



Circuit Protection



What Type of Fuse do I Need?



DC (automotive) fuses are offered in two basic forms: Blade or Bolt Down.

Blade & Cartridge fuses can be hand inserted into a fuse holder. These fuses provide protection for several amperage ratings up to 80A. They are well suited to protect smaller to medium diameter wires that are usually some distance from the battery. Single blade fuse holders are often called 'In-Line' fuse holders as they are spliced into the wiring. Remember to place the fuse holder as close to the battery and as far away from the load as possible, so that it protects the wire from a short anywhere along its length. Any short between the power source and the fuse is not protected. Littelfuse blade fuses include: MICRO2®, MICRO3®, MINI®, LP MINI®, ATO®, MAXI®, MCASE+®, JCASE® and LP JCASE®.



Bolt Down fuses need to be secured to the fuse holder with a screw, nut or bolt. These fuses provide protection from 30A to 600A. They are well suited to protect medium to large diameter wires that are usually closer to the battery. Ring terminals are crimped onto cables that are connected to these holders and spliced into the wiring. Remember to place the fuse holder as close to the battery and as far away from the load as possible, so that it protects the wire from a short anywhere along its length. Any short between the power source and the fuse is not protected which is why you should have master fusing as close the battery as possible. Littelfuse bolt-down fuses include: MIDI®, MEGA®, CF8 and ZCASE®.

Also, there are still a wide variety of applications that use glass tube fuses. These are typically lower current values and are becoming less popular for most automotive applications due to their size, form factors, and lack of color coding.

It Glows When it Blows!



SmartGlow® fuse technology makes identifying an open circuit quick and easy. Inside a fuse box, it can be difficult to locate which fuse in an array has blown. You can easily identify the SmartGlow because it lights up, indicating the need for replacement. Available in MINI, ATO, and MAXI blade fuses.

Every Fuse Requires a Fuse Holder!

Littelfuse offers a wide variety of fuse holder and power distribution modules in different configurations to meet unique needs. Please see the Power Distribution Modules or Fuse Blocks & Holders sections of the catalog to select a product that fits your application requirements.



FUSE SELECTION CHART

MICRO2®	MICRO3®	ATO®	MINI®	MCASE®	JCASE®	MAXI	MIDI®	MEGA®	PAL Series 0	PAL Series 1	PAL Series 2	PAL Series 5	ZCASE®
1A	2A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	3A	40A
2A	3A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	60A
3A	4A	5A	5A	5A	5A	5A	5A	5A	5A	5A	5A	5A	80A
4A	5A	7.5A	7.5A	7.5A	7.5A	7.5A	7.5A	7.5A	7.5A	7.5A	7.5A	7.5A	100A
5A	7.5A	10A	10A	10A	10A	10A	10A	10A	10A	10A	10A	10A	125A
7.5A	10A	15A	15A	15A	15A	15A	15A	15A	15A	15A	15A	15A	150A
10A	15A	20A	20A	20A	20A	20A	20A	20A	20A	20A	20A	20A	175A
15A	20A	25A	25A	25A	25A	25A	25A	25A	25A	25A	25A	25A	200A
20A	25A	30A	30A	30A	30A	30A	30A	30A	30A	30A	30A	30A	225A
25A	30A	40A	40A	40A	40A	40A	40A	40A	40A	40A	40A	40A	250A
30A	40A	50A	50A	50A	50A	50A	50A	50A	50A	50A	50A	50A	300A
40A	50A	60A	60A	60A	60A	60A	60A	60A	60A	60A	60A	60A	400A
													500A
													600A

GLASS

AGU

AGY, SFE30

AGX

AGW, SFE7.5, SFE9

SFE6

SFE14

AGA, SFE20, UK

AGA, SFE4

UK
35A, 50A

SFE
4A, 6A, 7.5A, 9A, 14A, 20A, 30A

AGY
50A

AGX
2A, 3A, 4A, 20A, 25A, 30A

AGW
1A, 1.5A, 2.5A, 3A, 4A, 5A, 6A, 10A, 15A, 20A, 25A, 30A

AGU
1A, 2A, 3A, 4A, 5A, 10A, 15A, 20A, 25A, 30A, 35A, 40A, 50A, 60A

AGC
.5A, 1A, 1.5A, 2A, 2.5A, 3A, 4A, 5A, 6A, 7.5A, 8A, 10A, 15A, 20A, 25A, 30A, 35A

AGA
1A, 1.5A, 2A, 2.5A, 3A, 5A, 6A, 7.5A, 10A, 15A, 20A, 25A, 30A

FUSE HOLDER SELECTION CHART

FUSE TYPE	ATO®				MINI®			MAXI			GLASS				
ACTUAL FUSE SIZE															
PHOTO															
Series Name	FHAC1	FHAC2	FHA1	FHA2	FHA-GLO	AFH1	AFH1	FHM1	FHM2	FHM-GLO	MAH1	FNY1	FNY2		
Holder Type	In-Line	In-Line	In-Line	In-Line	In-Line	In-Line Panel Mount	In-Line	In-Line	In-Line	In-Line	In-Line	In-Line	In-Line		
Max Amperage	20A	30A	20A	30A	30A	20A	30A	20A	30A	30A	60A	20A	30A		
Wire Color	Black	Orange	Black	Orange	Red	Black	Red	Black	Orange	Red	Black or Red	Black	Orange		
Weatherproof	•	•			•			•	•	•	•	•	•		
Notes	Standard	Heavy Duty	Standard	Heavy Duty	Smart-Glow	Standard	Heavy Duty	Standard	Heavy Duty	Smart-Glow	Standard	Standard	Heavy Duty		
FUSE TYPE	JCASE® and Low Profile JCASE®												MEGA®		
ACTUAL FUSE SIZE															
PHOTO															
Series Name	FHJC1	FHJC2	FHJ1	FHJ2	498	Compact-498	SN-MIDI	FLEX-MIDI	298	SN-MEGA	FLEX-MEGA				
Holder Type	In-Line	In-Line	In-Line	In-Line	In-Line	In-Line	Bolt-Down	Bolt-Down	Bolt-Down	Bolt-Down	Bolt-Down				
Max Amperage	40A	60A	40A	60A	200A	200A	200A	200A	500A	500A	500A				
Wire Color	Red	Red	Red	Red	—	—	—	—	—	—	—				
Weatherproof	•	•					•								
Notes	Standard	Heavy Duty	Standard	Heavy Duty	Standard	Compact with heat shrink	AssureLatch & IP69K	Busbars Available	Standard	AssureLatch & IP69K	Busbars Available				

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

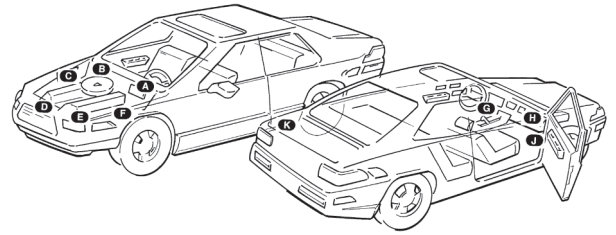
What: The current exceeds the amperage at which the wires or equipment are rated.

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.

- | | |
|--------------------------|--|
| A Left fire wall | G Behind/under dash left |
| B Right fire wall | H Behind/in glove box |
| C Right fender | J Behind/under dash right |
| D Right front | K Rear compartment |
| E Left front | IL In-line with device protected |
| F 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.



Fuseology

1

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.

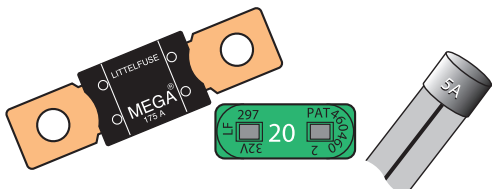
Responding to this growing problem, the United States International Trade Commission and then President Ronald Reagan issued and approved an exclusion order in 1983 prohibiting the importation of the look-alike blade fuses into the United States. This order was initiated because many of these fuses were 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

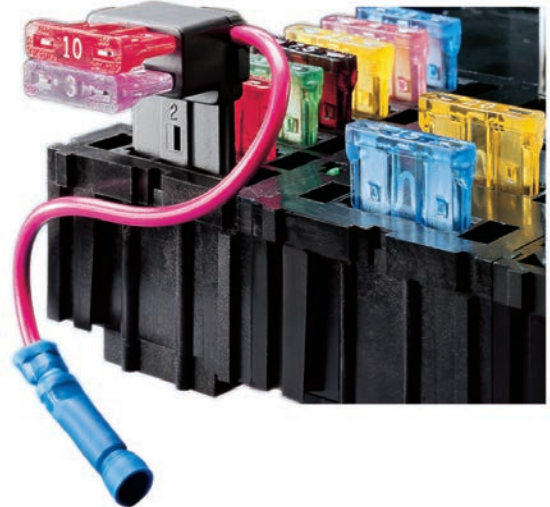
Overfusing is when the fuse has a current rating higher than the rating of the circuit. In this case, the fuse will not be able to protect the circuit properly because the circuit could reach overcurrent levels, causing damage and safety hazards, before the fuse would blow.

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.



Retail Information



Planogram

Updated brand packaging introduced in 2015 allowing for easy identification of product families in a retail display.

Littelfuse developed the next generation of Retail Circuit Protection with the ease of product selection as a top priority.

EASY IDENTIFICATION

of product families in color coordinated packages for an easy to use and set up planogram layout.

MORE SPACE

for higher margin kits and assortments.

INCREASE MARKET COVERAGE

with the newest Littelfuse MICRO2®, MICRO3®, MCASE+® and ZCASE® fuses.

**ORIGINAL
EQUIPMENT
MANUFACTURER**

OEM SYMBOL

Prominent on package assures consumers of quality and actual OE replacement.

COLOR CODED

for easier stocking and consumer selection.

MULTI-LINGUAL

One SKU covers US, Canadian, German and Latin American markets.

MATERIAL NUMBER	CATALOG NUMBER	DESCRIPTION
00940477Z	094477	Our 87 SKU, 510-piece pre-pack Plan-O-Gram includes full blade-fuse coverage, as well as expanded coverage into newer parts such as Low-Profile MINI, Low-Profile JCASE, MICRO2, MICRO3, MCASE and Emergency Kits. Includes blade fuses, glass fuses, circuit breakers, Assortment and Emergency kits, fuse holders and fuse tester/pullers. Measures approximately 36"x36".
00940478Z	094478	Our 103 SKU, 625-piece pre-pack Plan-O-Gram is our largest retail assortment featuring multiple facings of the most popular items. This assortment expands your line coverage to fill the needs of your DIY and professional dealer/installer customers as well. Measures approximately 48"x32".

Retail Information

Packaging / Part Numbering

1

Bulk Carton

The outer corrugated cardboard box that holds several cartons.



Carton

The outer corrugated cardboard box that holds several inner packs, or bulk fuses (no inner packs).

Blister Pack

A retail package containing one or several identical products, such as fuses, or it may contain an assortment of fuses. Blister packs are designed to fit on a peg-hook. 'Bubble pack' or 'clamshell' packages are blister packs.

Inner Pack

A small chipboard box containing several blister packs or pillboxes.

Pill Box

A small plastic box containing fuses. Pillboxes are snap-shut resealable.

Fuse Packaging

Standard Fuse Packaging

BOXED MERCHANDISE	PIECES/BOX	STANDARD PACK	ORDER
ATO, MINI Fuses	5 to a box	100 (twenty 5 packs)	by piece
Glass Ceramic Fuses	5 to a box	50 (ten 5 packs)	by piece
AGU Fuses	10 to a box	10 (one 10 pack)	by piece
MAXI, PAL, MEGA, MIDI	1 to a pack	10	by piece
Flashers, Circuit Breakers, Fuse Holders	1 to a pack	10	by piece
RETAIL PACKAGED MERCHANDISE	FUSES/CARD	STANDARD PACK	ORDER
ATO, MINI Fuses, Glass, Ceramic Fuses	5 to a card	5 cards/shelf pack	by card
MAXI, PAL, MEGA, MIDI Fuses	1 to a card	5 cards/shelf pack	by card
Plus Packs	25	5 cards/shelf pack	by card
Retail Carded Kits and Assortments	Various	5 cards/shelf pack	by card
Assortments, Jobber Boards, Merchandisers, etc.	Various	Single unit	by unit

Examples of Order Numbers

Order numbers must have between 9 characters and 15 characters. These are for added description, such as ZXPRO. When you place an order, write or type the characters without a break in the string.

0ATO 010. VP

First set of four
"ATO Fuses"

Second set of four
"10 Amps"

"Retail pack of 5"

0MIN 030. ZXPRO

First set of four
"MINI Fuses"

Second set of four
"30 Amps"

"Professional Pack"

Mandatory Characters

First set of four

These identify the product group, like LMIN (Low profile MINI fuse) or OMAX (MAXI fuses).

Second set of four

These identify the product subgroup. In fuses, this usually identifies the amperage.

The decimal point counts as one character, eg 010. = 10A, 100. = 100A, 01.5 = 1.5A.

9th character

Inner pack quantity. See list of codes below.

Inner Pack Codes

Quantity Code

1 = X	500 = U
5 = V	1,000 = M
10 = T	1,500 = D
20 = S	2,500 = E
50 = L	3,000 = W
100 = H	4,000 = Y
200 = F	5,000 = N
250 = G	10,000 = K

Optional Characters

10th Character

Packaging type. P= Retail pack, B=Blister Pack.

Last set of 5

May be used to give additional information such as, MXGLO for SmartGlow fuses

Blade Fuses

1



MINI® • 2-30A • Standard and Smart Glow Blade Fuses

The MINI fuse is quickly becoming the new standard for vehicle circuit protection. Its miniature design meets the need for more circuits to be protected while utilizing less space, and its ability to cope with high temperatures in adverse environments makes the MINI fuse the recommended choice for protection. Smart Glow fuses are innovative automotive style fuses that feature an indicator light that glows when the fuse is blown, saving time to troubleshoot an open circuit.

Additional information: littelfuse.com/MINI

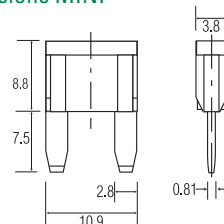
Standard: Voltage Rating Characteristics: 32V AC/DC Fast-Acting, Approvals: UL listed, SAE J2077.

Smart Glow: Interrupting Rating: 1000A @ 32V DC, Voltage Rating: 32V DC, Operating Temperature Range: -40°C to +125°C, Terminals: Tin plated zinc

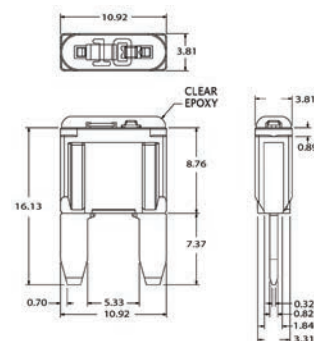


COLOR CODE	CURRENT RATING (A)	BOXED	CARDED	CARDED PLUS PACK	CARDED
		MATERIAL NUMBER	PACKAGING MATERIAL NUMBER	PACKAGING MATERIAL NUMBER	PACKAGING MATERIAL NUMBER
Gray	2	OMIN002.V	OMIN002.VP	—	—
Violet	3	OMIN003.V	OMIN003.VP	—	OMIN003.VPGLO
Pink	4	OMIN004.V	OMIN004.VP	—	—
Tan	5	OMIN005.V	OMIN005.VP	—	OMIN005.VPGLO
Brown	7.5	OMIN07.5V	OMIN07.5VP	—	OMIN07.5VPGLO
Red	10	OMIN010.V	OMIN010.VP	OMIN010.ZXPRO	OMIN010.VPGLO
Blue	15	OMIN015.V	OMIN015.VP	OMIN015.ZXPRO	OMIN015.VPGLO
Yellow	20	OMIN020.V	OMIN020.VP	OMIN020.ZXPRO	OMIN020.VPGLO
Clear	25	OMIN025.V	OMIN025.VP	OMIN025.ZXPRO	OMIN025.VPGLO
Green	30	OMIN030.V	OMIN030.VP	OMIN030.ZXPRO	OMIN030.VPGLO

Dimensions MINI®



Dimensions SMART GLOW MINI®



Low Profile MINI® • 2-30A • Blade Fuses

The Low Profile MINI fuse is designed to mate with tuning-fork terminals, which provides additional weight and material savings in fuse box designs by eliminating the need for female box terminals.

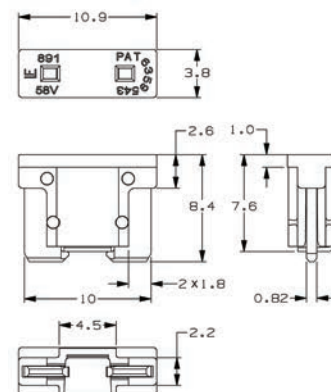
Additional information: littelfuse.com/LPMINI

Voltage Rating: 58V DC, Interrupting Rating: 1000A @ 58V DC, Operating Temperature Range: -40°C to +125°C, Terminals: Silver plated zinc, Housing Materials: Nylon composite



COLOR CODE	CURRENT RATING (A)	BOXED	CARDED	CARDED PLUS PACK
		MATERIAL NUMBER	PACKAGING MATERIAL NUMBER	PACKAGING MATERIAL NUMBER
Gray	2	LMIN002.V	—	—
Tan	5	LMIN005.V	LMIN005.VP	LMIN005.ZXPROA
Brown	7.5	LMIN07.5V	—	—
Red	10	LMIN010.V	LMIN010.VP	LMIN010.ZXPROA
Blue	15	LMIN015.V	LMIN015.VP	LMIN015.ZXPROA
Yellow	20	LMIN020.V	LMIN020.VP	LMIN020.ZXPROA
Clear	25	LMIN025.V	LMIN025.VP	LMIN025.ZXPROA
Green	30	LMIN030.V	LMIN030.VP	LMIN030.ZXPROA

Dimensions Low Profile MINI®



Blade Fuses



ATO® • Autofuse® • 1-40A • Standard and Smart Glow Blade Fuses

The ATO fuse is currently found on most cars, trucks, buses and off the road vehicles worldwide. Features Littelfuse designed industry standard color coding to indicate amp rating. Smart Glow fuses are innovative automotive style fuses that feature an indicator light that glows when the fuse is blown, saving time to troubleshoot an open circuit. Additional information: littelfuse.com/ATO

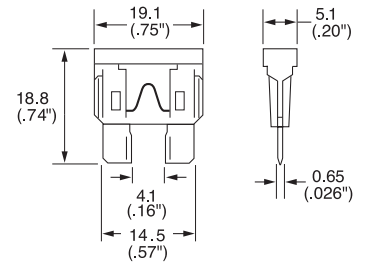
Standard: Voltage Rating Characteristics: 32V AC/DC Fast-Acting Approvals: UL listed, SAE J2077.

Smart Glow: Interrupting Rating: 1000A @ 32V DC Voltage Rating: 32V DC Operating Temperature Range: -40°C to +125°C Terminals: Tin plated zinc

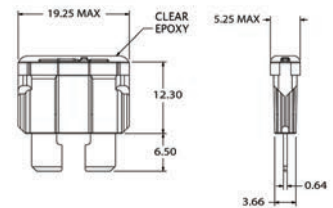


COLOR CODE	CURRENT RATING (A)	BOXED	CARDED	CARDED PLUS PACK	CARDED
		MATERIAL NUMBER	PACKAGING MATERIAL NUMBER	PACKAGING MATERIAL NUMBER	PACKAGING MATERIAL NUMBER
Black	1	OATO001.V	OATO001.VP	-	-
Gray	2	OATO002.V	OATO002.VP	-	-
Violet	3	OATO003.V	OATO003.VP	-	OATO003.VPGLO
Pink	4	OATO004.V	OATO004.VP	-	-
Tan	5	OATO005.V	OATO005.VP	OATO005.ZXPRO	OATO005.VPGLO
Brown	7.5	OATO007.5V	OATO007.5VP	OATO007.5ZXPRO	OATO007.5VPGLO
Red	10	OATO010.V	OATO010.VP	OATO010.ZXPRO	OATO010.VPGLO
Blue	15	OATO015.V	OATO015.VP	OATO015.ZXPRO	OATO015.VPGLO
Yellow	20	OATO020.V	OATO020.VP	OATO020.ZXPRO	OATO020.VPGLO
Clear	25	OATO025.V	OATO025.VP	OATO025.ZXPRO	OATO025.VPGLO
Green	30	OATO030.V	OATO030.VP	OATO030.ZXPRO	OATO030.VPGLO
Orange	40	OATO040.V	OATO040.VP	-	-

Dimensions ATO®



Dimensions SMART GLOW ATO®



MAXI • 20-100A • Standard and Smart Glow Blade Fuses

MAXI Fuses are primarily used for under hood applications and are produced with a high temperature polymer and silver plated blades. They replace the commonly used fusible wire or fusible link to protect a high current segment or system of the wiring harness. Features Littelfuse designed industry standard color coding to indicate amp rating. Smart Glow fuses are innovative automotive style fuses that feature an indicator light that glows when the fuse is blown, saving time to troubleshoot an open circuit.

