

# Whatever drives the world, we have the right solution.

**EXIDE**<sup>®</sup>

**FULMEN**<sup>®</sup>

Batteries for all ranges.



**ENERGIZING  
A NEW  
WORLD**

Creating the future - the Exide way:



Innovation



Reliability



Sustainability



High Performance

[exidegroup.com](http://exidegroup.com)

**EXIDE**<sup>®</sup>  
TECHNOLOGIES

# The world is changing. That's why we are energizing a new world.

For Exide Technologies, now is the time to release new energies to move even further into the future. Our new claim **“Energizing a new world”** is designed to convey this aspiration. We want to bring change to life, face challenges together with our partners, and develop solutions for today and tomorrow. **Let's create the future – the Exide Technologies way:**



**Innovation** is the engine of technology leadership. That's why we are constantly evolving, remain self-critical, and continue to inspire our customers. We believe that great questions deserve great answers, which is what our innovative R&D is responsible for.



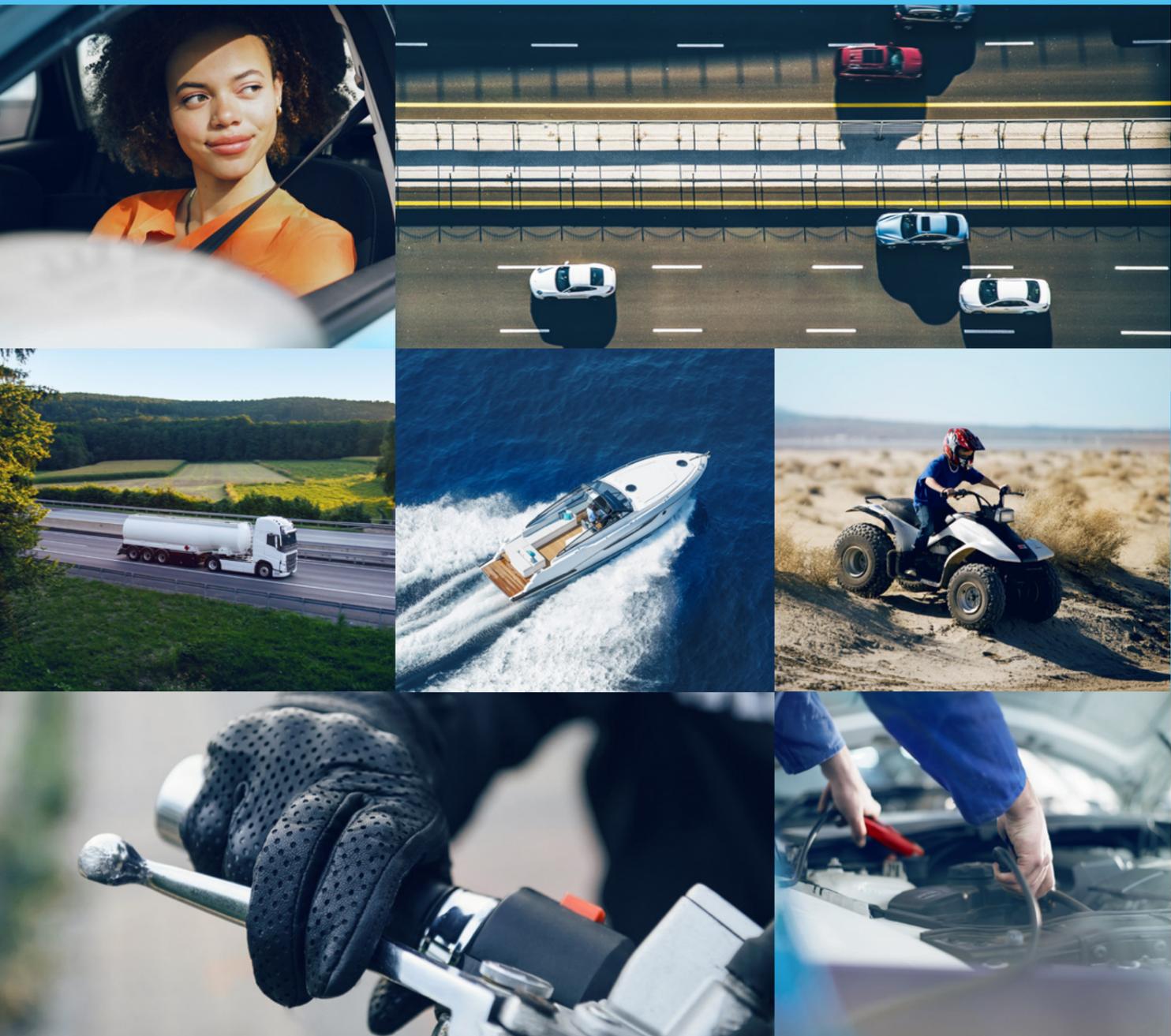
**Sustainability** is an important part of our responsibility. That's why we rely on renewable energy and intelligent recycling concepts.



