NexBot Robotics AC111-013 Ac Servo Motor 1.3kW 4.1 Nm

NexBot Robotics

SKU: NXB-SRV-AC111-013 | Category: Drive Systems > Servo Motors > AC Servo Motors

Overview

The NexBot Robotics AC111-013 is a high-precision AC servo motor engineered to provide reliable, dynamic motion control for industrial robotic systems. This motor is specifically designed for applications requiring rapid and precise positioning, such as automated assembly, material handling, and robotic welding. Its core design focuses on delivering high torque output from a compact and lightweight frame, making it an ideal component for multi-axis robot arms where space and weight are critical design constraints. Key features include a high-energy neodymium magnet rotor and optimized winding configuration, which together provide a continuous torque rating of 4.1 Nm and a peak torque significantly higher for short-duration movements. This high torque density allows for powerful joint actuation without adding excessive weight or bulk to the robot arm, improving overall payload capacity and dynamic performance. The low rotor inertia design enables exceptional acceleration and deceleration, reducing cycle times in fast-paced production environments. The motor operates on a standard 480VAC three-phase supply, simplifying integration into common industrial power systems. Housed in a rugged anodized aluminum casing and sealed to an IP65 rating, this servo motor is protected against dust ingress and low-pressure water jets from any direction. This durability ensures dependable operation in challenging industrial environments where contaminants or wash-down procedures are common. Designed for direct integration with NexBot Robotics actuation systems, the AC111-013 features standardized mounting flanges and connectors for simplified installation and maintenance, minimizing downtime and ensuring a secure mechanical and electrical connection.

Technical Specifications

Parameter	Value	Unit
Weight	4.2	kg
Material	Anodized Aluminum Alloy	
Voltage	480VAC	
IP Rating	IP65	
Country of Origin	KR	
Protocol	PROFINET	
Dimensions	110 x 110 x 215 mm	

Parameter	Value	Unit
Torque	4.1 Nm	

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