

Fisher™ easy-Drive™ 200L Quick Start Guide

Mounting and travel configuration for your Fisher easy-Drive 200L actuator.

Before You Begin



Do not install, operate, or maintain a 200L actuator without being fully trained and qualified in valve, actuator, and accessory installation, operation, and maintenance. To avoid personal injury or property damage, it is important to carefully read, understand, and follow all the contents of this quick start guide, including all safety cautions and warnings. Refer to the Fisher easy-Drive 200L Instruction Manual ([D104331X012](#)) for product specifications, custom setup information, maintenance procedures, and installation in hazardous locations. If you have any questions about these instructions, contact your [Emerson sales office](#) before proceeding.

⚠ WARNING

To avoid personal injury or property damage, keep hands and tools out of the actuator stem travel path. The actuator stem will move during calibration and positioning steps.

Always wear protective gloves, clothing, and eyewear when performing any installation operations to avoid personal injury.

Note

Refer to easy-Drive 200L Instruction Manual ([D104331X012](#)) for wiring, Modbus setup and connecting the Configurator to an easy-Drive actuator as this will be needed to configure and calibrate the 200L.

Ensure Actuator Stem is in the Proper Position Prior to Mounting and Coupling

Your 200L actuator has internal hard stops to limit maximum travel within the actuator. A new actuator will be shipped from the factory at 6% off the lower internal hard stop, which is the recommended mounting position.

Note

If you are mounting a new actuator that has never been positioned and is still in its recommended mounting position of 6% of maximum travel, you can begin at step 5.

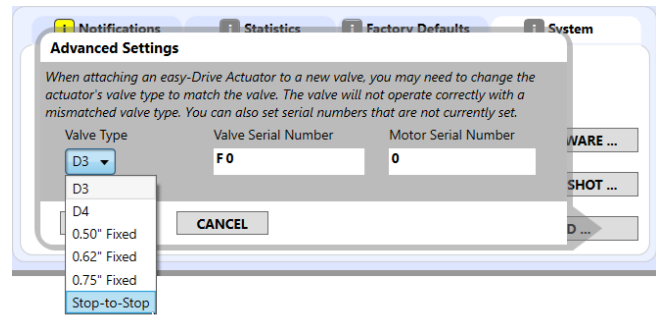
To set the stand-alone 200L actuator to the recommended mounting position of 6% of maximum travel, follow steps 1-4:

Step 1. Ensure use of a stand-alone 200L (must be actuator only, no valve body).

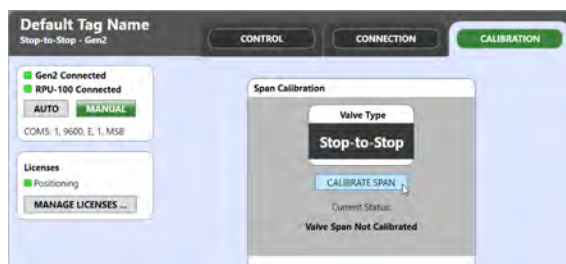


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Step 2. Using the Fisher easy-Drive Configurator, select the “System” tab and then “Advanced Settings.” Select the valve type “Stop-to-Stop” from the drop-down options and click “Apply.”



Step 3. Perform Span Calibration from Calibration tab.



Step 4. Position actuator to 6% travel.



