

LOXON LOCKING QUICK DISCONNECT (QD) TERMINALS

PRODUCT PRESENTATION
NPI ENHANCEMENT

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creating connections for life

molex

LOXON LOCKING QUICK DISCONNECT (QD) TERMINALS

Loxon Locking Quick Disconnect (QD) Terminals with positive locking help ensure reliable connectivity and prevent loose connections or accidental separation in high-vibration or continuous shock applications.

Key Product Information

Category: Solderless Terminals

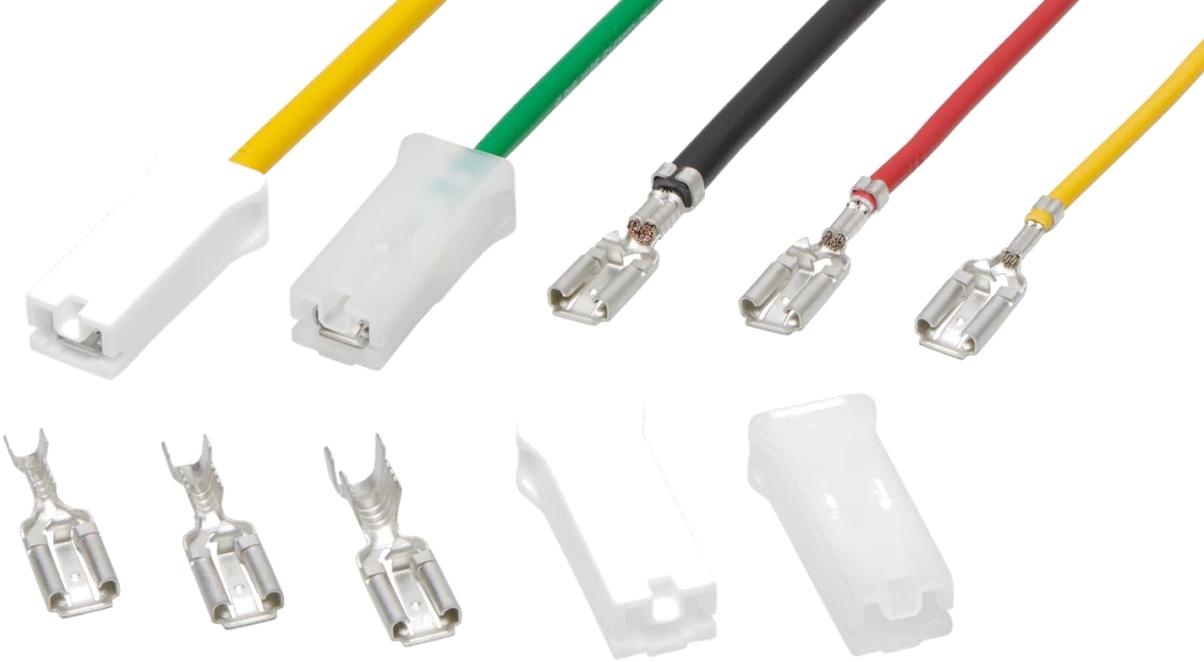
Current: Up to 24.0A

Wire: 10, 12, 14, 16, 18 or 20 AWG

Style: VibraKrimp

Terminal: Copper Alloy with Tin plating

Housing: Nylon



[View Product
Landing Page](#)

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Series
19439

**Loxon Locking Quick Disconnect (QD)
Terminals and Housings**

VITAL PRODUCT INFORMATION



What makes this product different from the competition?

New Loxon Locking Quick Disconnect (QD) Terminals from Molex help eliminate problems of loose connections or accidental disconnections common to high-vibration or continuous shock environments and applications. The positive locking feature secures firmly to a mating male tab on a PCB or a device such as a switch, relay, battery or capacitor. The design permits easy removal by simply depressing the latch or pulling on the housing.

How does this product/solution create value for our customers?

The Loxon terminal design prevents accidental disconnection due to high vibration, shock or an inadvertent pulling on the wire. It can be safely and reliably used in critical infrastructure applications where a loss of power could have particularly detrimental effects such as system or production stoppages, quality or safety issues, equipment damage or direct customer impact.

What is the Molex Advantage?

Molex's Loxon Locking QD starts with a high-performance alloy that allows the terminals to work even in adverse conditions. It is then post-plated to prevent exposed base metal anywhere near the mating area, which could result in corrosion and reduction in performance over time. It is cUL Listed to the UL 310 standard for quick connects when terminated with the recommended Molex application tooling.

PRODUCT OVERVIEW

Positive Locking for High-Vibration Applications

The positive-lock feature of Loxon Locking Quick Disconnect (QD) Terminals helps ensure permanent connectivity and reliable operation in environments subject to high vibration or continuous shock.

Quick and Easy Disconnect

Loxon Locking QD Terminals employ a latch design that enables the terminal to be quickly and easily disconnected by simply depressing the latch or pulling on the nylon housing.

Multiple Wire Gauge Options

For maximum flexibility across a range of applications, Loxon Locking QD Terminals are available for wire gauges 10 to 20 AWG and offer up to 24.0A current capacity.



MARKETS AND APPLICATIONS



Consumer

- Home appliances
- Home standby generators
- HVAC systems
- Lawn and garden power equipment
- Furnace controls



Commercial Vehicle

- Recreational vehicles
- Marine
- Motors
- Batteries



Telecom Infrastructure

- Server and storage architecture
- Power distribution
- Industrial control panels
- Security systems
- Manufacturing equipment
- Lighting and controls

FREQUENTLY ASKED QUESTIONS

Can I use the terminal without the housing?

Yes, you can. The terminal locking latch can be depressed manually and is designed for the user to do so comfortably.

Can I crimp the terminals manually and automatically?

