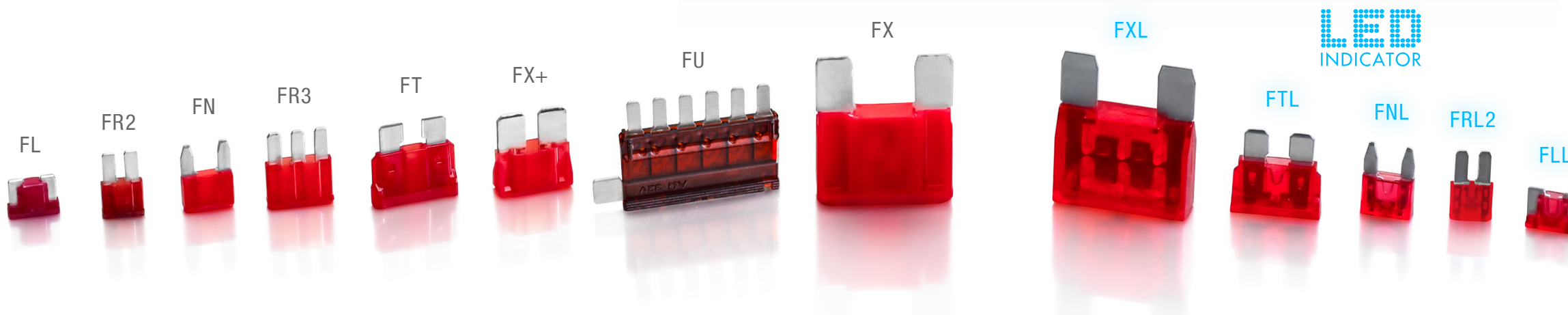


Blade fuses

At present, blade fuses are the global standard for automotive fuses and the most common fuse type used by automakers around the world. There are more electrical circuits on today's vehicles. More circuits necessitate more fuses. Since space is at a premium, new types of fuses like multi fuses and more compact types are needed.

- Compliant with ISO 8820, JASO and other standards
- Transparent or semi-transparent fuse body for better element visibility
- Self-extinguishing, colour coded body materials

Type	Series	Range	Number of ratings	Voltage
FL	Low profile MINI	2A - 30A	8	58V
FLL	GLOW Low profile MINI	5A - 30A	7	32V
FN	MINI	2A - 30A	10	32V
FNL	GLOW MINI	2A - 30A	10	32V
FR2	MICRO2	5A - 30A	7	32V
FRL2	GLOW MICRO2	5A - 30A	7	32V
FR3	MICRO3	5A - 15A	4	32V
FT	ATO	1A - 40A	13	32V
FTL	GLOW ATO	3A - 40A	11	32V
FE	MAXI+	20A - 60A	7	32V
FX	MAXI	20A - 100A	10	32V
FXL	GLOW MAXI	20A - 100A	8	32V
FU	MULTI	5A - 7,5A	2	32V



LED
INDICATOR

Cartridge fuses

Higher driving comfort led to the introduction of various new functions such as power windows, automatic wipers and air conditioning. A new type of fuses was needed - fuses that delayed the temperature rise accompanying high currents and therefore did not blow out immediately.

- Compliant with ISO 8820, JASO D612 and other standards
- Element visibility from top through transparent cover
- Self-extinguishing, colour coded body materials
- Safe and controlled time-delayed function

Type	Connector	Range	Number of ratings	Voltage
FJ07	Female terminal	20A - 100A	9	32V
FJ08	Female terminal	20A - 120A	9	32V
FJ09	Female terminal	45A - 75A	3	32V
FJ10	Female terminal	20A - 100A	8	32V
FJ11	Female terminal	20A - 120A	9	32V
FJ12	Bent male terminal	20A - 140A	10	32V
FJ13	Bent male terminal	20A - 140A	10	32V
FJ14	Straight male terminal	20A - 120A	9	32V
FJ15	Straight male terminal	20A - 120A	9	32V
FJ16	Female terminal	20A - 80A	8	32V
FJL6	GLOW, Female terminal	20A - 60A	5	32V
FJ17	Female terminal	20A - 60A	6	32V
FJL7	GLOW, Female terminal	20A - 60A	5	32V
FJ18	Female terminal	15A - 40A	5	32V
FJ19	Female terminal	15A - 40A	5	32V
FJ20	Female terminal	15A - 60A	7	32V