Note

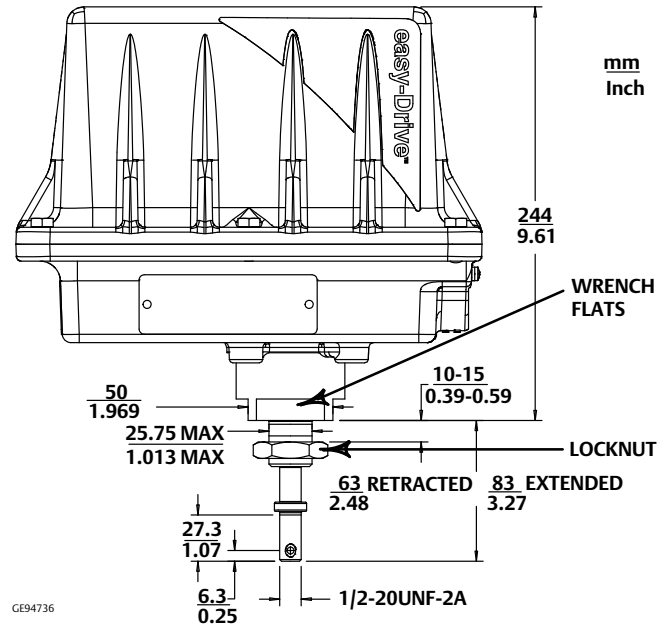
Stop-to-Stop is used for positioning the actuator to 6% off the lower travel stop. Select proper valve type and travel after mounting the 200L to the valve body.

Mount the Actuator to the Valve Body and Couple the Stems

Note

User supplied mounting bracket and stem coupler will be needed to complete this procedure.

- Step 5. Supply a method of supporting the weight of the valve and actuator during assembly.
- Step 6. Push the valve stem down away from the actuator to the valves closed position for push down to close valves.
- Step 7. Mount the to the mounting bracket supplied by the user. Tighten the actuator locknut to 205 N•m (151lb•ft).
- Step 8. Lift or hoist the actuator and mounting bracket onto the valve and mate the mounting bracket securely to the valve following the valve manufacturer's instructions.
- Step 9. Make the stem connection between the actuator and valve stems. When installing the user-supplied stem connector, be sure the actuator stem threads engage the threads of the stem connector by a distance equal to or greater than the diameter of the actuator stem.



Refer to the easy-Drive 200L bulletin ([D104361X012](#)) for complete mounting specifications.

Select Proper Valve Type

Step 10. Refer to valve manufacturer documentation to determine maximum valve travel. (Manufacturer specifications may vary.)

Step 11. In the Configurator, navigate to the Calibration tab.



Step 12. Click on the "Valve Type" and select the appropriate value that matches desired travel of the valve body for your application and is within manufacturer valve travel limits. Then click "Apply" to save the selection.

Note

Stop-to-Stop valve type selection should be avoided unless the valve is specifically designed with its own internal up and down hard stops within the valve body. Fixed travel settings are recommended and will set the travel from the valve seat (push down to close) up to a pre-defined amount of travel, e.g. '0.75" Fixed' setting, will set the full range of travel at 19 mm (0.75 inches) from the seat.

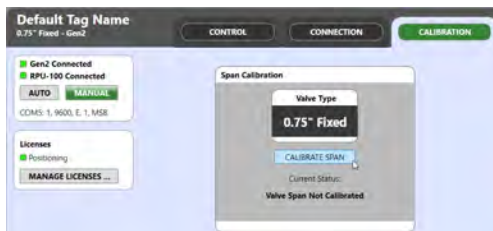
Calibrate Travel of the Actuator to the Valve Assembly

Step 13. Ensure the process and valve are in a safe state – the valve will move during the calibration steps.

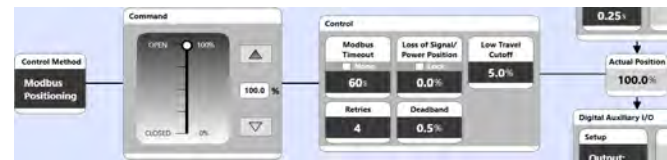
Step 14. Navigate to the Calibration tab of the Configurator

Step 15. Press the “Calibrate Span” button to initiate the span calibration. The software will show a progress bar during the calibration and display “Valve Span Calibrated” when complete.

Step 16. Verify valve is closed when commanded to 0%.



Step 17. Verify full desired travel is achieved when commanded to 100% by confirming “Actual Position” in the Configurator is 100%.



Note

If actuator cannot achieve desired travel, review steps 5-12 to ensure all steps were followed, validate proper Configurator selections were made, and confirm the stems were properly coupled.

The valve/actuator assembly is now ready to be put into operation. If the 200L is not operating properly contact your [Emerson sales office](#).

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