



# Limitorque® QX Series B Smart Quarter-Turn Electric Actuator

Superior reliability, usability and cost of ownership



*Experience In Motion*



## Unmatched reliability and versatility in demanding services

The Limatorque QX Series B (QXb) electric actuator from Flowserve provides unmatched reliability and precision while lowering the cost of ownership in a range of demanding applications.

This next-generation device builds on the proven, state-of-the-art Limatorque QX and MX actuator platforms to provide all the user-preferred features in a quarter-turn, smart actuator package. In addition, Flowserve improved the interface to streamline the user experience and accelerate commissioning by as much as 50%.



### Enhance efficiency and sustainability

Reliable flow control automation solutions are crucial for sustainable operations. Flowserve engineered the QXb actuator to maximize dependability and efficiency while enabling the transition to a low-carbon future. Along with a streamlined user experience and advanced diagnostics, it's designed to support your initiatives to consume fewer resources.

### Typical industries and applications

Flowserve designed the Limatorque QXb actuator for application versatility and to handle demanding services in:

- Oil and gas
  - Upstream and midstream (choke, isolation and control valves)
- Fresh and wastewater
  - Isolation, air scour and control valves
- Wind energy
  - Cooling water for offshore HVDC converter platforms
- Commercial power
- Chemical
- General industries

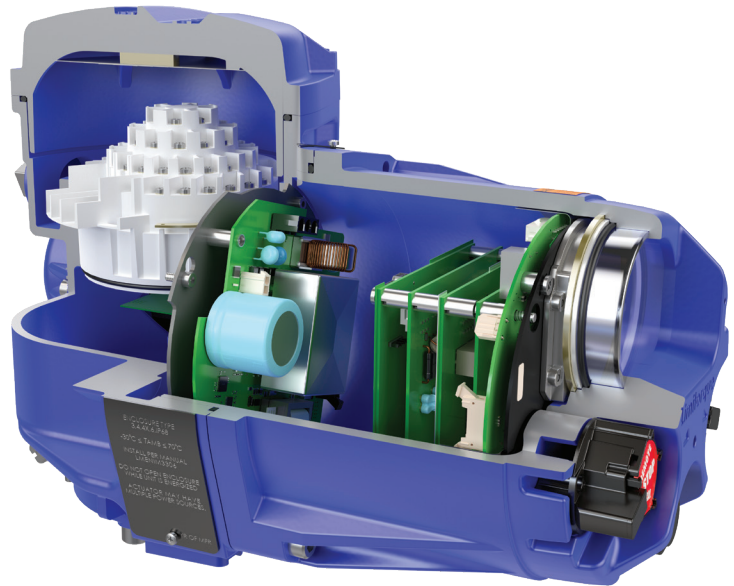
## Customer benefits and features

**Faster commissioning** — Simplified multi-language menu and intuitive rotary navigation knob enable up to 50% faster commissioning than previous models.

**Improved reliability** — Double-sealed IP68 enclosure with separate terminal compartment and non-intrusive control knobs prevent dust and water ingress, eliminating the need for a heater.

**More accurate positioning** — Advanced brushless DC motors provide more accurate positioning and improve safety while permitting a global range of voltages (single-phase and three-phase ACV and DCV) to be connected without modification.

**Enhanced safety** — An independent handwheel disconnects the motor and enables manual override, even during motor operation.



**Enhanced reliability** — Large, high-resolution LCD with adaptive brightness control is easy to read from up to 9 m (30 ft). It can be rotated 180 degrees for viewing in any orientation.

**Reduced maintenance costs** — Oil bath lubrication eliminates re-greasing while enabling mounting and storage in any orientation.

**Backward compatibility** — Easy electronics interchangeability enables updating of older models, reducing costs and providing future-proofing.

**Display real-time actuator status** — The advanced display provides real-time torque graphs, alarm and event logs, and other data in high resolution. There's also a real-time clock that time-stamps data logs for asset management functions and lifecycle analysis.



## Available models

Parameter	Units	Model				
		QX-1	QX-2	QX-3	QX-4	QX-5
Torque ratings	Nm	135	339	542	1,016	2,031
	ft-lbs	100	250	400	750	1,500
Operating times	Seconds, Minimum	5	8	15	30	60
	Seconds, Maximum	20	30	60	120	120
Flange	ISO 5210	F05/F07/F10	F07/F10	F10	F12/F14	F14
	MSS SP-102	FA05/07/10	FA07/10	FA10	FA12/14	FA14

## Specifications

Temperature range	-30°C to 70°C (-22°F to 158°F)
Torque	135 to 2,031 Nm (100 to 1,500 ft-lbs)
Conduits	(3) 1.0 in. NPT (standard) (3) M25 (optional) Optional fourth conduit entry (1) 1.25 in. NPT or M32
Network connections	Modbus DDC; Modbus TCP/IP; Profibus DP; Profibus DP with RedCom; Foundation Fieldbus H1; Profibus PA; DeviceNet; HART
Design standards	EN15714-02 - Industrial valves, Actuators, Part 2; ISA-96.02.01-2016- Guidelines for the Specification of Electric Valve Actuators; IP68 Enclosure Rating
Test standards	AWWA C542 - Electric Motor Actuators for Valves and Slide Gates; ASTM B117 - Standard Practice for Salt Spray Tests; UL1709
Certificates/approvals	FM, ATEX, IECEx, CCC; consult factory for different hazardous duty classifications.

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