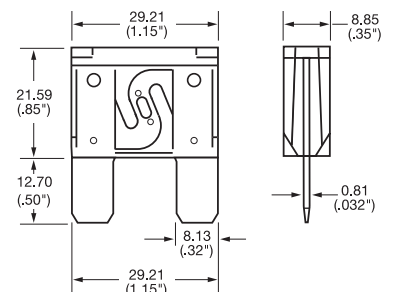
Additional information: littelfuse.com/MAXI

Standard: Voltage Rating: 32V DC, Interrupting Ratings: 1000A @ 32V DC, Operating Temperature Range: -40°C to +125°C, Terminals: Silver plated

Smart Glow: Voltage Rating: 32V DC, Interrupting Ratings: 1000A @ 32V DC, Operating Temperature Range: -40°C to +125°C, Terminals: Silver plated



Dimensions MAXI



COLOR CODE	CURRENT RATING (A)	BOXED	CARDED	CARDED
		MATERIAL NUMBER	PACKAGING MATERIAL NUMBER	PACKAGING MATERIAL NUMBER
Yellow	20	OMAX020.X	OMAX020.XP	OMAX020.XPGLO
Green	30	OMAX030.X	OMAX030.XP	OMAX030.XPGLO
Orange	40	OMAX040.X	OMAX040.XP	OMAX040.XPGLO
Red	50	OMAX050.X	OMAX050.XP	OMAX050.XPGLO
Blue	60	OMAX060.X	OMAX060.XP	OMAX060.XPGLO
Tan	70	OMAX070.X	-	OMAX070.XPGLO
Clear	80	OMAX080.X	OMAX080.XP	OMAX080.XPGLO
Purple	100	-	-	OMAX100.XPGLO

Blade Fuses

1



MICR02® • 5-30A • Blade Fuses

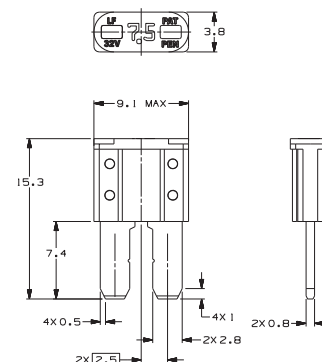
Its sub-miniature design meets the need for more circuits to be protected while utilizing less space and its ability to cope with high temperatures in adverse environments makes the MICR02 Fuse the recommended choice for protection.

Additional information: littelfuse.com/MICR02

Voltage Rating: 32V DC, Interrupting Ratings: 1000A @ 32V DC, Operating Temperature Range: -40°C to +125°C

COLOR CODE	CURRENT RATING (A)	BULK 50-PC	BOXED 25-PC	BOXED 5-PC	CARDED 5-PC
		MATERIAL NUMBER	MATERIAL NUMBER	MATERIAL NUMBER	MATERIAL NUMBER
Tan	5	0327005.LXS	–	MIC2005.V	MIC2005.VP
Brown	7.5	032707.5LXS	–	MIC207.5V	MIC207.5VP
Red	10	0327010.LXS	MIC2010.ZXPRO	MIC2010.V	MIC2010.VP
Blue	15	0327015.LXS	MIC2015.ZXPRO	MIC2015.V	MIC2015.VP
Yellow	20	0327020.LXS	MIC2020.ZXPRO	MIC2020.V	MIC2020.VP
Clear	25	0327025.LXS	–	MIC2025.V	MIC2025.VP
Green	30	0327030.LXS	MIC2030.ZXPRO	MIC2030.V	MIC2030.VP

Dimensions MICR02®



MICR03® • 5-15A • Blade Fuses

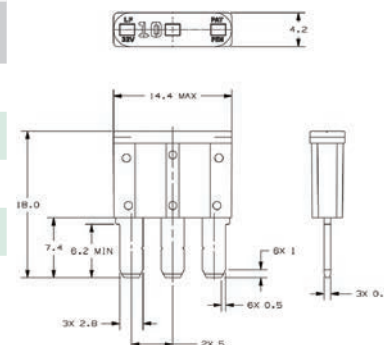
The MICR03 Fuse is the new standard for vehicle circuit protection. The MICR03 Fuse has 3 terminals and 2 fuse elements with a common center terminal. Its sub-miniature design meets the need for more circuits to be protected while utilizing less space and its ability to cope with high temperatures in adverse environments makes the MICR03 Fuse the recommended choice for protection.

Additional information: littelfuse.com/MICR03

Voltage Rating: 32V DC, Interrupting Ratings: 1000A @ 32V DC, Operating Temperature Range: -40°C to +125°C

COLOR CODE	CURRENT RATING (A)	BULK 50-PC	BOXED 25-PC	BOXED 5-PC	CARDED 5-PC
		MATERIAL NUMBER	MATERIAL NUMBER	MATERIAL NUMBER	MATERIAL NUMBER
Tan	5	0337005.LXS	MIC3005.ZXPRO	MIC3005.V	MIC3005.VP
Brown	7.5	033707.5LXS	MIC307.5ZXPRO	MIC307.5V	MIC307.5VP
Red	10	0337010.LXS	MIC3010.ZXPRO	MIC3010.V	MIC3010.VP
Blue	15	0337015.LXS	MIC3015.ZXPRO	MIC3015.V	MIC3015.VP

Dimensions MICR03®



Cartridge Fuses

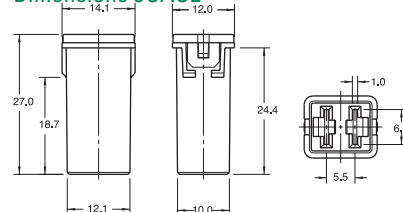
JCASE® • 20-60A • Cartridge Fuses

Smaller space saving footprint is being designed in by many OEM's. Patented technology provides both increased time delay and low voltage drop. Features ANSI standard OCR-A font for visual inspection systems, double spring-beam box terminal and unique secondary locking feature holds terminal firmly in place. Additional information: littelfuse.com/JCASE

Voltage Rating Characteristics: 32V AC/DC Slo-Blo®, Interrupting Ratings: 1000A @ 32V DC, Operating Temperature Range: -40°C to +125°C, Insertion Force: 53N max. (12lb), Extraction Force: 9N min. (2lb)

COLOR CODE	CURRENT RATING (A)	BOXED	CARDED
		MATERIAL NUMBER	PACKAGING MATERIAL NUMBER
Blue	20	JCAS020.X	JCAS020.XP
White	25	JCAS025.X	JCAS025.XP
Pink	30	JCAS030.X	JCAS030.XP
Green	40	JCAS040.X	JCAS040.XP
Red	50	JCAS050.X	JCAS050.XP
Yellow	60	JCAS060.X	JCAS060.XP

Dimensions JCASE®



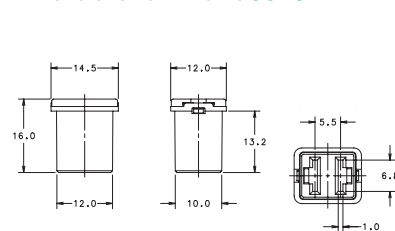
Low Profile JCASE® • 20-60A • Cartridge Fuses

Smaller space saving footprint is being designed in by many OEM's. Patented technology provides both increased time delay and low voltage drop. Features ANSI standard OCR-A font for visual inspection systems, double spring-beam box terminal and unique secondary locking feature holds terminal firmly in place. Additional information: littelfuse.com/LPJCASE

Voltage Rating: 58V DC, Interrupting Rating: 1000A @ 58V DC, Operating Temperature Range: -40°C to +125°C, Insertion Force: 53N Max. (12 lb.), Extraction Force: 9N Min (2 lb.)

COLOR CODE	CURRENT RATING (A)	BOXED	CARDED
		MATERIAL NUMBER	PACKAGING MATERIAL NUMBER
Blue	20	LJCA020.X	LJCA020.XP
White	25	LJCA025.X	LJCA025.XPA
Pink	30	LJCA030.X	LJCA030.XP
Green	40	LJCA040.X	LJCA040.XP
Red	50	LJCA050.X	LJCA050.XP
Yellow	60	LJCA060.X	LJCA060.XP

Dimensions Low Profile JCASE®

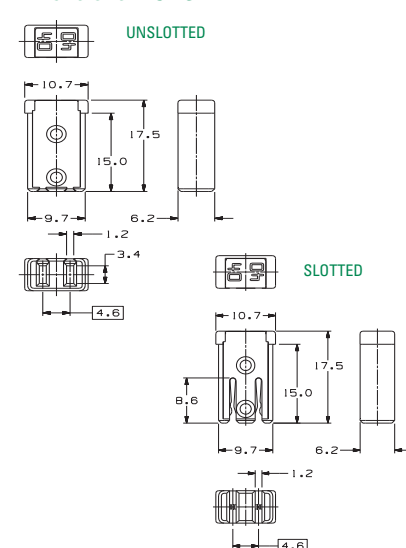


MCASE+® • 15-60A • Cartridge Fuses

The Unslotted MCASE+ Fuse is a cartridge style fuse up to 40A with female terminals for 2.8 mm male terminals. The Slotted MCASE+ Fuse is available up to 60A and can mate with larger male terminals (e.g., 6.3mm) or even mount directly to onto a busbar. Miniaturized footprint for optimal usage of space, featuring time delay and the ability to handle inrush currents. Additional information: littelfuse.com/MCASE

Voltage Rating: 32V DC, Interrupting Ratings: 1000A @ 32V DC, Operating Temperature Range: -40°C to +125°C Fuse Insertion Force: 50N (11.2lb) Typical, Extraction Force: 4N Min. (0.9 lb.) | 24.5N Max. (5.5 lb)

Dimensions MCASE+®



	COLOR CODE	CURRENT RATING (A)	BULK 500-PC	BOXED 50-PC	BOXED 5-PC	CARDED 1-PC
			MATERIAL NUMBER	MATERIAL NUMBER	MATERIAL NUMBER	MATERIAL NUMBER
UNSLOTTED	Gray	15	0695015.U	0695015.LPXP	MCAS015.V	MCAS015.XP
	Blue	20	0695020.U	0695020.LPXP	MCAS020.V	MCAS020.XP
	White	25	0695025.U	0695025.LPXP	MCAS025.V	MCAS025.XP
	Pink	30	0695030.U	0695030.LPXP	MCAS030.V	MCAS030.XP
	Green	40	0695040.U	0695040.LPXP	MCAS040.V	MCAS040.XP
SLOTTED	COLOR CODE	CURRENT RATING (A)	BULK 500-PC	BOXED 50-PC	BOXED 5-PC	CARDED 1-PC
	MATERIAL NUMBER	MATERIAL NUMBER	MATERIAL NUMBER	MATERIAL NUMBER	MATERIAL NUMBER	
	Gray	15	0695015.US	0695015.LPXPS	MCAS015.VS	MCAS015.XPS
	Blue	20	0695020.US	0695020.LPXPS	MCAS020.VS	MCAS020.XPS
	White	25	0695025.US	0695025.LPXPS	MCAS025.VS	MCAS025.XPS
	Pink	30	0695030.US	0695030.LPXPS	MCAS030.VS	MCAS030.XPS
	Green	40	0695040.US	0695040.LPXPS	MCAS040.VS	MCAS040.XPS
Red	50	0695050.US	0695050.LPXPS	MCAS050.VS	MCAS050.XPS	
Yellow	60	0695060.US	0695060.LPXPS	MCAS060.VS	MCAS060.XPS	

* Please inquire about additional bulk quantities

Bolt-Down Fuses

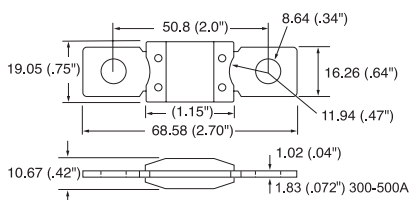
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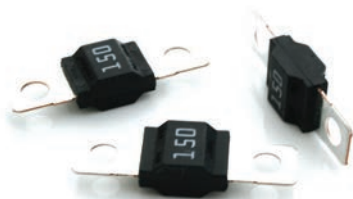
MEGA® • 80-500A • Bolt-Down Fuses

Littelfuse patented fuse designed for high current protection up to 500A found on many OEM vehicles. Slo-Blo® feature eliminates nuisance blowing during temporary, short duration overloads. Commonly used for battery and alternator connections and other heavy gauge cables requiring ultra high current protection. Also available with a clear housing, M6 mounting hole, single mounting hole or silver plating. For details, contact Littelfuse or visit: littelfuse.com/MEGA
Voltage Rating Characteristics: 32V AC/DC, Slo-Blo®

Dimensions MEGA®



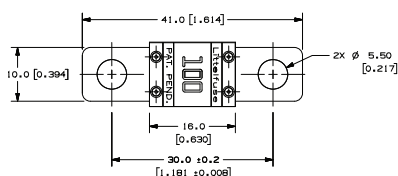
CURRENT RATING (A)	BOXED 50-PC	BOXED 1-PC	CARDED
	MATERIAL NUMBER	MATERIAL NUMBER	MATERIAL NUMBER
80	—	OMEG080.X	OMEG080.XPA
100	OMEG100.L	OMEG100.X	OMEG100.XP
125	OMEG125.L	OMEG125.X	OMEG125.XP
150	OMEG150.L	OMEG150.X	OMEG150.XP
175	OMEG175.L	OMEG175.X	OMEG175.XP
200	OMEG200.L	OMEG200.X	OMEG200.XP
225	OMEG225.L	OMEG225.X	OMEG225.XP
250	OMEG250.L	OMEG250.X	OMEG250.XP
300	OMEG300.L	OMEG300.X	—
350	OMEG350.L	OMEG350.X	—
400	OMEG400.L	OMEG400.X	—
450	OMEG450.L	OMEG450.X	—
500	OMEG500.L	OMEG500.X	—



MIDI® • 30-200A • Bolt-Down Fuses

Littelfuse patented fuse found on many OEM vehicles. Slo-Blo® feature eliminates nuisance blowing during temporary, short duration overloads. Also available with a clear housing, M6 mounting hole, single mounting hole or silver plating. For details, contact Littelfuse or visit: littelfuse.com/MIDI
Voltage Rating Characteristics: 32V AC/DC, Slo-Blo®

Dimensions MIDI®

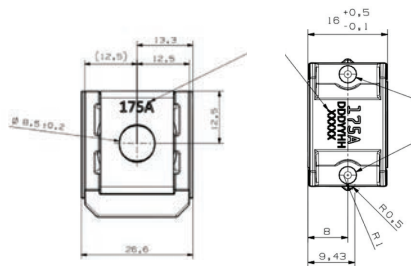


CURRENT RATING (A)	BULK 10-PC	BOXED	CARDED
	MATERIAL NUMBER	MATERIAL NUMBER	MATERIAL NUMBER
30	0498030.TXN	—	—
40	0498040.TXN	—	—
50	0498050.TXN	0MID050.X	0MID050.XP
60	0498060.TXN	—	—
70	0498070.TXN	—	—
80	0498080.TXN	0MID080.X	0MID080.XP
100	0498100.TXN	—	—
125	0498125.TXN	—	—
150	0498150.TXN	—	0MID150.XP
200	0498200.TXN	—	—

ZCASE® • 40-600A • Bolt-Down Fuses

Designed for a one bolt connection M6 (125-250A) or M8 (300-600A) and can be used directly on a battery post or busbar connection. Additional information: littelfuse.com/ZCASE
Voltage Rating Characteristics: 32V AC/DC, Slo-Blo®

Dimensions ZCASE®



CURRENT RATING (A)	BULK 480-PC	BULK 100-PC	CARDED
	MATERIAL NUMBER	MATERIAL NUMBER	MATERIAL NUMBER
40	3298040.Z	3298040.H	—
60	3298060.Z	3298060.H	—
80	3298080.Z	3298080.H	ZCAS080.XP
100	3298100.Z	3298100.H	ZCAS100.XP
125	3298125.Z	3298125.H	ZCAS125.XP
150	3298150.Z	3298150.H	ZCAS150.XP
175	3298175.Z	3298175.H	ZCAS175.XP
200	3298200.Z	3298200.H	ZCAS200.XP
225	3298225.Z	3298225.H	ZCAS225.XP
250	3298250.Z	3298250.H	ZCAS250.XP
300	3298300.ZXSTA	3298300.H	ZCAS300.XP
350	3298350.ZXSTA	3298350.H	ZCAS350.XP
400	3298400.ZXSTA	3298400.H	ZCAS400.XP
500	3298500.ZXSTA	3298500.H	ZCAS500.XP
600	3298600.ZXSTA	3298600.H	—

Auto Link Fuses



PAL Auto Link Fuses

Commonly found on many Japanese and Domestic built vehicles in current ratings up to 140 amperes. Available with female connector, male connector, bent connector and locking female connector. Color coded to indicate amp rating.

Additional information: littelfuse.com/PAL



PAL Female Terminal

COLOR CODE	CURRENT RATING (A)	BOXED	CARDED
		MATERIAL NUMBER	PACKAGING MATERIAL NUMBER
Blue	20	OPAL020.X	OPAL020.XP
Pink	30	OPAL030.X	OPAL030.XP
Green	40	OPAL040.X	OPAL040.XP
Red	50	OPAL050.X	OPAL050.XP
Yellow	60	OPAL060.X	OPAL060.XP



PAL MINI® Female Terminal

COLOR CODE	CURRENT RATING (A)	BOXED	CARDED
		MATERIAL NUMBER	PACKAGING MATERIAL NUMBER
Pink	30A	OPAL330.X	OPAL330.XP
Green	40A	OPAL340.X	OPAL340.XP



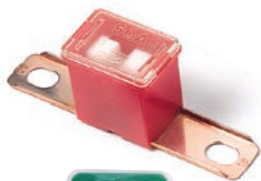
PAL Straight Male Terminal

COLOR CODE	CURRENT RATING (A)	BOXED	CARDED
		MATERIAL NUMBER	PACKAGING MATERIAL NUMBER
Pink	30	OPAL130.X	OPAL130.XP
Yellow	60	OPAL160.X	OPAL160.XP
Black	80	OPAL180.X	OPAL180.XP
Blue	100	OPAL1100X	OPAL1100XP
Gray	120	OPAL1120X	OPAL1120XP



PAL 9/16" Bent Male Terminal

COLOR CODE	CURRENT RATING (A)	BOXED	CARDED
		MATERIAL NUMBER	PACKAGING MATERIAL NUMBER
Pink	30	OPAL430.X	OPAL430.XP
Green	40	OPAL440.X	OPAL440.XP
Red	50	OPAL450.X	OPAL450.XP
Black	80	OPAL480.X	OPAL480.XP
Blue	100	OPAL4100X	OPAL4100XP
White	120	–	OPAL4120XP
Purple	140	–	OPAL4140XP



PAL 13/16" Bent Male Terminal

COLOR CODE	CURRENT RATING (A)	BOXED	CARDED
		MATERIAL NUMBER	PACKAGING MATERIAL NUMBER
Pink	30	OPAL230.X	OPAL230.XP
Green	40	OPAL240.X	OPAL240.XP
Red	50	OPAL250.X	OPAL250.XP
Yellow	60	OPAL260.X	OPAL260.XP
Brown	70	OPAL270.X	OPAL270.XP
Black	80	OPAL280.X	OPAL280.XP
Blue	100	OPAL2100X	OPAL2100XP
Gray	120	OPAL2120X	OPAL2120XP
Purple	140	–	OPAL2140XP



PAL Locking Female Terminal

COLOR CODE	CURRENT RATING (A)	BOXED	CARDED
		MATERIAL NUMBER	PACKAGING MATERIAL NUMBER
Brown	25	OPAL525.X	OPAL525.XP
Green	30	OPAL530.X	OPAL530.XP



Glass Fuses

1



AG • Glass Fuses

Originally stood for “all glass.” The automotive industry uses the “AG” prefix (AGC, AGW) for most glass fuses. They vary in length, diameter and amperage rating.

Additional information: littelfuse.com/Glass

Voltage Rating: 32V AC/DC, 250V may be substituted

CURRENT RATING (A)	BOXED	CARDED
	MATERIAL NUMBER	PACKAGING MATERIAL NUMBER
AGA (1AG)		
1	0AGA001.V	0AGA001.VP
2	0AGA002.V	0AGA002.VP
3	0AGA003.V	0AGA003.VP
5	0AGA005.V	0AGA005.VP
6	0AGA006.V	–
7.5	0AGA007.5V	–
10	0AGA010.V	0AGA010.VP
15	0AGA015.V	0AGA015.VP
20	0AGA020.V	0AGA020.VP
25	0AGA025.V	–
30	0AGA030.V	0AGA030.VP
AGW (7AG)		
1	0AGW001.V	–
1.5	0AGW01.5V	–
2.5	0AGW02.5V	–
3	0AGW003.V	–
4	0AGW004.V	–
5	0AGW005.V	0AGW005.VP
6	0AGW006.V	–
15	0AGW015.V	0AGW015.VP
20	0AGW020.V	0AGW020.VP
30	0AGW030.V	0AGW030.VP

CURRENT RATING (A)	BOXED	CARDED
	MATERIAL NUMBER	PACKAGING MATERIAL NUMBER
AGC (3AG)		
.5	0AGC.500V	–
1	0AGC001.V	0AGC001.VP
1.5	0AGC01.5V	0AGC01.5VP
2	0AGC002.V	0AGC002.VP
2.5	0AGC02.5V	0AGC02.5VP
3	0AGC003.V	0AGC003.VP
4	0AGC004.V	0AGC004.VP
5	0AGC005.V	0AGC005.VP
6	0AGC006.V	0AGC006.VP
7.5	0AGC07.5V	0AGC07.5VP
8	0AGC008.V	–
10	0AGC010.V	0AGC010.VP
15	0AGC015.V	0AGC015.VP
20	0AGC020.V	0AGC020.VP
25	0AGC025.V	0AGC025.VP
30	0AGC030.V	0AGC030.VP
35	0AGC035.V	0AGC035.VP

CURRENT RATING (A)	BOXED	CARDED
	MATERIAL NUMBER	PACKAGING MATERIAL NUMBER
AGU (5AG)		
10	0AGU010.T	–
15	0AGU015.T	–
20	0AGU020.T	–
25	0AGU025.T	–
30	0AGU030.T	–
35	0AGU035.T	–
40	0AGU040.T	0AGU040.VPG
50	0AGU050.T	0AGU050.VPG
60	0AGU060.T	0AGU060.VPG
AGX (8AG)		
20	–	0AGX020.VP
25	–	0AGX025.VP
30	–	0AGX030.VP



SFE • Glass Fuses

Glass fuses designed to specifications set by the Society of Fuse Engineers. All are 1/4 inch in diameter, but vary in length according to the ampere rating to ensure accurate fuse replacement.

Voltage Rating: 32V AC/DC, 250V may be substituted

Additional information: littelfuse.com/Glass

CURRENT RATING (A)	BOXED	CARDED
	MATERIAL NUMBER	PACKAGING MATERIAL NUMBER
4	0SFE004.V	0SFE004.VP
6	0SFE006.V	0SFE006.VP
7.5	0SFE007.5V	0SFE007.5VP
9	0SFE009.V	0SFE009.VP
14	0SFE014.V	0SFE014.VP
20	0SFE020.V	0SFE020.VP
30	0SFE030.V	0SFE030.VP



GBC • Torpedo Fuse

A thermoplastic type, torpedo shaped fuse that can be currently found in many European cars. Consisting of a heat resistant body, the fuse element stretches over the exterior of the body from end to end. The bodies vary in color (by amperage) to ensure proper replacement.

Voltage Rating: 32V AC/DC, 250V may be substituted

Additional information: littelfuse.com/Glass

CURRENT RATING (A)	BOXED	CARDED
	MATERIAL NUMBER	PACKAGING MATERIAL NUMBER
5	0GBC005.V	–
8	0GBC008.V	0GBC008.VP
16	0GBC016.V	0GBC016.VP
25	0GBC025.V	0GBC025.VP

Specialty Fuse Products

CNNe, CNN, CNL Forklift Type Fuses

CNNe fuses are rated for applications up to 80V DC. As fork lift trucks voltages increase, circuit protection needs to be rated higher to handle the increased voltage. The 80V CNN_E and 48V CNN are considered very fast-acting for quicker reaction time, the 32V CNL fuses are fast-acting.

- Voltage Rating: CNL: 32V DC / 32V AC
CNN: 48V DC / 125V AC
CNNe: 80V DC / 125V AC
- Ampere Range: 10-800A
- Interrupting Rating: 2,500A
- Maximum Torque: 90 lbs

Download additional information: littelfuse.com/CNN



PART NUMBER			PART NUMBER			PART NUMBER		
MATERIAL #	CATALOG #	V DC	MATERIAL #	CATALOG #	V DC	MATERIAL #	CATALOG #	V DC
OCNN035E.V	CNN035E	80	OCNN010.V	CNN010	48	OCNL035.V	CNL035	32
OCNN040E.V	CNN040E	80	OCNN035.V	CNN035	48	OCNL040.V	CNL040	32
OCNN050E.V	CNN050E	80	OCNN040.V	CNN040	48	OCNL050.V	CNL050	32
OCNN060E.V	CNN060E	80	OCNN050.V	CNN050	48	OCNL060.V	CNL060	32
OCNN080E.V	CNN080E	80	OCNN060.V	CNN060	48	OCNL080.V	CNL080	32
OCNN090E.V	CNN090E	80	OCNN080.V	CNN080	48	OCNL100.V	CNL100	32
OCNN100E.V	CNN100E	80	OCNN090.V	CNN090	48	OCNL125.V	CNL125	32
OCNN125E.V	CNN125E	80	OCNN100.V	CNN100	48	OCNL150.V	CNL150	32
OCNN150E.V	CNN150E	80	OCNN125.V	CNN125	48	OCNL175.V	CNL175	32
OCNN175E.V	CNN175E	80	OCNN150.V	CNN150	48	OCNL200.V	CNL200	32
OCNN200E.V	CNN200E	80	OCNN175.V	CNN175	48	OCNL250.V	CNL250	32
OCNN225E.V	CNN225E	80	OCNN200.V	CNN200	48	OCNL275.V	CNL275	32
OCNN250E.V	CNN250E	80	OCNN225.V	CNN225	48	OCNL300.V	CNL300	32
OCNN275E.V	CNN275E	80	OCNN250.V	CNN250	48	OCNL350.V	CNL350	32
OCNN300E.V	CNN300E	80	OCNN275.V	CNN275	48	OCNL400.V	CNL400	32
OCNN325E.V	CNN325E	80	OCNN300.V	CNN300	48	OCNL500.V	CNL500	32
OCNN350E.V	CNN350E	80	OCNN325.V	CNN325	48			
OCNN400E.V	CNN400E	80	OCNN350.V	CNN350	48			
OCNN500E.V	CNN500E	80	OCNN400.V	CNN400	48			
OCNN600E.V	CNN600E	80	OCNN500.V	CNN500	48			
OCNN700E.V	CNN700E	80	OCNN600.V	CNN600	48			
OCNN800E.V	CNN800E	80	OCNN700.V	CNN700	48			
			OCNN800.V	CNN800	48			

160/300V DC • 1-1200A • UL Class T • JLLN & JLLS Series Fuses

- Voltage Rating: JLLN: 160V DC (1-60A) • 125V DC (70-1200A except 900A)
JLLS: 300V DC (1-1200A)

Download technical information at: littelfuse.com/JLLN or littelfuse.com/JLLS



CURRENT RATING (A)	JLLN			JLLS			CURRENT RATING (A)	JLLN			JLLS		
	V DC	MATERIAL NUMBER	V DC	MATERIAL NUMBER	PACK SIZE	V DC		MATERIAL NUMBER	V DC	MATERIAL NUMBER	PACK SIZE		
1	160	JLLN001.T	300	JLLS001.T	10	125	125	JLLN125.X	300	JLLS125.X	1		
2	160	JLLN002.T	300	JLLS002.T	10	150	125	JLLN150.X	300	JLLS150.X	1		
3	160	JLLN003.T	300	JLLS003.T	10	175	125	JLLN175.X	300	JLLS175.X	1		
6	160	JLLN006.T	300	JLLS006.T	10	200	125	JLLN200.X	300	JLLS200.X	1		
10	160	JLLN010.T	300	JLLS010.T	10	225	125	JLLN225.X	300	JLLS225.X	1		
15	160	JLLN015.T	300	JLLS015.T	10	250	125	JLLN250.X	300	JLLS250.X	1		
20	160	JLLN020.T	300	JLLS020.T	10	300	125	JLLN300.X	300	JLLS300.X	1		
25	160	JLLN025.T	300	JLLS025.T	10	350	125	JLLN350.X	300	JLLS350.X	1		
30	160	JLLN030.T	300	JLLS030.T	10	400	125	JLLN400.X	300	JLLS400.X	1		
35	160	JLLN035.T	300	JLLS035.T	10	450	125	JLLN450.X	300	JLLS450.X	1		
40	160	JLLN040.T	300	JLLS040.T	10	500	125	JLLN500.X	300	JLLS500.X	1		
45	160	JLLN045.T	300	JLLS045.T	10	600	125	JLLN600.X	300	JLLS600.X	1		
50	160	JLLN050.T	300	JLLS050.T	10	700	125	JLLN700.X	300	JLLS700.X	1		
60	160	JLLN060.T	300	JLLS060.T	10	800	125	JLLN800.X	300	JLLS800.X	1		
70	125	JLLN070.V	300	JLLS070.V	5	900	-	-	300	JLLS900.X	1		
80	125	JLLN080.V	300	JLLS080.V	5	1000	125	JLLN1000X	300	JLLS1000X	1		
90	125	JLLN090.V	300	JLLS090.V	5	1100	125	JLLN1100X	300	JLLS1100X	1		
100	125	JLLN100.V	300	JLLS100.V	5	1200	125	JLLN1200X	300	JLLS1200X	1		
110	125	JLLN110.X	300	JLLS110.X	1								

Honda, Volkswagen and Universal Fusible Links

- Honda** Fusible links fit Honda Civics fusible link bar. Available in 45, 55 & 65A. Carded merchandise only available in 3 piece assortment 094413.
- Volkswagen** Fusible links fit Volkswagen and Universal fusible link bars. Available in 30, 40, 50, 60, 80, 110, 150 & 175 amp fuse bars.
- Universal** Fusible links are OEM replacement fusible link bars. Available in 30, 50, 80 & 100A.



CARDERD PART NUMBER		DESCRIPTION
MATERIAL NUMBER	CATALOG NUMBER	
00940413ZP	094413	Fusible Link assortment - fits Honda™ vehicles
00940402ZP	0940402	Fusible Link assortment - fits Volkswagen™ vehicles
OFLC014.XP	FLC14BP	Fusible Link 14 AWG
OFLW014.XP	FLW14BP	Fusible Link 14 AWG with Terminals
OFLW016.XP	FLW16BP	Fusible Link 16 AWG with Terminals

Assortment Kits

Value Pack Kits

1

The Littelfuse Value Packs contain a complete assortment of OEM fuses. Value Packs give you the tools for the protection you need — when and where you need it! The Ultimate fuse kit for home and repair shop comes in a clear plastic, reusable package.



MATERIAL NUMBER	CATALOG NUMBER	DESCRIPTION
00940400Z	094400	ATO Super Value Pack 40pc
00940462Z	094462	MINI Super Value Pack 40pc
00940475Z	094475	ATO , MINI, MAXI Super Value Pack 21pc
00940550Z	094550	MINI /JCASE Super Value Pack 29pc
00940554Z	—	Low Profile MINI / Low Profile JCASE Super Value Pack 30pc
00940557ZXA	—	AGC Glass Super Value Pack 40pc
00940566ZXA	—	MICRO2/MICRO3 Super Value Pack 60pc

Fuse Assortment Kits

Littelfuse assortments contain a variety of a specific fuse type in assorted amperages.



MATERIAL NUMBER	CATALOG NUMBER	DESCRIPTION	CONTENTS
00940133ZP	94133	European Fuse Assortment	2 each: GBC 8A, 16A Fuses & 1 each: GBC 25 A
00940134ZP	94134	British Fuse Assortment	1 each: AGC 7.5A, 15A, 20A (SFE 20) 1 each: 03000128M Amp Fuses
00940135ZP	94135	Japanese Fuse Assortment	1 each: AGC 5A, 10A, 15A, 20A (SFE 20), 30A Fuses
00940154ZP	94154	American Fuse Assortment	1 each: AGC 10A, 15A, 30A & 1 each: SFE 9A, 14A, 20A Fuses
00940189ZP	94189	Cellular Fuse Assortment	1 each: AGC 1.5A, 3A Fuses & 3 each: AGC 2A Fuses
00940202ZP	94202	ATO Fuse Assortment 6pc	1 each: ATO 5A, 10A, 15A, 20A, 25A, 30A Fuses
00940301ZP	94301	Japanese ATO Fuse Assortment	1 each: ATO 5A, 7.5A, 10A, 15A, 20A Fuses
00940362ZP	94362	MINI Fuse Assortment	1 each: MINI 3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A
00940408ZP	94408	Computer Fuse Assortment	1 each: AGC .5A Fuses & 2 each: AGC 1A, 2A Fuses
00940506ZP	94506	Low Profile MINI Fuse Assortment	1 each: LMIN 7.5A, 10A, 15A, 20A, 25A, 30A Fuses
00940558ZPA	94558	MICRO2 Fuse Assortment	1 each: MICRO2 5A, 10A, 15A, 20A, 25A Fuses
00940559ZPA	94559	MCASE Fuse Assortment	1 each: 15A, 20A, 25A, 30A, 40A Fuses
0AGA0001ZP	AGA1ZP	AGA Glass Fuse Assortment	1 each: AGA 1A, 2A, 3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A Fuses
0AGA0002ZP	AGA2ZP	AGA Glass Fuse Assortment	1 each: AGA 2A, 3A, 10A Fuses & 2 each: AGA 5A Fuses NEW
0AGA0003ZP	AGA3ZP	AGA Glass Fuse Assortment	1 each: AGA 15A Fuse & 2 each: AGA 20A, 30A Fuses NEW
0AGC0001ZP	AGC1ZP	AGC Glass Fuse Assortment	1 each: AGC 1A, 2A, 2.5A, 3A, 4A, 5A, 6A, 7.5A, 8A, 10A, 15A, 20A, 25A, 30A, 35A Fuses
0AGC0002ZP	AGC2ZP	AGC Glass Fuse Assortment	1 each: AGC 1A, 2A, 2.5A Fuses & 2 each: AGC 3A Fuses NEW
0AGC0003ZP	AGC3ZP	AGC Glass Fuse Assortment	1 each: AGC 4A, 6A, 7.5A Fuses & 2 each: AGC 5A Fuses NEW
0AGC0004ZP	AGC4ZP	AGC Glass Fuse Assortment	1 each: AGC 10A Fuse & 2 each: AGC 15A, 20A Fuses NEW
0AGC0005ZP	AGC5ZP	AGC Glass Fuse Assortment	1 each: AGC 35A Fuse & 2 each: AGC 25A, 30A Fuses NEW
0AGW0001ZP	AGW1ZP	AGW/AGX Glass Fuse Assortment	1 each: AGW 3A, 4A, 5A, 15A, 20A, 30A Fuses 1 each: AGX 3A, 20A, 25A, 30A Fuses
0AGW0002ZP	AGW2ZP	AGW Glass Fuse Assortment	1 each: AGW 5A, 20A, 30A Fuses & 2 each: AGW 15A Fuses NEW
0AGX0002ZP	AGX2ZP	AGX Glass Fuse Assortment	1 each: AGX 25A, 30A Fuses & 3 each: AGX 20A Fuses NEW
0SFE0001ZP	SFE1ZP	SFE Glass Fuse Assortment	1 each: SFE 4A, 6A, 7.5A, 9A Fuses & 2 each: 14A, 20A, 30A Fuses

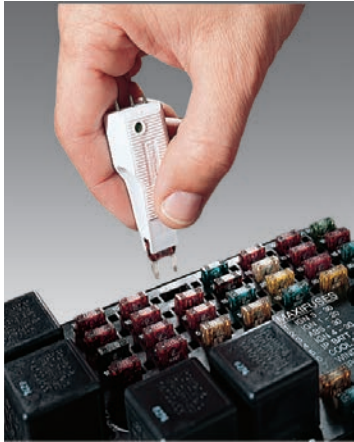
SMART GLOW Fuse



MATERIAL NUMBER	CATALOG NUMBER	DESCRIPTION	CONTENTS
00940202ZPGL0	10-1008	ATO SmartGlow Assortment 5 pack	1 each: ATO 10A, 15A, 20A, 25A, 30A Fuses
00940362ZPGL0	11-1008	MINI SmartGlow Assortment 5 pack	1 each: MINI 10A, 15A, 20A, 25A, 30A Fuses
00940400ZGL0	14-0000	ATO SmartGlow Assortment 42 pack	7 each: ATO GLO 5A, 10A, 15A, 20A, 25A, 30A Fuses
00940462ZGL0	15-0000	MINI SmartGlow Assortment 36 pack	6 each: MINI GLO 5A, 10A, 15A, 20A, 25A, 30A Fuses
00940555ZPGL0	—	ATO SmartGlow Assortment 5 pack w/ Flashlight	1 each: ATO GLO 10A, 15A, 20A, 25A, 30A Fuses & (1) MINI Keychain LED Flashlight
00940556ZPGL0	094556	MINI SmartGlow Assortment 5 Pack w/ Flashlight	1 each: MINI GLO 10A, 15A, 20A, 25A, 30A Fuses & (1) MINI Keychain LED Flashlight
0AGC0001ZPGL0	16-1008	AGC Glass Assortment 5 pack	1 each: AGC 5A, 10A, 15A, 20A, 30A Fuses
0SFE0001ZPGL0	—	SFE Glass SmartGlow Assortment 5 pack	1 each: SFE 7.5A, 9A, 14A & 2 each: 20A Fuses

Assortment Kits

1



Emergency Kits

Available in OEM ATO and MINI fuse versions. The Littelfuse Emergency Diagnostic Fuse Kits are ideal for the glove box or trunk offering instant protection in the garage or on the road. Contains the most popular amperages.

Includes roadside tester/puller that tests, removes and installs fuses. Has its own power source that allows it to operate with or without voltage to a maximum of 24V DC.



MATERIAL NUMBER	CATALOG NUMBER	DESCRIPTION	CONTENTS
00940363ZP	094363	MINI Emergency Fuse Kit	1 each: MINI 3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A Fuses (1) Puller
00940365ZP	094365	Motorcycle Glass Emergency Kit	1 each: AGX 5A, 10A, 15A, 20A Fuses 2 each: AGX 8A Fuses (1) Puller
00940366ZP	094366	Motorcycle ATO Emergency Kit	1 each: ATO 5A, 7.5A, 10A, 15A, 20A Fuses (1) Puller
00940367ZP	094367	American Glass Emergency Kit	1 each: SFE 9A, 14A, 20A 1 each: AGC 5A, 15A, 30A Fuses (1) Puller
00940368ZP	094368	European GBC Emergency Kit	1 each: GBC 5A, 16A, 25A Fuses 2 each: GBC 8A Fuses (1) Puller
00940369ZP	094369	Japanese Glass Emergency Kit	1 each: AGC 5A, 10A, 15A, 20A, 30A Fuses (1) Puller
00940370ZP	094370	ATO Emergency Kit	1 each: ATO 5A, 10A, 15A, 20A, 25A, 30A Fuses (1) Puller
00940418ZP	094418	ATO Emergency Diagnostic Kit	1 each: ATO 5A, 10A, 15A, 20A, 25A, 30A Fuses (1) ATO Puller
00940419ZP	094419	Glass Emergency Fuse Kit	1 each: AGC 7.5, 15A, 20A, 25A, 30A (1) Glass Puller
00940461ZP	094461	MINI Emergency Diagnostic Kit	1 each: MINI 3A, 4A, 7.5A, 10A, 15A, 20A, 25A, 30A Fuses (1) ATO/MINI Tester/Puller
00940479ZP	094479	ATO/MINI Emergency Diagnostic Kit	1 each: ATO 5A, 10A, 15A, 20A, 25A, 30A Fuses 1 each: MINI 3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A Fuses (1) Puller
00940441ZP	094441	LP MINI Emergency Fuse Kit	1 each: LP MINI 2A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A Fuses, (1) Puller
00940442ZP	094442	MCASE, MICRO2, MICRO3 Emergency Kit	1 each: MCASE 15A, 20A, 25A, 30A, 40A Fuses, (1) MCCase Puller 1 each: MICRO2 5A, 7.5A, 10A, 15A, 20A, 25A, 30A Fuses 1 each: MICRO3 5A, 7.5A, 10A, 15A Fuses, (1) MICRO Puller
00940561ZPA	094561	OEM Emergency Kit - GM	1 each: MINI 7.5A, 25A, 30A Fuses 1 each: LP MINI 10A, 15A Fuses 1 each: JCASE 20A, 30A, 40A, 50A Fuses 1 each: LPJCASE 30A, 40A Fuses 2 each: MINI 20A Fuses 3 each: MINI 10A, 15A Fuses
00940562ZPA	094562	OEM Emergency Kit - Ford	1 each: MINI 7.5A, 25A, 30A Fuses 1 each: LP MINI 10A, 15A Fuses 1 each: JCASE 20A, 30A, 40A, 50A Fuses 1 each: LPJCASE 30A, 40A Fuses 2 each: MINI 20A Fuses 3 each: MINI 10A, 15A Fuses
00940563ZPA	094563	OEM Emergency Kit - Chrysler/Dodge/Jeep	1 each: MINI 7.5A, 25A, 30A Fuses 1 each: JCASE 20A, 30A, 40A, 50A Fuses 2 each: MINI 20A Fuses 3 each: MINI 10A, 15A Fuses
00940565ZPA	094565	Toyota/Lexus Emergency Fuse Kit	1 each: MICRO2 5A, 7.5A, 10A, 15A, 20A, 25A, 30A Fuses 1 each: LP MINI 5A, 7.5A, 10A, 15A, 20A, 30A Fuses (2) Pullers NEW
00940566ZPA	094566	Nissan/Infiniti Emergency Fuse Kit	1 each: MICRO2 5A, 10A, 15A, 20A, 30A Fuses 1 each: MINI 2A, 3A, 4A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A Fuses 1 each: ATO 5A, 7.5A, 10A, 15A, 20A, 30A, 40A Fuses 1 each: MCASE+ 30A, 40A, 60A, Fuses 2 each: MCASE+ 50A Fuses (3) Pullers NEW
00940567ZPA	094567	Volkswagen/Audi Emergency Fuse Kit	1 each: ATO 1A, 2A, 3A, 4A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A, 40A Fuses 1 each: MINI 2A, 3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A Fuses 1 each: JCASE 20A, 25A, 30A, 40A, 50A, 60A Fuses 1 each: HSB 40A, 50A, 80A, 110A, 175A Fuse Strip (2) Pullers NEW
00940569ZPA	094569	Hyundai/Kia/Genesis Emergency Fuse Kit	1 each: MINI 10A, 15A, 20A, 25A, 30A Fuses 1 each: LP MINI 7.5A, 10A, 15A, 20A, 25A, 30A Fuses 1 each: JCASE 30A, 40A, 50A Fuses 1 each: LPJCASE 20A, 30A, 40A Fuses 1 each: MICRO2 10A, 15A, 20A, 25A, 30A Fuses (3) Pullers NEW

Assortment Kits

1

Commercial Assortments

Littelfuse Commercial Assortments cover all of the professional technician's circuit protection needs. Littelfuse offers the most comprehensive circuit protection kits on the market today addressing the needs of the Professional Service Center and Road Service Operation with genuine Littelfuse OEM fuses. Littelfuse Commercial Assortments are designed for the professional installer who needs a larger quantity and variety of fuses at the point of installation. Assortments are packaged in tough plastic storage containers perfect for the parts drawer, tool box, under counter or road service vehicle.

Additional information: littelfuse.com/KitAssortments



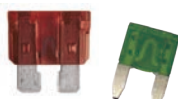
ATO® Fuse
80 Piece Commercial Assortment



CARDED	MATERIAL NUMBER	CATALOG NUMBER	CONTENT
	00940409Z	094409	ATO (10-pc): 3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A



ATO® / MINI® Fuse
80 Piece Commercial Assortment



CARDED	MATERIAL NUMBER	CATALOG NUMBER	CONTENT
	00940422Z	094422	ATO (10-pc): 15A, 20A, 25A, 30A MINI (10-pc): 15A, 20A, 25A, 30A (1) Puller



MINI® Fuse
80 Piece Commercial Assortment



CARDED	MATERIAL NUMBER	CATALOG NUMBER	CONTENT
	00940551Z	094551	MINI (10-pc): 3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A



Low Profile MINI® Fuse
80 Piece Commercial Assortment



CARDED	MATERIAL NUMBER	CATALOG NUMBER	CONTENT
	00940552Z	094552	LPMINI (10-pc): 3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A



MICRO2® Fuse
70 Piece Commercial Assortment



CARDED	MATERIAL NUMBER	CATALOG NUMBER	CONTENT
	00940560ZXA	00940560	MICRO2 (10): 5A, 7.5A, 10A, 15A, 20A, 25A, 30A



MICRO2® MICRO3® MCASE® Fuse
135 Piece Commercial Assortment



CARDED	MATERIAL NUMBER	CATALOG NUMBER	CONTENT
	00940570ZXA	00940570	MICRO2 (10): 5A, 7.5A, 10A, 15A, 20A, 25A, 30A MICRO3 (10): 5A, 7.5A, 10, 15A MCASE (5): 15A, 20A, 25A, 30A, 40A



MCASE® Fuse
80 Piece Commercial Assortment



CARDED	MATERIAL NUMBER	CATALOG NUMBER	CONTENT
	00940565ZXA	00940565	MCASE (20): 15A, 20A, 25A, 30A, 40A



JCASE® Fuse
10 Piece Commercial Assortment



CARDED	MATERIAL NUMBER	CATALOG NUMBER	CONTENT
	00940480Z	094480	JCASE (2-pc): 20A, 40A, 50A JCASE (3-pc): 30A - JCASE (1-pc): 60A (1) Puller



Low Profile JCASE® Fuse
16 Piece Commercial Assortment



CARDED	MATERIAL NUMBER	CATALOG NUMBER	CONTENT
	00940553Z	094553	LPJCASE (4-pc): 20A, 30A, 40A LPJCASE (2-pc): 50A, 60A (1) Puller

Assortment Kits

SMART GLOW FUSE



It glows when it blows.

Smart Glow Commercial Assortments

Littelfuse Commercial Assortments cover the professional technician's circuit protection needs including Smart Glow style fuses. Available in ATO and MINI fuse styles the assortments are packaged in tough plastic storage containers perfect for the parts drawer, tool box, under counter or road service vehicle.

Additional information: littelfuse.com/KitAssortments



**Smart Glow ATO® Blade Fuse
80 Piece Commercial Assortment**



**Smart Glow MINI® Blade Fuse
80 Piece Commercial Assortment**

CARDED	MATERIAL NUMBER	CONTENT
	00940509ZXGLOA	ATO (10-pc): 3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A

CARDED	MATERIAL NUMBER	CONTENT
	00940510ZXGLOA	MINI (10-pc): 3A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A



Professional Fuse Caddy

Provides a complete assortment designed to meet the professional installer's on-the-road fuse needs. Contains 180 of the most popular fuses and installation tools (includes ATO®/MINI® Tester/ Puller) needed to service passenger cars and light trucks, heavy and medium trucks and buses.

Comes in compact handy storage box perfect for the on-the-road vehicle.

Additional information: littelfuse.com/KitAssortments

CARDED	MATERIAL NUMBER	CATALOG NUMBER	CONTENT
	00940396Z	094396	ATO (5-pc): 3A, 5A, 7.5A - ATO (10-pc): 10A, 25A - ATO (15-pc): 15A, 20A, 20A MINI (5-pc): 2A, 3A, 4A, 5A, 7.5A, 10A, 15A, 20A, 25A, 30A AGC (5-pc): 5A, 10A, 15A, 20A, 25A, 30A SFE (5-pc): 14A, 20A, 30A MAXI (1-pc): 20A, 30A, 40A, 50A, 60A (1) Fuse Tester and Puller (1) Tri-puller™ (1) MAXI Fuse Puller

Assortment Kits

1



Red Box™

Designed by Littelfuse, the kit features the exact OEM parts used for the glass, ATO, MINI, LP MINI, MAXI, PAL, JCASE, LP JCASE, MCASE, MICRO2 and MICRO3 fuses installed on over 98% of the cars, vans, light trucks and SUV's on the road today. All come packed inside one compact, portable, organized carrying case. With Red Box, your days of wasting valuable shelf space on redundant part numbers is over. Over 500 fuses inside Red Box meet over 98% of the market's circuit protection needs, giving you more coverage and more profit with a lot less inventory.

Additional information: littelfuse.com/RedBox

KIT Professional Installer Case

MATERIAL NUMBER	CATALOG NUMBER
ORED0BOXZ	REDBOX

KIT Professional Installer Case (No Glass with Module 5)

MATERIAL NUMBER	CATALOG NUMBER
ORED0BOXZNG	REDBOXNG

KIT Professional Installer Case (No Glass with Module 6)

MATERIAL NUMBER
ORED0BOXZNGA

Glass Module (Module 5)

MATERIAL NUMBER	CATALOG NUMBER	
ORBOX005Z	RBOX5	
0AGC001.V	AGC GLASS BOX 1A	10
0AGC002.V	AGC GLASS BOX 2A	10
0AGC003.V	AGC GLASS BOX 3A	10
0AGC004.V	AGC GLASS BOX 4A	10
0AGC005.V	AGC GLASS BOX 5A	10
0AGC006.V	AGC GLASS BOX 6A	10
0AGC007.5V	AGC GLASS BOX 7.5A	10
0AGC010.V	AGC GLASS BOX 10A	10
0AGC015.V	AGC GLASS BOX 15A	10
0AGC020.V	AGC GLASS BOX 20A	10
0AGC025.V	AGC GLASS BOX 25A	10
0AGC030.V	AGC GLASS BOX 30A	10
0AGW030.V	AGW GLASS BOX 30A	10
0AGX030.V	AGX GLASS BOX 30A	10
0SFE004.V	SFE GLASS BOX 4A	10
0SFE009.V	SFE GLASS BOX 9A	10
0SFE014.V	SFE GLASS BOX 14A	10
0SFE020.V	SFE GLASS BOX 20A	10
0SFE030.V	SFE GLASS BOX 30A	10
	Puller Tester	1

Low Profile MINI® Module (Module 1)

MATERIAL NUMBER	CATALOG NUMBER	
ORBOX001Z	RBOX1	
LMIN005.V	5A LOW PROFILE MINI FUSE	5
LMIN07.5V	7.5A LOW PROFILE MINI FUSE	10
LMIN010.V	10A LOW PROFILE MINI FUSE	10
LMIN015.V	15A LOW PROFILE MINI FUSE	10
LMIN020.V	20A LOW PROFILE MINI FUSE	5
LMIN025.V	25A LOW PROFILE MINI FUSE	5
LMIN030.V	30A LOW PROFILE MINI FUSE	10

JCASE® Module (Module 2)

MATERIAL NUMBER	CATALOG NUMBER	
ORBOX002Z	RBOX2	
JCAS020.V	JCASE 32V S/B BOX 20A	2
JCAS030.V	JCASE 32V S/B BOX 30A	2
JCAS040.V	JCASE 32V S/B BOX 40A	2
JCAS050.V	JCASE 32V S/B BOX 50A	2
JCAS060.V	JCASE 32V S/B BOX 60A	2

Blade Fuse Module (Module 3)

MATERIAL NUMBER	CATALOG NUMBER	
ORBOX003Z	RBOX3	
0ATO005.V	ATO BLADE FUSE BOX 5A	10
0ATO07.5V	ATO BLADE FUSE BOX 7.5A	10
0ATO010.V	ATO BLADE FUSE BOX 10A	25
0ATO015.V	ATO BLADE FUSE BOX 15A	25
0ATO020.V	ATO BLADE FUSE BOX 20A	25
0ATO025.V	ATO BLADE FUSE BOX 25A	25
0ATO030.V	ATO BLADE FUSE BOX 30A	25
0ATO040.V	ATO BLADE FUSE BOX 40A	10
0MIN005.V	MINI BLADE FUSE BOX 5A	10
0MIN07.5V	MINI BLADE FUSE BOX 7.5A	10
0MIN010.V	MINI BLADE FUSE BOX 10A	20
0MIN015.V	MINI BLADE FUSE BOX 15A	20
0MIN020.V	MINI BLADE FUSE BOX 20A	20
0MIN025.V	MINI BLADE FUSE BOX 25A	10
0MIN030.V	MINI BLADE FUSE BOX 30A	10
0MAX020.V	MAXI BLADE BOX 20A	2
0MAX030.V	MAXI BLADE BOX 30A	2
0MAX040.V	MAXI BLADE BOX 40A	2
0MAX050.V	MAXI BLADE BOX 50A	2
0MAX060.V	MAXI BLADE BOX 60A	2
0MAX070.V	MAXI BLADE BOX 70A	1
0MAX080.V	MAXI BLADE BOX 80A	1
00970019X	FUSE TESTER AND PULLER BOX	1
FHAC0002Z	ATO HD INLINE FUSE HOLDER BOX	1
0FHM0002Z	MINI HD INLINE FUSE HOLDER BOX	1

PAL Module (Module 4)

MATERIAL NUMBER	CATALOG NUMBER	
ORBOX004Z	RBOX4	
OPAL020.X	FEMALE TERM BOX 20A	1
OPAL030.X	FEMALE TERM BOX 30A	1
OPAL040.X	FEMALE TERM BOX 40A	1
OPAL050.X	FEMALE TERM BOX 50A	1
OPAL060.X	FEMALE TERM BOX 60A	1
OPAL130.X	STRAIGHT MALE TERM BOX 30A	1
OPAL160.X	STRAIGHT MALE TERM BOX 60A	1
OPAL180.X	STRAIGHT MALE TERM BOX 80A	1
OPAL1100.X	STRAIGHT MALE TERM BOX 100A	1
OPAL1120.X	STRAIGHT MALE TERM BOX 120A	1
OPAL230.X	13/16" BENT MALE TERM BOX 30A	1
OPAL240.X	13/16" BENT MALE TERM BOX 40A	1
OPAL250.X	13/16" BENT MALE TERM BOX 50A	1
OPAL260.X	13/16" BENT MALE TERM BOX 60A	1
OPAL270.X	13/16" BENT MALE TERM BOX 70A	1
OPAL280.X	13/16" BENT MALE TERM BOX 80A	1
OPAL2100.X	13/16" BENT MALE TERM BOX 100A	1
OPAL2120.X	13/16" BENT MALE TERM BOX 120A	1
OPAL330.X	MINI FEMALE TERM BOX 30A	1
OPAL340.X	MINI FEMALE TERM BOX 40A	1
OPAL430.X	9/16" BENT MALE TERM BOX 30A	1
OPAL440.X	9/16" BENT MALE TERM BOX 40A	1
OPAL450.X	9/16" BENT MALE TERM BOX 50A	1
OPAL480.X	9/16" BENT MALE TERM BOX 80A	1
OPAL4100.X	9/16" BENT MALE TERM BOX 100A	1
OPAL525.X	LOCKING FEMALE TERM BOX 25A	1
OPAL530.X	LOCKING FEMALE TERM BOX 30A	1

MICRO2®, MICRO3®, MCase®, Low Profile JCASE® Module (Module 6)

MATERIAL NUMBER	CATALOG NUMBER	
ORBOX006Z	RBOX6	
MIC2005.V	MICRO2 Fuse 5A	10
MIC207.5V	MICRO2 Fuse 7.5A	10
MIC2010.V	MICRO2 Fuse 10A	10
MIC2015.V	MICRO2 Fuse 15A	10
MIC2020.V	MICRO2 Fuse 20A	10
MIC2025.V	MICRO2 Fuse 25A	10
MIC3005.V	MICRO3 Fuse 5A	10
MIC307.5V	MICRO3 Fuse 7.5A	10
MIC3010.V	MICRO3 Fuse 10A	10
MCAS020.V	MCASE Fuse 20A	10
MCAS025.V	MCASE Fuse 25A	10
MCAS030.V	MCASE Fuse 30A	10
MCAS040.V	MCASE Fuse 40A	10
LJCA020.V	LOW PROFILE JCASE 20A	10
LJCA025.V	LOW PROFILE JCASE 25A	10
LJCA030.V	LOW PROFILE JCASE 30A	10
LJCA040.V	LOW PROFILE JCASE 40A	10
LJCA050.V	LOW PROFILE JCASE 50A	10
LJCA060.V	LOW PROFILE JCASE 60A	10

MATERIAL NUMBER	CATALOG NUMBER
ORBOX003ZGLO	RBOX3GLO

Contact your local sales manager for more information

Assortment Kits

Modular Rack Systems

The new MRS Modular Rack System is a flexible offering of fuses that can be ordered based on your needs. Each rack is sold individually and can be locked together to sit on a counter, or wall mounted. They are also available as a complete kit. Size charts, and color identification charts are included to serve as a guide for easy identification and replacement.



OMRS0007ZXA

MATERIAL NUMBER	CATALOG NUMBER	DESCRIPTION	CONTENTS
OMRS0001Z	MRS1	ATO Modular Rack System	See Table Below
OMRS0002Z	MRS2	MINI-MAXI Modular Rack System	See Table Below
OMRS0003Z	MRS3	Glass Modular Rack System	See Table Below
OMRS0004Z	MRS4	PAL / MEGA Modular Rack System	See Table Below
OMRS0005Z	MRS5	PAL / JCASE Modular Rack System	See Table Below
OMRS0006Z	MRS6	ATO / MINI Assortments Modular Rack System	See Table Below
OMRS0007Z	MRS7	Complete Modular Rack System - 6 Racks	MRS 1, 2, 3, 4, 5 & 6 - See Table Below
OMRS0007ZXA	MRS7A	Complete Modular Rack System - 7 Racks	MRS 1, 2, 3, 4, 5, 6 & 9 - See Table Below
OMRS0009ZXA	MRS9	ACS / MICRO2 / MICRO3 / MCASE Modular Rack System	See Table Below
OMRS0200Z	MRS200	ATO / MINI / MAXI Modular Rack System	MRS Racks 1 & 2 (Assembled)
OMRS0300Z	MRS300	ATO / MINI / MAXI / Glass Modular Rack System	MRS Racks 1, 2 & 3 (Assembled)

Modular Rack Systems Part Number Contents

MATERIAL NUMBER	OMRS0001Z	OMRS0002Z	OMRS0003Z	OMRS0004Z	OMRS0005Z	OMRS0006Z	OMRS0009ZXA
CATALOG NUMBER	MRS1	MRS2	MRS3	MRS4	MRS5	MRS6	MRS9
FUSE TYPE	ATO	MINI / MAXI	GLASS / CERAMIC	PAL / MEGA	PAL / JCASE	ATO / MINI ASSORTMENTS	MICRO2 / MICRO3 / MCASE
CONTENTS	(5) ATO3	(5) MIN2	(5) AGC1 (10) SFE4	(2) PAL20	(1) PAL1120 (1) PAL430	(12) 094202B	(2) MIC2 5 (3) MIC3 10
	(5) ATO4	(5) MIN3	(5) AGC2 (10) SFE7.5	(4) PAL30	(1) PAL230 (1) PAL440	(12) 094362B	(2) MIC2 7.5 (3) MIC3 15
	(10) ATO5	(5) MIN4	(10) AGC3 (10) SFE9	(3) PAL40	(1) PAL240 (1) PAL450		(4) MIC2 10 (2) MCAS 15
	(10) ATO7.5	(10) MIN5	(5) AGC5 (10) SFE14	(3) PAL50	(1) PAL250 (1) PAL480		(4) MIC2 15 (3) MCAS 20
	(15) ATO10	(10) MIN7.5	(5) AGC7.5 (30) SFE20	(2) PAL60	(1) PAL260 (1) PAL4100		(4) MIC2 20 (2) MCAS 25
	(15) ATO15	(15) MIN10	(10) AGC10 (10) SFE30	(1) PAL130	(1) PAL270 (1) PAL525		(3) MIC2 25 (4) MCAS 30
	(20) ATO20	(20) MIN15	(20) AGC15 (10) GBC8	(2) PAL160	(1) PAL280 (1) PAL530		(3) MIC2 30A (3) MCAS 40
	(10) ATO25	(20) MIN20	(20) AGC20 (10) GBC16	(3) PAL180	(1) PAL2100 (1) JCAS40		(3) MIC3 5
	(15) ATO30	(15) MIN25	(10) AGC25 (10) GBC25	(2) PAL1100	(1) PAL2120 (1) JCAS50		(3) MIC3 7.5
	(5) ATO40	(15) MIN30	(30) AGC30	(2) MEG 175	(1) JCAS20 (1) JCAS60		
		(2) MAX20	(5) AGW15		(2) JCAS30		
		(3) MAX30	(5) AGW20		(1) PAL330		
		(2) MAX40			(1) PAL340		
	(2) MAX50						
	(3) MAX60						

Circuit Breakers

1

Type I • Automatic Reset

Cycles or continuously resets until the fault is corrected. Type I circuit breakers are typically used to protect circuits which occasionally experience momentary overloads such as wiper motor and headlamp circuits where a self resetting device is preferred.

Additional information: littelfuse.com/CircuitBreakers

Type II • Modified Reset

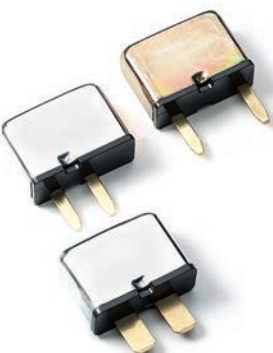
Non-cycling, remains in open position while there is power to the circuit. Resets when ignition is turned off. Type II circuit breakers are typically used in applications where fuse replacement is objectionable, such as power window, seat and sunroof circuits.

Type III • Manual Reset

Manually resettable circuit breakers remain in the open position until a button, lever or other external reset device is manually depressed. Type III circuit breakers are typically used in applications where a manual reset is desired for safe diagnosis of a circuit fault.

MINI® Footprint Circuit Breakers

Designed to fit in a MINI Blade fuse block or panel. SAE Type II used primarily as a wiring harness protector in 12V DC automotive systems. Conforms to SAE J553C standard.



CURRENT RATING (A)	PART NUMBERS	
	BULK	BOXED
10	30419-10	—
15	30419-15	30419-15-BX
20	30419-20	30419-20-BX
25	30419-25	30419-25-BX

Wide MINI® Footprint Circuit Breakers

Direct factory replacement for many domestic OEM applications. Designed to fit either in an ATO or MINI blade fuse block or panel. Their blade configuration is of the MINI design and fit in a standard ATO fuse slot or across two MINI slots. Available in either SAE Type I cycling or SAE Type II non-cycling used primarily as a wiring harness protector in 12V DC automotive systems. Conforms to SAE J553C standard.

CURRENT RATING (A)	BOXED	APPLICATION	CYCLING	NON-CYCLING
	MATERIAL NUMBER			
15	0MMB015.X	Heavy Truck Headlamp	•	
20	0MMB020.X	Automotive Headlamp	•	
10	0MNB010.X	Heavy Duty Truck		•
15	0MNB015.X	Heavy Duty Truck		•
20	0MNB020.X	Automotive/Heavy Truck		•
25	0MNB025.X	Automotive/Heavy Truck		•
30	0MNB030.X	Automotive/Heavy Truck		•

Specialty OEM ATO® Footprint Circuit Breakers

Direct factory replacement for many domestic OEM vehicles. SAE Type I and Type II modified reset used primarily as a wiring harness protector in 12V DC automotive systems. Conforms to SAE J553C standard. Designed to mount in ATO style fuse blocks and panels.



CURRENT RATING (A)	BOXED	CARDED	APPLICATION	OEM PART NUMBER
	MATERIAL NUMBER	MATERIAL NUMBER		
20	—	0ACB020.XP	Automotive Headlamp	GM# 12040816
30	—	0ACB030.XP	Power Windows, & Locks	GM# 01252240
20	0FCB020.X	0FCB020.XP	Power Windows	Ford# 83507005
25	0CCB025.X	0CCB025.XP	Windows, Seats & Locks	Ford# D9AB-14526-BA Chrysler# 4527053

Fuse Clip Circuit Breakers

Direct replacement for many OEM applications. Designed for glass fuses without physical alteration in the system. Fits 1-1/4" fuse clips. SAE Type II non-cycling used primarily as a wiring harness protector in 12V DC automotive systems. Conforms to SAE J553C standard.



CURRENT RATING (A)	PART NUMBERS	
	BULK	BOXED
10	-	30410-10-BX
15	30410-15	30410-15-BX
20	30410-20	30410-20-BX
25	30410-25	30410-25-BX
30	30410-30	30410-30-BX

Circuit Breakers

Universal ATO® Footprint Circuit Breakers

Universal Circuit Breakers function identically and have same internal components as OEM breakers but offer the versatility of snap off terminals for greater flexibility. SAE Type II modified reset used primarily as a wiring harness protector in 12V DC automotive systems. Meets OEM requirements. Conforms to SAE J553C standard. Designed to mount in ATO style fuse blocks and panels.



CURRENT RATING (A)	BOXED	BOXED BULK	CARDED
	MATERIAL NUMBER	MATERIAL NUMBER	PACKAGING MATERIAL NUMBER
5	OUCB005.X	BUCB005.Z	OUCB005.XP
10	OUCB010.X	BUCB010.Z	OUCB010.XP
15	OUCB015.X	BUCB015.Z	OUCB015.XP
20	OUCB020.X	BUCB020.Z	OUCB020.XP
25	OUCB025.X	BUCB025.Z	OUCB025.XP
30	OUCB030.X	BUCB030.Z	OUCB030.XP

MAXI Style Circuit Breakers

Direct factory replacement for many domestic OEM applications. Designed to fit a MAXI Blade fuse block or panel. Available in either SAE Type I cycling or SAE Type II non-cycling. Used primarily as a wiring harness protector in 12V DC automotive systems. Meet OEM requirements. Conforms to SAE J553C standard.



CURRENT RATING (A)	BOXED	APPLICATION	CYCLING	NON CYCLING
	MATERIAL NUMBER			
20	OMCB020.X	Automotive Headlamp	•	
30	OMCB030.X	Automotive Headlamp, Seats & Wipers	•	
40	OMCB040.X	–	•	
20	OMXB020.X	Automotive Power Devices Heavy Truck & Auto Cooling Fan		•
30	OMXB030.X	Automotive Power Window Heavy Truck & Auto Cooling Fan & Power Window		•

Circuit Breaker Mounting Brackets & Bus Bars

Mounting brackets available in steel or nylon and accept 30056 and 30137 series breakers.

Bus bars are made from heavy solid brass or copper, with holes or slots that make it easy to connect box-type circuit breakers with studs, in order to feed a number of protected circuits.



30090-04 4-gang steel bracket



86099-5 brass busbar with holes



86126-4 copper busbar with slots

PART NUMBERS		DESCRIPTION	NUMBER OF GANGS	MATERIAL	DIMENSIONS	MOUNTING HOLE DIMENSIONS	NOTES
BULK	BOXED						
30090-2	30090-2-BX	Mounting Bracket	2	Steel	.81" x 1.29" (122.2 x 32.8 mm)	4.00" (101.6mm) on centers	For all steel breakers without a bracket. Breakers snap into position, engaging with dimples in the case of the breaker.
30090-3	30090-3-BX		3		5.71" x 1.29" (145.0 x 32.8mm)	1.90" (124.5mm) on centers	
30090-4	30090-4-BX		4		6.62" x 1.29" (160.1 x 32.8mm)	5.81" (147.6mm) on centers	
30090-6	30090-6-BX		6		8.43" x 1.29" (214.1 x 32.8mm)	7.62" (193.5mm) on centers	
30090-8	30090-8-BX		8		10.25" x 1.29" (260.4 x 32.8mm)	9.43" (239.5mm) on centers	
–	86099-2-BX	Busbar	2	Brass	1.53" long (38.9mm)	–	Holes: .910" (23.1mm) on centers, .021" (5.3mm) diameter
86099-3	86099-3-BX		3		2.43" long (61.7mm)	–	
86099-4	86099-4-BX		4		3.34" long (84.8mm)	–	
86099-5	86099-5-BX		5		4.24" long (107.7mm)	–	
86126-2	86126-2-BX		2		Copper	1.41" x .560" (35.8 x 14.2mm)	
86126-4	86126-4-BX	4	3.23" x .560" (82.1 x 14.2mm)	2.73" (69.34mm) on centers			
86126-6	86126-6-BX	6	5.05" x .560" (128.3 x 14.2mm)	4.55" (115.57mm) on centers			
86126-8	86126-8-BX	8	6.87" x .560" (174.5 x 14.2mm)	6.37" (161.79mm) on centers			
86126-12	86126-12-BX	12	10.51" x .560" (267.0 x 14.2mm)	10.01" (254.25mm) on centers			

Box Style Circuit Breakers

1

Steel or plastic housing. Steel box type is approximately 1 1/4" x 3/4" x 2/3" and comes with integral brackets (to be directly affixed with screws or bolts) or without (needs a mounting bracket). Breakers have 10-32 studs, blades or wire leads. Wire lead type has a 10" wire loop connected to studs and PVC-coated. Loop is intended to be cut, stripped and spliced into a circuit.

Additional information: littelfuse.com/CircuitBreakers



30056, 30137, 30171 - with studs, no bracket



30055, 30138, 30172 - with studs and bracket



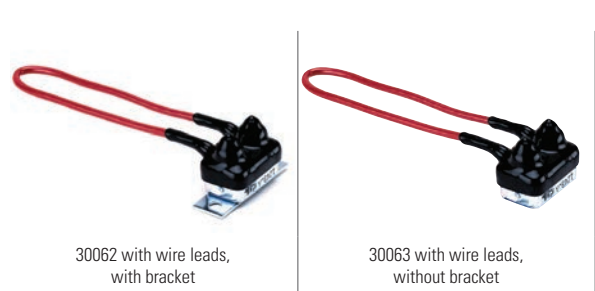
30128 - with studs and cross-bracket



3088, 30507 - double breaker assembly

Type I Steel Case with Stud Terminals

PART NUMBERS				VOLT	AMPS	SEALED	NOTES	PART NUMBERS				VOLT	AMPS	SEALED	NOTES	PART NUMBERS				VOLT	AMPS	SEALED	NOTES
BULK	BOXED	RETAIL	BULK					BOXED	RETAIL	BULK	BOXED					RETAIL	BULK	BOXED	RETAIL				
30056-10	30056-10-BX	-	10	-	-	Type I	30055-10	30055-10-BX	-	10	-	Type I with bracket	30171-10	30171-10-BX	-	10	-	Type I					
30056-15	30056-15-BX	-	15	-	30055-15		30055-15-BX	30055-15-BP	15	-	30171-15		30171-15-BX	-	15	-							
30056-20	30056-20-BX	-	20	-	30055-20		30055-20-BX	30055-20-BP	20	-	30171-20		30171-20-BX	-	20	-							
30056-25	30056-25-BX	-	25	-	30055-25		30055-25-BX	-	25	-	30171-30		30171-30-BX	-	30	-							
30056-30	30056-30-BX	-	30	-	30055-30		30055-30-BX	30055-30-BP	30	-	30172-10		-	-	24	10	-						
30056-40	30056-40-BX	-	40	-	30055-40		30055-40-BX	30055-40-BP	40	-	30172-15		30172-15-BX	-	15	-							
30056-50	30056-50-BX	-	50	-	30055-50		30055-50-BX	30055-50-BP	50	-	30172-20		30172-20-BX	-	20	-							
30137-10	-	-	10	•	-		30138-10	-	-	10	•		30172-30	30172-30-BX	-	30	-						
30137-15	30137-15-BX	-	15	•	Type I sealed		30138-15	-	-	12	•		3088-50	-	-	50	-						
30137-20	30137-20-BX	-	20	•			-	30138-30-BX	-	-	30		•	3088-60	3088-60-BX	-	60		-				
30137-30	-	-	30	•		-	30138-40	-	-	40	•	3088-80	3088-80-BX	-	80	-							
						-	30128-10	30128-10-BX	-	10	-	30507-60	30507-60-BX	-	60	•							
						-	30128-15	30128-15-BX	-	15	-	30507-80	30507-80-BX	-	80	•							
					-	30128-20	30128-20-BX	-	20	-													
					-	30128-30	30128-30-BX	-	30	-													
					-	30128-40	30128-40-BX	-	40	-													



PVC-Coated Steel Case with Wire Terminals

PART NUMBERS		VOLT	AMPS	SEALED	NOTES
BULK	BOXED				
-	30062-20-BX	12	20	•	Type I with Bracket
30062-30	30062-30-BX	12	30	•	
30063-10	-	10	10	•	Type I
30063-20	30063-20-BX	12	10	•	
30063-30	-	30	30	•	



Stud Type Low Voltage (6-12 V DC) Circuit Breakers

SAE Type I automatic reset provides protection in installations where it is not possible to manually reset a breaker because of location or safety requirements. Used primarily as a wiring harness protector in 12V DC automotive systems. Conforms to SAE J553C standard. Available with or without mounting bracket.

CURRENT RATING (A)	BOXED W/O BRACKET	BOXED W/ BRACKET	CARDED
	MATERIAL NUMBER	MATERIAL NUMBER	MATERIAL NUMBER
5	0812005.ZXST	0813005.ZXST	-
6	0812006.ZXST	-	-
8	-	0813008.ZXST	-
10	0812010.ZXST	0813010.ZXST	-
15	0812015.ZXST	0813015.ZXST	-
20	0812020.ZXST	0813020.ZXST	0813020.XP
25	0812025.ZXST	0813025.ZXST	-
30	0812030.ZXST	0813030.ZXST	0813030.XP
4	0812040.ZXST	0813040.ZXST	0813040.XP
50	0812050.ZXST	0813050.ZXST	0813050.XP

Circuit Breakers

50-150A • 32V DC • Hi-Amp Type III • Circuit Breakers

These high amp circuit breakers are typically used in auxiliary and accessory circuits for trucks, buses, RVs and marine applications in battery charger systems and DC audio systems. All high amp circuit breakers comply with the SAE J1117 and J1625 standard for ignition protection.



- Agency Approvals: UL Approved for all amp ratings at 32V DC
- Interrupting Rating: 3000A @30V DC
- Ignition Protection: SAE J1625 and J1171
- Material: Thermoset Plastic UL Rating 94VO
- Temperature Range: -32C to 92C
- RoHS Compliant
- Waterproof

CURRENT RATING (A)	BOXED PART NUMBERS		CARDED PART NUMBERS		INTERRUPTING RATING	RoHS
	MATERIAL NUMBER	CATALOG NUMBER	MATERIAL NUMBER	CATALOG NUMBER		
50	0185050.X	185050	–	–	3000A @ 30V DC	•
60	0185060.X	185060	–	–	3000A @ 30V DC	•
70	0185070.X	185070	–	–	3000A @ 30V DC	•
80	0185080.X	185080	–	–	3000A @ 30V DC	•
100	–	–	0185100.XP	185100BP	3000A @ 30V DC	•
120	–	–	0185120.XP	185120BP	3000A @ 30V DC	•
150	–	–	0185150.XP	185150BP	3000A @ 30V DC	•



MINI® Type I Circuit Breakers

Designed to fit in a MINI blade fuse block or panel. Conforms to SAE J553. Cycles or continuously resets until the fault is corrected. Type I circuit breakers are typically used to protect circuits which occasionally experience momentary overloads such as wiper motor and headlamp circuits where a self resetting device is preferred.



CURRENT RATING (A)	CARDED PART NUMBERS	
	MATERIAL NUMBER	CATALOG NUMBER
10	0211010.XP	211010BP
15	0211015.XP	211015BP
20	0211020.XP	211020BP
25	0211025.XP	211025BP
30	0211030.XP	211030BP

ATO® Circuit Breakers Series - Type I Automatic Reset

Circuit breakers and fuses are a cost-effective solution to protecting wiring, equipment and subsystems. Terminals are grooved so that they can be easily snapped off with pliers to fit the electrical blocks of different vehicles. Use as is (long terminals) for Kenworth trucks. Use with one segment snapped off each terminal for: Dodge trucks, Ford heavy trucks, Navistar trucks. Use with two segments snapped off (short terminals) for Ford pickup trucks.

Color-coded housings with rating marked on the top: 10A red, 15A blue, 20A yellow, 25A silver, 30A green.



Long terminals, as supplied One segment snapped off Two segments snapped off

CURRENT RATING (A)	PART NUMBERS			COLOR
	BULK	BOXED	RETAIL CLAMSHELL	
10	30409-10	30409-10-BX	–	Red
15	30409-15	30409-15-BX	–	Blue
20	30409-20	30409-20-BX	30409-20-BP	Yellow
25	30409-25	30409-25-BX	–	Silver
30	30409-30	30409-30-BX	30409-30-BP	Green

Fuse Blocks, Holders & Terminal Blocks



Fuse Holders accept fuses to provide electrical protection on circuits. In the following section, there is a wide range of fuse holders from lower current to higher current ratings and in various levels of sealing from moisture and dust. These are all single fuse products. For products accepting multiple fuses, refer to our Power Distribution Module (PDM) product offerings, in the next section of this catalog.

Where Do I Need a Fuse Holder?

Fuse holders allow you to install a fuse into an electrical circuit to protect the wiring from the harmful effects of excessive amount of electricity flowing through the cables. The fuse is a replaceable element that will 'blow' to stop the flow of an overload of electricity. If a fuse blows in a circuit, it is important to understand what caused the issue before replacing the fuse, otherwise there is a risk of repeated failures.

Fuses (in fuse holders) should be placed on every wire, as close to the point of the source of power (the battery) as possible. Every time a wire is split or spliced into smaller wires, each of those should be fused. Single fuse holders protect a single wire. A fuse (holder) should be properly sized. Larger diameter wires require larger fuses and smaller diameter wires get smaller rated fuses. Refer to best practices for proper selection fuses for your system

Sealed or Unsealed

Depending where on the vehicle a fuse holder is placed, it may be wise to utilize sealed fuse holders. In all instances, it is wise to try to have the most amount of physical protection of the fuse/fuse holder combination that makes sense. Fuse holders may have simple coverings (to prevent accidental shorting), all the way to completely sealing the fuse and cable to provide protection from moisture and dust in the electrical system. The more exposure to impurities the more risk to the safe and efficient performance of the electrical system as these elements can cause corrosion, and even electrical faults and failures. Some environments however are protected and it may not be necessary to use a sealed fuse holder. Littelfuse offers a wide variety of fuse holders that range from open to fully sealed.



Bolt-Down Fuse Blocks



MEGA® Bolt-Down Fuse Block

Use with MEGA fuses up to 500A. Ideal for battery and alternator connections and other heavy gauge cables requiring ultra high current protection. Includes protective cover. Features interconnecting pins on side of fuse block for multiple block configurations. Includes M8 threaded studs and hex nuts with lock washers. Fuse not included. Additional information: littelfuse.com/298

PART NUMBERS			VOLTAGE	AMPERAGE	HARDWARE MATERIAL	STUD TORQUE
BULK 70-PC	BULK 20-PC	BULK 10-PC				
02980900Z	02980900S	02980900TXN	32V DC	500A	Zinc-Plated Steel	12-18 Nm



MEGA® SN Series Assure-Latch™ Fuse Block

The SN Series is a high amperage in-line MEGA fuse block with sealed positive latching technology. The fuse holder base and cover are secured together with AssureLatch™ technology to form a water resistant and ignition protected assembly. Fuse not included. Additional information: littelfuse.com/SN

PART NUMBERS	VOLTAGE	AMPERAGE	INGRESS	HARDWARE MATERIAL	STUD TORQUE	NOTES
880014	32V DC	500A	IP66 & IP69K	Tin-Plated Steel	20 Nm	Ignition Protected



Flex-MEGA® Fuse Block

For use with MEGA bolt-down fuses, up to 500A. The Flex holder offers a flexible cover, which allows cable entry from virtually any direction, large wire size, and ring terminal stack up. Busbars are available for multiple holder applications and a dovetail feature allows interlocking of multiple Flex-MIDI and Flex-MEGA fuse holders together for a power distribution block. Fuse not included. Additional information at: littelfuse.com/FLEX-MEGA

PART NUMBERS	VOLTAGE	AMPERAGE	HARDWARE MATERIAL	STUD TORQUE	NOTES
02981001ZXT	32V DC	500A	Zinc-Plated Steel	12-18 Nm	330 PC
02981028HXFC-SS	32V DC	500A	Stainless Steel	12-18 Nm	-
02981028HXFC	32V DC	500A	Zinc-Plated Steel	12-18 Nm	-
BUSBAR PART NUMBERS	DESCRIPTION	HARDWARE MATERIAL	STUD TORQUE	NOTES	
882-839-2	2 Position Bus Bar	Tin-Plated Copper	-	For use 2 Fuse Holders	
882-839-3	3 Position Bus Bar	Tin-Plated Copper	-	For use 3 Fuse Holders	
882-839-4	4 Position Bus Bar	Tin-Plated Copper	-	For use 4 Fuse Holders	
882-839-5	5 Position Bus Bar	Tin-Plated Copper	-	For use 5 Fuse Holders	



MIDI® SN Series Assure-Latch™ Fuse Block

The SN Series is a high amperage in-line MEGA fuse block with sealed positive latching technology. The fuse holder base and cover are secured together with AssureLatch™ technology to form a water resistant and ignition protected assembly. Fuse not included. Additional information: littelfuse.com/SN

PART NUMBERS	VOLTAGE	AMPERAGE	INGRESS	HARDWARE MATERIAL	STUD TORQUE	NOTES
880015	32V DC	200A	IP66 & IP69K	Tin-Plated Steel	20 Nm	Ignition Protected



Flex-MIDI® Fuse Block

For use with MIDI bolt-down fuses, up to 200A. The Flex holder offers a flexible cover, which allows cable entry from virtually any direction, large wire size, and ring terminal stack up. Busbars are available for multiple holder applications and a dovetail feature allows interlocking of multiple Flex-MIDI and Flex-MEGA fuse holders together for a power distribution block. Fuse not included. Additional information: littelfuse.com/FLEX-MIDI

PART NUMBERS	VOLTAGE	AMPERAGE	HARDWARE MATERIAL	STUD TORQUE	NOTES
04981038HXFC	32V DC	200A	Zinc-Plated Steel	3.0-5.0 Nm	-
04982001ZXFC	32V DC	200A	Zinc-Plated Steel	3.0-5.0 Nm	2 Holders with Busbar
BUSBAR PART NUMBERS	DESCRIPTION	HARDWARE MATERIAL	STUD TORQUE	NOTES	
882-267-002	2 Position Bus Bar	Tin-Plated Copper	-	For use 2 Fuse Holders	
882-267-003	3 Position Bus Bar	Tin-Plated Copper	-	For use 3 Fuse Holders	
882-267-004	4 Position Bus Bar	Tin-Plated Copper	-	For use 4 Fuse Holders	
882-267-005	5 Position Bus Bar	Tin-Plated Copper	-	For use 5 Fuse Holders	

In-Line Fuse Holders

2



MIDI® Compact In-line Fuse Holder

Designed for use with bolt-down MIDI style fuses. It can be conveniently installed directly in-line with the cables and no mounting required. The fuse holder is easy to shrinkwrap for environmental protection and the corners of the cover are curved so that shrinkwrap will not be split.

Download additional technical information at: littelfuse.com/498-IL

PART NUMBERS		DETAILS	AMPERAGE	HARDWARE MATERIAL
BULK	BOXED			
04980921GXM5		Complete Assembly	200A	Zinc-Plated Steel



MIDI® In-line Fuse Holder

Use with MIDI fuses up to 200 amps. Includes protective cover. Features interconnecting pins on side of fuse block for multiple block configurations. Includes M5 threaded studs and hex nuts with lock washers. Fuse not included.

Download additional technical information at: littelfuse.com/498

PART NUMBERS			DETAILS	AMPERAGE	HARDWARE MATERIAL
BULK 10-PC	BULK 20-PC	BULK 330-PC			
0498900.TXN	04980900S	04980900ZXT	Complete Assembly	200A	Zinc-Plated Steel
-	-	04980903ZXT	Holder with mounting brackets	200A	Zinc-Plated Steel
-	-	04980904ZXT	Includes protective cover, threaded M5 studs, split washers, and hexnuts	200A	Zinc-Plated Steel

MAXI In-line Blade Fuse Holders with Covers - MAH Series

Use with MAXI Fuse up to 60 amps. Supplied with two 6" wire leads of 6 gauge black wire. Includes protective cover for harsh environment and mounting hole for easy firewall installation.

Download additional technical information at: littelfuse.com/MAH



BOXED PART NUMBERS		DETAILS	AMPERAGE	INGRESS	WIRE DETAILS			COVER
MATERIAL NUMBER	CATALOG NUMBER				GAUGE	LENGTH	COLOR	
MAHC0001ZXJ	MAH1	Standard	up to 60A	IP67	6	5"	Black	•
MAHC0001ZXJA	MAH1	Standard	up to 60A	IP67	6	5"	Red	•
MAHC0001TXJ	MAH1	Standard	up to 60A	IP67	6	5"	Black	•

* Please inquire about additional bulk quantities

MAXI In-line Blade Splash Resistant Fuse Holders with Covers - 152 Series

The In-line Splash Resistant Fuse Holder provides an efficient, simple installation method for MAXI fuse applications in harsh under-the-hood environments

Download additional technical information at: littelfuse.com/152



PART NUMBERS		DETAILS	AMPERAGE	INGRESS	KIT CONTENTS		
BULK	BOXED				SEALS	TERMINALS	COVER
01520003TXN941		for 4-6mm ² wire	60A	IP54	•	•	•
01520003TXN942		for 6-10mm ² wire	60A	IP54	•	•	•
01520005Z		Body with tabs	60A	IP54		•	•
01520006Z		Body without tabs	60A	IP54		•	•

MAXI In-line Fuse Holders with Optional Covers - MAB Series

Use with MAXI fuses up to 60 amps. Safe/easy replacement for hard to replace fusible link wire. Perfect for high amp audio applications. Interlocking block feature permits two pole position installation. Contains screw terminals. Optional dust cover available (Part Number: 01520007Z).

Download additional technical information at: littelfuse.com/MAB



PART NUMBERS			DETAILS	AMPERAGE	COVER
BULK	BOXED	CARDED			
0MAB0001S	0MAB0001F	0MAB0001XP	High Amp	up to 60A	Sold Separately

In-Line Blade Fuse Holders

MINI® In-line Blade Fuse Holders with Covers - FHM Series

Use with MINI 2 to 20A fuses. Supplied with two 4" wire leads of 14 gauge black wire. Includes protective cover for harsh environment. Heavy Duty MINI® In-line Blade Fuse Holders with Covers - FHM Series: Use with MINI 25 and 30A fuses. Supplied with two 4" wire leads of 12 gauge orange wire. Includes protective cover for harsh environment.

Download additional technical information at: littelfuse.com/FHM

PART NUMBERS			DETAILS	AMPERAGE	INGRESS	WIRE DETAILS			COVER
BULK 20-PC	CARDED					GAUGE	LENGTH	COLOR	
	MATERIAL NUMBER	CATALOG NUMBER							
0FHM0001SXJ	0FHM0001XP	FHM1BP	Standard	2-20A	IP67	14	4"	Black	•
0FHM0002SXJ	0FHM0002XP	FHM2BP	Heavy Duty	25-30A	IP67	12	4"	Orange	•
-	0FHM0001XPGLO	20-1020	Smart Glow	-	IP67	-	4"	Red	•

* Please inquire about additional bulk quantities

ATO® In-line Blade Fuse Holders with Covers - FHAC Series

Use with ATO 1 to 20A fuses. Supplied with two 3.5" wire leads of 16 gauge black wire. Includes protective cover for harsh environment. Heavy Duty ATO® In-line Blade Fuse Holders with Covers - FHAC Series: Use with ATO 25 and 30A fuses for air conditioner or other heavy duty applications. Supplied with two 3.5" wire leads of 12 gauge orange wire. Includes protective cover for harsh environment.

Download additional technical information at: littelfuse.com/FHAC

PART NUMBERS			DETAILS	AMPERAGE	INGRESS	WIRE DETAILS			COVER
BULK 20-PC	CARDED					GAUGE	LENGTH	COLOR	
	MATERIAL NUMBER	CATALOG NUMBER							
FHAC0001SXJ	FHAC0001XP	FHAC1BP	Standard	2-20A	IP67	16	3.5"	Black	•
FHAC0002SXJ	FHAC0002XP	FHAC2BP	Heavy Duty	25-30A	IP67	12	3.5"	Orange	•

* Please inquire about additional bulk quantities

ATO® In-line Blade Fuse Holders - FHA Series

Use with ATO 1 to 20A fuses. Supplied with two 4" wire leads of 16 gauge black wire. Heavy Duty ATO® In-line Blade Fuse Holders - FHA Series: Use with ATO 25 and 30A fuses for air conditioner or other heavy duty applications. Supplied with two 4" wire leads of 12 gauge orange wire. FHA30BP includes 30 amp fuse.

Download additional technical information at: littelfuse.com/FHA

PART NUMBERS					DETAILS	AMPERAGE	WIRE DETAILS		
BULK 20-PC	CARDED		BOXED				GAUGE	LENGTH	COLOR
	MATERIAL NUMBER	CATALOG NUMBER	MATERIAL NUMBER	CATALOG NUMBER					
0FHA0001SXJ	0FHA0001XP	FHA1BP	-	-	Standard	1-20A	16	4"	Black
0FHA0002SXJ	0FHA0002XP	FHA2BP	-	-	Heavy Duty	25-30A	12	4"	Orange
-	0FHA0030XP	FHA30BP	0FHA0030Z	FHA30	Heavy Duty with 30A Fuse	25-30A	12	4"	Orange
-	0FHA0001XPGLO	20-1010	-	-	Smart Glow	-	-	4"	Red

* Please inquire about additional bulk quantities

ATO® In-line Panel Mount Blade Fuse Holders - AFH and 155 Series

Versatile fuse holder for in-line or snap mount panel applications. Interlock body design allows fuse holders to be snapped together. Supplied with 8" loop of 14 gauge black wire. Heavy Duty ATO® In-line Panel Mount Blade Fuse Holders - AFH and 155 Series: Use with ATO 25 and 30A fuses. Supplied with 8" loop of 10 gauge orange wire.

Download additional technical information at: littelfuse.com/AFH

PART NUMBERS				DETAILS	AMPERAGE	WIRE DETAILS		
BOXED		CARDED				GAUGE	LENGTH	COLOR
MATERIAL NUMBER	CATALOG NUMBER	MATERIAL NUMBER	CATALOG NUMBER					
0AFH0001Z	AFH1	0AFH0001XP	AFH1BP	Standard	1-20A	14	8" loop	Black
-	-	0AFH0002XP	AFH2BP	Heavy Duty	25-30A	10	8" loop	Orange
01550300Z	155300	-	-	Standard	20A	14	8" loop	Black

* Please inquire about additional bulk quantities



SMART GLOW Fuses



SMART GLOW Fuses



JCASE & Glass Fuse Holders

2

JCASE® In-line Cartridge Fuse Holders - FHJC & FHJ Series

In-line fuse holders for JCASE fuses available with brackets covers or wire sizes 10AWG (up to 40A) or 8AWG (up to 60A). Additional information: littelfuse.com/FHJC



PART NUMBERS		DETAILS	AMPERAGE	INGRESS	WIRE DETAILS			BRACKET	COVER
BULK 250-PC	BULK 50-PC				GAUGE	LENGTH	COLOR		
FHJC1001G	–	Standard	up to 40A	IP67	10AWG	4"	Red	–	•
FHJC1002G	FHJC1002L	Heavy Duty	up to 60A	IP67	8AWG	4"	Red	–	•
FHJC2002G	FHJC2002L	Heavy Duty	up to 60A	IP67	8AWG	4"	Red	•	•
0FHJ1001G	–	Standard	up to 40A	–	10AWG	4"	Red	–	–
0FHJ1002G	–	Heavy Duty	up to 60A	–	8AWG	4"	Red	–	–
0FHJ2001G	–	Standard	up to 40A	–	10AWG	4"	Red	•	–
0FHJ2002G	–	Heavy Duty	up to 60A	–	8AWG	4"	Red	•	–

* Please inquire about additional bulk quantities

Glass Fuse In-line Twist-Lock Fuse Holders • FNY Series

Constructed of weather resistant nylon. Simple "twist-lock" allows easy fuse removal and replacement. Supplied with 8" loop of 14 gauge black wire and one spring. Use with Glass SFE 4, 6, 71/2, 9, 14, 20, AGA, AGC, AGW and AGX Fuses up to 20 amps. Additional information: littelfuse.com/FNY



CARDED PART NUMBERS		DETAILS	AMPERAGE	WIRE DETAILS		
MATERIAL	CATALOG			GAUGE	LENGTH	COLOR
0FNY0001XP	FNY1BP	Holder Only	up to 20A	14	8" loop	Black

* Please inquire about additional bulk quantities

Glass Fuse In-line Heavy Duty Fuse Holders • FNY Series

Spring loaded heavy duty glass fuse holder includes AGC 20A or 30A fuse for GM air conditioner, heater blower motors or other heavy duty applications. Supplied with two 4" wire leads of 12 gauge orange wire. FNY20BP includes 20A fuse, FNY30BP includes 30A fuse. Additional information: littelfuse.com/FNY



CARDED PART NUMBERS		DETAILS	AMPERAGE	WIRE DETAILS		
MATERIAL	CATALOG			GAUGE	LENGTH	COLOR
0FNY0020XP	FNY20BP	With 20A Fuse	20A	12	4"	Orange
0FNY0030XP	FNY30BP	With 30A Fuse	30A	12	4"	Orange

Glass Fuse In-line Bayonet Knob Fuse Holders • FHP Series

Constructed of tough black thermoset (UL94V0). Includes 3 springs for various fuse sizes and spring-locked, bayonet type knob. Supplied with 15" loop of 14 gauge red wire. Use with Glass SFE 71/2, 9, 14, 20, AGA, AGC, AGW and AGX Fuses up to 20 amps. Additional information: littelfuse.com/FHP



BOXED PART NUMBERS		DETAILS	AMPERAGE	WIRE DETAILS		
MATERIAL	CATALOG			GAUGE	LENGTH	COLOR
0FHP0001Z	FHP1	Holder Only	up to 20A	14	15" loop	Red

Glass Fuse In-line Fuse Holders

Holders accept SFE and AGC fuses through 30A. Supplied with wire loop which can be cut and spliced. Holder twist-locks the fuse in place. Available with the fuse. Additional information: littelfuse.com/3031



PART NUMBERS			DETAILS	AMPERAGE	WIRE DETAILS		
BULK	BOXED	RETAIL			GAUGE	LENGTH	COLOR
3031-0	3031-0-BX	3031-0-BP	Holder Only	up to 30A	14	8" loop	Black
3031-20	3031-20-BX	3031-20-BP	With 20A Fuse	20A	14	8" loop	Black
3031-30	3031-30-BX	–	With 30A Fuse	30A	14	8" loop	Black

3AG Shock-Safe Panel Mount Fuse Holders

Designed to eliminate the possibility of electrical shock, as defined in IEC standards 65 and 257. Shock-Safe fuse holders feature a low profile body, finger-grip knob and anti-tease feature that eliminates circuit interruption when knob is accidentally depressed.



CARDED MATERIAL NUMBER	VOLTAGE	AMPERAGE	TERMINALS
03453LF2XP	250V	20A	¼" straight NEMA/DIN quick connect

Add-A-Circuit® & Power Feed



ATO® Add-A-Circuit®

Allows easy installation of additional circuits without cutting or splicing. Turns one fuse slot into two while providing protection for both circuits. Maintains new car warranty. Use with ATO Fuses up to 10 amps. Carded Kit Part Numbers include ATO 3, 5, 7.5 and 10 amp fuses.

BULK PART NUMBERS		CARDED KIT PART NUMBERS	
MATERIAL NUMBER	CATALOG NUMBER	MATERIAL NUMBER	CATALOG NUMBER
0FHA0200Z	FHA200	0FHA0200ZP	FHA200BP



MINI® Add-A-Circuit®

Same as ATO Add-A-Circuit except for use with MINI Fuses up to 10 amps. Carded Kit Part Numbers include MINI 3, 5, 7.5 and 10 amp fuses.

BULK PART NUMBERS		CARDED KIT PART NUMBERS	
MATERIAL NUMBER	CATALOG NUMBER	MATERIAL NUMBER	CATALOG NUMBER
0FHM0200Z	FHM200	0FHM0200ZP	FHM200BP



LP MINI® Add-A-Circuit®

Same as ATO Add-A-Circuit except for use with LPMINI Fuses up to 10 amps. Carded Kit Part Numbers include LPMINI 3, 5, 7.5 and 10 amp fuses.

BULK PART NUMBERS	CARDED KIT PART NUMBERS
MATERIAL NUMBER	MATERIAL NUMBER
FHLM0200Z	FHLM0200ZPA



MICRO2® Add-A-Circuit®

Same as ATO Add-A-Circuit except for use with MICRO2 Fuses up to 10 amps. Carded Kit Part Numbers include MICRO2 3, 5, 7.5 and 10 amp fuses.

BULK PART NUMBERS	CARDED KIT PART NUMBERS
MATERIAL NUMBER	MATERIAL NUMBER
FHM20200Z	FHM20200ZPA



Battery Power Feed Kit

Attaches directly to battery terminal. Allows the addition of up to 3 circuits. Includes MINI fuse in-line fuse holder with protective cap. Also can be used as a frame ground. Constructed of durable brass for optimal conductivity..

CARDED PART NUMBERS	
MATERIAL NUMBER	CATALOG NUMBER
0BPF0001ZP	BPF1BP

Caution: Fusetaps are not a recommended alternative for adding circuits because they can stress 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.

Fuse Pullers and Battery Accessories

2

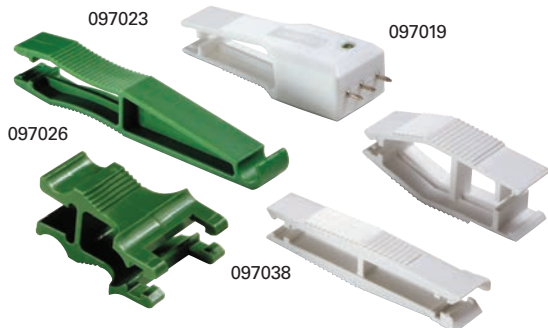


Fuse Tester and Puller

Conveniently and easily tests ATO and MINI blade fuses either in or out of the fuse block, with or without vehicle battery power. Indicator light on tester glows bright green when fuse is good. Fuse puller end allows for easy fuse removal and replacement. 24V maximum.

Fuse Pullers

Fuse puller allows for easy fuse removal and replacement.



BOXED PART NUMBERS		CARDED PART NUMBERS		DESCRIPTION
MATERIAL NUMBER	CATALOG NUMBER	MATERIAL NUMBER	CATALOG NUMBER	
00970019X	097019	00970019XP	097019BP	ATO & MINI Fuse Puller / Tester
-	097023	00970023XP	097023BP	Tri-Puller™ – Glass Fuses, Ceramic Type Fuses, ATO and MINI Blade Fuse Puller
-	097026	00970026XP	097026BP	MAXI Blade Fuse Puller
-	097038	00970038XPA	-	ATO and MINI Fuse Puller
-	-	00970053XP	-	JCASE Fuse Puller
-	-	00970025XPA	-	MICRO2 / MICRO3 Fuse Puller
-	-	00970054XPA	-	MCASE Fuse Puller



Anti-Theft Battery Master Switch

- Available in two versions, Fused and Detachable.
- Fused version maintains current to all electrical circuits such as the alarm, on-board computer, central locking system and radio memory presets.
- Detachable version features a special disconnect that allows the battery to easily be removed for anti-theft protection. Perfect for seasonal storage needs or easy off vehicle battery charging for Autos, Motorcycles, RV's, Boats, etc.
- Generate sales with the lowest cost anti-theft devices available on the market today.
- A simple turn of the knob isolates the battery and makes the vehicle unable to start.
- Makes anti-theft protection affordable when compared to expensive alarm systems.
- Eliminates complicated installation — no special electrical or mechanical expertise required.
- Fits all standard Top Mount Post batteries. Can be used with Side Mount Post batteries by using a Top Mount Adapter Post (not included).
- Works on 12 to 24 volt systems up to 135 amperes.

CARDED PART NUMBERS		DESCRIPTION
MATERIAL NUMBER	CATALOG NUMBER	
0ATD0300ZBP	ATD300BP	Anti-theft Battery Master Switch – Fused

Multiple Position Fuse Blocks

BMZ Series • Battery Mount ZCASE® Fuse Holder

The BMZ fuse holder allows you to mount fusing directly to a post style battery without any special hardware. The isolated bolts eliminate the traditional need for nylon nuts and fuses can be assembled using standard M8 threaded hardware.

- Max Continuous Current: 275A
- Mounts directly to a post style of battery
- Available in 2 or 3 outputs
- Fusing directly at the battery allows location of larger power distribution boxes outside of the engine compartment while assuring protection of the supply cable

Download additional technical information at: littelfuse.com/BMZ



PART NUMBERS			POSITIONS	DESCRIPTION
BULK	BOXED	RETAIL		
882-854	–	–	2	2 Way Bus Bar & Stud Assembly
882-853	–	–	3	3 Way Bus Bar & Stud Assembly
876-199	–	–	–	Battery Terminal
901-325	–	–	–	Red Rubber 2 or 3 Way Cover
–	0FHZ00854-BX	–	2	Kit: 882-854 (2 way bus bar), 876-199 (terminal mount), 901-325 (red cover), 1X M8 Bolt, 3x M8 Nuts
–	0FHZ00853-BX	–	3	Kit: 882-853 (3 way bus bar), 876-199 (terminal mount), 901-325 (red cover), 3x M8 Nuts

SMZ Series • Stud Mount ZCASE® Fuse Holder

The SMZ stud mount fuse holder allows you to mount fusing directly to a M8 or M10 stud on applications such as batteries, alternators, battery switches or electrical relays.

- Mounts directly to a M10 or M8 stud
- Uses high amp ZCASE fuses, (M8) available 40-600A
- Tin plate coating on the busbar ensures corrosion resistance

Download additional technical information at: littelfuse.com/SMZ



PART NUMBERS	MOUNTING SIZE	FUSE TERMINAL NUT (M8)	DETAILS
0FHZ0201Z	M8 (8.5mm)	•	901-525 Fuse/Stud Cover
0FHZ0202Z	M8 (8.5mm)	•	901-524 Fuse Cover
0FHZ0211Z	M10 (10.5mm)	•	901-525 Fuse/Stud Cover
0FHZ0212Z	M10 (10.5mm)	•	901-524 Fuse Cover

ATO® Fuse Blocks with Common Feed

Multi-position black thermoplastic fuse block for ATO fuses. Contacts are recessed for additional safety and a recession in the center of the block accepts a label.

- Common hot feed – stud terminal is 10-32 with hexnut, flat washer and lockwasher
- Blade terminals are .25" wide (6.4mm)
- Four .218" (5.5mm) diameter mounting holes take #10 screws
- Size: 3.375" wide x .812" high (85.7 x 20.6mm)
- Mounting holes 1.06" (27.0mm) on centers, widthwise.

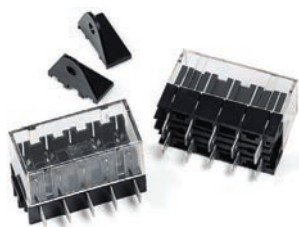
Download additional technical information at: littelfuse.com/Fuseholders



PART NUMBERS			VOLTAGE	MAX CONTINUOUS CURRENT	MAX FUSE RATING PER CIRCUIT	FUSE POSITIONS	DIMENSIONS	MOUNTING HOLES ON CENTERS
BULK	BOXED	RETAIL						
46377-6	46377-6-BX	46377-6-BP	12-24V DC	150A	25A	6	2.47"L x 3.375"W x .812"H	.625"
46377-8	46377-8-BX	–	12-24V DC	150A	25A	8	3.09"L x 3.375"W x .812"H	1.25"
46377-10	46377-10-BX	–	12-24V DC	150A	25A	10	3.72"L x 3.375"W x .812"H	1.875"
46377-12	46377-12-BX	–	12-24V DC	150A	25A	12	4.34"L x 3.375"W x .812"H	2.5"
46377-18	46377-18-BX	–	12-24V DC	150A	25A	18	6.22"L x 3.375"W x .812"H	4.375"
46379-6	46379-6-BX	–	12-24V DC	150A	25A	6	–	–
46379-8	46379-8-BX	–	12-24V DC	150A	25A	8	–	–

Multiple Position Glass Fuse Blocks

2



ATO® Fuse Blocks with 1/4" Quick Connect Terminals

Use with ATO fuses up to 15 amps. Available in 5 pole unit with removable clear protective cover. Available in side or bottom positioned 1/4" Q.C. terminal configurations. Unit with bottom Q.C. terminals includes detachable side mounting brackets.

Download additional technical information at: littelfuse.com/Fuseholders

PART NUMBERS			DETAILS	AMPERAGE	PROTECTIVE COVER
BULK 10-PC	CARDED	CATALOG NUMBER			
03500417TXN	03500417XP	350417BP	1/4" Q.C. side position	2-20A	•
03500418TXN	03500418XP	350418BP	1/4" Q.C. bottom position (includes mounting brackets)	25-30A	•

* Please inquire about additional bulk quantities

Omni-Blok® Fuse Blocks with 1/4" Quick Connect Terminals

For 1/4" x 1-1/4" glass fuses. Available in one through twelve pole units. Units may be easily broken apart as needed to obtain the desired number of poles. Rated at 20A, 300 V

Download additional technical information at: littelfuse.com/Fuseholders



PART NUMBERS		POLES	VOLTAGE	AMP
BULK	CARDED			
03540801ZXGY	—	1	300V	20A
03540802ZXGY	00MN0002XP	2	300V	20A
03540804ZXGY	00MN0004XP	4	300V	20A

Common Hot Feed Glass Fuse Block

Fiber base with 11/64" (4.4mm) diameter mounting holes. Solid brass busbar, phosphor-bronze fuse clips. Brass terminals and screws.

Download additional technical information at: littelfuse.com/Fuseholders

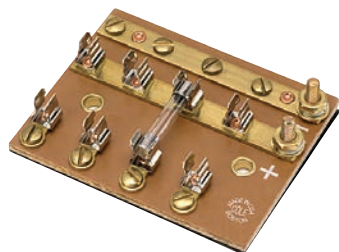


PART NUMBERS			MAX FUSE RATING PER CIRCUIT	FUZE POSITIONS	DIMENSIONS	BUSBAR
BULK	BOXED	RETAIL				
M-414-01	—	M-414-01-BP	20A	4	2.75"L x 2.24"W x .625"H	•
M-415-01	—	—	20A	5	3.50"L x 2.24"W x .625"H	•
M-641-01	M-641-01-BX	M-641-01-BP	20A	6	4.25"L x 2.24"W x .625"H	•
M-643-01	M-643-01-BX	M-643-01-BP	20A	8	5.75"L x 2.24"W x .625"H	•
—	—	—	20A	12	8.75"L x 2.24"W x .625"H	•

M-674 • Combination Glass Fuse Block and Terminal Block

Combination Fuse Block & Terminal Block For SFE 20A or 3AG (AGC) fuses. Common hot feed to four independently-fused circuits, and common ground strip for four circuits. Solid brass busbars, terminals and terminal screws. Nickel-plated phosphor-bronze fuse clips. Two eyelet holes for mounting with 3/16" (4.8mm) screws, 2.25" (57.2mm) on centers.

Download additional technical information at: littelfuse.com/Fuseholders

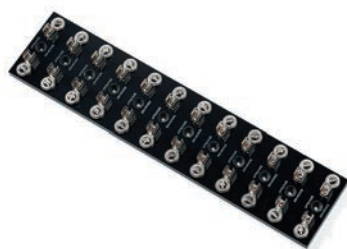


PART NUMBERS			MAX FUSE RATING PER CIRCUIT	FUZE POSITIONS	DIMENSIONS	BUSBAR
BULK	BOXED	RETAIL				
—	M-674-BX	M-674-BP	20A	4	3.50"L x 2.75"W x .781"H	•

Laminated Base Fuse Block with Screw Terminals

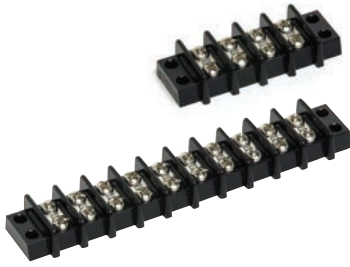
For 1/4" x 1-1/4" glass fuses. Available in one through twelve pole units. Rated at 20A, 300V.

Download additional technical information at: littelfuse.com/Fuseholders



PART NUMBERS					PART NUMBERS				
BULK	BOXED	POLES	VOLTAGE	AMP	BULK	BOXED	POLES	VOLTAGE	AMP
03560001Z	—	1	300V	20A	03560009Z	—	9	300V	20A
03560002Z	—	2	300V	20A	03560010Z	—	10	300V	20A
03560004Z	—	4	300V	20A	03560011Z	—	11	300V	20A
03560006Z	—	6	300V	20A	03560012Z	—	12	300V	20A

Terminal Blocks



M-42X Individual Feed Screw Terminal Blocks

Moisture-resistant molded Bakelite insulator base with barrier strips. Nickel-plated brass terminal links and 8-32 binding head screws.

Download additional technical information at: littelfuse.com/TerminalBlocks

PART NUMBERS			NUMBER OF POSITIONS	TERMINALS		DIMENSIONS	MOUNTING HOLE DIMENSION
BULK	BOXED	RETAIL		MATERIAL	SIZE		
M-426	M-426-BX	M-426-BP	4	Nickel-Plated Brass	8-32	3.22"L x 1.31"W x .67"H	2.81" (71.4mm) on centers
M-427	M-427-BX	M-427-BP	6	Nickel-Plated Brass	8-32	4.33"L x 1.31"W x .67"H	3.93" (99.9mm) on centers
M-428	M-428-BX	M-428-BP	8	Nickel-Plated Brass	8-32	5.46"L x 1.31"W x .67"H	5.06" (128.5mm) on centers
M-429	M-429-BX	M-429-BP	10	Nickel-Plated Brass	8-32	6.59"L x 1.31"W x .67"H	6.19" (157.2mm) on centers
M-456	M-456-BX	-	14	Nickel-Plated Brass	8-32	8.84"L x 1.31"W x .67"H	8.44" (214.4mm) on centers



4721 Individual Feed Stud Terminal Blocks

Moisture-repellent phenolic insulator base with brass stud terminals. Hexnuts, flat washers and lockwashers included. Two mounting holes accept 3/16" (4.8mm) screws (not included).

Download additional technical information at: littelfuse.com/TerminalBlocks

PART NUMBERS			NUMBER OF POSITIONS	TERMINALS		DIMENSIONS	MOUNTING HOLE DIMENSION
BULK	BOXED	RETAIL		MATERIAL	SIZE		
4721-P2	4721-P2-BX	-	2	Brass	10-32	2.68"L x .5/8"W x 27/32"H	1.87" (47.5mm) on centers
4721-P3	4721-P3-BX	-	3	Brass	10-32	3.25"L x .5/8"W x 27/32"H	2.50" (63.5mm) on centers
4721-P4	4721-P4-BX	-	4	Brass	10-32	3.87"L x .5/8"W x 27/32"H	3.12" (79.2mm) on centers
4721-P5	4721-P5-BX	-	5	Brass	10-32	4.5"L x .5/8"W x 27/32"H	3.75" (95.3mm) on centers
4721-P6	4721-P6-BX	-	6	Brass	10-32	5.12"L x .5/8"W x 27/32"H	4.38" (111.3mm) on centers
4721-P8	4721-P8-BX	-	8	Brass	10-32	6.37"L x .5/8"W x 27/32"H	5.62" (142.7mm) on centers
4721-P10	4721-P10-BX	-	10	Brass	10-32	7.62"L x .5/8"W x 27/32"H	6.87" (174.5mm) on centers
4721-P12	4721-P12-BX	-	12	Brass	10-32	8.87"L x .5/8"W x 27/32"H	8.12" (206.2mm) on centers
4721-P14	4721-P14-BX	-	14	Brass	10-32	10.12"L x .5/8"W x 27/32"H	9.37" (238.0mm) on centers



4758 & 4755 Individual Feed Stud Terminal Blocks

Moisture-repellent molded insulator base with barrier strips. Two mounting holes accept 1/4" (6.3mm) screws. Hardware sold separately.

Download additional technical information at: littelfuse.com/TerminalBlocks

PART NUMBERS			NUMBER OF POSITIONS	TERMINALS		DIMENSIONS	MOUNTING HOLE DIMENSION
BULK	BOXED	RETAIL		MATERIAL	SIZE		
4758	4758-BX	-	4	Steel	10-24	4.5"L x .5/8"W x 27/32"H	3.75" (95.3mm) on centers
4755	4755-BX	-	5	Steel	10-24	5.25"L x .5/8"W x 27/32"H	4.5" (114.3mm) on centers

Terminal Blocks

2



M-449 & M-448 Common Busbar Terminal Blocks

Moisture-resistant molded thermoplastic insulator base with solid brass busbar that safely carries up to 50A. Two 1/4-20 brass studs with hexnuts. 8-32 round head screws for attachment of wires. Two mounting holes accept No. 10 countersink flathead screws that are 5.19" (131.5mm) on center for 10-gang version, and 8.31 (211.07mm) on center for 20-gang versions.

Download additional technical information at: littelfuse.com/TerminalBlocks

PART NUMBERS			NUMBER OF POSITIONS	TERMINALS		DIMENSIONS	BUSBAR
BULK	BOXED	RETAIL		MATERIAL	SIZE		
M-449	M-449-BX	M-449-BP	10	Brass	8-32	5.75"L x 1.25"W x 1.031"H	•
M-448	M-448-BX	-	20	Brass	8-32	5.75"L x 1.25"W x 1.031"H	•
M-448-02	-	-	20	Tin-Plated Brass	8-32	8.875"L x 1.25"W x 1.031"H	•

46206-04 Common Busbar Terminal Blocks



Moisture-repellent thermoset plastic insulator base with 3/16" (4.76mm) diameter mounting holes. Eyelets are 3.125" (79.4mm) on centers.

Download additional technical information at: littelfuse.com/TerminalBlocks

PART NUMBERS			NUMBER OF POSITIONS	TERMINALS		DIMENSIONS	BUSBAR
BULK	BOXED	RETAIL		MATERIAL	SIZE		
46206-04	46206-04-BX	-	4	Brass	10-32	3 7/8"L x 5/8"W x 27/32"H	•

86099 Brass Busbars

Solid Brass busbar meant for mounting circuit protection including fuses and circuit breakers. Busbars tested to 70A with temperature rise no greater than 55°C.

Download additional technical information at: littelfuse.com/TerminalBlocks



PART NUMBERS			NUMBER OF POSITIONS	MATERIAL	DIMENSIONS	MOUNTING HOLE DIMENSION
BULK	BOXED	RETAIL				
-	86099-2-BX	-	2	Brass	1.53" long (38.9mm)	.910" (23.1mm) on centers, .21" (5.3mm) diameter.
86099-3	86099-3-BX	-	3	Brass	2.43" long (61.7mm)	
86099-4	86099-4-BX	-	4	Brass	3.34" long (84.8mm)	
86099-5	86099-5-BX	-	5	Brass	4.24" long (107.7mm)	

86126 Copper Busbars

Solid copper busbars meant for mounting circuit protection including fuses and circuit breakers.

Download additional technical information at: littelfuse.com/TerminalBlocks



PART NUMBERS			NUMBER OF POSITIONS	MATERIAL	DIMENSIONS	MOUNTING HOLE DIMENSION
BULK	BOXED	RETAIL				
86126-2	86126-2-BX	-	2	Copper	1.41" x .560" (35.8 x 14.2mm)	.910" (23.1mm) on centers
86126-4	86126-4-BX	-	4	Copper	3.23" x .560" (82.1 x 14.2mm)	2.73" (69.34mm) on centers
86126-6	86126-6-BX	-	6	Copper	5.05" x .560" (128.3 x 14.2mm)	4.55" (115.57mm) on centers
86126-8	86126-8-BX	-	8	Copper	6.87" x .560" (174.5 x 14.2mm)	6.37" (161.79mm) on centers
86126-12	86126-12-BX	-	12	Copper	10.51" x .560" (267.0 x 14.2mm)	10.01" (254.25mm) on centers

AFTERMARKET FUSE HOLDERS

COMPACT DESIGNS SAVE SPACE & REDUCE WIRE CONNECTIONS

SMZ SERIES STUD MOUNT ZCASE® FUSE HOLDER

The SMZ stud mount fuse holder allows you to mount fusing directly to a M8 or M10 stud on applications such as batteries, alternators, battery switches or electrical relays. The SMZ stud mount fuse holder features a compact design which saves space and eliminates the need to wire in a separate fuse holder or power distribution module.

Download additional technical information at: littelfuse.com/SMZ



Specifications

Voltage Rating:	80V DC or max rating of the fuse
Max Continuous Current:	400A
Available Fuse Rating:	40- 600A
Fuse Terminal Torque:	M8 Nut: 14 ± 2 Nm
Operating Temp:	-40° to 105° C

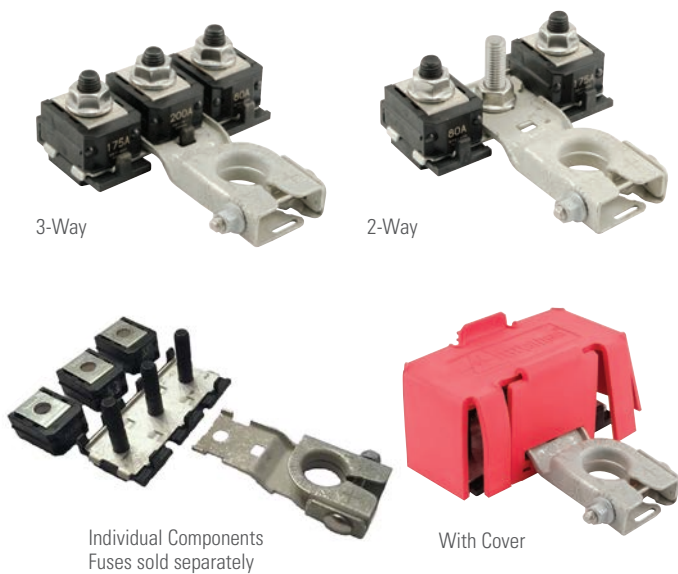
PART NUMBERS	DESCRIPTION
OFHZ0201Z	M8 SMZ Fuse Holder with Fuse and Stud Cover
OFHZ0202Z	M8 SMZ Fuse Holder with Fuse Cover
OFHZ0211Z	M10 SMZ Fuse Holder with Fuse and Stud Cover
OFHZ0212Z	M10 SMZ Fuse Holder with Fuse Cover



BMZ SERIES BATTERY MOUNT ZCASE® FUSE HOLDER KITS

The BMZ battery post mount fuse holder allows you to mount fusing directly to a post style battery terminal. The BMZ series accepts the Littelfuse proprietary ZCASE fuse that is available in 40-600A ratings with similar characteristics to the MEGA® fuse. The BMZ post mount fuse holder mounts directly to the battery without any need for additional mounting hardware and is available in 2 or 3-pole versions.

Download additional technical information at: littelfuse.com/BMZ



Specifications

Max Voltage Rating:	32V DC or max rating of the fuse
Max Continuous Current:	275A
Available Fuse Rating:	40- 600A
Fuse Terminal Torque:	M8 Nut: 14 ± 2 Nm
Battery Terminal Torque:	5.4 ± 0.9 Nm @ 540 RPM
Operating Temp:	-40° to 125° C

PART NUMBERS	DESCRIPTION
OFHZ00854-BX	Kit: 882-854 (2 way bus bar), 876-199 (terminal mount), 901-325 (red cover), 1X M8 Bolt, 3x M8 Nuts
OFHZ00853-BX	Kit: 882-853 (3 way bus bar), 876-199 (terminal mount), 901-325 (red cover), 3x M8 Nuts



Power Distribution Modules



Power Distribution Modules (PDMs) are devices that accept electrical power from one or more wires (inputs) and then distribute it to multiple cables (outputs). The PDMs also accept power protection and control devices from one or more fuse, circuit breaker, relay, diode, or even solid state and electronic circuitry and distribute to multiple outputs.

Blade or Bolt-Down Fuse?

DC (automotive) fuses are offered in two basic forms: Blade or Bolt Down.

Blade & Cartridge fuses can be hand inserted into a fuse holder. These fuses provide protection for several amperage ratings up to 70A. They are well suited to protect smaller to medium diameter wires that are usually some distance from the battery. Single blade fuse holders are often called 'In-Line' fuse holders as they are spliced into the wiring. Remember to place the fuse holder as close to the battery and as far away from the load as possible, so that it protects the wire from a short anywhere along its length. Any short between the power source and the fuse is not protected. Littelfuse blade fuses include: MICRO2®, MICRO3®, MINI®, LP MINI®, ATO®, MAXI, MCASE®, MCASE+®, JCASE® and LP JCASE®.

Bolt Down fuses need to be secured to the fuse holder with a screw or nut/bolt. These fuses provide protection from 30A to 600A. They are well suited to protect medium to large diameter wires that are usually closer to the battery. Ring terminals are crimped onto cables that are connected to these holders and spliced into the wiring. Remember to place the fuse holder as close to the battery and as far away from the load as possible, so that it protects the wire from a short anywhere along its length. Any short between the power source and the fuse is not protected which is why you should have master fusing as close the battery as possible. Littelfuse bolt-down fuses include: MIDI®, MEGA®, CF8 and ZCASE®.

Also, there are still a wide variety of applications that use glass tube fuses. These are typically lower current values and are becoming less popular for most automotive applications due to their size, form factors, and lack of color coding.



Hard-Wired Boxes

HWB Series - Compact Sealed Hard-Wired Boxes for 2.8mm Style Fuses & Relays

The HWB series hard-wired boxes are sealed units that accept any 2.8mm style fuses, relays, circuit breakers or diodes depending on which HWB model is selected. The HWB series is the perfect fit for accessory circuits and overflow circuits from your main power distribution module.

The series features durable construction, IP67 & IP69K ratings, compact sizes, gasket sealed covers and multiple mounting types. See chart below for specific details. The HWB series eliminates the use of internal bussing allowing the user or design engineer to customize the circuitry utilizing direct wire-to-component connections. TPAs (terminal position assurance locks) give secondary locking protection of the wire leads, which aid in prevention of leads from being pulled out and snap onto the back after wires are installed.

- Accepts a combination of 2.8mm components – MINI® fuses, relays, circuit breakers or diodes. (sold separately)
- Cover tethers available to prevent loss of component during service.
- HWB60 series are modular and can be dovetailed together to expand circuit protection capacity. They can also be interlocked to other PDMs and fuse holders (FLEC Flexible Electrical Control Center and MEGA/MIDI Flex fuse holder)
- HWB60 and HWB18 series uses Delphi Metri-Pack 280 terminals, cable seals and cavity plugs. Download datasheet for specific details.
- HWB12 and HWB6 series are available with black or clear covers for easy component status identification.
- HWB12 and HWB6 series use TYCO MCP terminals, cable seals and cavity plugs. See datasheet for specific details.

Datasheet, 3D Models, 2D Prints and additional information: littelfuse.com/HWB



SERIES	PART NUMBERS		MAX CONTINUOUS CURRENT	MAX FUSE RATING PER CIRCUIT	NUMBER OF CAVITIES	MOUNTING TORQUE	INGRESS PROTECTION	DIMENSIONS	TERMINALS (sold separately)		KIT CONTENTS				
	BULK	RETAIL							DELPHI METRI-PACK	TYCO MCP	COVER	AssureLatch	GASKET	TPAs	BRACKET
HWB60-AL	PDM71001ZXM	–	250A	30A	60	4-6 Nm	IP67 & IP69K	113x52x82mm	•		Black	•	•	•	
HWB60-AL	PDM71003ZXM	–	250A	30A	60	4-6 Nm	IP67 & IP69K	113x52x82mm	•		Black	•	•	•	
HWB60	PDM21001LXM	–	250A	30A	60	4-6 Nm	IP67 & IP69K	113x52x82mm	•		Black		•	•	
HWB18	PDM31001ZXM	–	200A	30A	18	5.5-6.5 Nm	IP67 & IP69K	60x38x74mm	•		Black		•	•	•
HWB18	PDM31002ZXM	–	200A	30A	18	5.5-6.5 Nm	IP67 & IP69K	60x38x74mm	•		Black		•	•	
HWB12	PDM33001ZXM	–	130A	30A	12	5.5-6.5 Nm	IP67 & IP69K	83x70x44mm		•	Clear	•	•	•	
HWB12	PDM33003ZXM	–	130A	30A	12	5.5-6.5 Nm	IP67 & IP69K	83x70x44mm		•	Clear	•	•	•	•
HWB12	PDM33004ZXM	–	130A	30A	12	5.5-6.5 Nm	IP67 & IP69K	83x70x44mm			Black				•
HWB6	PDM32001ZXM	–	68A	30A	6	5.5-6.5 Nm	IP67 & IP69K	71x64x36mm		•	Clear	•	•	•	
HWB6	PDM32003ZXM	–	68A	30A	6	5.5-6.5 Nm	IP67 & IP69K	71x64x36mm		•	Clear	•	•	•	•
HWB6	PDM32004ZXM	–	68A	30A	6	5.5-6.5 Nm	IP67 & IP69K	71x64x36mm			Black				•

Power Distribution Modules

HWA20 Series • ATO® Fuse Hard-Wired Box



Compact hard-wired fuse holder holds up to 10 ATO blade fuses, with a combined amperage up to 210A. Perfect for accessory circuits, overflow circuits from main power distribution module, or as a main module on smaller vehicles.

- Without internal bussing: enables the user to customize the circuitry.
- Dovetail slots on the sides of the box interlock with other units.
- Easy to connect wires plug into the back of the unit using industry-standard Tyco sealed power terminals.

Download additional technical information at: littelfuse.com/HWA20

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SERIES	PART NUMBERS		MAX CONTINUOUS CURRENT	MAX FUSE RATING PER CIRCUIT	FUSE POSITIONS	MOUNTING TORQUE	INGRESS PROTECTION	DIMENSIONS	CONTENTS		
	BULK	RETAIL							COVER	GASKET	TPAs
HWA20	PDM61001ZXM	–	210A	40A	10	4-6 Nm	IP67	161x40x52mm	•	•	•



MTR Series • (2+2) MINI® & JCASE® Fuse Hard-Wired Box

Sealed low to medium current fuse holder houses two JCASE cartridge fuses and two MINI bladed fuses. Holder is gasket-sealed to protect fuses from moisture and contamination. Fuses are internally bussed to a single main power stud – one input powers four fuse circuits. Utilizes the MINI fuse for fast-acting 2-30A circuit protection and the JCASE cartridge style fuse with increased time delay for 20-60A medium current circuits. Output circuits are designed for use with Delphi terminals.

Download additional technical information at: littelfuse.com/MTR

SERIES	PART NUMBERS		MAX CONTINUOUS CURRENT	MAX INPUT CURRENT	FUSE POSITIONS	MOUNTING TORQUE	INGRESS PROTECTION	DIMENSIONS	CONTENTS		
	BULK	RETAIL							COVER	GASKET	TPAs
MTR	BPDMA104HXF1	–	100A	2-60A	4	6-8 Nm	IP67	86x34x77mm	•	•	•



LTX Series • 4 position MEGA® & 2 position MIDI® Fuse Box

The LTX Power Distribution Module is a high current sealed primary fuse box that can be placed in the battery box, or near the battery box to fuse major feeder cables. Featuring bussed input to all 6 MEGA and 2 MIDI fuses. All bolt down connections are made inside of the seals which enhances the environmental protection of the box.

Download additional technical information at: littelfuse.com/LTX

SERIES	PART NUMBERS		VOLTAGE	MAX CONTINUOUS CURRENT	FUSE POSITIONS	MOUNTING TORQUE	INGRESS PROTECTION	DIMENSIONS	CONTENTS		
	BULK	RETAIL							COVER	GASKET	BUSBAR
LTX	07981002ZXS	–	6-32V DC	240A	6	10-12 Nm	IP66	231x312x60mm	•	•	•



SL Series • 350A • Power Distribution Module

The SL Series provides main battery shutdown from a remote location, optional manual control knob switches high-amp circuits, three switched 30A to 200A MIDI® fuse location, four unswitched 24-hour 1A-20A ATO® fuse locations and eliminates significant factory or field interconnections

- Littelfuse Remote Control Switch: 880092

Download additional technical information at: littelfuse.com/SL

SERIES	PART NUMBERS		MAX CONTINUOUS CURRENT	MAX FUSE RATING PER CIRCUIT		FUSE POSITIONS	TERMINAL STUD TORQUE	INGRESS PROTECTION	DIMENSIONS	CONTENTS	
	BULK	RETAIL		MIDI	ATO					COVER	GASKET
SL	880076	–	350A	170A	30A	7	20 Nm	IP59K	152x102x45mm	•	

Power Distribution Modules



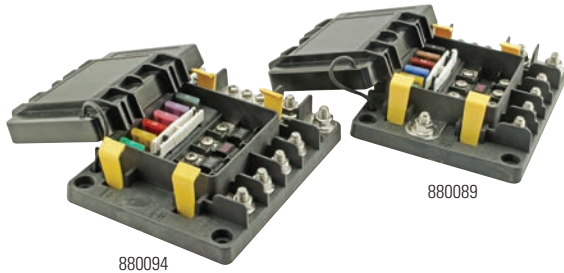
MDB Series • MIDI® Fuse Distribution Box

Internally bussed, water-proof and dust-proof fuse holder developed for high current loads, and harsh conditions. The unit is well-suited for near-the-battery applications and can be mounted in exposed locations to fit your design. Available for 2 or 3 MIDI fuses and includes the cover seal and M5 thread bolts for a fuse installation. Kits include seals, plugs and caps. Fuses are sold separately.

- AssureLatch™ Technology keeps the cover securely in place while allowing for fast service.
- Included tether connects cover to base preventing misplacement.
- The module is internally bussed allowing for high current power distribution.
- Sealed to IP67 and IP69K for maximum flexibility in mounting location.

Download additional technical information at: littelfuse.com/MDB

PART NUMBERS		POLES	VOLTAGE	MAX CONTINUOUS CURRENT	MAX FUSE RATING PER CIRCUIT	MOUNTING TORQUE	INGRESS PROTECTION	DIMENSIONS	CONTENTS	
BULK	BOXED									
04980932ZXT	–	2	6-58V DC	200A	200A	6-8 Nm	IP67 & IP69K	131x68x38mm	2-pole box with busbar and nuts	
04980933ZXT	–	3	6-58V DC	200A	200A	6-8 Nm	IP67 & IP69K	131x68x38mm	3-pole fuse box with busbar and nuts	
–	04980932.X	2	6-58V DC	200A	200A	6-8 Nm	IP67 & IP69K	131x68x38mm	Input: 1x 25 mm² cap 1x 25 mm² seal	Output: 2x 6-10 mm² seal 3x 10-16 mm² seal 1x plug & 1x 6-16 mm² cap
–	04980933.X	3	6-58V DC	200A	200A	6-8 Nm	IP67 & IP69K	131x68x38mm		



LX Series • 200A & 600A • ATO® & MIDI® Fuse PDM

Protect high and low-amp circuits while providing a collection point for ground returns, and eliminate battery box clutter and damage to battery terminals when adding circuits. Combines an ignition protected fuse block with screw termination. Holds four 30A-200A MIDI fuses and six 1A-30A ATO fuse locations. Negative bus provides common location for ground returns.

- The 880094 provides one fused input feeding the unit and other fuses while, the 880089 has an unfused input feeding the fuse circuits.

Download additional technical information at: littelfuse.com/LX

SERIES	PART NUMBERS		MAX CONT. CURRENT	MAX FUSE RATING PER CIRCUIT		FUSE POSITIONS	TERMINAL STUD TORQUE	INGRESS PROTECTION	DIMENSIONS	CONTENTS		
	BULK			MIDI	ATO					COVER	GASKET	PULLER
LX	880089		600A	170A	30A	10	20 Nm	IP59K	165x127x51mm	•	•	•
	880094		200A	170A	30A	10	20 Nm	IP59K	165x127x51mm	•	•	•



XT Series • 350A • ATO® & MIDI® Fuse PDM

The XT combines an ATO fuse block that has integrated sealed plug outputs (FCI APEX 2.8mm female 4-way connector p/n 54200409) and a MIDI fuse block that consolidates up to seven circuits from 1–200A. Three 30–200A MIDI fuse locations are ideal for high-amp circuits and four 1–40A ATO fuse locations for low-amp circuits. Tin-plated copper busbar and stainless steel studs and hardware provides superior corrosion resistance.

Download additional technical information at: littelfuse.com/XT

SERIES	PART NUMBERS		MAX CONTINUOUS CURRENT	MAX FUSE RATING PER CIRCUIT		FUSE POSITIONS	TERMINAL STUD TORQUE	INGRESS PROTECTION	DIMENSIONS	CONTENTS	
	BULK			MIDI	ATO					COVER	GASKET
XT	880073		350A	170A	30A	7	20 Nm	IP59K	152x102x45mm	•	•

Power Distribution Modules



FLEC® Series • Configurable Flexible Electrical Center

The Flexible Electrical Center (FLEC) is a power distribution module for the commercial vehicle market. It accommodates circuit protection components in a compact, sealed footprint. The PCB accepts active and passive devices. Part number below is a standard market version but FLEC is configurable to your custom electrical schematic and can be programmed to create a simple "plug-and-play" system.

- High component density maximizes available space and limits the number of additional units required.
- The versatile nature of the FLEC unit means it can accept a large number of component types.
- Rugged and sealed, the unit boasts an IP67 rating which allows it to be mounted in locations susceptible to moisture and dirt without any adverse effects

Download additional technical information at: littelfuse.com/FLEC

SERIES	PART NUMBER	DESCRIPTION	VOLTAGE	MAX LOAD	MAX FUSE RATING	FUSE CAPACITY	RELAY CAPACITY	INGRESS PROTECTION	OUTPUT CONNECTORS
FLEC	FLEC3000Z-0	With MINI Fuses & Relays	12-24V DC	300A	30A	28	18	IP67	Delphi GT
FLEC	FLEC3000Z-0U	No Fuses or Relays	12-24V DC	300A	30A	28	18	IP67	Delphi GT



MiniFlec Series • 150A • Connectorized Power Distribution Module

The standard MiniFlec is a compact, front access, internally bussed, connectorized, sealed power distribution module, suitable for mounting in rugged commercial vehicle applications. An internally mounted Printed Circuit Board (PCB) allows bussed connections to a large number of devices.

- Designed for panel mounting (rear fed connectors). Base compression limiters prevent over-torquing when unit is mounted
- Tethered cover securely latches to base, with positive AssureLatch yellow latches

Download additional technical information at: littelfuse.com/MINIFLEC

SERIES	PART NUMBERS	MAX LOAD	FUSE RATING RANGE	INPUT STUD	MOUNTING TORQUE	INGRESS PROTECTION	DIMENSIONS	RELAY CAPACITY
	BULK							
MINIFLEC	LFMX0007Z-01	150A	MINI® Fuse: 2-30A MCASE+® Fuse: 15-60A	M8	12-15Nm	IEC 529 IP67/69K	157mm x 96mm x 126mm	3 Form C 280 Series Micro Relays, 3 Form A Ultra Micro Relays, 1 ISO Micro Relay



EPC Series • 200A • Connectorized Power Distribution Module

The standard EPC is an internally bussed, connectorized, sealed power distribution module, suitable for mounting in rugged commercial vehicle applications. The EPC is a product that has dense concentration of high power circuits and accepts plug devices like automotive fuses, diodes and relays to protect and control complex electrical systems. An internally mounted Printed Circuit Board (PCB) allows bussed connections to a large number of devices.

Download additional technical information at: littelfuse.com/EPC

SERIES	PART NUMBERS	MAX LOAD	FUSE RATING RANGE	MOUNTING TORQUE	INGRESS PROTECTION	DIMENSIONS	RELAY CAPACITY
	BULK						
EPC	LFMX0006Z-01	200A	5 to 30A	6 - 8 Nm	IP67 / IP69K	179mm x 155mm x 69 mm	Tailor to application - Up to 3 Form C 280 and 6 Form A 280 Relays



FHZ Series • 400A • Power Distribution Module

The 5 Stud ZCASE Fuse Holder uses a single power input (usually with a ZCASE shunt) and a common busbar to feed up to 4 additional ZCASE fused circuits. Freely interchangeable ZCASE fuse ratings; configurable stud size (M6, M8, or M10); and available 2-, 3-, 4-, or 5-position busbars allow for a wide range of possible configurations.

Download additional technical information at: littelfuse.com/5StudZCASE

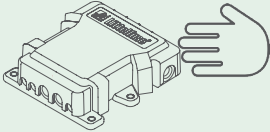
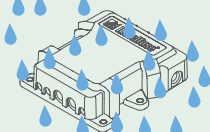
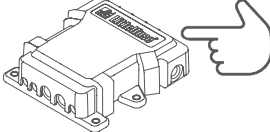
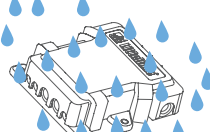
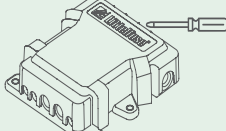

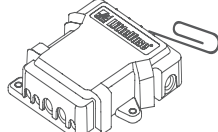

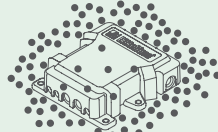
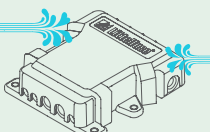
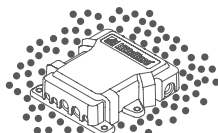
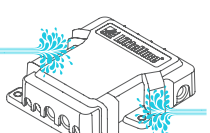
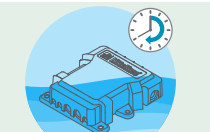
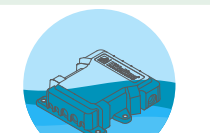

SERIES	PART NUMBER	DESCRIPTION	AMPERAGE	MAX FUSE RATING	FULL ASSEMBLY	CONTACT TEMP	DIMENSIONS
FHZ	0FHZ0001Z	Assembly with Bolts and Bus Bar	400A	40-600A		-40° to 105° C	217mm x 86mm x 59mm
FHZ	0FHZ0002Z	Full Assembly with M10 Input			•		
FHZ	0FHZ0003Z	Box Only for Configuration					
FHZ	0FHZ0005Z	Full Assembly with M8 Input			•		

Ingress Protection Explained

Harsh Environments and Ingress Protection Ratings

Environmental factors play a huge role in a product's ability to do its job and survive the lifetime of the equipment. Ingress Protection, or IP, indicates the degree of protection of a power distribution module. IP ratings are a measure of how resistant a part is to environmental contaminants such as debris, dust, and water. IP rating selections should be based on where the PDM will be mounted and what type of environment the equipment will be used in.

The numbers following IP represent levels of sealing and can range from no sealing (IP00) to protection against dust and continuous immersion in water (IP68). The table below provides a description of the protection at each level.

1st Digit - SOLID Degree of protection against solid objects	2nd Digit - LIQUID Degree of protection against water
 <p>1 Protected against a solid object greater than 50mm</p>	 <p>1 Protected against vertically falling water drops</p>
 <p>2 Protected against a solid object greater than 12.5mm</p>	 <p>2 Protected against vertical water drops when enclosure tilted up to 15 degree angle</p>
 <p>3 Protected against a solid object greater than 2.5mm</p>	 <p>3 Protected against spraying water from up to a 60 degree angle</p>
 <p>4 Protected against a solid object greater than 1.0mm</p>	 <p>4 Protected against splashing water</p>
 <p>5 Dust Protected. Prevents ingress of dust sufficient to cause harm</p>	 <p>5 Protected against water jets</p>
 <p>6 Dust tight. No ingress of dust.</p>	 <p>6 Protected against powerful water jets</p>
<p>Example</p> <p>IP67</p> <p>Dust tight. No ingress of dust. Protected against effects of temporary submersion in water.</p>	 <p>7 Protected against the effects of temporary immersion in water between 15cm and 1m for 30 minutes</p>
	 <p>8 Protected against the effects of continuous immersion in water under conditions agreed between manufacturer and user</p>
	 <p>9K Protected against close-range high pressure, high temperature spray downs</p>