

The Evolution of Excellence: *IMO Unveils the Jaguar NXG Series Inverter Drive*

Industrial automation stands at a transformative crossroads, where the relentless demand for efficiency, connectivity, and safety meets the need for proven reliability. Into this landscape, IMO Precision Controls introduces the Jaguar NXG Series Inverter Drive, a product that does more than simply control motor speed; it marks the rebirth of a legend. With over four decades of heritage and five million installations globally, the Jaguar name returns to lead the next generation of inverter control.

A Legacy of Innovation: The History of the Jaguar Inverter Drive

The story of the Jaguar inverter drive is a story of consistent evolution. First launched in 1984, the Jaguar quickly carved a niche as a benchmark for excellence. In an era where inverter equipment was often bulky and required high maintenance, the Jaguar soon earned a reputation for its compactness and reliability.

Throughout the 1990s and early 2000s, IMO continued to evolve the Jaguar and lead the industry:

1984: The launch of the VL series, one of the first miniature analogue 3-phase drives.

1988: The launch of the first digital inverter drive with the CD Mk1.

1993: The introduction of the first DIN-rail mountable micro drive, a revolutionary step for panel builders.

1995-2000: The arrival of advanced torque vector technology, providing the precision control needed for complex production lines.

The IMO Jaguar led the transformation to reliable, compact inverter technology and the market's response was immediate and loyal. Engineers increasingly asked for "Jaguar dependability", updated for a world defined by Industry 4.0. The NXG Series is IMO's definitive answer to that call.

Performance at its Core: Power and Precision

The Jaguar NXG is engineered for high-performance motor control across a wide range of power requirements, from 0.2kW up to 22kW (1/4HP to 30HP). This range covers the vast majority of standard industrial applications, from small standalone machines to integrated factory systems.

High Starting Torque and Sensorless Vector Control

At the heart of the NXG's performance is its Sensorless Vector Control (SVC). Traditional V/f control is often insufficient for demanding applications that require high torque at low speeds. The NXG's SVC technology delivers a massive 200% starting torque at just 0.5Hz for asynchronous motors.

Torque Response: The drive responds to torque changes in less than 10ms.

Speed Regulation: It offers a 1:100 speed



regulation ratio for asynchronous motors and 1:50 for synchronous motors.

Precision: Speed control accuracy is maintained at $\pm 0.2\%$.

Dual Rating for Maximum Versatility

Understanding that different applications place different stresses on a drive, the NXG features **Dual Rating** as standard:

1. Heavy Duty (HD - Constant Torque): Designed for loads like conveyors or cranes that require high torque throughout the speed range. Overload capacity is 150% for 1 minute or 180% for 10 seconds.

2. Normal Duty (ND - Variable Torque): Ideal for centrifugal pumps and fans where torque requirements decrease with speed. Overload capacity is 110% for 1 minute or 150% for 10 seconds.

Safety Without Compromise: Integrated STO and Fire Mode

In modern manufacturing, safety is paramount. The Jaguar NXG eliminates the need for expensive, space-consuming external safety components by integrating Safe Torque Off (STO) into every unit.