**High performance** is the standard we set for our products and services. We want all our solutions to be best in class. This gives our customers the certainty of being optimally equipped for any task.



**Reliability** defines our business. This applies to our products as well as our innovative development work, services, and partnerships. We have a responsibility that doesn't stop with our products, but rather starts there.



# Full performance designed for full range.

Quality in quantity. That could be the guiding principle of Exide's engineers. Our demand to implement future-orientated, reliable technology moves the world a step closer to the future. Fulmen designs, manufactures, and markets batteries used across a wide range of vehicle types. From cars, trucks, boats, caravans and motorhomes, motorbikes, special vehicles, agri-

culture, and construction equipment. Right up to the mobility of the future, which is already getting the best possible drive: electrified vehicles – no matter which powertrain is installed, from micro-hybrid to full-electric. We provide a full range of OE-caliber products made to the highest quality standards in our world-class manufacturing facilities.



**Light vehicle range**  
page 4



**Commercial vehicle range**  
page 8

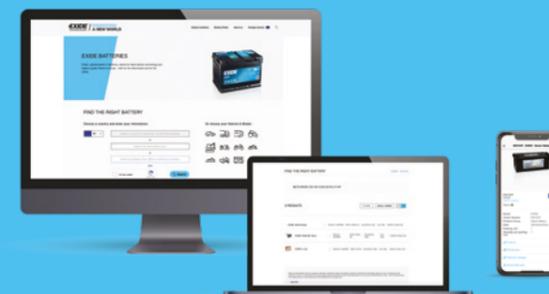


**Marine & Leisure range**  
page 14



**Motorbike and Sport range**  
page 18

# Moving is full of adventure. That's why we make battery selection a walk in the park.



**Click here to open  
the Battery Finder  
or scan the code.**



Each vehicle has different requirements for battery performance. The correct battery needs to be selected for the vehicle type and specific electrical needs.

We are happy to help with this – with our Online Battery Finder. After just a few clicks, a selection of suitable batteries is displayed. For further information just visit: [exidegroup.com/eu/en/battery-finder](http://exidegroup.com/eu/en/battery-finder)



# Ready when you are.

Times change constantly – and there is even one more important constant in our industry: Exide Technologies' aspiration for innovation and pushing things forward by providing one of the largest ranges of batteries offer. Based on the expertise in original equipment business, we are at the forefront to deliver the most advanced products, including a suite of professional smart tools and accessories that allow workshops to provide customers with the highest level of service.

As strategic partner of major car makers, Exide is aware of the irreversible trend in the evolution of alternative drive systems. Since the restriction of CO<sub>2</sub> emissions, registrations of electric vehicles break records each year. But all alternative powertrains will need the support of lead-acid batteries which means that a new generation is just underway. Furthermore, the rapidly increasing number of Start-Stop vehicles all need OE-compliant AGM and EFB batteries. The change from conventional powertrains to more advanced systems is experiencing a huge shift.

Start-Stop

Conventional



Feature	AGM	EFB	Formula Xtreme	Formula	Standard
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## Vehicle requirements

Start-Stop powertrain	 Recommended OE replacement	 Recommended OE replacement			
Non Start-Stop powertrain	 Unless specified by vehicle manufacturer	 Extra life for conventional vehicles	 Faster recharge for high equipment level	 Widest range to fit almost 100% of car parc	 Cost effective for older and more basic vehicles
Regenerative braking	■■■■■	■■■■■			
Intensive urban use	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■
Power-hungry equipment	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■

## Battery performance

CCA (cold cranking amperes)	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■
Charge acceptance*	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■
Cycle life	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■
Extra energy**	■■■■■	■■■■■	■■■■■	■■■■■	■■■■■

\* Charge acceptance (in A/Ah)

