



# BRAD® POWER AND CONNECTIVITY SYSTEMS ARE IDEAL FOR RAPID COMMISSIONING OF ROBOTIC SYSTEMS

Streamline and simplify robotics installation and maintenance using pre-molded, quick-connect cables for power distribution and motor control, and patented push-to-lock connectors to link sensors, actuators and other devices.

## BUSINESS CHALLENGE

**Time and Cost of Robotics Installation.** Designers and installers of rugged robotic machinery for use in manufacturing and assembly plants are challenged by the time, cost and complexity of commissioning the machinery once it is on-site. Typically, these automated systems require many hours of labor by licensed professionals to configure and power the systems for precise operation and synchronization. This leads to time delays in deployment and rapid escalation of the total cost of ownership. Later, when the robotic systems require routine maintenance, they must be disassembled, serviced and reassembled – another time consuming and costly task. Finding ways to streamline and simplify machine maintenance procedures is an ongoing challenge for plant engineers and managers. As time and labor costs continue to mount, productivity, throughput and profitability falls. There is a better way to offer practical, cost-effective solutions for the installation of robotic systems with the power quick-connect machine wiring system and the Brad connectivity Ultra-Lock™ connection system.

## SOLUTION

**A “One-Stop-Shop” for Robotic Machinery Solutions.** Our innovative Brad® product lines have been developed specifically to streamline the manufacture, installation and maintenance of industrial and robotic machinery. Brad products are ruggedly designed and constructed to provide long-term reliable performance in even the harshest industrial environments. For robotic systems, we offer:

The Brad power products quick-connect machine wiring system is a “soft-wiring” system designed to provide fast, modular connectivity for motor control and power distribution to synchronized robotic system components. The NFPA-79 compliant system features rugged, factory applied connector heads (IP67 rated) molded onto cables in a complete system comprised of trunk/feeder cordsets, drop/ branch cordsets, tees and reducing adapters, receptacles, disconnect switch, and a power distribution box. The system can be installed quickly and easily by a trained technician rather than a licensed professional, without the time and effort associated with cable pulling and hard-wiring installation and termination. To disassemble and reassemble the machine

or system for maintenance or plant reconfiguration, technicians need only disconnect and reconnect the cordsets and connectors.

The Brad connectivity Ultra-Lock connection system enables safe, reliable connection of sensors, actuators and other control devices in robotic automation systems. The operator-independent Ultra-Lock system is built on a patented “push-to-lock” technology that provides secure, long-lasting mating without turning the coupler. Assemblers simply push down to connect and pull up to disconnect, thus saving a significant amount of time, while eliminating the repetitive hand/wrist motion required to install traditional threaded M12 connectors. The result is higher productivity, faster commissioning of the system and time to production.





## BENEFITS AND ROI

**Reduced labor costs and faster time to commissioning of your robotic automation systems are just the beginning of the return on investment that Brad systems offer.** Over time, the operational and business benefits continue to grow, including:

- Up to a 80% reduction in electrical commissioning time of industrial machinery and automation systems
- Highly reliable performance with full NFPA-79 code compliance and built-in safety features
- Up to a 50% reduction in total installed cost resulting from the ability to change machine configurations quickly and easily, without the need to hire a licensed electrician
- Optimum flexibility and scalability to configure, modify or expand the system as operations change or to accommodate plant floor or system re-design
- Faster, easier handling of machine maintenance and repair, for higher productivity, less downtime
- Significantly lower cost of ownership over the entire lifecycle of your equipment.

To learn more visit [www.molex.com/ab/bradpowerconnectivity.html](http://www.molex.com/ab/bradpowerconnectivity.html)