over valve stem assuring it is centered.
NOTE: Depending on FMK design, it may be necessary to perform this step before step 4 or in conjunction with step 4.
6. Place actuator on bracket, aligning actuator shaft with coupling and making sure the coupling is centered within actuator shaft. Attach actuator to bracket using fasteners included with the FMK. Tighten bolts finger-tight only at this time.
7. Carefully stroke actuator and valve several times using blowgun or other pneumatic connection. This step causes actuator shaft, coupling and valve stem to self-align and minimizes binding in the assembly.
8. Tighten all fasteners.
9. Slowly stroke actuator and valve and check for signs of binding (vibrating or grinding sounds). If binding is detected, loosen fasteners and repeat steps 7 and 8.
10. Loosen actuator travel stop lock nuts and check end-of-travel valve positions, making sure valve fully closes and opens (refer to actuator instructions for procedures on adjusting travel stops).
11. Tighten actuator travel stop lock nuts.
12. Install any pneumatic accessories following manufacturer's recommended procedures.

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