

NexBot Robotics 621-007

Door Interlock, PLe/SIL3

NexBot
Robotics

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> Safety Interlocks > Door Interlocks

Overview

The NexBot Robotics 621-007 is a solenoid-controlled door interlock designed to safeguard personnel by preventing access to hazardous areas during robotic operations. This essential safety component ensures that machine guards, gates, and doors remain securely locked until the machinery has reached a safe state, mitigating risks in automated environments. Its primary application is in the perimeter guarding of industrial robot cells, where it integrates directly with the system's safety controller. Key features include a high functional safety rating, certified to PLe (EN ISO 13849-1) and SIL3 (IEC 62061). This certification provides confidence that the interlock meets stringent international safety standards. The unit operates with a 24VDC solenoid, allowing for electrical control over the locking mechanism, which can be tied to the robot controller's status. With a robust locking pin and a holding force of up to 1500 N, it reliably prevents gates from being forced open during operation. The housing is constructed from a durable die-cast zinc alloy and is sealed to an IP67 rating, making it suitable for demanding industrial environments where dust and liquids are present. Integrated diagnostic LEDs provide clear, at-a-glance status indication for locked, unlocked, and fault conditions, simplifying troubleshooting for maintenance personnel. Installation is straightforward, with standard mounting patterns compatible with common machine framing and guard door profiles. The 621-007 interlock is a critical element for building compliant safety systems for applications such as robotic welding, automated assembly, packaging, and material handling. By ensuring that access doors cannot be opened while the robot is in motion, this interlock provides a fundamental layer of protection for operators and technicians.

Technical Specifications

Parameter	Value	Unit
Weight	0.8	kg
Material	Die-Cast Zinc Alloy, Powder Coated	
Voltage	24VDC	
IP Rating	IP67	
Country of Origin	KR	
Dimensions	145 x 40 x 50 mm	

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

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