\*\* Energy throughput during lifetime



Spare ORIGINAL Part

### Fulmen AGM

- Top charge acceptance
- Higher energy throughput over battery lifespan due to new LifeGrid® technology
- Optimised for partial state of charge operations (PSoC)
- Ideal for large cars, SUVs, vans, and vehicles with Start-Stop and power-hungry electrical equipment
- Top-level safety features and absolutely no free acid
- Absorbent glass mat
- Regenerative braking
- Recombinant VRLA (valve regulated)
- Latest generation approved by car manufacturers
- Great car parc coverage from a limited number of SKUs
- Long shelf life
- Designed and built to endure continuous battery discharge and recharge of Start-Stop systems



carbon boost 2.0

Spare ORIGINAL Part

### Fulmen EFB

- High dynamic charge acceptance over life of battery
- Extra energy & extra life for vehicles with and without Start-Stop systems
- Optimised regenerative braking functionality in vehicles with Start-Stop systems – ensuring maximum fuel savings and less CO<sub>2</sub> emissions
- High-level safety features
- Optimal operation in engine compartment
- 3DX grid technology
- Latest generation approved by car manufacturers
- Great car parc coverage from a limited number of SKUs
- Long shelf life



carbon boost 2.0

Matching QUALITY Part

### Fulmen Formula Xtreme

- New recycled plastic components to reduce pollutant emissions
- Recharges up to 2 times faster compared to other conventional batteries
- Latest plate design for greater robustness and increased resistance to high temperatures
- Updated top label – 'CAUTION' label to prevent conventional batteries being installed in Start-Stop vehicles
- 30% extra starting power
- Ideal for highly equipped cars with powerful engines and demanding electrical needs
- Ideal for extreme weather and urban driving conditions
- 3DX grid technology
- Original equipment experience inside
- Meets OE requirements



### Fulmen Formula

- Updated top label – 'CAUTION' label to prevent conventional batteries being installed in Start-Stop vehicles
- 15% extra starting power
- All-round battery for standard use
- 3DX grid technology
- Original equipment experience inside



### Fulmen Standard

- Updated top label – 'CAUTION' label to prevent conventional batteries being installed in Start-Stop vehicles
- Economy solution
- Ideal for cars with basic power needs
- 3DX grid technology



### Start-Stop Auxiliary

- Auxiliary batteries power the electrical equipment in certain cars, as a complement to the main starter battery.
- Absorbent glass mat
  - High cycle life
  - Long shelf life
  - VRLA for leak-proof security
  - Original equipment experience inside

## Carbon Boost 2.0

Carbon Boost® is Exide's unique recipe for carbon additives on the negative plates that was first developed for Exide's Start-Stop OEM batteries. Continuous investments in R&D, tighter emissions regulations, and the increasing demands from the OEMs in regards to charge acceptance and energy availability have led to the development of the new Carbon Boost 2.0.

Carbon Boost 2.0 uses improved carbon additives, combining an optimized surface structure with significantly better conductivity. This enables a better current flow within the battery, resulting in unmatched charge acceptance. It also helps to dissolve the lead sulfate deposits that usually consolidate on a battery's discharged negative plates, reducing its ability to charge back efficiently.

Equipment ORIGINAL Manufacturer



Without Carbon Boost\*  
The plates are covered with sulfate



With Carbon Boost\*  
Sulfate is reduced due to Carbon Boost technology

## Fulmen light vehicle batteries type list

Code	Capacity Ah	CCA A (en)	Assembly drawing	L (mm)	W (mm)	H (mm)	Box type	Hold down
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### AGM

FK508	50	800		260	173	206	G34	B7
FK600	60	680		242	175	190	L02	B13
FK620	62	680		242	175	190	L02	B13
FK700	70	760		278	175	190	L03	B13
FK720	72	760		278	175	190	L03	B13
FK800	80	800		315	175	190	L04	B13
FK820	82	800		315	175	190	L04	B13
FK950	95	850		353	175	190	L05	B13
FK960	96	850		353	175	190	L05	B13
FK1050	105	950		392	175	190	L06	B13
FK1060	106	950		392	175	190	L06	B13

### EFB

FL550	55	540		207	175	190	L01	B13
FL600	60	640		242	175	190	L02	B13
FL604	60	520		230	173	222	D23	B0
FL605	60	520		230	173	222	D23	B0
FL652	65	650		278	175	175	LB3	B13
FL700	70	760		278	175	190	L03	B13
FL752	75	730		315	175	175	LB4	B13
FL754	75	750		270	173	222	D26	B0
FL800	80	800		315	175	190	L04	B13
FL954	95	800		306	173	222	D31	Korean B1
FL955	95	800		306	173	222	D31	Korean B1
FL1000	100	900		353	175	190	L05	B13
FL1050	105	950		392	175	190	L06	B13

Code	Capacity Ah	CCA A (en)	Assembly drawing	L (mm)	W (mm)	H (mm)	Box type	Hold down
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### Auxiliary