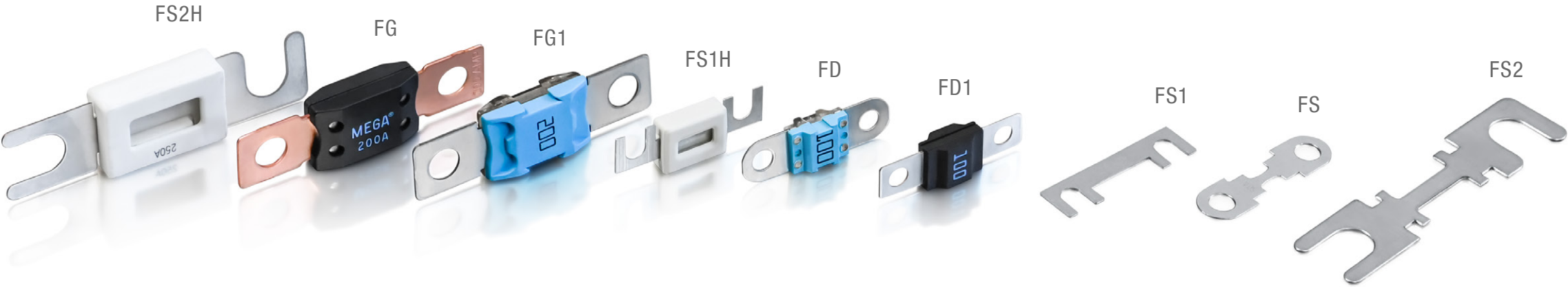


Bolt-down fuses

The Bolt down fuses are designed to protect heavy electrical cables that connect the battery and alternator. Designed to replace fusible links, which have less precise parameters. Typical applications can be found in diesel and battery powered vehicles.

- Compliant with ISO 8820, JASO D612 and other standards
- Constructions with / without the fuse body
- Fuses with connection holes for easy installation

Type	Series	Range	Number of ratings	Voltage
FD	MIDI	30A - 200A	10	32V
FD1	MIDI (black)	30A - 200A	11	32V
FG	MEGA (black)	40A - 500A	15	32V
FG1	MEGA	100A - 500A	10	32V
FS	STRIP	30A - 175A	8	32V
FS1	STRIP	25A - 150A	11	36V
FS1H	STRIP (housing)	30A - 150A	10	36V
FS2	STRIP	35A - 500A	22	48V
FS2H	STRIP (housing)	35A - 500A	22	48V



Special fuses

The range of special fuses includes in particular fuses for electric and hybrid cars and other innovative, space saving slow blow fuse series.

Type	Series	Range	Number of ratings	Voltage
FH1	EV (electric vehicles)	10A - 50A	4	500V
FH2	EV (electric vehicles)	60A - 125A	5	500V
FM	MAIN (battery clamp)	50A - 300A	9	58V

