

NexBot Drives LA013-002 6-Axis Robot Arm 120kg Payload

**NexBot
Robotics**

SKU: NXB-ROB-LA013-002 | Category: Robots
> Articulated Robots > Large Articulated
(50-200kg)

Overview

The NexBot Drives LA013-002 is a versatile 6-axis articulated robot arm designed to handle high-payload applications in demanding industrial environments. This robot provides an optimal balance of speed, power, and precision, making it a reliable solution for automating complex manufacturing processes. Its robust construction ensures long-term performance and durability under continuous operation cycles. The primary benefit of the LA013-002 is its substantial 120 kg payload capacity, which allows it to manipulate heavy workpieces, tooling, and assemblies with ease. This capability is complemented by an extensive horizontal reach of 2,702 mm, creating a large, flexible work envelope suitable for serving multiple machines or covering wide conveyor systems. The arm's design incorporates high-stiffness components to minimize deflection under load, achieving a position repeatability of ± 0.05 mm. This level of precision is critical for tasks requiring consistent quality, such as spot welding, sealant application, and intricate assembly operations. Common applications for this robot arm include: - Automotive: Body-in-white (BIW) assembly, part transfer, and machine tending. - Logistics and Warehousing: High-capacity palletizing, depalletizing, and sorting of heavy goods. - Metal Fabrication: Handling large castings, loading and unloading CNC machines, and performing spot welding. - General Manufacturing: Heavy material handling, assembly of large components, and inspection. The robot arm is designed for floor mounting and features a streamlined profile to reduce interference within the workcell. The wrist is rated to IP67, providing enhanced protection against dust and liquids, making it suitable for environments with cutting fluids or washdown requirements. The main body is sealed to an IP65 rating. The LA013-002 represents a powerful and dependable automation tool for increasing throughput and improving process stability in heavy industrial sectors.

Technical Specifications

Parameter	Value	Unit
Weight	1250.0	kg
Material	Cast Aluminum Alloy	

Parameter	Value	Unit
Voltage	400-480VAC 3-Phase	
IP Rating	IP65 (Body), IP67 (Wrist)	
Country of Origin	IT	
Protocol	PROFINET	
Dimensions	800 x 650 mm (Base Footprint)	
Reach	2,702 mm	
Payload	120 kg	
Axes	6	
Repeatability	±0.05 mm	

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