

# NexBot Robotics CLR032-001 SCARA Robot 5kg Payload 450mm Reach

NexBot  
Robotics

SKU: NXB-ROB-CLR032-001 | Category: Robots  
> SCARA Robots > Cleanroom SCARA

## Overview

The NexBot Robotics CLR032-001 is a high-performance 4-axis SCARA robot designed specifically for automated tasks within controlled cleanroom environments. This robot delivers an effective combination of speed, precision, and payload capacity, making it an ideal solution for applications where particle generation must be minimized. Engineered for ISO Class 4 (Class 10) cleanroom compliance, the CLR032-001 features a specialized, non-porous surface coating and an internal vacuum system to actively prevent contamination of the surrounding workspace. Its streamlined design, with internally routed cabling and air lines, eliminates external sources of particulate, ensuring the integrity of sensitive manufacturing processes. This makes the robot particularly well-suited for semiconductor wafer handling, sterile medical device assembly, and pharmaceutical packaging. With a maximum payload of 5 kg and a horizontal reach of 450 mm, the CLR032-001 provides a versatile work envelope for a wide range of tabletop automation tasks. The robot's powerful servo system enables rapid acceleration and high-speed cycle times, directly contributing to increased production throughput. Despite its speed, it maintains exceptional accuracy, offering a position repeatability of  $\pm 0.01$  mm. This level of precision is critical for tasks such as micro-electronics assembly, component testing, and precise fluid dispensing, where even minor deviations can impact product quality. The compact base and small footprint allow for flexible cell layouts and seamless integration into existing production lines where space is at a premium. The bottom-exit configuration for all electrical and pneumatic connections further simplifies installation and maintains a clean, uncluttered operational area. The CLR032-001 robot is built for reliability and sustained performance in demanding, 24/7 industrial settings, providing a robust automation platform for advanced manufacturing.

## Technical Specifications

Parameter	Value	Unit
Weight	25.5	kg

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Material	Die-cast Aluminum with Cleanroom-rated Coating	
Voltage	220VAC Single-Phase	
IP Rating	IP65	
Country of Origin	SE	
Protocol	EtherCAT	
Dimensions	220 x 220 x 750 mm	
Reach	450 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).