Classic fuses

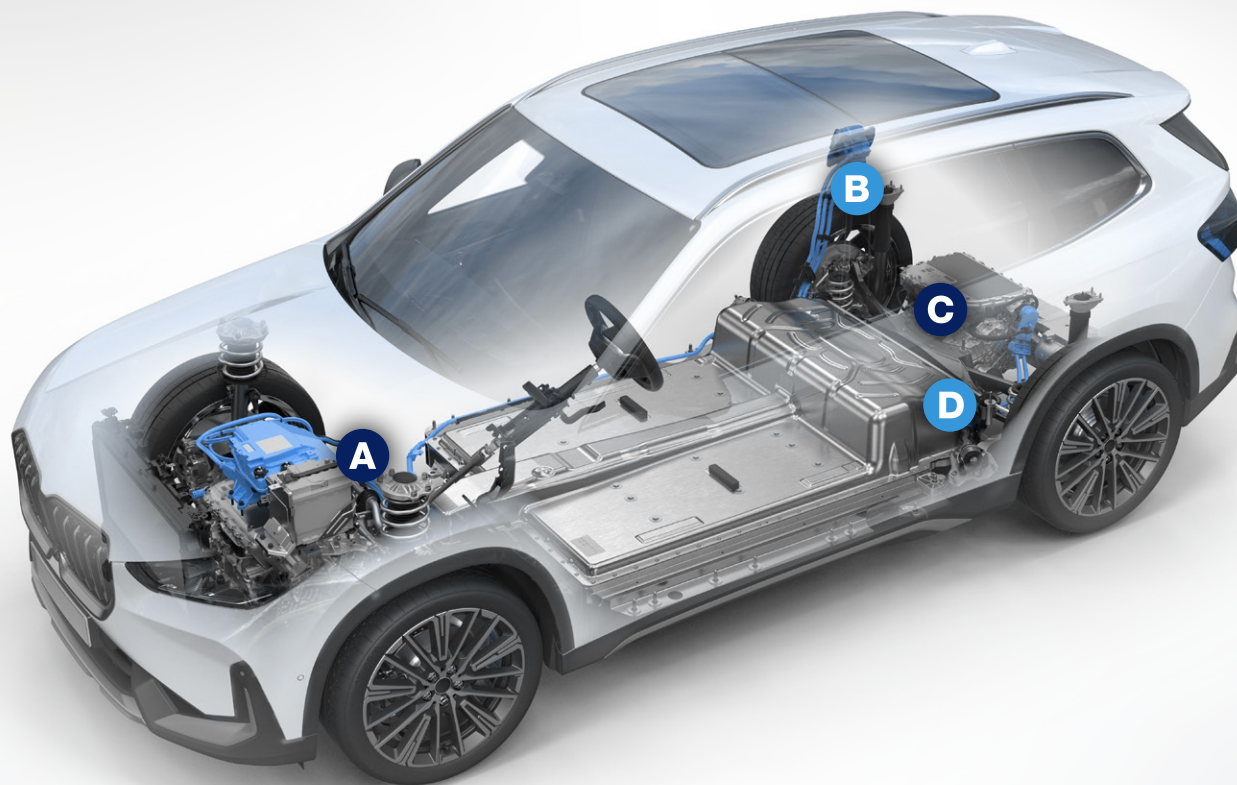
Continental fuses and glass fuses are used in old cars made in Europe and the USA. There are a few different styles with different diameters and lengths.

Type	Series	Range	Number of ratings	Voltage
FGL1	GLASS (fast acting)	0,5A - 10A	14	250V
FGL2	GLASS (time-lag)	0,5A - 10A	14	250V
FGL3	GLASS	5A - 35A	7	32/250V
FC	Continental (torpedo)	5A - 40A	5	32V



Fuses for **electric vehicles**

The high voltage fuses of the **FH series** for electric and hybrid cars have large rated voltage and rated current, excellent pre-arcing characteristics and high durability. The fuses can withstand large current fluctuations and are designed to be more resistant to vibration, heat and humidity.



- Bolt-down fuses with predictable time-delayed circuit protection in high-voltage, high-current automotive systems
- 500V_{DC} voltage rating, a 20kA at 500V_{DC} interrupting rating while operating over -40°C to +125°C temperature range
- The fuse body made of melamine-laminated fiberglass instead of the ceramic commonly used in standard fuses

FH1 series



FH2 series



A EV Junction fuse box - FH1, FH2

B On-board charger - FH1

C DCDC converter - FH1, FH2

D Battery distribution unit - FH2