

# NexBot Robotics DC112-005

## DC Servo Motor 5.0 Nm

NexBot  
Robotics

SKU: NXB-SRV-DC112-005 | Category: Drive Systems > Servo Motors > DC Servo Motors

### Overview

The NexBot Robotics DC112-005 is a high-torque, brushless DC servo motor engineered for precision and durability in industrial automation and robotics. This motor is specifically designed to provide dynamic and accurate motion for robot axes requiring consistent performance under continuous load. Its compact, high-power-density design makes it an ideal solution for applications where space and weight are critical factors, without compromising on power or responsiveness. Key features include a brushless design that minimizes maintenance requirements and extends operational life by eliminating wear-prone components like brushes. The motor's low-inertia rotor enables rapid acceleration and deceleration, which is crucial for high-speed pick-and-place, assembly, and material handling tasks. With a continuous torque rating of 5.0 Nm, the DC112-005 provides ample power for smaller robot joints or auxiliary axes on larger systems. The motor operates on a standard 48VDC power supply, simplifying system integration with common industrial power sources. Constructed with a rugged anodized aluminum housing, this servo motor is built to withstand challenging industrial environments. It features an IP65 rating, ensuring protection against dust ingress and low-pressure water jets from any direction, making it suitable for use in facilities with moderate washdown requirements. The standard mounting flange and shaft configuration ensure straightforward mechanical installation, reducing downtime during integration or replacement. For optimal performance, this motor should be paired with a compatible digital servo drive to achieve precise control over position, velocity, and torque. The DC112-005 motor is a reliable component for achieving high-precision motion control in a variety of robotic systems.

### Technical Specifications

Parameter	Value	Unit
Weight	3.8	kg
Material	Anodized Aluminum	
Voltage	48VDC	
IP Rating	IP65	
Country of Origin	KR	
Protocol	PROFINET	
Dimensions	185 x 86 x 86 mm	

Parameter	Value	Unit
Torque	5.0 Nm	

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