

NexBot Drives SA011-006 6-Axis Robot Arm 10kg Payload

NexBot Robotics

SKU: NXB-ROB-SA011-006 | Category: Robots > Articulated Robots > Small Articulated (≤10kg)

Overview

The NexBot Drives SA011-006 is a high-performance 6-axis articulated robot arm engineered for precision automation in demanding industrial environments. This versatile robot provides an ideal balance of speed, payload capacity, and work envelope size for a wide range of applications. Its robust construction and reliable performance make it a cornerstone for modern manufacturing and logistics operations. The primary benefit of the SA011-006 is its exceptional flexibility, derived from its six axes of motion. This full articulation allows the arm to maneuver around obstacles and approach workpieces from any angle, which is critical for intricate assembly, welding, or dispensing tasks. With a substantial payload capacity of 10 kg, the robot arm can handle a variety of end-effectors and parts, making it suitable for everything from delicate component placement to light material handling. The generous 1300 mm horizontal reach creates a large, usable workspace, enabling the robot to service multiple machines or cover wide conveyor areas without repositioning. Precision is paramount in automated processes, and the SA011-006 delivers with a position repeatability of ±0.02 mm. This high degree of accuracy ensures that tasks are performed consistently cycle after cycle, reducing defects and improving overall product quality. The arm's rigid, lightweight cast aluminum structure minimizes vibration and deflection, contributing to its smooth and stable motion paths even at high speeds. The main body of the robot is rated to IP54 for protection against dust and splashing water, while the wrist is sealed to IP67 standards, allowing it to operate reliably in environments with coolants or washdowns. Common applications for this robot arm include: * Machine Tending: Loading and unloading CNC machines, injection molding presses, and stamping presses. * Pick and Place: High-speed sorting, packing, and palletizing. * Assembly: Automating the assembly of electronics, automotive components, and consumer goods. * Dispensing: Applying adhesives, sealants, or paints with consistent pathing and volume. The SA011-006 is designed for straightforward integration into new or existing production lines, featuring a standardized mounting flange and connections.

Technical Specifications

Parameter	Value	Unit
Weight	125.0	kg
Material	Cast Aluminum Alloy	
Voltage	400-480VAC 3-Phase	
IP Rating	IP54 (Body), IP67 (Wrist)	

Parameter	Value	Unit
Country of Origin	IT	
Protocol	PROFINET	
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).