

NexBot Vision 512-011 Bus Power Cable (5m, IP67)

NexBot
Robotics

SKU: NXB-CBL-512-011 | Category: Cables & Connectors > Power Cables > Bus Power Cables

Overview

The NexBot Vision 512-011 is a high-performance bus power cable engineered to provide consistent and clean power to critical components within NexBot robotic systems. This cable is essential for maintaining the operational integrity of the robot's distributed I/O, sensors, and other peripheral devices that rely on the main system power bus. Its design focuses on durability and electrical stability, making it a dependable component for any automated cell. Constructed with a high-flexibility Polyurethane (PUR) outer jacket, the 512-011 cable is built to withstand the rigors of continuous motion and mechanical stress found in industrial applications. This makes it suitable for installation in dynamic cable carriers and on articulated arms where constant bending occurs. The robust construction minimizes the risk of insulation breakdown or conductor fatigue, directly contributing to increased uptime and reduced maintenance needs. A key feature of this cable is its IP67 ingress protection rating. This ensures that the electrical terminations are fully protected against dust and can withstand temporary immersion in water. This level of protection is critical in environments where equipment is exposed to cutting fluids, coolants, or frequent washdown procedures, safeguarding the system from short circuits and corrosion. The cable operates reliably on a 48VDC system, providing the necessary power capacity for multiple downstream devices. The 5-meter length offers sufficient flexibility for routing within standard-sized robot cells, connecting the main controller to junction boxes or end-of-arm tooling power distribution points. Internally, the cable incorporates advanced shielding to mitigate the effects of electromagnetic interference (EMI) and radio frequency interference (RFI) from nearby motors, drives, and welding equipment. This shielding ensures clean power delivery, which is vital for the precise operation of sensitive electronic components. Installation is straightforward, utilizing secure, vibration-resistant terminations designed for rapid and reliable integration into the NexBot ecosystem.

Technical Specifications

Parameter	Value	Unit
Weight	1.2	kg
Material	Polyurethane (PUR) Jacket	
Voltage	48VDC	
IP Rating	IP67	
Country of Origin	IT	
Protocol	PROFINET	

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