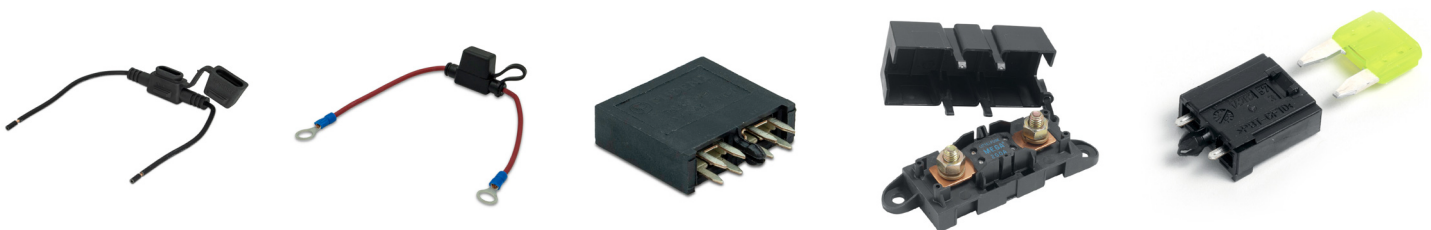




Expertise Applied | Answers Delivered



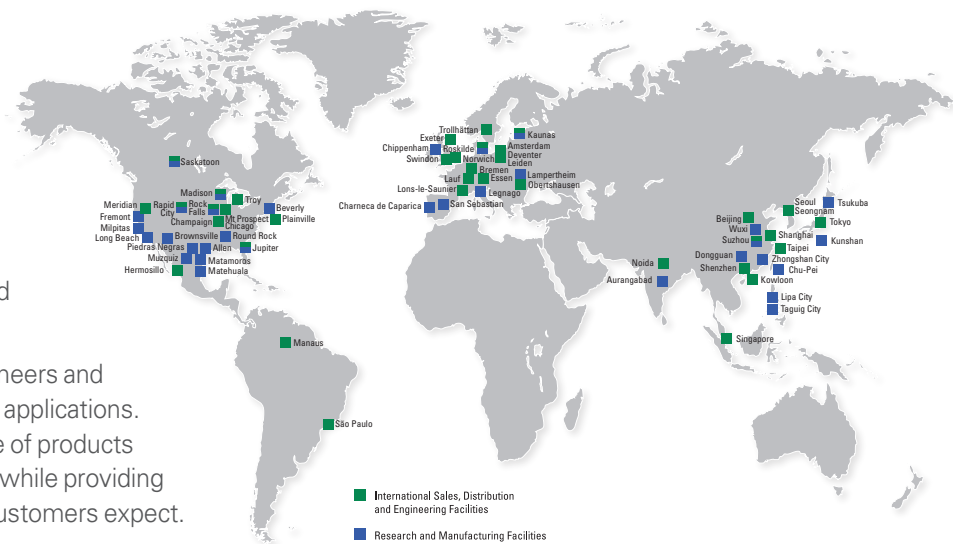
## AUTOMOTIVE AND COMMERCIAL VEHICLE FUSE HOLDERS



# GLOBAL Market

Littelfuse products help protect, control and distribute vehicle electrical power in OEM and aftermarket applications for industries such as heavy-duty truck, construction and agriculture.

For decades, we have helped OEMs, engineers and end-users select the right product for their applications. Today, Littelfuse offers the broadest range of products for protection, sensing, and control needs while providing exceptional service and support that our customers expect.



# Why Choose Littelfuse

Littelfuse is the global leader in circuit protection solutions with the broadest spectrum of electrical power technologies. Our Commercial Vehicle Products portfolio provides a total solution to protect, control and distribute vehicle electrical power.

## Single Source for Vehicle Electrical Products

Littelfuse offers an extensive commercial vehicle product line and if an off-the-shelf product does not fit your needs we can work with you to develop a customized solution that fits your application.

## Product Development and Testing Expertise

Our global team of engineers design innovative solutions, provide customer support and perform product testing to ensure you have the best solution that meets all requirements and regulations.

## Global Support Team

Littelfuse has a world-wide team of specialist prepared to support your application needs from conceptual development to continuous quality assurance for the lifetime of your program.

**[Littelfuse.com/fuseholders](http://Littelfuse.com/fuseholders)**



# Fuse Considerations

## Beware of Counterfeit Fuses

At first glance, it's hard to tell the difference between a genuine Littelfuse blade fuse and a counterfeit. The counterfeit may have the same physical dimensions, but using it can be dangerous because it fails to perform to the stringent performance and safety specifications developed by Littelfuse and the OEMs.

In many cases, the elements in counterfeit fuses do not correspond with the amperage specification stamped on the fuse. This will prevent the elements from opening at the rated or correct amperage, which could result in a fire causing serious damage to the vehicle, its contents and its passengers.

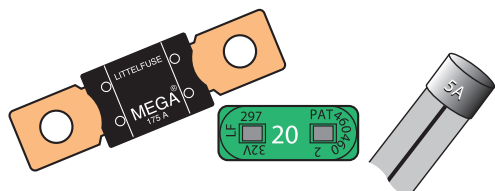
Responding to this growing problem, the United States International Trade Commission and then President Ronald Reagan issued and approved an exclusion order in 1983 prohibiting the importation of the look-alike blade fuses into the United States. This order was initiated because many of these fuses were proven to be totally unsafe. The photos shown here indicate why counterfeit fuses are potentially unsafe and present a fire risk.

To guarantee quality and safety, look for the Littelfuse name on fuses and fuse packaging.



## Current Rating — Amperage

The current rating, marked on every fuse, is the maximum current in amperes that the fuse can continuously carry under specified conditions.



**Tip:** When selecting a fuse, make sure the current rating of the fuse is the same amperage as the circuit. You can obtain the current rating of a circuit by looking in the owner's manual of the vehicle or checking to see if it is written on the fuse block.

## Overfusing and Underfusing

**Overfusing** is when the fuse has a current rating higher than the rating of the circuit. In this case, the fuse will not be able to protect the circuit properly because the circuit could reach overcurrent levels, causing damage and safety hazards, before the fuse would blow.

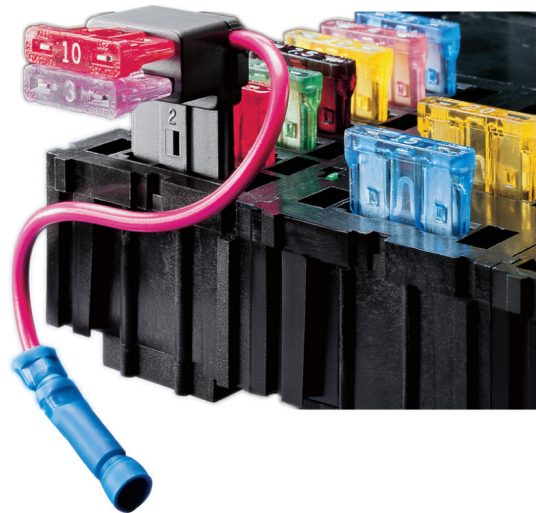
**Underfusing** is when the fuse is rated at a current too far below the rating of the circuit. In this case the fuse will blow, even though the circuit is functioning normally without an overcurrent. Underfusing almost guarantees that a fuse will blow repeatedly. This is referred to as a nuisance blow.

## Voltage Rating

The voltage rating, marked on every fuse, indicates the maximum voltage at which the fuse is designed to operate safely if an overcurrent occurs.

**Tip:** The fuse voltage rating must equal or exceed this circuit voltage where the fuse is installed. This is not a problem in fuse selection because automotive fuse applications are typically around 12 volts, while the voltage rating of the majority of Littelfuse automotive fuses including ATO Fuse, MINI Fuse, MAXI Fuse and MEGA Fuse is 32 volts.

