

# NexBot Robotics CLR032-004 Cleanroom SCARA Robot 5kg

## NexBot Robotics

SKU: NXB-ROB-CLR032-004 | Category: Robots >  
SCARA Robots > Cleanroom SCARA

### Overview

The NexBot Robotics CLR032-004 is a high-speed, 4-axis SCARA robot specifically engineered for demanding applications within controlled environments. Its design and construction meet ISO 14644-1 Class 4 standards, making it an ideal solution for automation in semiconductor manufacturing, pharmaceutical processing, and medical device assembly where minimizing particulate contamination is critical. The robot's smooth, sealed surfaces and internal routing of air and electrical lines prevent particle shedding and simplify cleaning procedures. This robot delivers exceptional performance with a maximum payload capacity of 5 kg, suitable for handling delicate components such as silicon wafers, electronic parts, and sterile products. The compact arm architecture provides a horizontal reach of 400 mm, enabling efficient operation within space-constrained workcells without sacrificing performance. One of the key benefits is its outstanding position repeatability of  $\pm 0.01$  mm, which ensures consistent and accurate placement for high-tolerance assembly, dispensing, and inspection tasks. This level of precision reduces process variability and enhances final product quality. Key applications for the CLR032-004 robot include wafer handling in fabrication plants, assembling and packaging medical devices in sterile environments, and sorting and kitting in pharmaceutical labs. Its robust construction ensures long-term reliability and operational uptime. The robot integrates seamlessly with standard industrial control systems via common communication protocols, allowing for straightforward deployment into new or existing automation lines. For maintenance, all service points are easily accessible, and the sealed design minimizes the ingress of contaminants during routine checks, preserving the integrity of the cleanroom environment.

### Technical Specifications

Parameter	Value	Unit
Weight	22.0	kg
Material	Anodized Aluminum with Powder Coating	
Voltage	200-240VAC	
IP Rating	IP65	
Country of Origin	DE	
Protocol	EtherCAT	

Parameter	Value	Unit
Dimensions	220 x 180 mm (Base Footprint)	
Reach	400 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).