Yes, you can. Hand tools as well as applicators are available for terminating loose piece or strip parts.

Are the terminals available for other tab widths besides 6.35 by 0.81mm?

No, these are not currently available.

Will this product mate to any standard 6.35 by 0.81mm tabs?

The product is designed to mate with male tabs meeting the UL 310 standard and that have a hole in them to facilitate locking.

Does Molex offer the mating tabs?

Yes, we do. Any of the 6.35 by 0.81mm tabs in our 19705 or 19708 series PCB tab family will mate with Loxon Locking Quick Disconnect (QD) Terminals.

SOLVING INDUSTRY CHALLENGES

Industry Need	Industry Challenge	Industry Solution	Anticipated Results
Prevent accidental disconnection	Customers want a quick but reliable connection in harsh environments exposed to continuous or intermittent vibration.	The Loxon Locking Quick Disconnect (QD) Terminal is firmly affixed to the mating tab and cannot be removed without depressing the latch or pulling on the housing.	Customers will enjoy a highly reliable connection that stays securely connected until purposely disconnected.
Ease of use	Customers want an intuitive product that can be easily terminated to wire and mated to industry-standard tabs.	One of the most common interconnects has been improved with locking capability. Application tooling for any level of production, prototyping or field repairs is available.	Easy mating and un-mating will simplify assembly processes. The secure mating will reduce field failures.
Cost-effective solutions	Consumers want cost-effective solutions to their interconnect needs.	The Loxon Locking QD Terminal is a very cost-effective approach when compared to the potential cost of failure.	End users have reliable connections that can be trusted to perform for years without interruption thanks to the robust design and anticorrosion plating.

PRODUCT FEATURES AND ADVANTAGES

Tin plating of terminals after stamping

Helps prevent corrosion and eliminate unplated (bare) edges for improved reliability



Conformance to UL 310 standard

Assures optimal safety and performance

Mating to 6.35 by 0.81mm male tabs with hole

Permits use with the most popular size of quick disconnect

Availability with three wire ranges

Makes the terminal suitable for a wide variety of applications incorporating this type of connection

Housing available with 94V-2 or 94V-0 UL flammability rating and Glow Wire capable

Meets most customer requirements for use in harsh environments including home appliances and white goods

Key Specifications

Current	Up to 24.0A
Wire	10, 12, 14, 16, 18 or 20 AWG
Mates With	6.35 by 0.81mm disconnect
Terminal Material	Copper Alloy with Tin plating
Housing Material	Nylon
Operating Temperatures	Terminal: -40 to +149°C Housing: -40 to +105°C

UNIQUE AND USEFUL DIFFERENTIATION VS. SIMILAR MOLEX PRODUCT

	Molex Loxon Locking Quick Disconnect Terminals	Molex Quixon Quick Disconnect Terminals
Series Number	19439	19273, 19274, 19275, 19276, 19277
Current Rating (max.)	24.0A	24.0A
Voltage Rating (max.)	600V (with housing)	600V
Positive Lock	Yes	No
Style	VibraKrimp	AviKrimp or InsulKrimp
Wire Gauge Options	10 to 20 AWG	10 to 22 AWG
Operating Temperatures	-40 to +149°C (Terminal) -40 to +105°C (Housing)	-55 to +105°C

SPECIFICATIONS AND SUPPORTING INFORMATION

Reference Information

Packaging: Bag or reel
Designed in: Inches
RoHS (Housings): Yes
Halogen Free: Yes
Glow Wire Capable (Housings): Yes
UL Flammability Ratings (Housings):
 Part No. 19439-0007 – 94V-2
 Part No. 19439-0008 – 94V-0
Agency: UL and cUL E79133

Electrical

Voltage (max.): 600V AC (in housing)
Current (max.): 24.0A (with 10 AWG)

Mechanical

Wire: 10, 12, 14, 16, 18 or 20 AWG

Style: VibraKrimp

Mating Tab: .250" by .031"
 6.35 by 0.81mm

Hand Tool:

10 and 12 AWG – 213309-4300

14 and 16 AWG – 213309-4200

18 and 20 AWG – 213309-4100

Applicator:

10 and 12 AWG – 203702-9400

14 and 16 AWG – 203702-9300

18 and 20 AWG – 203702-9200

Durability (max.): 25 cycles
(UL 310 has a 6-cycle requirement)

Physical

Housing: Nylon

Terminal Material: Copper Alloy

Plating: Tin (2.54 microns min.)

Operating Temperatures: Terminal: -40 to +149°C

Housing: -40 to +105°C

Additional Resources

Web Overview Page

www.molex.com/en-us/products/connectors/solderless-terminals

Datasheet

987652-6061.pdf (molex.com)

Training Presentation

Loxon Locking QD_PRES.pdf

Global Product Manager

Chip Walsh, ISBU, DSS

UNIQUE AND USEFUL DIFFERENTIATION VS. COMPETITOR'S PRODUCT

	Molex Loxon Locking Quick Disconnect Terminals	Competitor's Positive Lock Receptacles
Current Rating (max.)	24.0A	24.0A
Voltage Rating (max.)	600V (with housing)	600V (with housing)
Positive Lock	Yes	Yes
Terminal Material	High-performance alloy	Brass
Plating	Post-plated Tin, no bare edges	Pre-plated Tin, exposed edges
Wire Gauge Options	10 to 20 AWG	10 to 22 AWG
Agency Approval	cUL Listed	UL Recognized

WHAT IS THE MOLEX ADVANTAGE?

Global manufacturing capability, high-quality materials and manufacturing methods, and a large network of distribution partners all help make Molex a unique partner in finding solutions.

*Information gathered from the world wide web at the time of this product launch



THANK YOU

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