

NexBot Robotics SA011-005 6-Axis Robot Arm 10kg Payload

NexBot Robotics

SKU: NXB-ROB-SA011-005 | Category: Robots > Articulated Robots > Small Articulated (≤10kg)

Overview

The NexBot Robotics SA011-005 is a versatile 6-axis articulated robot arm designed for complex assembly, pick-and-place, and machine tending applications where precision and agility are critical. Engineered for high-duty cycle industrial environments, this robot arm provides a compact footprint without sacrificing performance, making it an excellent solution for integrating automation into constrained spaces. Key to its performance is a balanced combination of strength and speed. The 10 kg payload capacity makes it suitable for handling a wide range of parts and end-of-arm tooling, from small electronic components to larger machined parts, without compromising cycle times. A generous horizontal reach of 1,300 mm provides an extensive work envelope, allowing the robot to service multiple stations or access difficult-to-reach points within a workcell. This extended reach enhances its flexibility for tasks such as palletizing, packaging, and tending larger CNC machines. For applications demanding high accuracy, the SA011-005 delivers exceptional position repeatability of ±0.02 mm. This level of precision ensures consistent and reliable execution of tasks, which is essential for quality-critical processes like electronics assembly, precision dispensing, or intricate material handling. The arm's rigid construction, featuring a lightweight yet robust cast aluminum alloy frame, minimizes vibration and deflection even during rapid movements, contributing to its overall accuracy. Built for durability, the robot arm is sealed to an IP67 rating, providing complete protection against dust and enabling it to withstand temporary immersion in water. This makes it suitable for deployment in harsh manufacturing environments with exposure to coolants, dust, or washdown procedures. Installation is streamlined through a standardized ISO mounting flange, facilitating quick integration with existing cell layouts and tooling. Internally routed airlines and I/O cabling protect critical connections from external damage and reduce the risk of snagging during complex maneuvers, simplifying setup and improving long-term reliability.

Technical Specifications

Parameter	Value	Unit
Weight	125.0	kg
Material	Cast Aluminum Alloy	
Voltage	400-480VAC 3-Phase	
IP Rating	IP67	
Country of Origin	US	

Parameter	Value	Unit
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).