

NexBot Robotics

STD031-001 SCARA

Robot 5kg Payload

550mm Reach

NexBot
Robotics

SKU: NXB-ROB-STD031-001 | Category: Robots
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Overview

The NexBot Robotics STD031-001 is a four-axis SCARA robot engineered for high-speed, high-precision automation in constrained workspaces. This robot excels in applications requiring rapid and repeatable point-to-point movements, such as electronics assembly, packaging, and material handling. Its robust construction ensures reliable performance in demanding industrial environments, operating 24/7 with minimal downtime. The key to its performance is a combination of powerful, low-inertia motors and advanced motion control algorithms. Its 5 kg payload capacity makes it suitable for handling a wide range of small to medium-sized components, from electronic circuit boards to consumer goods. A horizontal reach of 550 mm provides a substantial work envelope for tasks like packaging, sorting, and machine tending, while maintaining a compact footprint that allows for flexible cell design and easy integration into existing production lines. Exceptional point repeatability of ± 0.01 mm ensures consistent and accurate placement, which is critical for intricate assembly operations and quality control inspections where precision is paramount. Designed for ease of integration, the STD031-001 robot features a compact mounting base and streamlined internal cabling, reducing interference and simplifying installation. The robot's architecture is optimized for rapid acceleration and short cycle times, significantly increasing throughput in high-volume production lines. Common applications include screw driving, dispensing, parts inspection, and kitting. Its combination of speed, precision, and payload capacity provides a versatile automation solution for manufacturers looking to improve productivity and product quality.

Technical Specifications

Parameter	Value	Unit
Weight	28.0	kg
Material	Cast Aluminum Alloy	
Voltage	200-240VAC Single Phase	

Parameter	Value	Unit
IP Rating	IP54	
Country of Origin	IT	
Protocol	EtherCAT	
Dimensions	200 x 200 x 650 mm	
Reach	550 mm	
Payload	5 kg	
Axes	4	
Repeatability	±0.01 mm	

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