

NexBot Drives

AC111-002 Ac Servo Motor

NexBot
Robotics

SKU: NXB-SRV-AC111-002 | Category: Drive Systems > Servo Motors > AC Servo Motors

Overview

The NexBot Drives AC111-002 is a high-performance AC servo motor engineered for precision motion control in demanding industrial automation and robotics applications. This motor provides a robust and reliable solution for axes requiring dynamic response and high accuracy. Its core design focuses on maximizing torque density, delivering 2.1 Nm of continuous torque from a compact 86 mm frame. This allows for powerful and precise movements without adding excessive weight or inertia to the robot arm, which is critical for maintaining high acceleration rates and achieving shorter cycle times. A key feature of the AC111-002 is its low-cogging design, which ensures exceptionally smooth rotation, particularly at low speeds. This characteristic is essential for applications requiring fine control and steady motion, such as intricate assembly, precise dispensing, or detailed surface finishing. The motor is built for durability in industrial settings, featuring a rugged aluminum alloy housing with an IP65 rating. This level of protection safeguards internal components from dust ingress and low-pressure water jets, ensuring consistent performance even in challenging environments. Designed to operate on a 400VAC supply, this servo motor integrates seamlessly with NexBot Drives control systems. It is an ideal choice for driving the wrist and end-of-arm tooling axes (J4-J6) on collaborative and smaller articulated robots, where its combination of power, precision, and compact size provides significant advantages. The motor's standardized mounting flange and shaft simplify mechanical integration, reducing engineering and assembly time. For optimal performance, pair this motor with a compatible servo drive and correctly shielded power and feedback cabling.

Technical Specifications

Parameter	Value	Unit
Weight	2.8	kg
Material	Anodized Aluminum Alloy	
Voltage	400VAC	
IP Rating	IP65	

Parameter	Value	Unit
Country of Origin	CH	
Protocol	PROFINET	
Dimensions	185 x 86 x 86 mm	
Torque	2.1 Nm	

Safety Notice: This product must be installed and operated by qualified personnel in accordance with applicable safety standards (ISO 10218, IEC 61508).