



Limitorque® MX Series B Smart Electric Actuator

Unmatched reliability, precision, advanced diagnostics capabilities and a streamlined user experience

Ensuring simple, trouble-free commissioning and improved process control along with the ability to overcome the challenges of electronics survivability are critical to reliable operation. The Flowserve Limitorque MX electric actuator was introduced in 1997 as the first smart actuator with: a unique absolute encoder that doesn't require a battery back; LimiGard™ technology; easy-to-use menus in six languages; and Hall effect devices to eliminate potentially troublesome reed switches.

The MX Series B (MXb), multi-turn 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 within the oil and gas upstream and midstream, commercial power, chemical, fresh and wastewater, and general industries.

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

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

- Increased memory capacity by 500 times with real-time clock (RTC) for improved data logging capabilities
- Enhanced diagnostic notification system alerts operators to deviations in advance and provides greater visibility into the process and performance.

Enhanced electronic connector design

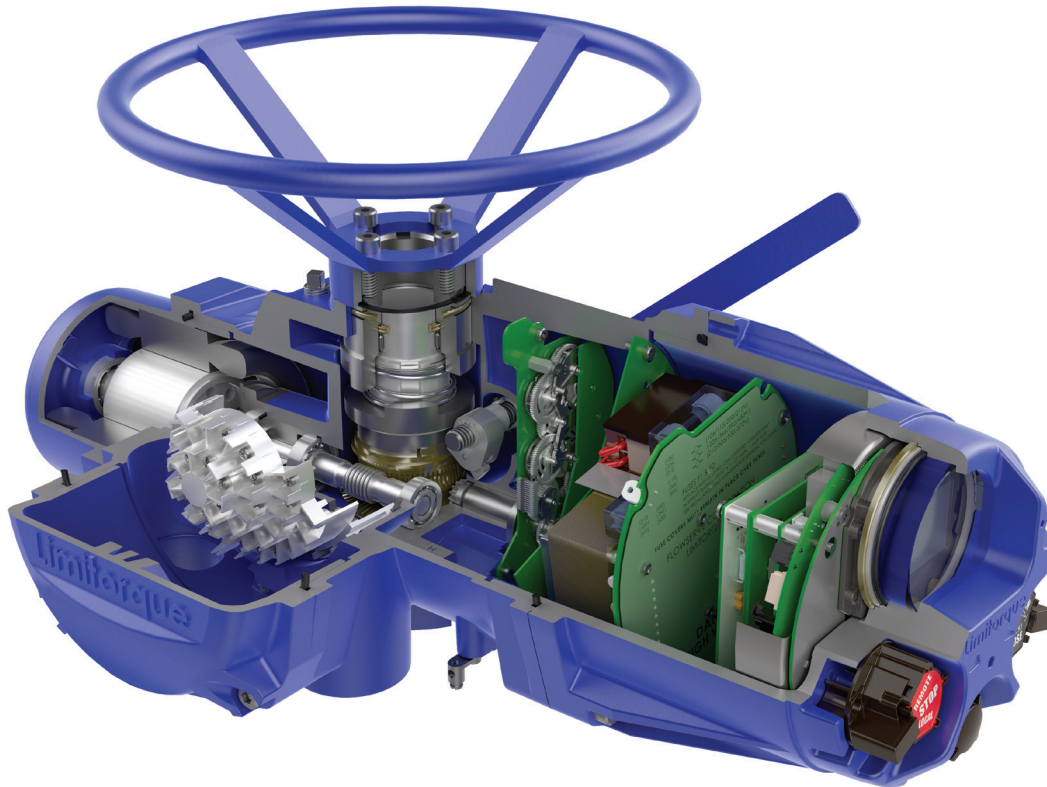
- New connector design removes the need for brackets and hold-downs, making maintenance easier and faster.
- Ensures robust connectivity throughout the rated seismic and vibration envelope

Easy interchangeability

- The MXb actuator's display and control electronics assembly are backward compatible and can be easily retrofitted to previous MX actuator models.

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Specifications

Temperature range	-30°C to 65°C (-22°F to 149°F)
Torque	75 to 2,000 Nm (55 to 1,500 ft-lb)
Speed	15 to 200 RPM
Conduits	(2) 1.25 in NPT or M32 (standard) (1) 1.50 in NPT or M38 (standard) (1) 1.0 in NPT or M25 (optional)
Network connections	Modbus DDC; Modbus TCP/IP; Profinet; Profibus DP; Profibus DP with RedCom; Foundation Fieldbus H1; Profibus PA; DeviceNet; and HART
Design standards	EN15714-02; industrial valves; actuators: Part 2 and ISA-96.02.01-2016; Guidelines for the Specification of Electric Valve Actuators
Test standards	AWWA C542; Electric Motor Actuators for Valves and Slide Gates; ASTM B117, Standard Practice for Salt Spray Tests
Certificate/approvals	FM, ATEX and IECEx; consult factory for different hazardous duty classifications.