

NexBot Robotics FLR022-004 Collaborative Robot Arm 10kg Payload

NexBot Robotics

SKU: NXB-ROB-FLR022-004 | Category: Robots > Collaborative Robots > Floor Cobots (5-20kg)

Overview

The NexBot Robotics FLR022-004 is a 6-axis collaborative robot arm engineered for flexible automation and safe operation alongside human personnel in shared workspaces. This cobot provides an optimal balance of strength, reach, and safety, making it suitable for a wide array of industrial applications without the need for extensive safety fencing. Its core design philosophy centers on power and force limiting technology, where integrated sensors at each joint continuously monitor external forces, enabling the robot to automatically stop upon contact with an object or person, thus minimizing risk. Key features include a substantial 10 kg payload capacity, which allows the robot to handle heavier parts, tools, and end-of-arm tooling for tasks like machine tending and material handling. With a generous reach of 1300 mm, the FLR022-004 can service larger work areas and access components in complex machine setups. The arm's design ensures high positional accuracy, delivering a repeatability of ± 0.03 mm for consistent and reliable process execution in applications demanding precision, such as electronics assembly and quality inspection. The FLR022-004 is built for rapid deployment and ease of use. It features an intuitive programming interface and a hand-guiding function, allowing operators to teach the robot new paths and tasks by simply moving the arm to the desired positions. This significantly reduces programming time and empowers non-expert users to adapt the robot to new production requirements quickly. Common applications for this cobot include pick-and-place operations, packaging and palletizing, automated assembly, and CNC machine tending. The robust cast aluminum construction and IP54 rating ensure durability and reliable performance in typical industrial environments.

Technical Specifications

Parameter	Value	Unit
Weight	35.5	kg
Material	Cast Aluminum Alloy	
Voltage	48VDC	
IP Rating	IP54	
Country of Origin	IT	
Protocol	EtherCAT	

Parameter	Value	Unit
Reach	1300 mm	
Payload	10 kg	
Axes	6	
Repeatability	±0.03 mm	

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