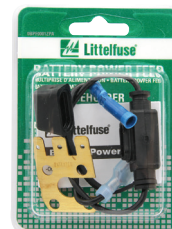
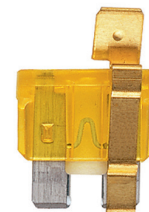
## ADDING A CIRCUIT



Always use a circuit protection device with a fuse holder or fuse block whenever adding additional circuits to ensure optimal safety. The fastest, easiest option for installers who need to add a circuit for applications such as electronic components, is the Littelfuse Add-A-Circuit Fuse Holder. Add-A-Circuit, available in ATO® and MINI® blade fuse versions, is designed to facilitate installation of fuses for accessories of 10 amps or less. The Add-A-Circuit adapts the fuse block to the installer's needs, quickly turning one slot in the fuse block into two, providing a safe, economical alternative to splicing or fusetaps.

**Caution:** Fusetaps are not a recommended alternative for adding circuits because they can overstress the terminals in the fuse block. This situation can create a loose fitting fuse, which in turn produces excessive heat, which can cause nuisance blows, even melting of the fuse and fuse block and possibly an expensive repair in the future. When a fusetap is used, in many cases there is no fuse protecting the new circuit, a condition which can also present a hazard.

Another alternative to adding a circuit is the Littelfuse Battery Power Feed (BPF1). This device attaches directly to the battery terminal, allowing the addition of up to three circuits. Then use an in-line fuse holder to protect the circuit properly.



# Selecting The Right Fuse

Understanding how circuit protection works is a key to diagnosing automotive electrical problems. When a fuse blows, that means the fuse is doing its job — sending you a message that something needs to be fixed.

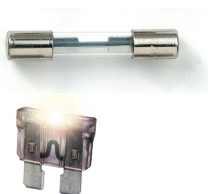
## WHAT IS THE PURPOSE OF A FUSE?

A fuse is a safety valve. It is designed to stop current from exceeding the rating of the wires or components. Without fuses, excessive current could cause damage to electrical systems, and even result in fires.

In general, a fuse has a simple construction. The key component is the “element” — a short piece of metal wire or strap.

## WHAT CAUSES A FUSE TO BLOW?

The element is designed to melt at a specific temperature, to protect wires and equipment from overcurrents. An overcurrent is any current that exceeds the amperage rating or wiring capacity of equipment or devices under normal conditions of use.



If an overcurrent causes the current in a circuit to rise above a specific level — often the circuit’s rating — the heat produced will melt the fuse’s element, causing the fuse to “blow.” This opens the circuit and immediately stops the flow of current. Fuses are designed to blow at temperatures far below those that would cause damage or hazards.

Once a fuse is blown, it can be replaced to allow the current to flow again.

**But simply replacing a fuse may not be the solution to the problem.**

In fact, there is a chance the fuse will just blow again, because the fuse is signaling a problem in the system. Understanding the factors that cause a fuse to blow will help you diagnose automotive electrical problems.

There are two types of overcurrents that can cause a fuse to blow: overloads and short circuits.

### Overload

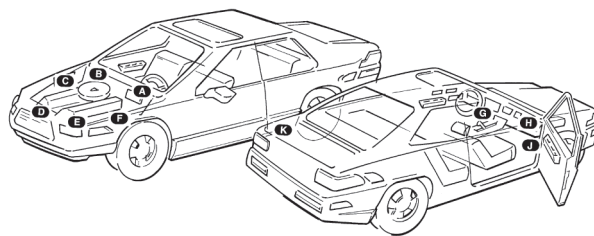
**What:** The current exceeds the amperage at which the wires or equipment are rated.

**Why:** Too many devices are connected to one circuit, or a device malfunctions and draws higher than its normal operating current. Sustained overloads cause overheating of circuit components and the fuse blows.

### Short Circuit

**What:** The current is out of its normal path.

**Why:** A malfunction creates an unintended path for electricity to flow from the battery or alternator to ground. This can be caused by the touching of any positive wire to a ground wire, e.g. due to frayed wire insulation, or tools laid across the positive and ground wires of a circuit. The uncontrolled current to ground then surpasses the normal resistance of the wire contained in the circuit, forcing higher and higher current to the point of the generating heat which blows the fuse.



**Bold letter indicates fuse block location.**

|                          |                                                        |
|--------------------------|--------------------------------------------------------|
| <b>A</b> Left fire wall  | <b>G</b> Behind/under dash left                        |
| <b>B</b> Right fire wall | <b>H</b> Behind/in glove box                           |
| <b>C</b> Right fender    | <b>J</b> Behind/under dash right                       |
| <b>D</b> Right front     | <b>K</b> Rear compartment                              |
| <b>E</b> Left front      | <b>IL</b> In-line with device protected                |
| <b>F</b> Left fender     | (locations may vary from car to car, see your dealer.) |

## FINDING A FUSE

To be able to address fuse issues, you first must be able to locate the appropriate fuse within the vehicle. In today’s vehicles, each individual wire is protected by a circuit protection device.

Fuses are contained in fuse blocks located at various points throughout the vehicle. The diagram above illustrates typical fuse block locations.

## SELECTING THE RIGHT FUSE

Once you have found the fuse that has blown, and solved the problem in the vehicle, you must replace the blown fuse with an appropriate device.

When selecting the right fuse for replacement, you should consider the following:

### Physical Type

The replacement fuse must be of the same physical type as the blown fuse being replaced. It must be of the same style and have the same dimensions so that it can fit properly in the fuse block or fuse holder. Check your owner’s manual to determine the appropriate fuse type.

**Installation Tip:** Littelfuse holds patents for the designs on most automotive fuses. It is important to remember that the physical type of the fuse is important, but it is not the only factor affecting the fuse’s function. Although some fuses appear to be the same type and dimension as Littelfuse fuses, they do not necessarily have the same performance characteristics.

### Look for the Littelfuse OEM Label

To guarantee the same level of quality in circuit protection that the major automotive manufacturers require for their original equipment fuses, look for the OEM seal on Littelfuse aftermarket products. Only Littelfuse products can guarantee this level of quality.

**ORIGINAL  
EQUIPMENT  
MANUFACTURER**

# Why Should You Use a Fuse Holder?

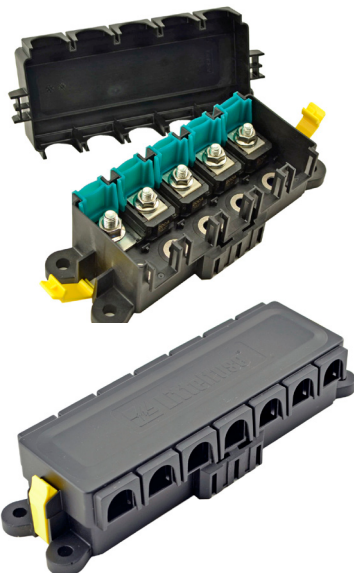
Every fuse requires a fuse holder for installation. That's because fuse holders perform two essential functions.

The first is to mount the fuse or fuses in a convenient or easily accessible location, whether it is for the sake of integration in assembly or for applications that require frequent serviceability.

The second job of a fuse holder is to shield the critical circuit protection elements in an application against environmental conditions, whether it's simply safeguarding against debris interfering with the connections or providing full waterproof and dust-tight protection.



ZCASE® FHZ bolt-down fuse holders shown below can be found on page 7.



## Application Considerations

Fuse holders are designed to work with specific fuses. However, your application requirements will dictate the type of fuse and fuse holder you need. When selecting a fuse and fuse holder, consider your application's electrical load requirements, number of circuits, and mounting location.

Do you need circuit protection for a low-amperage or high-amperage application? Are you trying to protect multiple circuits in a tight space? Will you need to mount the fuse holder in an exposed location?

