



Limatorque Actuation Systems

Quick Setup for Accutronix MX Actuators

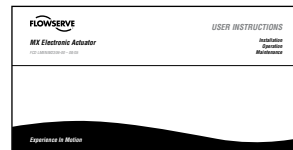


Before You Begin

The MX actuator's 32-character LCD display provides easy-to-read actuator status, diagnostics, and setup information—in the language you choose. Once you have set the actuator's position limits, the unit will be ready for normal operation. The screen message will indicate the valve position as a percentage of the valve opening. Full open is expressed as **100% OPEN** and full close is expressed as **0% OPEN**.

Factory Settings

The MX actuator can be configured with the parameters that you require in the field. The calibration of position limits are addressed in this document. If full valve data was not provided when ordering, or if changes to the default settings are needed, see *Bulletin LMENIM2306, Installation and Operation for MX-05 through MX-140*, for complete instructions.

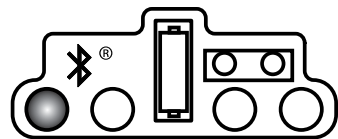


Checking the Open/Closed Settings

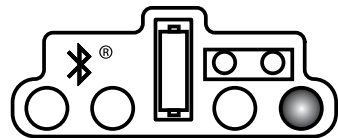
- **Valve Closed** As you close the valve using the actuator, make sure that the close light (green) illuminates just as the travel limit is reached. The display should read **0% OPEN**.
- **Valve Open** As you open the valve using the actuator, make sure that the open light (red) illuminates just as the travel limit is reached. The display should read **100% OPEN**.

Setting the Password

At the **ENTER PASSWORD?** prompt, use the black knob and toggle to select the correct password. Another option in the Change Settings menu is **CHANGE PASSWORD?** You may disable the actuator's password function by setting the password to **000**. The password function can be re-enabled by resetting the password to any other three-digit code.



0% OPEN



100% OPEN

100

**FACTORY DEFAULT
PASSWORD**

Setup






1

Connect Power to the Unit.

Refer to the nameplate on the actuator for the correct voltage for the main power supply. Or connect an auxiliary 24 VDC supply to terminal points 6 (-) and 7 (+).


2

Begin Setup.



Move the red selector knob to  **STOP**. Within 10 seconds, toggle the black control knob to the  **YES**,  **NO**, and  **YES** positions. This will trigger the prompt **SETUP?** to appear on the screen. Answer  **YES** within 10 seconds.

Use the black control knob to answer the following prompts:

SETUP?  YES


CHANGE SETTINGS? ...  YES

ENTER PASSWORD.....  YES


Toggle through numbers using the  NO knob and select the correct three-digit password by toggling  YES. See “Setting the Password” if you are having trouble.

3







Change Settings Menu.

After successfully entering the password, answer  NO to the Change Settings menu prompts until you reach the prompt CHANGE POSITION SETUP?

Answer  YES.

Next, follow steps 4–6 to set Position Limits, choosing either electrical or handwheel operation ... 

Set Position Limits for Electrical Operation

- 4 Set closed valve position.** At the **CLOSE VALVE-OK?** prompt, move the red control knob to  **LOCAL**. Hold the black control knob in the  **CLOSE** position until the valve has reached the desired position. Move the red control knob to  **STOP**.
- 5 Set the open valve position.** At the **OPEN VALVE-OK?** prompt, move the red control knob to  **LOCAL**. Hold the black control knob in the  **OPEN** position until the valve has reached the desired position. Move the red control knob to  **STOP**.
- 6 Inspect for correct operation.** The position calibration is now complete. The actuator will function as ordered. Inspect for correct operation by running actuator electrically.

Note: For torque seated valves, ensure that the Position limit is not set at torque seat. It is recommended that the Position limit be set approximately one handwheel turn (360°) in the opposite direction from the torque seat.

Set Position Limits for Manual Operation

- 4 Set close position.** At **SET CLOSE POSITION LIMIT?** answer **YES**. At **CLOSE VALVE-OK?** depress declutch lever and slowly rotate handwheel until clutch is fully engaged. Release declutch lever; the clutch will stay in handwheel mode. If the valve is fully closed, move the handwheel one turn in the open direction to allow for coasting of the motor. When valve is in the desired location, select **YES**. At **SAVE CLOSE LIMIT-OK?** select **YES** to set the close position or **NO** to adjust the setting.
- 5 Set open position.** At **SET OPEN POSITION LIMIT?** select **YES** to get **OPEN VALVE-OK?** Engage the clutch (see step 1). Valve should be fully opened. Move the handwheel one turn toward the closed position to allow for coasting of the motor. When valve is in the desired location, select **YES** again to set the open position or **NO** to adjust the setting.
- 6 Checking the settings.** Turn the handwheel and verify that the open and close LEDs function correctly (see Checking the Settings). If adjustments are necessary, select **NO** to return to **CHANGE POSITION SETUP?** and repeat from step 1.

