

# NexBot Drives FLR022-002 Collaborative Robot Arm 10kg Payload

## NexBot Robotics

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SKU: NXB-ROB-FLR022-002 | Category: Robots  
> Collaborative Robots > Floor Cobots  
(5-20kg)

### Overview

The NexBot Drives FLR022-002 is a versatile 6-axis collaborative robot arm engineered for seamless integration into shared human-robot workspaces. This cobot is designed to handle a variety of automation tasks with precision and reliability, enhancing productivity without the need for extensive safety guarding typically required for traditional industrial robots. The key to its versatility is a robust 10 kg payload capacity, which allows the robot to manage heavier workpieces, utilize complex end-of-arm tooling, and perform tasks such as machine tending and light assembly. Its expansive 1300 mm horizontal reach provides a large, flexible work envelope, making it suitable for applications that require access across conveyors, into machinery, or for palletizing operations. High-precision tasks are executed flawlessly thanks to a position repeatability of  $\pm 0.05$  mm, ensuring consistent quality in processes like electronics assembly, detailed inspection, and precise part placement. Safety is a core design principle of the FLR022-002. Integrated force and torque sensing in all six joints allows the robot to detect unexpected contact and safely stop its motion, enabling operators to work alongside it with confidence. This collaborative nature reduces the overall footprint and cost of the automation cell. Common applications for this robot include: - Machine Tending: Loading and unloading CNC machines, injection molding presses, and other manufacturing equipment. - Pick and Place: Transferring parts between production stages with speed and accuracy. - Assembly: Performing repetitive assembly tasks, such as screw driving, part insertion, and fastening. - Packaging and Palletizing: Stacking boxes, loading cases, and preparing goods for shipment. Deployment is streamlined through an intuitive programming interface that allows for quick setup and adjustments by personnel without deep robotics expertise. The robot arm features a standard ISO 9409-1-50-4-M6 tool flange for broad compatibility with a wide range of grippers and end effectors.

# Technical Specifications

Parameter	Value	Unit
Weight	28.5	kg
Material	Aluminum Alloy with ABS covers	
Voltage	48VDC	
IP Rating	IP54	
Country of Origin	KR	
Protocol	EtherCAT	
Reach	1300 mm	
Payload	10 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).