Littelfuse offers a large portfolio of in-line and bolt-down fuse holders, and fuse blocks for high-current and low-current applications as well as options that are waterproof or splashproof or come with an ignition protection rating.

### In-Line Fuse Holders

In-line fuse holders offer a flexible, quick solution for placing fuses in cramped spaces or for adding overflow circuits or accessory circuits for low-current applications, such as electronics, panel displays, blower motors, air conditioners, and lighting.

In our portfolio, you'll find in-line fuse holders for ATO®, MINI®, MAXI®, JCASE®, MIDI®, and glass fuses. We offer in-line fuse holders with various wire lead sizes, colors, and lengths to accommodate different industry guidelines and applications. Plus, we have options with and without covers and with and without waterproof ratings.

### Bolt-Down Fuse Holders & Fuse Blocks

For high-current applications, such as battery and alternator connections and starter fusing, the electrical requirements dictate the use of larger fuses like MEGA®, MIDI®, and ZCASE®. Because of their larger size and placement requirements, these fuses typically need a bolt-down fuse holder or multi-fuse block to house and protect them from harsh conditions. For these applications, we offer battery-mount, stud-mount, bolt-down fuse holders with and without waterproof ratings and ignition protection ratings.

Littelfuse also offers fuse blocks and boxes for both high-amperage fuses, such as MEGA® and MIDI®, and low-amperage fuses, such as ATO® and MINI®, that are designed for efficient multi-fuse installation and power distribution.

### Circuit Protection & Electrical Ratings

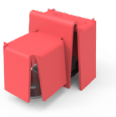
While the fuse is what we typically think of as providing the circuit protection because it is the weak link that breaks when there is a type of fault in the circuit, the fuse holder is an essential part of circuit protection that helps prevent injuries and damage to vehicles.

Though fuse holders are designed to work with specific fuse types, it is important to look for the electrical ratings, such as maximum voltage and maximum current, of the fuse holder to ensure the fuse holder can support the intended fuse.

# ZCASE® Fuse Holders

Battery-mount, stud-mount, and multi-fuse power distribution options for 32V ZCASE® fuses.

| Series Name        | ZCASE-BMZ                                                                                                                                                                         |                                                                                   | ZCASE-SMZ                                                                                                                                                                                      |                                                                                     |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Description        | The ZCASE® BMZ battery-mounted fuse holder lets you install high-current fusing on a post-style battery. Insulated bolts allow fuse assembly using standard M8 threaded hardware. |                                                                                   | The space-saving ZCASE® SMZ stud-mount fuse holder features an insulated M8 stud on the busbar and enables direct installation of fuses on an alternator, battery switch, or electrical relay. |                                                                                     |
| Part Numbers       | 0FHZ00853-BX                                                                                                                                                                      | 0FHZ00854-BX                                                                      | 0FHZ0201Z                                                                                                                                                                                      | 0FHZ0202Z                                                                           |
| Product Image      |                                                                                                  |  |                                                                                                              |  |
| Max Current Rating | 275A                                                                                                                                                                              | 275A                                                                              | 400A                                                                                                                                                                                           | 400A                                                                                |
| Mounting Method    | M8 Stud Mount - Battery terminal                                                                                                                                                  | M8 Stud Mount - Battery terminal                                                  | M8                                                                                                                                                                                             | M8                                                                                  |
| Max Voltage Rating | 32V DC                                                                                                                                                                            | 32V DC                                                                            | 32V DC                                                                                                                                                                                         | 32V DC                                                                              |
| Notes              | 3-Position                                                                                                                                                                        | 2-Position                                                                        | With Fuse & Stud Cover                                                                                                                                                                         | With Fuse Cover                                                                     |

| Series Name        | ZCASE-SMZ                                                                                                                                                                                      |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Description        | The space-saving ZCASE® SMZ stud-mount fuse holder features an insulated M8 stud on the busbar and enables direct installation of fuses on an alternator, battery switch, or electrical relay. |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| Part Numbers       | 0FHZ0211Z                                                                                                                                                                                      | 0FHZ0212Z                                                                         | 0FHZ0231Z                                                                         | 0FHZ0232Z                                                                          | 0FHZ0233Z                                                                           | 0FHZ0241Z                                                                           |
| Product Image      |                                                                                                               |  |  |  |  |  |
| Max Current Rating | 400A                                                                                                                                                                                           | 400A                                                                              | 400A                                                                              | 400A                                                                               | 400A                                                                                | 400A                                                                                |
| Mounting Method    | M10                                                                                                                                                                                            | M10                                                                               | M6                                                                                | M6                                                                                 | M6                                                                                  | M10                                                                                 |
| Max Voltage Rating | 32V DC                                                                                                                                                                                         | 32V DC                                                                            | 32V DC                                                                            | 32V DC                                                                             | 32V DC                                                                              | 80V DC                                                                              |
| Notes              | With Fuse & Stud Cover                                                                                                                                                                         | With Fuse Cover                                                                   | With Fuse & Stud Cover                                                            | With Fuse Cover                                                                    | Without Cover                                                                       | With Fuse Holder                                                                    |

| Series Name        | ZCASE-BMZB                                                                                                                                                                                        |                                                                                     |                                                                                     |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Description        | The ZCASE® BMZB battery-mounted fuse holder is for up to 400A ZCASE® M6 fuses. It features an integrated busbar and eliminates the need for additional or complex wiring around a battery system. |                                                                                     |                                                                                     |
| Part Numbers       | FHZ210                                                                                                                                                                                            | FHZ310                                                                              | FHZ410                                                                              |
| Product Image      |                                                                                                                |  |  |
| Max Current Rating | 400A                                                                                                                                                                                              | 400A                                                                                | 400A                                                                                |
| Mounting Method    | Post-Style Battery Terminal                                                                                                                                                                       | Post-Style Battery Terminal                                                         | Post-Style Battery Terminal                                                         |
| Max Voltage Rating | 32V DC                                                                                                                                                                                            | 32V DC                                                                              | 32V DC                                                                              |
| Notes              | 2-Position                                                                                                                                                                                        | 3-Position                                                                          | 4-Position                                                                          |

| Series Name        | ZCASE-FHZ                                                                                        |                                                                                     |                                                                                      |                                                                                       |
|--------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Description        | The space-saving ZCASE® FHZ bolt-down fuse holder. This product works with ZCASE Fuse Rated 32V. |                                                                                     |                                                                                      |                                                                                       |
| Part Numbers       | 0FHZ0002Z                                                                                        | 0FHZ0005Z                                                                           | 0FHZ0007Z                                                                            | 0FHZ0009Z                                                                             |
| Product Image      |               |  |  |  |
| Max Current Rating | 400A                                                                                             | 400A                                                                                | 400A                                                                                 | 400A                                                                                  |
| Mounting Method    | Bolt-Down                                                                                        | Bolt-Down                                                                           | Bolt-Down                                                                            | Bolt-Down                                                                             |
| Max Voltage Rating | 32V DC                                                                                           | 32V DC                                                                              | 32V DC                                                                               | 32V DC                                                                                |
| Notes              | 5-Stud Assembly                                                                                  | 5-Stud Assembly                                                                     | 7-Stud Assembly                                                                      | 7-Stud Assembly                                                                       |

# MEGA® Fuse Holders

Sealed, flexible, and splashproof options for high-current 32V MEGA® bolt-down fuses.