FK091	9	120		150	90	105	C54	B0
FK111	11	150		150	90	130	C55	B0
FK131	13	200		150	90	145	C56	B0
FK143	14	80		150	100	100	C76	B0
FK151	15	200		150	90	145	C56	B0

### Formula Xtreme

FA406	40	350		187	136	220	B19	B1
FA456	45	390		237	136	227	B24	B1
FA472	47	450		207	175	175	LB1	B13
FA530	53	540		207	175	190	L01	B13
FA601	60	600		242	175	190	L02	B13
FA612	61	600		242	175	175	LB2	B13
FA640	64	640		242	175	190	L02	B13
FA654	65	580		230	173	222	D23	Korean B1
FA680	68	650		277	175	190	S68	B13/Adapter
FA681	68	650		277	175	190	S68	B13/Adapter
FA722	72	720		278	175	175	LB3	B13
FA754	75	630		270	173	222	D26	Korean B1+B6
FA755	75	630		270	173	222	D26	Korean B1+B6
FA770	77	760		278	175	190	L03	B13
FA852	85	800		315	175	175	LB4	B13
FA900	90	720		315	175	190	L04	B13
FA954	95	800		306	173	222	D31	Korean B1
FA955	95	800		306	173	222	D31	Korean B1
FA1000	100	900		353	175	190	L05	B13
FA1050	105	850		315	175	205	LH4	B13

Code	Capacity Ah	CCA A (en)	Assembly drawing	L (mm)	W (mm)	H (mm)	Box type	Hold down
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### Formula

FB356	35	240		187	127	220	B19	B0
FB356A	35	240		187	136	220	B19	Korean B1 Long
FB357	35	240		187	127	220	B19	B0
FB440	44	400		175	175	190	L00	B13
FB442	44	420		207	175	175	LB1	B13
FB450	45	330		220	135	225	E02	B1
FB451	45	330		220	135	225	E02	B1
FB454	45	330		237	127	227	B24	B0
FB455	45	330		237	127	227	B24	B0
FB456	45	330		237	127	227	B24	B0
FB457	45	330		237	127	227	B24	B0
FB500	50	450		207	175	190	L01	B13
FB501	50	450		207	175	190	L01	B13
FB504	50	360		200	173	222	D20	Korean B1
FB558	55	620		230	180	186	575	B7
FB602	60	540		242	175	175	LB2	B13
FB604	60	480		230	173	222	D23	Korean B1
FB605	60	480		230	173	222	D23	Korean B1
FB620	62	540		242	175	190	L02	B13
FB621	62	540		242	175	190	L02	B13
FB704	70	540		270	173	222	D26	Korean B1+B6
FB705	70	540		270	173	222	D26	Korean B1+B6
FB708	70	740		260	180	186	G78	B7
FB712	71	670		278	175	175	LB3	B13

Code	Capacity Ah	CCA A (en)	Assembly drawing	L (mm)	W (mm)	H (mm)	Box type	Hold down
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### Formula

FB740	74	680		278	175	190	L03	B13
FB741	74	680		278	175	190	L03	B13
FB800	80	640		315	175	190	L04	B13
FB802	80	700		315	175	175	LB4	B13
FB852	85	760		353	175	175	LB5	B13
FB950	95	800		353	175	190	L05	B13
FB954	95	760		306	173	222	D31	Korean B1
FB955	95	760		306	173	222	D31	Korean B1
FB1000	100	720		315	175	205	LH4	B13
FB1100	110	850		392	175	190	L06	B13

### Standard

FC440	44	360		207	175	190	L01	B13
FC542	54	500		242	175	175	LB2	B13
FC550	55	460		242	175	190	L02	B13
FC652	65	540		278	175	175	LB3	B13
FC700	70	640		278	175	190	L03	B13
FC900	90	720		353	175	190	L05	B13
FC904	90	680		306	173	222	D31	Korean B1
FC905	90	680		306	173	222	D31	Korean B1

# The shortcut to success.

As a true expert in OE batteries, Exide helps you select the right battery. For fleet owners and installers alike, it is vital to make the right choice for the conditions of use. Three important criteria to consider in battery performance are: vibration resistance, cycling endurance, and cranking power.

