

NexBot Vision HA014-003 6-Axis Robot Arm 250kg Payload

**NexBot
Robotics**

SKU: NXB-ROB-HA014-003 | Category: Robots
> Articulated Robots > Heavy Articulated
(>200kg)

Overview

The NexBot Vision HA014-003 is a powerful 6-axis articulated robot arm engineered for high-payload material handling, machine tending, and complex assembly applications. This robot is designed to operate in demanding industrial environments, providing a robust platform for tasks that require significant strength and reach without sacrificing precision. Its core feature is the substantial 250 kg payload capacity, which enables the handling of heavy workpieces such as engine blocks, large castings, and fully loaded pallets. The arm's rigid construction, featuring a cast iron base and high-strength steel alloys, minimizes deflection under heavy loads, ensuring consistent performance. This structural integrity is critical for achieving a position repeatability of ± 0.07 mm, a specification that guarantees accuracy in applications like spot welding, precise part insertion, and CNC machine tending. The generous 3,100 mm horizontal reach provides an extensive work envelope, allowing the HA014-003 to service multiple stations, access large machinery, or stack materials across a wide area. With six axes of motion, the robot arm offers maximum dexterity, capable of orienting tools and parts at complex angles required for intricate assembly or processing tasks. The arm is protected with an IP67 rating, making it resilient to dust ingress and capable of withstanding temporary water immersion, ensuring reliability in harsh production settings. Internal routing of cables and air lines protects them from wear and snagging, simplifying installation and reducing maintenance downtime. The HA014-003 is an ideal solution for automating physically demanding and repetitive processes in the automotive, foundry, and logistics industries, improving both safety and operational efficiency.

Technical Specifications

Parameter	Value	Unit
Weight	2300.0	kg
Material	Cast Iron and Aluminum Alloy	
Voltage	480VAC	

Parameter	Value	Unit
IP Rating	IP67	
Country of Origin	US	
Protocol	PROFINET	
Reach	3100 mm	
Payload	250 kg	
Axes	6	
Repeatability	±0.07 mm	

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