| Series Name        | MEGA-298-Splashproof                                                                                                                                                                                       |                                                                                    |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Description        | The MEGA® 298 Splashproof Series fuse holder with M8 stud input and output terminals is ideal for battery and alternator connections. When mated, the nylon base and cover provide splashproof protection. |                                                                                    |
| Part Numbers       | 298907-030                                                                                                                                                                                                 | 298907-040                                                                         |
| Product Image      |                                                                                                                           |  |
| Max Current Rating | 250A                                                                                                                                                                                                       | -                                                                                  |
| Mounting Method    | Plastic tab with M6 hole                                                                                                                                                                                   | Plastic tab with M3.8 hole<br>(Mates with 298907-030 base)                         |
| Max Voltage Rating | 70V DC                                                                                                                                                                                                     | -                                                                                  |
| Notes              | Base                                                                                                                                                                                                       | Cover                                                                              |

| Series Name        | MEGA-Flex                                                                                                                                                                                               |                                                                                   |                                                                                     |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Description        | The MEGA® Flex fuse holder has a flexible cover to accommodate large wire sizes and ring terminal stack up. A dovetail feature lets you use multiple fuse holders to create a power distribution block. |                                                                                   |                                                                                     |
| Part Numbers       | 02981028HXFC-SS                                                                                                                                                                                         | 02981028HXFC                                                                      | 02981028HXFC-RED                                                                    |
| Product Image      |                                                                                                                        |  |  |
| Max Current Rating | 500A                                                                                                                                                                                                    | 500A                                                                              | 500A                                                                                |
| Mounting Method    | Bolt-Down, M6 Mounting hole and M6 Slot X 6MM Long                                                                                                                                                      | Bolt-Down, M6 Mounting hole and M6 Slot X 6MM Long                                | Bolt-Down, M6 Mounting hole and M6 Slot X 6MM Long                                  |
| Max Voltage Rating | 70V DC                                                                                                                                                                                                  | 70V DC                                                                            | 70V DC                                                                              |
| Notes              | Stainless Steel Hardware, Black Cover                                                                                                                                                                   | Zinc-Plated Steel Hardware, Black Cover                                           | Zinc-Plated Steel Hardware, Red Cover                                               |

| Series Name        | MEGA-298-Bolt-Down                                                                                                                                                        |                                                                                     |                                                                                     |                                                                                       |                                                                                       |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Description        | The MEGA® 298 Bolt-Down Series fuse holder provides ultra-high-current protection. A dovetail feature lets you connect multiple fuse holders for multi-fuse applications. |                                                                                     |                                                                                     |                                                                                       |                                                                                       |
| Part Numbers       | 02981039ZXT                                                                                                                                                               | 02981001ZXT                                                                         | 02981003ZXT                                                                         | 02980900Z                                                                             | 02980900S                                                                             |
| Product Image      |                                                                                        |  |  |  |  |
| Max Current Rating | 500A                                                                                                                                                                      | 500A                                                                                | 500A                                                                                | 500A                                                                                  | 250A                                                                                  |
| Mounting Method    | Bolt-Down, M6 Slots x 15mm Long                                                                                                                                           | Bolt-Down, M6 Mounting Holes                                                        | Bolt-Down, M6 Mounting Holes                                                        | Bolt-Down, M6 Mounting Holes                                                          | Bolt-Down, M6 Mounting Holes                                                          |
| Max Voltage Rating | 70V DC                                                                                                                                                                    | 70V DC                                                                              | 70V DC                                                                              | 70V DC                                                                                | 70V DC                                                                                |

| Series Name        | MEGA-SN                                                                                                                                                                                                                                   |                                                                                     |                                                                                      |                                                                                       |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Description        | The MEGA® SN sealed, in-line fuse holder is for high-current, in-line main or branch circuit protection in harsh environments. AssureLatch™ technology ensures water resistance (IP66/P69K) and ignition protection (SAE J1171/ISO 8846). |                                                                                     |                                                                                      |                                                                                       |
| Part Numbers       | 880014150                                                                                                                                                                                                                                 | 880014175                                                                           | 880014                                                                               | 880014125                                                                             |
| Product Image      |                                                                                                                                                        |  |  |  |
| Max Current Rating | 150A                                                                                                                                                                                                                                      | 175A                                                                                | 500A                                                                                 | 125A                                                                                  |
| Mounting Method    | Bolt-Down, M6 Mounting hole and M6 Slot x 6mm Long                                                                                                                                                                                        | Bolt-Down, M6 Mounting hole and M6 Slot x 6mm Long                                  | Bolt-Down, M6 Mounting hole and M6 Slot x 6mm Long                                   | Bolt-Down, M6 Mounting hole and M6 Slot x 6mm Long                                    |
| Max Voltage Rating | 70V DC                                                                                                                                                                                                                                    | 70V DC                                                                              | 70V DC                                                                               | 70V DC                                                                                |
| Notes              | With 150A Fuse                                                                                                                                                                                                                            | With 175A Fuse                                                                      | Without Fuse                                                                         | With 125A Fuse                                                                        |

# MINI® Fuse Holders

Sealed in-line, PCB-mount, and fuse block options for 32V MINI® fuses, plus Add-A-Circuit® options for 32V and 58V MINI® fuses.

| Series Name        | SD MINI                                                                                                                                                                          |                                                                                   |                                                                                     |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Description        | SD MINI® fuse blocks feature LED indicators that alert you to blown fuses, enabling quick maintenance and decreased equipment downtime. A snap-on, insulating cover is included. |                                                                                   |                                                                                     |
| Part Numbers       | 880024                                                                                                                                                                           | 880025                                                                            | 880026                                                                              |
| Product Image      |                                                                                                 |  |  |
| Max Current Rating | 100A                                                                                                                                                                             | 100A                                                                              | 100A                                                                                |
| Mounting Method    | Bolt-Down; 4xM5                                                                                                                                                                  | Bolt-Down; 4xM5                                                                   | Bolt-Down; 4xM5                                                                     |
| Max Voltage Rating | 32V DC                                                                                                                                                                           | 32V DC                                                                            | 32V DC                                                                              |
| Notes              | 4 Cavities                                                                                                                                                                       | 6 Cavities                                                                        | 10 Cavities                                                                         |

| Series Name        | Add A Circuit MINI Carded                                                                                                                                                                                                         |                                                                                    |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Description        | The MINI® Add-A-Circuit® fuse holder for MINI® or Low Profile MINI® fuses allows installation of additional circuits without cutting or splicing. The fuse tap turns 1 fuse slot into 2 to protect the new and existing circuits. |                                                                                    |
| Part Numbers       | OFHM0200Z                                                                                                                                                                                                                         | FHLM0200Z                                                                          |
| Product Image      |                                                                                                                                                  |  |
| Max Current Rating | 10A                                                                                                                                                                                                                               | 100A                                                                               |
| Mounting Method    | In-Line Fuse Holder Blades / Butt Splice Connector                                                                                                                                                                                | In-Line Fuse Holder Blades / Butt Splice Connector                                 |
| Max Voltage Rating | 32V DC                                                                                                                                                                                                                            | 58V DC                                                                             |
| Notes              | MINI Fuse                                                                                                                                                                                                                         | Low Profile MINI Fuse                                                              |

| Series Name        | MINI-FL1                                                                                                                                                                                                                                  |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description        | The MINI® FL1 fuse holder lets you add a MINI® fuse to a printed circuit board (PCB). A heat-resistant body with a UL 94 V-0 flammability rating makes it ideal for accessory, sensor, and vehicle control circuits. Fits a 7.62mm pitch. |
| Part Numbers       | 178.6764.0001                                                                                                                                                                                                                             |
| Product Image      |                                                                                                                                                        |
| Max Current Rating | 30A                                                                                                                                                                                                                                       |
| Mounting Method    | PCB Mount                                                                                                                                                                                                                                 |
| Max Voltage Rating | 32V DC                                                                                                                                                                                                                                    |
| Notes              | Stand-Alone Vertical Holder                                                                                                                                                                                                               |