## Range overview and features.



Performance	Strong PRO EFB+	Endurance PRO EFB	Endurance+ PRO GEL	Power PRO	Power PRO Agri & Construction	Start PRO
Vibration resistance	██████	██████	██████	██████	██████	██████
Cycling endurance	██████	██████	██████	██████	██████	██████
Cranking power	██████	██████	██████	██████	██████	██████
Charge acceptance	██████	██████	██████	██████	██████	██████
Maintenance	⊘	⊘	⊘	⊘	⊘	⊘

## Battery recommendation by vehicle type & application.

Type of vehicles	Application	Strong PRO EFB+	Endurance PRO EFB	Endurance+ PRO GEL	Power PRO	Power PRO Agri & Construction	Start PRO
Long-haul modern trucks, standard trucks	Rear-chassis installation/ rough terrain, high vibrations	⊙	⊙ <sup>1</sup>				
Express delivery (lifters), city bus	Power-hungry equipment, deep cycling applications	⊙		⊙ <sup>2</sup>			
Long-haul modern trucks	Overnight stop/ hotel function	⊙	⊙ <sup>1</sup>				
Standard trucks or vehicles with large/ highly compressed engines	Extreme climate and/or high CCA requirements				⊙		
Tractors, construction machines	Special vehicles					⊙ <sup>3</sup>	
Standard trucks	Standard requirements/ older vehicle						⊙ <sup>3</sup>

<sup>1</sup> Please top up the battery with distilled water if needed. The charging system must be compatible with Sb/Ca alloy. If these conditions are not met, choose the **Strong PRO EFB+**.

<sup>2</sup> Endurance+ PRO GEL requires charging voltage limitation to max 14.4V. If not compatible, choose the **Strong PRO EFB+**.

<sup>3</sup> Top up with distilled water when needed (depending on battery model).

## Three main factors when selecting the right battery.



For trucks with rear-chassis battery installations (e.g. Euro 5/Euro 6 trucks), robust and highly vibration-resistant batteries are mandatory to avoid breakdowns. Vibration resistance is also required for any vehicle operating on bad roads or rough terrain.

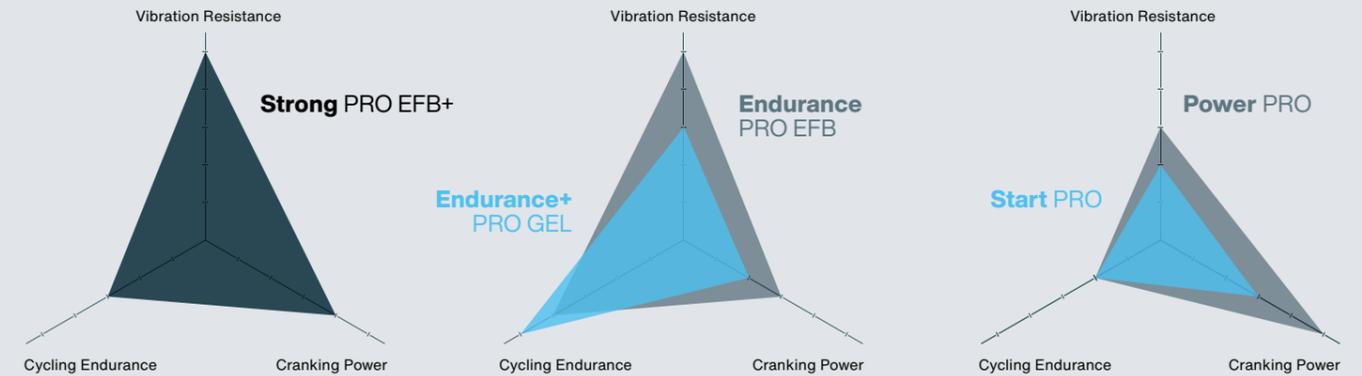


High cycling endurance is important in batteries for long-haul trucks with life on-board, commercial vehicles doing intensive urban deliveries, and any commercial vehicle with extensive energy requirements. This maximizes battery lifespan and ensures a safe battery start.



High cranking power allows for engine starts in cold climates and is particularly required by many agriculture and construction vehicles with reliable starting power needs.

## The perfect battery for every need.



## HVR® Technology

### New features in the robust battery design.

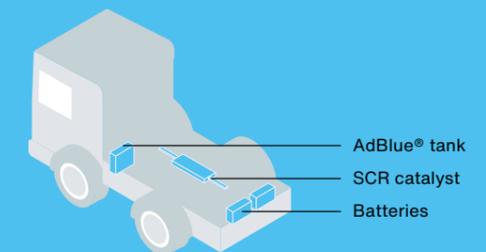
Several economic factors (higher fuel costs, higher road taxes, higher toll and parking charges, and higher charges to enter low emission zones) have led fleet owners to upgrade by purchasing new Euro 5 or Euro 6 vehicles, thus reducing particulate matter and NOx emissions. