



**PROTECT  
CONTROL  
SENSE**



# New product introduction **MEGA+ RIVET**

PVB Protection, TM  
11<sup>th</sup> April 2024 – Rev. L

 **Littelfuse®**  
Expertise Applied | Answers Delivered

# MEGA+ RIVET Series

Bolt-down fuse – Rated 32 V



## OVERVIEW



[MEGA Plus Rivet Series - High Current Fuses](#)

The **MEGA+® RIVET** fuse is designed for high current circuit protection and provides time delay characteristics.

Available in different mounting configurations, the **MEGA+® RIVET** fuse covers a wide range of rating (80 A up to 500 A) with the same terminal thickness of 0.8 mm.

The four metal rivets improve the mechanical resistance to stress, tightening torques and forces generated by eventual short-circuits, making this new bolt-down fuse extremely robust.

High contrast OCR white marking is ideal for camera reading in the assembly lines.

The **MEGA+® RIVET** Fuse is ideal for battery and alternator protection application and other heavy gauge cables requiring ultra-high current protection.

# MEGA+ RIVET Series

Bolt-down fuse – Rated 32 V



## GENERAL SPECIFICATIONS

<b>Interrupting Rating:</b>	2000A @32VDC
<b>Voltage Rating:</b>	32VDC
<b>Operating Temperature Range:</b>	-40 °C up to +125 °C
<b>Housing Material:</b>	PET-GF30FR
<b>Flammability acc. UL94:</b>	V0
<b>Terminal Material:</b>	Copper alloy
<b>Terminal Plating:</b>	Tin
<b>Typical Weight per fuse:</b>	12 g
<b>M6 Mounting Torque:</b>	8-14 Nm - recommended range value
<b>M8 Mounting Torque:</b>	12-18 Nm - recommended range value (25 Nm max. allowed)
<b>Refer to:</b>	ISO 8820-5
<b>Fuse rating:</b>	80 A – 500 A



# MEGA+ RIVET Series

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## FEATURES & BENEFITS

- ISO-compliant OCR-A Font (high contrast)
- Tin plated Terminals
- High torque withstand ability (up to 25 Nm)
- Housing Material acc. UL94 V0
- Terminal thickness of 0.8 mm over all ratings (80A up to 500A)
- Laser marked date code
- Variant range:
  - 2-Holes (M6/ M8)
  - 1-Hole (M6/M8)
  - No-holes (clinch version)



2-Holes M6/M8



1-Hole M6/M8



No-Holes

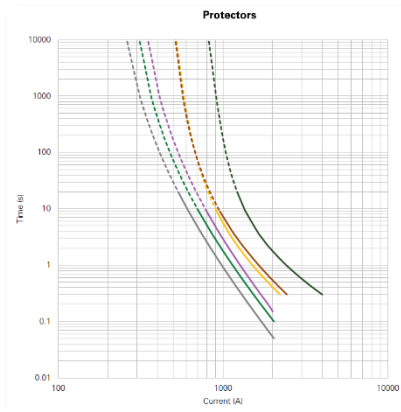
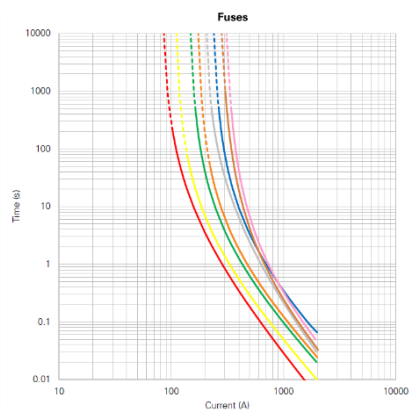
# MEGA+ RIVET Series

Bolt-down fuse – Rated 32 V



## PERFORMANCES – OPERATING TIMES

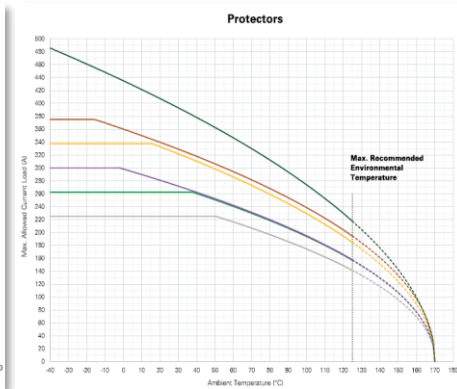
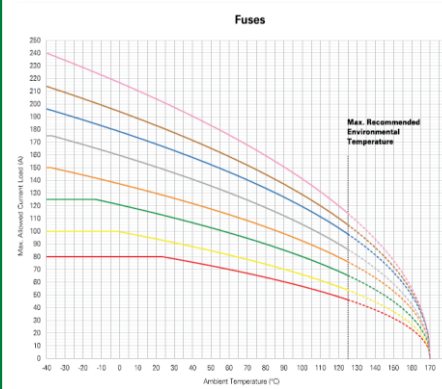
MEGA+ RIVET cover all the operating times according ISO 8820-5



- 80 A
- 100 A
- 125 A
- 150 A
- 175 A
- 200 A
- 225 A
- 250 A
- 300 A
- 350 A
- 400 A
- 450 A
- 500 A

% of Rating	Opening Time Min. / Max. (s)		
	80 A - 250 A	300 A	350 A - 500 A
75	- / -	14400 / -	14400 / -
100	14400 / -	- / -	- / -
135	120 / 1800	- / -	- / -
150	20 / 450	- / -	- / -
200	1 / 15	1 / 15	1 / 15
350	0.3 / 5	0.5 / 5	0.5 / 5
500	- / -	0.1 / 2	0.1 / 2
600	0.1 / 1	0.1 / 1	- / -

## PERFORMANCES – DERATING



	Max. allowed current load (A) at ambient temperature based on typical derating						
	-40 °C	0 °C	25 °C	65 °C	85 °C	110 °C	125 °C
80 A	80	80	80	68	62	53	46
100 A	100	100	94	80	72	61	54
125 A	125	121	114	97	88	75	65
150 A	150	137	130	111	101	86	76
175 A	175	160	151	127	115	98	86
200 A	196	178	168	143	130	111	98
225 A	214	194	183	155	141	120	105
250 A	240	217	204	172	155	131	114
300 A	225	225	225	212	191	162	141
350 A	263	263	263	235	213	180	157
400 A	300	300	300	237	214	181	158
450 A	338	338	333	280	252	213	185
500 A	375	360	340	288	261	222	194

- 80 A
- 100 A
- 125 A
- 150 A
- 175 A
- 200 A
- 225 A
- 250 A
- 300 A
- 350 A
- 400 A
- 450 A
- 500 A

Product in development  
Final values for voltage drop, resistance, melting I<sup>2</sup>t, T/C curves and derating curves, will be generated from PV tests data.

# MEGA+ RIVET Series

Bolt-down fuse – Rated 32 V



## COMPARISON WITH EXISTING PRODUCTS

### MEGA® (.ZXEH & .ZXH)

[MEGA® 32V - Littelfuse](#)

- Fuse rating NOT in OCR-A font (ISO color coding)
- Series name (MEGA) hot stamped
- Voltage rating (engraved)
- Littelfuse brand name (hot stamped)
- Date code
- Metal rivets assembly technology
- Different terminal thicknesses between ratings (1.02 mm and 1.8 mm)
- High tightening torque withstand ability (up to 25 Nm)
- Series ID (engraved)
- Patent number (engraved)
- No plating



### MEGA+ (.UXP)

[MEGA+® Fuse Rated 32V - Littelfuse](#)

- Fuse rating in OCR-A font (ISO color coding)
- Series name (MEGA+) laser marked
- Voltage rating (laser marked)
- Littelfuse logo (laser marked)
- Date code (laser marked)
- Ultrasonic welding assembly technology
- Different terminal thicknesses between ratings (0.8 mm and 1 mm)
- High tightening torque withstand ability (up to 25 Nm)
- Tin plated



### **NEW MARKET PRODUCT:** MEGA+ RIVET (.UXR)

[MEGA Plus Rivet Series - High Current Fuses](#)

- Fuse rating and series name (MEGA) in OCR-A font (ISO color coding), on both sides
- Voltage rating (engraved)
- Littelfuse logo (engraved)
- Date code (laser marked)
- Metal rivets assembly technology
- Same terminal thickness across all fuse ratings (thk 0.8 mm)
- High tightening torque withstand ability (up to 25 Nm)
- Tin plated



# MEGA+ RIVET Series

Bolt-down fuse – Rated 32 V



## COMPARISON WITH EXISTING PRODUCTS - DERATING

### MEGA® (.ZXEH & .ZXH)

[MEGA® 32V - Littelfuse](#)

Max. allowed current load (A) at ambient temperature (typical derating)							
	-40 °C	0 °C	20 °C	65 °C	85 °C	110 °C	125 °C
40A	36	33	31	26	23	20	17
60A	50	45	43	36	32	27	24
80A	80	77	73	61	56	47	41
100A	100	97	91	76	69	58	51
125A	125	123	116	98	89	76	66
150A	150	143	135	114	103	87	76
175A	175	158	149	125	113	95	83
200A	195	176	166	140	127	107	94
225A	205	186	175	148	135	115	100
250A	243	220	207	175	158	134	117
300A	225	225	225	205	185	156	136
350A	263	263	263	232	210	177	154
400A	300	300	284	240	217	184	160
450A	338	320	302	257	234	200	176
500A	375	359	338	285	258	218	190

### MEGA+ (.UXP)

[MEGA+® Fuse Rated 32V - Littelfuse](#)

MEGA+ has equal or slightly better Derating values compared to MEGA "REGULAR"

Max. Allowed Current Load (A) at Ambient Temperature based on Typical Derating							
	-40°C	0°C	20°C	65°C	85°C	110°C	125°C

80A	80	80	80	68	62	53	46
100A	100	100	94	80	72	61	54
125A	125	121	114	97	88	75	65
150A	150	137	130	111	101	86	76
175A	175	160	151	127	115	98	86
200A	196	178	168	143	130	111	98
225A	214	194	183	155	141	120	105
250A	240	217	204	172	155	131	114
300A	225	225	225	212	191	162	141
350A	263	263	263	235	213	180	157
400A	300	298	281	237	214	181	158
450A	338	338	333	280	252	213	185
500A	375	360	340	288	261	222	194

### NEW MARKET PRODUCT: MEGA+ RIVET (.UXR)

[MEGA Plus Rivet Series - High Current Fuses](#)

Same Derating values of MEGA+ including protectors with element thickness of 0.8 mm!

Max. Allowed Current Load (A) at Ambient Temperature based on Typical Derating							
	-40°C	0°C	20°C	65°C	85°C	110°C	125°C

80A	80	80	80	68	62	53	46
100A	100	100	94	80	72	61	54
125A	125	121	114	97	88	75	65
150A	150	137	130	111	101	86	76
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200A	196	178	168	143	130	111	98
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Product in development

Final values for voltage drop, resistance, melting  $I_t$ , T/C curves and derating curves, will be generated from PV tests data.

# MEGA+ RIVET Series

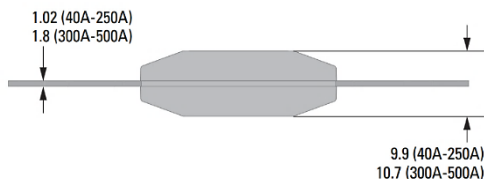
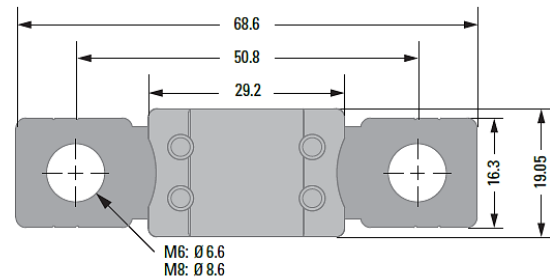
Bolt-down fuse – Rated 32 V



## COMPARISON WITH EXISTING PRODUCTS - DIMENSIONS

### MEGA® (.ZXEH & .ZXH)

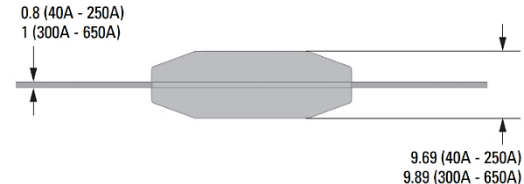
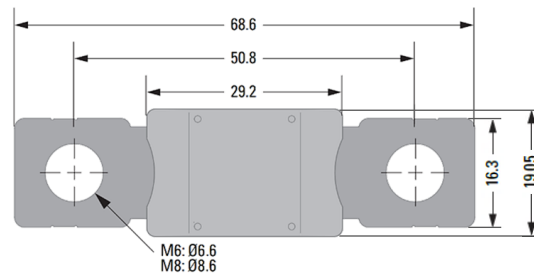
[MEGA® 32V - Littelfuse](#)



### MEGA+ (.UXP)

[MEGA+® Fuse Rated 32V - Littelfuse](#)

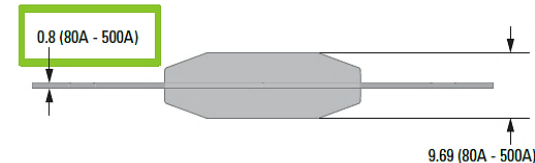
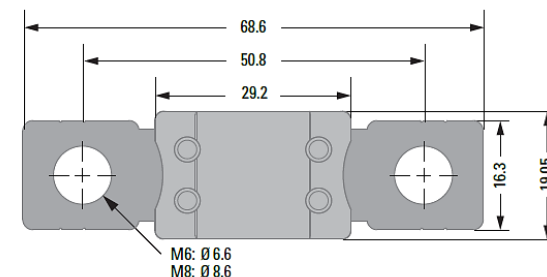
Thinner metal terminals compared to MEGA "REGULAR"



### NEW MARKET PRODUCT: MEGA+ RIVET (.UXR)

[MEGA Plus Rivet Series - High Current Fuses](#)

Same overall dimensions than MEGA "REGULAR" and MEGA+, but **same terminals thickness across all ratings**





# MEGA+ RIVET Series

Bolt-down fuse – Rated 32 V



PROTECT

## MARKINGS

### FUSE RATING & MEGA SERIES NAME

OCR-A font,  
high contrast stamped marking  
on both sides of the fuse  
(color coding according ISO)

### DATE CODE

(Laser marked)

### VOLTAGE RATING

(Engraved)



### LF Logo

(Engraved)



# MEGA+ RIVET Series

## Bolt-down fuse – Rated 32 V



### DATASHEET

MEGA Plus Rivet Series - High Current Fuses

Fuse Datasheet

**MEGA+ RIVET Series**  
 Bolt-down Fuses – Rated 32 V DC

REHS



**Description**

The MEGA+ RIVET fuse is designed for high current circuit protection and provides time delay characteristics. Available in different mounting configurations, the MEGA+ RIVET fuse covers a wide range of rating (80 A up to 500 A) with the same terminal thickness of 0.8 mm.

The four metal rivets improve the mechanical resistance to stress, tightening torques and forces generated by eventual short-circuits, making this new bolt-down fuse extremely robust. High contrast OCR marking (color coding according ISO) is ideal for camera reading in the assembly lines.

The MEGA+ RIVET Fuse is ideal for battery and alternator protection application and other heavy gauge cables requiring ultra-high current protection.

**Features & Benefits**

- High tightening torque (up to 25 Nm for M8 version)
- High-contrast colored OCR marking easily readable by camera and naked eye
- Terminals in tin plated copper alloy
- Housing in PEI GF30FR (UL 94 Flammability rating -V0)
- Refers to ISO 8820-5

**Applications**

- Cars / SUVs
- Trucks
- Offroad vehicles
- Buses
- Watercraft as approved by LitchiFuse®

**Specifications**

<b>Voltage Rating:</b>	32 V DC
<b>Interrupting Rating:</b>	2000 A @ 32 V DC
<b>Recommended Environmental Temperature:</b>	-40 °C to +125 °C
<b>Terminals Material:</b>	Tin-plated copper alloy
<b>Housing Material:</b>	PEI GF30FR (UL 94 Flammability rating of V0)
<b>Typical Weight per Fuse:</b>	12.0 g
<b>Mounting Torque MB:</b>	8 - 14 Nm (Recommended range value)
<b>Mounting Torque MB:</b>	12 - 18 Nm (Recommended range value)
<b>Mounting Torque MB:</b>	25 Nm max. allowed
<b>Refer to:</b>	ISO 8820-5

**Additional Information**

Resources

Samples

Fuse Datasheet

**MEGA+ RIVET Series**  
 Bolt-down Fuses – Rated 32 V DC

Fuse Datasheet

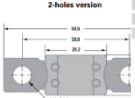
**Ordering Information**

Part Number	Current Rating
0280LX120(24)	80 A - 300
0280LX150	80 A - 300
0280LX200(24)	80 A - 300
0280LX250	80 A - 300
0280LX300	80 A - 300


**Dimensions**

Dimensions in mm. Please refer to the outline drawing.

**2-holes version**



MB 250  
MB 250



0.8 (0.031)

**atings**

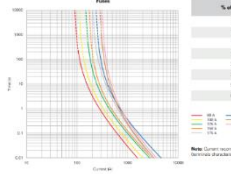
Part Number	Current Rating (A)
0280LX120	80
0280LX150	100
0280LX175	125
0280LX190	150
0280LX200	175
0280LX225	200
0280LX250	225
0280LX275	250
0280LX300	300
0280LX350	350
0280LX400	400
0280LX450	450
0280LX500	500

■ Steel Case Protector only. Precision development only.  
 ■ Refer to the dimensions for their corresponding models.  
 Note: The value "I<sub>sc</sub>" is an average value calculated from the I<sub>sc</sub>.

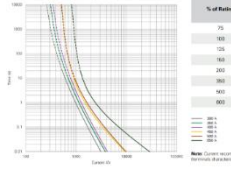
**MEGA+ RIVET Series**  
Bolt-down Fuses – Rated 32 V DC

**Time-Current Characteristic**

**Fuses**



**Protectors**

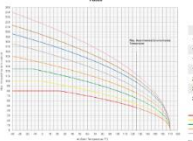


**MEGA+ RIVET Series**  
Bolt-down Fuses – Rated 32 V DC

**Typical Derating Curves**

Temperature security margin is 20%.  
 Please consult LitchiFuse® for Details Regarding Derating Test Set Up.

**Fuses**



**Protectors**