# MINI® Fuse Holders (continued)

| Series Name        | MINI-153-PC                                                                                                                                                                                                              |                                                                                   |                                                                                     |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Description        | The MINI® 153-PC fuse holder features a circuit board locking anchor for secure installation of a MINI® blade-style fuse. Horizontal, stackable vertical, and single vertical (end unit) mounting options are available. |                                                                                   |                                                                                     |
| Part Numbers       | 01530007Z                                                                                                                                                                                                                | 01530008Z                                                                         | 01530009Z                                                                           |
| Product Image      |                                                                                                                                         |  |  |
| Max Current Rating | 20A                                                                                                                                                                                                                      | 20A                                                                               | 20A                                                                                 |
| Mounting Method    | PC Horizontal Mount                                                                                                                                                                                                      | PC Vertical Mount                                                                 | PC Vertical Mount                                                                   |
| Max Voltage Rating | 32V DC                                                                                                                                                                                                                   | 32V DC                                                                            | 32V DC                                                                              |
| Notes              | 4 Cavities                                                                                                                                                                                                               | End Unit (No Post)                                                                | With Interlocking Post                                                              |

| Series Name        | MINI-FHM                                                                                                                                                                                                                 |                                                                                    |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Description        | The MINI® 153-PC fuse holder features a circuit board locking anchor for secure installation of a MINI® blade-style fuse. Horizontal, stackable vertical, and single vertical (end unit) mounting options are available. |                                                                                    |
| Part Numbers       | 0FHM0001SXJ                                                                                                                                                                                                              | 0FHM0002SXJ                                                                        |
| Product Image      |                                                                                                                                         |  |
| Max Current Rating | 20A                                                                                                                                                                                                                      | 30A                                                                                |
| Mounting Method    | In-Line                                                                                                                                                                                                                  | In-Line                                                                            |
| Max Voltage Rating | 32V DC                                                                                                                                                                                                                   | 32V DC                                                                             |
| Notes              | Black 14 AWG Wire                                                                                                                                                                                                        | Orange 12 AWG Wire                                                                 |

| Series Name        | Sealed MINI Inline Fuse Holder                                                                                                                                                                                           |                                                                                      |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Description        | The MINI® 153-PC fuse holder features a circuit board locking anchor for secure installation of a MINI® blade-style fuse. Horizontal, stackable vertical, and single vertical (end unit) mounting options are available. |                                                                                      |
| Part Numbers       | FHMS200                                                                                                                                                                                                                  | FHMS201                                                                              |
| Product Image      |                                                                                                                                       |  |
| Max Current Rating | 30A                                                                                                                                                                                                                      | 20A                                                                                  |
| Mounting Method    | In-Line                                                                                                                                                                                                                  | In-Line                                                                              |
| Max Voltage Rating | 32V DC                                                                                                                                                                                                                   | 32V DC                                                                               |
| Notes              | Red 12 AWG GXL Wire                                                                                                                                                                                                      | Red 14 AWG GXL Wire                                                                  |

# ATO® Fuse Holders

Add-A-Circuit®, fuse block, and sealed in-line options for 32V ATO® blade-style fuses, plus PCB-mount options for 32V and 58V ATO® fuses.

| Series Name        | ZCASE-BMZ                                                                                                                                                                                    |                                                                                   | Add A Circuit ATO                                                                                                                                                     |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description        | The ATO® Sealed In-Line Series waterproof fuse holder makes it simple to install an ATO® blade-style fuse in a wet or dirty environment outside of the cab. IP67 rating. Red GXL wire leads. |                                                                                   | The ATO® Add-A-Circuit® in-line fuse holder allows easy installation of an added circuit without cutting or splicing. The fuse tap turns a single fuse slot into two. |
| Part Numbers       | FHAS100                                                                                                                                                                                      | FHAS101                                                                           | 0FHA0200Z                                                                                                                                                             |
| Product Image      |                                                                                                             |  |                                                                                    |
| Max Current Rating | 30A                                                                                                                                                                                          | 20A                                                                               | 400A                                                                                                                                                                  |
| Mounting Method    | In-Line                                                                                                                                                                                      | In-Line                                                                           | In-Line                                                                                                                                                               |
| Max Voltage Rating | 32V DC                                                                                                                                                                                       | 32V DC                                                                            | 32V DC                                                                                                                                                                |
| Notes              | 1 Cavity                                                                                                                                                                                     | 1 Cavity                                                                          | Includes a 16 AWG UL1015 Wire Lead                                                                                                                                    |

| Series Name        | SD ATO                                                                                                                                                                          |                                                                                    |                                                                                      |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Description        | SD ATO® fuse blocks feature LED indicators that alert you to blown fuses, enabling quick maintenance and decreased equipment downtime. A snap-on, insulating cover is included. |                                                                                    |                                                                                      |
| Part Numbers       | 880021                                                                                                                                                                          | 880022                                                                             | 880023                                                                               |
| Product Image      |                                                                                               |  |  |
| Max Current Rating | 100A                                                                                                                                                                            | 100A                                                                               | 100A                                                                                 |
| Mounting Method    | Bolt-Down; 4xM5                                                                                                                                                                 | Bolt-Down; 4xM5                                                                    | Bolt-Down; 4xM5                                                                      |
| Max Voltage Rating | 32V DC                                                                                                                                                                          | 32V DC                                                                             | 32V DC                                                                               |
| Notes              | 4 Cavities                                                                                                                                                                      | 6 Cavities                                                                         | 10 Cavities                                                                          |

| Series Name        | ST ATO                                                                                                                                                                                                                                               |                                                                                      |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Description        | ST ATO® fuse blocks centralize wiring into a single, convenient location and ensure the safe distribution of power. They feature an integrated negative busbar and include a sheet of circuit identification labels and a snap-on, insulating cover. |                                                                                      |
| Part Numbers       | 880027                                                                                                                                                                                                                                               | 880028                                                                               |
| Product Image      |                                                                                                                                                                   |  |
| Max Current Rating | 100A                                                                                                                                                                                                                                                 | 100A                                                                                 |
| Mounting Method    | Bolt-Down; 4xM5                                                                                                                                                                                                                                      | Bolt-Down; 4xM5                                                                      |
| Max Voltage Rating | 32V DC                                                                                                                                                                                                                                               | 32V DC                                                                               |
| Notes              | 6 Cavities                                                                                                                                                                                                                                           | 12 Cavities                                                                          |

# ATO® Fuse Holders (continued)

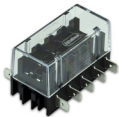
| Series Name        | ATO-155                                                                                                                                                |                                                                                   | ATO-AFH                                                                                                                                                                        |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description        | The ATO® 155 stackable, in-line, panel-mount fuse holder with looped wire leads makes it simple to install an ATO® or FKS blade-style automotive fuse. |                                                                                   | ATO® FH2 stackable-block, panel-mount fuse holders can be attached in the x- and y-direction and feature a thermoplastic body with a UL 94 V-0 rating and a transparent cover. |
| Part Numbers       | 01550300Z                                                                                                                                              | 01550400Z                                                                         | 0AFH0001Z                                                                                                                                                                      |
| Product Image      |                                                                       |  |                                                                                             |
| Max Current Rating | 20A                                                                                                                                                    | 30A                                                                               | 20A                                                                                                                                                                            |
| Mounting Method    | In-Line                                                                                                                                                | In-Line                                                                           | In-Line                                                                                                                                                                        |
| Max Voltage Rating | 32V DC                                                                                                                                                 | 32V DC                                                                            | 32V DC                                                                                                                                                                         |
| Notes              | Black 14 AWG Wire                                                                                                                                      | Orange 10 AWG Wire                                                                | Without Fuse                                                                                                                                                                   |

| Series Name        | ATO-FHAC                                                                                                               |                                                                                    |                                                                                      |
|--------------------|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Description        | The ATO® FHAC waterproof, in-line fuse holder features a built-in protective cover to provide an IP67-rated enclosure. |                                                                                    |                                                                                      |
| Part Numbers       | FHAC0001ZXJ                                                                                                            | FHAC0002ZXJ                                                                        | FHAC0001ZXJG                                                                         |
| Product Image      |                                      |  |  |
| Max Current Rating | 30A                                                                                                                    | 30A                                                                                | 40A                                                                                  |
| Mounting Method    | In-Line                                                                                                                | In-Line                                                                            | In-Line                                                                              |
| Max Voltage Rating | 32V DC                                                                                                                 | 32 VDC                                                                             | 32 VDC                                                                               |
| Notes              | Black 16 AWG Wire                                                                                                      | Orange 12 AWG GXL Wire                                                             | Black 16 AWG Wire                                                                    |

| Series Name        | ATO-FHA                                                                                                                                        |                                                                                      |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Description        | The ATO® FHA fuse holder has wire leads for easy in-line installation. It features a heat-resistant body and tin-plated copper alloy contacts. |                                                                                      |
| Part Numbers       | 0FHA0001SXJ                                                                                                                                    | 0FHA0002SXJ                                                                          |
| Product Image      |                                                             |  |
| Max Current Rating | 20A                                                                                                                                            | 30A                                                                                  |
| Mounting Method    | In-Line                                                                                                                                        | In-Line                                                                              |
| Max Voltage Rating | 32V DC                                                                                                                                         | 32V DC                                                                               |
| Notes              | Black 16 AWG Wire                                                                                                                              | Orange 12 AWG Wire                                                                   |

# ATO® Fuse Holders (continued)

| Series Name        | ATO-FKH                                                                                                                          |                                                                                   | 277 In-Line                                                                                                                                                      |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description        | Designed for 32V ATO® blade-style fuses up to 30A, the ATO® FKH in-line fuse holder is also compatible with FKS fuses at 80V DC. |                                                                                   | The 277 In-Line fuse holder features a tethered cover that provides waterproof protection. Red PVC FLY HT105° ISO 6722 leads enable simple in-line installation. |
| Part Numbers       | 178.6152.0002                                                                                                                    | 178.6152.0001                                                                     | 277.6306.0001                                                                                                                                                    |
| Product Image      |                                                 |  |                                                                               |
| Max Current Rating | 30A                                                                                                                              | 30A                                                                               | 20A                                                                                                                                                              |
| Mounting Method    | In-Line                                                                                                                          | In-Line                                                                           | In-Line                                                                                                                                                          |
| Max Voltage Rating | 80V                                                                                                                              | 80V                                                                               | 32V DC                                                                                                                                                           |
| Notes              | DFK-2 Spring Leaf Terminals; Bulk Pack                                                                                           | DFK-2 Spring Leaf Terminals                                                       | Fuse Holder with Cover                                                                                                                                           |

| Series Name        | ATO-FBA5                                                                                                                                                                                                                           |                                                                                    |                                                                                      |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Description        | The ATO® FBA5 5-Position terminal fuse block helps you protect up to 5 circuits using ATO® blade fuses. Panel-mount and PCB options are available. A clear cover provides protection while making it easy to identify blown fuses. |                                                                                    |                                                                                      |
| Part Numbers       | 03500418Z                                                                                                                                                                                                                          | 03500417Z                                                                          | 03500420Z                                                                            |
| Product Image      |                                                                                                                                                  |  |  |
| Max Current Rating | 15A                                                                                                                                                                                                                                | 15A                                                                                | 15A                                                                                  |
| Mounting Method    | Vertical Contacts                                                                                                                                                                                                                  | Horizontal Contacts                                                                | PCB Contacts                                                                         |
| Max Voltage Rating | 32V DC                                                                                                                                                                                                                             | 32V DC                                                                             | 32V DC                                                                               |
| Notes              | Quick Connect Tin-Plated Brass Terminals on Bottom of Box; Includes Detachable Side-Mounting Brackets                                                                                                                              | Quick Connect Tin-Plated Brass Terminals on Side of Box                            | 5 Cavities                                                                           |

| Series Name        | ATO-FLR                                                                                                                                                                   |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description        | ATO® FLR printed circuit board (PCB) fuse holders are for throughhole soldering. A locking feature secures the UL 94 V-0 thermoplastic housing to a PCB prior to welding. |
| Part Numbers       | 178.4265.0002                                                                                                                                                             |
| Product Image      |                                                                                        |
| Max Current Rating | 10A                                                                                                                                                                       |
| Mounting Method    | PCB Mount                                                                                                                                                                 |
| Max Voltage Rating | 58V DC                                                                                                                                                                    |
| Notes              | 4 Mounting Pins                                                                                                                                                           |

# MIDI® Fuse Holders

In-line, bolt-down, and flexible options for 32V MIDI® fuses.

| Series Name        | MIDI-498-IL                                                                                                                                                                                                        | MIDI-Flex                                                                                                                                                                                               |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description        | The MIDI® 498-IL in-line fuse holder provides high-current main or branch circuit protection in harsh conditions. A curved cover enables the use of heat shrink tubing (not included) for added splash protection. | The MIDI® Flex fuse holder has a flexible cover to accommodate large wire sizes and ring terminal stack up. A dovetail feature lets you use multiple fuse holders to create a power distribution block. |
| Part Numbers       | 04980921GXM5                                                                                                                                                                                                       | 04981038HXFC                                                                                                                                                                                            |
| Product Image      |                                                                                                                                   |                                                                                                                      |
| Max Current Rating | 200A                                                                                                                                                                                                               | 200A                                                                                                                                                                                                    |
| Mounting Method    | In-Line                                                                                                                                                                                                            | Bolt-Down                                                                                                                                                                                               |
| Max Voltage Rating | 58V DC                                                                                                                                                                                                             | 58V DC                                                                                                                                                                                                  |
| Notes              | Base and Cover                                                                                                                                                                                                     | Flexible Cover Included                                                                                                                                                                                 |

| Series Name        | MIDI-498                                                                                                                                                                                                                                                |                                                                                     |                                                                                      |                                                                                       |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Description        | Featuring interlocking pins, the MIDI® 498 fuse holder with M5 threaded studs can be used to install a single MIDI® fuse or combined with additional fuse holders to create a fuse block. Base styles are available with and without mounting brackets. |                                                                                     |                                                                                      |                                                                                       |
| Part Numbers       | 04980900ZXT                                                                                                                                                                                                                                             | 04980902ZXT                                                                         | 04980903ZXT                                                                          | 04980908ZXT                                                                           |
| Product Image      |                                                                                                                                                                      |  |  |  |
| Max Current Rating | 200A                                                                                                                                                                                                                                                    | 200A                                                                                | 200A                                                                                 | 200A                                                                                  |
| Mounting Method    | Bolt-Down                                                                                                                                                                                                                                               | Bolt-Down                                                                           | Bolt-Down                                                                            | Bolt-Down                                                                             |
| Max Voltage Rating | 58V DC                                                                                                                                                                                                                                                  | 58V DC                                                                              | 58V DC                                                                               | 58V DC                                                                                |
| Notes              | With 150A Fuse                                                                                                                                                                                                                                          | With 175A Fuse                                                                      | Without Fuse                                                                         | With 125A Fuse                                                                        |

# MAXI® Fuse Holders

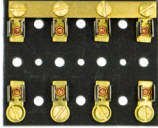
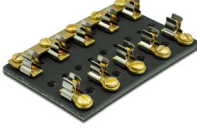
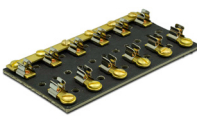
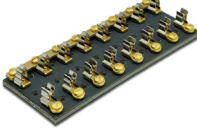
Splashproof, screw-terminal, and bulkhead mounting options for 32V MAXI® blade-style fuses.

| Series Name        | MAXI-MAH                                                                                                                    |                                                                                   | MAXI-MAB                                                                                                                                                                                                            |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description        | The MAXI® MAH in-line fuse holder has a tethered protective cover and a center hole in the body for easy bulkhead mounting. |                                                                                   | The MAXI® MAB in-line, screw-terminal fuse holder safely and easily replaces hard-to-change fusible link wire, making it ideal for high-amp audio circuit protection. Interlocking feature for 2-pole installation. |
| Part Numbers       | MAHC0001ZXJ                                                                                                                 | MAHC0001ZXJA                                                                      | 0MAB0001XP                                                                                                                                                                                                          |
| Product Image      |                                            |  |                                                                                                                                  |
| Max Current Rating | 60A                                                                                                                         | 60A                                                                               | 60A                                                                                                                                                                                                                 |
| Mounting Method    | In-Line                                                                                                                     | In-Line                                                                           | In-Line                                                                                                                                                                                                             |
| Max Voltage Rating | 32V DC                                                                                                                      | 32V DC                                                                            | 32V DC                                                                                                                                                                                                              |
| Notes              | Black 6 AWG Wire                                                                                                            | Red 6 AWG Wire                                                                    | Maxi FuseBlock without Fuse                                                                                                                                                                                         |

| Series Name        | MAXI-152                                                                                                                                                                                                           |                                                                                    |                                                                                    |                                                                                     |                                                                                      |                                                                                      |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Description        | The MAXI® 152 in-line, IP54 splashproof fuse holder protects fusing in harsh conditions. Available in 60A and 80A configurations with or without molded mounting tabs. Cable seals are available in various sizes. |                                                                                    |                                                                                    |                                                                                     |                                                                                      |                                                                                      |
| Part Numbers       | 01520003U                                                                                                                                                                                                          | 01520004Z                                                                          | 01520005Z                                                                          | 01520006Z                                                                           | 01520008Z                                                                            | 01520009Z                                                                            |
| Product Image      |                                                                                                                                  |  |  |  |  |  |
| Max Current Rating | 80 A                                                                                                                                                                                                               | 80 A                                                                               | 80 A                                                                               | 80 A                                                                                | 80 A                                                                                 | 80 A                                                                                 |
| Mounting Method    | In-Line                                                                                                                                                                                                            | In-Line                                                                            | In-Line                                                                            | In-Line                                                                             | In-Line                                                                              | In-Line                                                                              |
| Max Voltage Rating | 32V DC                                                                                                                                                                                                             | 32V DC                                                                             | 32V DC                                                                             | 32V DC                                                                              | 32V DC                                                                               | 32V DC                                                                               |
| Notes              | Without Mounting Tabs; Interlocking Post                                                                                                                                                                           | With Open Mounting Tabs                                                            | With Closed Mounting Tabs                                                          | Without Mounting Tabs                                                               | With Closed Mounting Tabs                                                            | Without Mounting Tabs                                                                |

# Glass® Fuse Holders

Bolt-down, multi-fuse, and in-line options for 32V glass fuses.

| Series Name        | Glass-FBG                                                                                                                                                                                       |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Description        | The Glass FBG multi-pole bolt-down fuse block is compatible with SFE and AGC (3AG) glass fuses and comes in a variety of configurations, including 4-pole, 5-pole, 6-pole, and 8-pole versions. |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Part Numbers       | M-414-01                                                                                                                                                                                        | M-415-01                                                                          | M-641-01                                                                          | M-643-01                                                                           | M-674                                                                               |
| Product Image      |                                                                                                                |  |  |  |  |
| Max Current Rating | 20A                                                                                                                                                                                             | 20A                                                                               | 20A                                                                               | 20A                                                                                | 20A                                                                                 |
| Mounting Method    | Bolt-Down                                                                                                                                                                                       | Bolt-Down                                                                         | Bolt-Down                                                                         | Bolt-Down                                                                          | Bolt-Down                                                                           |
| Max Voltage Rating | 32V DC                                                                                                                                                                                          | 32V DC                                                                            | 32V DC                                                                            | 32V DC                                                                             | 32V DC                                                                              |
| Notes              | 4 Positions                                                                                                                                                                                     | 5 Positions                                                                       | 6 Positions                                                                       | 8 Positions                                                                        | Term Block 4 Positions                                                              |

| Series Name        | Glass-FNY                                                                                                                                      | Glass-FHP                                                                                                                                                                                                          | Glass-3031                                                                                                                                                                                              |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description        | The Glass FNY in-line fuse holder accepts SFE, AGA, AGW, and AGX glass fuses. A spring-loaded, twist-lock body ensures easy fuse installation. | The Glass FHP in-line, bayonet knob fuse holder comes with 3 springs to allow use with glass SFE (7.5, 9, 14, and 20) and AGC (3AG) up to 20 amps. The red 15" looped 14 AWG wire makes in-line installation easy. | The Glass 3031 fuse holder accommodates SFE glass fuses and AGC (3AG) glass fuses. The in-line fuse holder features an 8" looped 14 AWG GPT lead, large brass contacts, and a positive twist-lock seal. |
| Part Numbers       | 0FNY0001ZXJ                                                                                                                                    | 0FHP0001Z                                                                                                                                                                                                          | 3031-0                                                                                                                                                                                                  |
| Product Image      |                                                             |                                                                                                                                 |                                                                                                                    |
| Max Current Rating | 20A                                                                                                                                            | 100A                                                                                                                                                                                                               | 5A                                                                                                                                                                                                      |
| Mounting Method    | In-Line                                                                                                                                        | In-Line                                                                                                                                                                                                            | In-Line                                                                                                                                                                                                 |
| Max Voltage Rating | 32V DC                                                                                                                                         | 32V DC                                                                                                                                                                                                             | 32V DC                                                                                                                                                                                                  |
| Notes              | Black 14 AWG Wire                                                                                                                              | Red 14 AWG Wire                                                                                                                                                                                                    | Fuse Connector                                                                                                                                                                                          |

# JCASE® Fuse Holders

In-line options for 58V JCASE® and Low-Profile JCASE® fuses rated for 40A and 60A.

| Series Name        | JCASE-FHJ                                                                                                                                                                                                                           |                                                                                     |                                                                                      |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Description        | The JCASE® FHJ in-line fuse holder comes with 10 AWG or 8 AWG leads for compatibility with up to 40A or 60A JCASE® or Low-Profile JCASE® fuses. Versions with a splashproof cover and/or integrated mounting bracket are available. |                                                                                     |                                                                                      |
| Part Numbers       | FHJC1001G                                                                                                                                                                                                                           | FHJC1002G                                                                           | FHJC2002G                                                                            |
| Product Image      |                                                                                                                                                  |  |  |
| Max Current Rating | 40A                                                                                                                                                                                                                                 | 20A                                                                                 | 20A                                                                                  |
| Mounting Method    | In-Line                                                                                                                                                                                                                             | In-Line                                                                             | In-Line                                                                              |
| Max Voltage Rating | 58V DC                                                                                                                                                                                                                              | 58V DC                                                                              | 58V DC                                                                               |
| Notes              | Red 10 AWG GXL Wire                                                                                                                                                                                                                 | Red 8 AWG GXL Wire                                                                  | Red 8 AWG GXL Wire                                                                   |

# Multi-Fuse Power Distribution Fuse Holders

Multi-fuse power distribution boxes for 32V and 70V MIDI® & MEGA® fuses.

