Limitorque® MX Series B Smart Electric Actuator Conversion Kit

Easily upgrade to the MXb actuator for improved reliability, precision, advanced diagnostics capabilities and a streamlined user experience

The MX Series B (MXb) multi-turn smart electric actuator is Limitorque’s next-generation, high-performance unit, offering superior reliability, enhanced analytics and an improved user experience. It is designed for application versatility and tackles the toughest, most critical services.

The new electronics cover has been designed to offer Flowserve Limitorque customers the possibility to upgrade their existing MX and MXa actuator installations to the latest technology — without the need to replace the entire actuator — with a simple retrofit.

Upgrading to the MXb actuator interface allows users to benefit from:

**Enhanced user experience**
- Faster commissioning, setup and operation from a simplified menu structure and quick and advanced setup options
- Improved legibility owing to a larger LCD screen that provides industry-leading resolution and extends viewing distance and detail by up to 9 m (30 ft)
- Bluetooth® Low Energy standard
- Possibility to configure and control the actuator using dedicated mobile app

**Improved reliability and extended life**
- Isolated input/outputs to improve protection from outside interference
- Longer service life from higher temperature-rated components for extended operating ranges and mean time between failure (MTBF)

**Advanced diagnostics and analytics**
- Data logger with real-time clock (RTC) for time-stamped actions and alarms
- Advanced diagnostics that enable predictive maintenance
- Enhanced, NAMUR NE107-compliant, diagnostic notification system provides higher process visibility and control

**Enhanced electronic connector design**
- New connector design removes the need for brackets and hold-downs, making maintenance easier and faster
- Ensures robust connectivity throughout the rated seismic and vibration envelope

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<tr>
<th>Features</th>
<th>MXa actuator</th>
<th>MXb actuator</th>
<th>Benefits</th>
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<tbody>
<tr>
<td>LCD</td>
<td>122x32 graphical</td>
<td>240x160 graphical</td>
<td>Higher resolution and contrast for improved visualization</td>
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<tr>
<td>Bluetooth</td>
<td>Optional</td>
<td>Standard Bluetooth Low Energy</td>
<td>Ensures compatibility with present and future Bluetooth-enabled mobile devices</td>
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<tr>
<td>UPS</td>
<td>Optional</td>
<td>Standard</td>
<td>12 to 24 VDC commissioning without mains or controls and display backup</td>
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| Diagnostics | Basic      | Advanced     | • Improved asset management  
                        • Higher process control from improved diagnostics  
                        • Battery backed up RTC                                   |
| Isolation | Basic        | Enhanced: Isolated inputs and outputs | Increased robustness and reliability from protection of micro controller and internal electronics from interference or failure |
| Connections | Unclamped mainboard  
• Special tools | Latch/eject connectors  
• No special tools | • Simplified maintenance repairs/upgrades  
                        • Higher resistance to stress/strain and vibration |
| Contacts  | (2) 1A       | (4) 5A       | More user-friendly discrete outs                                          |

Previous Limitorque MX actuator models  
Conversion kit  
Upgraded MX actuator model with new Limitorque MXb actuator interface