If your actuator has DDC, Modutronic, or APT options,
continue to the next page for steps 7 and 8 ...



Set Actuator Options

Networks

- 7 Change Networks menu.** At the **CHANGE SETTINGS?** prompt, select **YES** and enter your password. Toggle through the change settings menu items until you reach **CHANGE NETWORKS**. Select **YES**. (If you are already in the Change Settings menu, select **NO** to the prompts until you reach **CHANGE NETWORKS**.)
- 8 Set DDC address.** Select **YES** at each prompt in the Networks menu until you reach **NETWORK ADDRESS OK?** Select **NO**. Change the address by selecting **NO** with the black control knob until the correct number is displayed (**1-250**). Set the address by selecting **YES**.

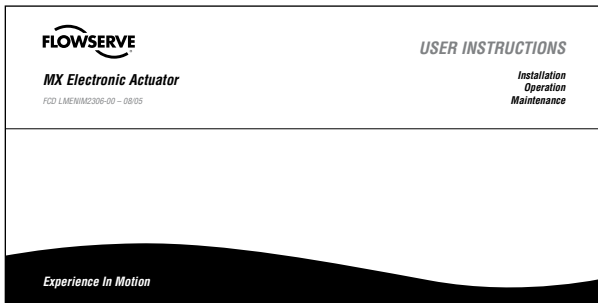
Caution: The network address of the valve must be entered in accordance with the user address assignment sheet. The address should correspond to the contract specifications and should not be used elsewhere in the same network.

Modutronic & Analog Position Transmitter (APT)

If you have these options, setting the open and close limits will automatically calibrate zero and span of the Modutronic and APT (Analog Position Transmitter) actuators. The 4-20 mA signal will default to 4 mA at close and 20 mA at open. To change from the default setting, see *Bulletin LMENIM2306, Installation and Operation for MX-05 through MX-140*.

For More Information

For in-depth instructions for setup and operation of your MX actuator, see *Bulletin LMENIM2306, Installation and Operation for MX-05 through MX-140*. This document is supplied with each actuator.





**FLOWERVE CORPORATION
FLOWERVE FLOW CONTROL**

Limatorque Actuation Systems
5114 Woodall Road
P.O. Box 11318
Lynchburg, VA 24506-1318
Phone: 434 528 4400
Facsimile: 434 845 9736
www.limatorque.com

Flowserve Corporation has established industry leadership in the design and manufacture of its products. When properly selected, this Flowserve product is designed to perform its intended function safely during its useful life. However, the purchaser or user of Flowserve products should be aware that Flowserve products might be used in numerous applications under a wide variety of industrial service conditions. Although Flowserve can (and often does) provide general guidelines, it cannot provide specific data and warnings for all possible applications. The purchaser/user must therefore assume the ultimate responsibility for the proper sizing and selection, installation, operation, and maintenance of Flowserve products. The purchaser/user should read and understand the Installation and Maintenance (I & M) instructions included with the product, and train its employees and contractors in the safe use of Flowserve products in connection with the specific application.

While the information and specifications contained in this literature are believed to be accurate, they are supplied for informative purposes only and should not be considered certified or as a guarantee of satisfactory results by reliance thereon. Nothing contained herein is to be construed as a warranty or guarantee, express or implied, regarding any matter with respect to this product. Because Flowserve is continually improving and upgrading its product design, the specifications, dimensions and information contained herein are subject to change without notice. Should any question arise concerning these provisions, the purchaser/user should contact Flowserve Corporation at any one of its worldwide operations or offices.

For more information about Flowserve Corporation, visit www.flowserve.com or call USA 1-800-225-6989.

<p>USA Flowserve Limatorque 5114 Woodall Road Lynchburg, VA 24506 Phone: 434-528-4400 Fax: 434-845-9736</p>	<p>China Limatorque Asia - Beijing Room B803 Han Wei Plaza No. 7 Guang Hua Road, Chao Yang District Beijing 100004, P.R. China Phone: 8610 6561 2701 FAX: 8610 6561 2702</p>	<p>Singapore Limatorque Asia PTD 12, Tuas Avenue 20 Singapore 638824 Phone: 065 6862 3332 Fax: 065 6862 4940</p>	<p>Canada Flowserve Flow Control 120 Vinyl Court Woodbridge, Ontario L4L 4A3 Canada Phone: 905 856 8568 Fax: 905 856 7905</p>	<p>EMA Limatorque EMA Abex Road Newbury, Berkshire RG14 5EY United Kingdom Phone: 44 1635 46999 Fax: 44 1635 36034</p>	<p>Japan Nippon Gear Co., Ltd Asahi Seimei Building 9th Floor 1-11-11 Kita-Saiwai Nishi-Ku Yokohama-Shi, Japan 220-0004 Phone: 81 45 326 2065 Fax: 81 45 320 5962</p>
--	---	---	--	---	--