| Series Name        | MDB5                                                                                                                                                                                                                                                        |                                                                                   |                                                                                    |                                                                                     |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Description        | The MDB5 sealed, high-current power distribution box is IP67/69K rated, features a high continuous current capacity of 400A, and holds 2 MEGA® and 3 MIDI® bolt-down fuses. Configurations are available for standard 32V and 70V (48V applications) fuses. |                                                                                   |                                                                                    |                                                                                     |
| Part Numbers       | 07985001ZXS                                                                                                                                                                                                                                                 | 07985003ZXS                                                                       | 07985002ZXS                                                                        | 07985004ZXS                                                                         |
| Product Image      |                                                                                                                                                                            |  |  |  |
| Fuse Type          | 2 - MEGA®<br>3 - MIDI®                                                                                                                                                                                                                                      | 2 - MEGA®<br>3 - MIDI®                                                            | 2 - MEGA®<br>3 - MIDI®                                                             | 2 - MEGA®<br>3 - MIDI®                                                              |
| Max Current Rating | One 50mm² Input Wire:<br>200A<br>Two 50mm² Input Wires:<br>400A                                                                                                                                                                                             | One 50mm² Input Wire:<br>200A<br>Two 50mm² Input Wires:<br>400A                   | One 50mm² Input Wire:<br>200A<br>Two 50mm² Input Wires:<br>400A                    | One 50mm² Input Wire:<br>200A<br>Two 50mm² Input Wires:<br>400A                     |
| Mounting Method    | Bolt-Down                                                                                                                                                                                                                                                   | Bolt-Down                                                                         | Bolt-Down                                                                          | Bolt-Down                                                                           |
| Max Voltage Rating | 32V DC                                                                                                                                                                                                                                                      | 32V DC                                                                            | 70V DC                                                                             | 70V DC                                                                              |
| Notes              | Covered Mating Terminals                                                                                                                                                                                                                                    | Covered Mating Terminals                                                          | Sealed Mating Terminals                                                            | Sealed Mating Terminals                                                             |



# Hard-Wired Power Distribution Fuse Holders

Sealed, hard-wired power distribution boxes for MINI® fuses and ISO 280-style relays and components.



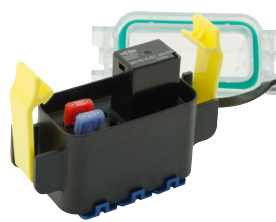
PDM31001ZXM



PDM71001ZXM



PDM21001LXM



PDM33001ZXM



PDM32001ZXM

## HARD WIRED BOXES

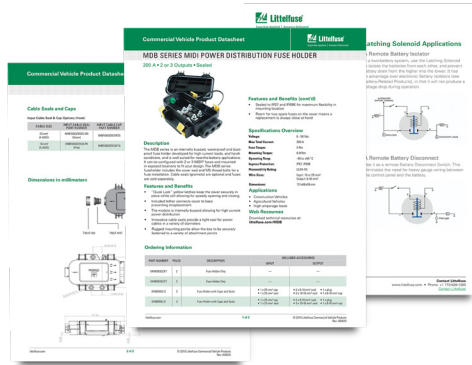
| PART NUMBER | SERIES   | MAX FUSE RATING<br>(PER CIRCUIT) | MAX CONTINUOUS<br>CURRENT | FUSE TYPE | ACCEPTS ISO 280<br>STYLE RELAYS | NUMBER OF CAVITIES | INGRESS PROTECTION<br>RATING | MATING TERMINALS<br>& SEALS | COVER |       | ASSURELATCH™ |      | GASKET | GRID | MOUNTING<br>BRACKET |     | TPAS INCLUDED |
|-------------|----------|----------------------------------|---------------------------|-----------|---------------------------------|--------------------|------------------------------|-----------------------------|-------|-------|--------------|------|--------|------|---------------------|-----|---------------|
|             |          |                                  |                           |           |                                 |                    |                              |                             | BLACK | CLEAR | FINGER       | TOOL |        |      | 90°                 | 30° |               |
| PDM32001ZXM | HWB6     | 30A                              | 68A                       | MINI      |                                 | 6                  | IP67/IP69K                   | Tyco MCP                    |       | •     | •            |      | •      |      |                     |     | •             |
| PDM32002ZXM |          | 30A                              | 68A                       | MINI      |                                 | 6                  | IP67/IP69K                   | Tyco MCP                    | •     |       | •            |      | •      |      |                     |     | •             |
| PDM32003ZXM |          | 30A                              | 68A                       | MINI      |                                 | 6                  | IP67/IP69K                   | Tyco MCP                    |       | •     | •            |      | •      |      | •                   |     | •             |
| PDM32004ZXM |          | 30A                              | 68A                       | MINI      |                                 | 6                  | IP67/IP69K                   | Tyco MCP                    | •     |       | •            |      | •      |      | •                   |     | •             |
| PDM33001ZXM | HWB12    | 30A                              | 130A                      | MINI      | •                               | 12                 | IP67/IP69K                   | Tyco MCP                    |       | •     | •            |      | •      |      |                     |     | •             |
| PDM33002ZXM |          | 30A                              | 130A                      | MINI      | •                               | 12                 | IP67/IP69K                   | Tyco MCP                    | •     |       | •            |      | •      |      |                     |     | •             |
| PDM33003ZXM |          | 30A                              | 130A                      | MINI      | •                               | 12                 | IP67/IP69K                   | Tyco MCP                    |       | •     | •            |      | •      |      | •                   |     | •             |
| PDM33004ZXM |          | 30A                              | 130A                      | MINI      | •                               | 12                 | IP67/IP69K                   | Tyco MCP                    | •     |       | •            |      | •      |      | •                   |     | •             |
| PDM31001ZXM | HWB18    | 30A                              | 100A                      | MINI      | •                               | 18                 | IP67/IP69K                   | Delphi Metri-Pack 280       | •     |       |              |      | •      |      |                     | •   | •             |
| PDM31002ZXM |          | 30A                              | 100A                      | MINI      | •                               | 18                 | IP67/IP69K                   | Delphi Metri-Pack 280       | •     |       |              |      | •      |      |                     |     | •             |
| PDM31003ZXM |          | 30A                              | 100A                      | MINI      | •                               | 18                 | IP67/IP69K                   | Delphi Metri-Pack 280       | •     |       |              |      | •      |      |                     |     |               |
| PDM71001ZXM | HWB60-AL | 30A                              | 250A                      | MINI      | •                               | 60                 | IP67/IP69K                   | Delphi Metri-Pack 280       | •     |       |              | •    | •      |      |                     |     | •             |
| PDM71003ZXM |          | 30A                              | 250A                      | MINI      | •                               | 60                 | IP67/IP69K                   | Delphi Metri-Pack 280       | •     |       | •            |      | •      |      |                     |     | •             |
| PDM71004ZXM |          | 30A                              | 250A                      | MINI      | •                               | 60                 | IP67/IP69K                   | Delphi Metri-Pack 280       | •     |       |              | •    |        | •    |                     |     | •             |
| PDM71006ZXM |          | 30A                              | 250A                      | MINI      | •                               | 60                 | IP67/IP69K                   | Delphi Metri-Pack 280       | •     |       |              | •    | •      |      |                     |     | •             |
| PDM71008ZXM |          | 30A                              | 250A                      | MINI      | •                               | 60                 | IP67/IP69K                   | Delphi Metri-Pack 280       | •     |       | •            |      | •      |      |                     |     | •             |
| PDM71009ZXM |          | 30A                              | 250A                      | MINI      | •                               | 60                 | IP67/IP69K                   | Delphi Metri-Pack 280       | •     |       |              | •    |        | •    |                     |     |               |
| PDM21001LXM | HWB60    | 30A                              | 250A                      | MINI      | •                               | 60                 | IP67/IP69K                   | Delphi Metri-Pack 280       | •     |       |              |      | •      |      |                     |     | •             |

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