

NexBot Robotics

SA011-001 6-Axis Robot

Arm 10kg Payload

NexBot
Robotics

SKU: NXB-ROB-SA011-001 | Category: Robots
> Articulated Robots > Small Articulated
(≤10kg)

Overview

The NexBot Robotics SA011-001 is a high-performance 6-axis articulated robot arm engineered for complex automation tasks in space-constrained environments. This robot provides an excellent balance of speed, payload capacity, and working range, making it a versatile solution for a wide variety of industrial processes. Its six degrees of freedom offer maximum dexterity, enabling the arm to perform intricate movements and reach difficult-to-access points within a work cell, similar to the flexibility of a human arm. The SA011-001 features a substantial 10 kg payload capacity, which is ideal for handling a broad range of parts, components, and end-of-arm tooling (EOAT). This capability allows it to be deployed in applications from simple pick-and-place to more demanding tasks like light machining or dispensing. The robot arm's generous 1300 mm horizontal reach creates an expansive work envelope, providing significant operational flexibility for machine tending, palletizing, and assembly line integration. Precision is paramount in modern manufacturing, and the SA011-001 delivers with an exceptional position repeatability of ± 0.02 mm. This high level of accuracy ensures that tasks are performed consistently cycle after cycle, which is critical for maintaining product quality and reducing defects in applications such as electronics assembly or precision insertion. Designed for reliability in industrial settings, the robot arm body is rated to IP54 standards, with the wrist assembly rated to IP67, providing protection against dust and water ingress. The streamlined design incorporates internally routed cabling and air lines, which minimizes interference, reduces wear, and simplifies integration. Common applications for the SA011-001 robot include CNC machine tending, injection molding machine unloading, intricate parts assembly, automated inspection, and packaging. Its compact footprint and flexible mounting options (floor, ceiling, or wall) allow for efficient use of factory floor space, making it an effective choice for both new automation projects and retrofitting existing production lines.

Technical Specifications

Parameter	Value	Unit
Weight	65.0	kg

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Material	Cast Aluminum Alloy	
Voltage	400-480VAC 3-Phase	
IP Rating	IP54 (Body), IP67 (Wrist)	
Country of Origin	US	
Protocol	EtherCAT	
Reach	1300 mm	
Payload	10 kg	
Axes	6	
Repeatability	±0.02 mm	

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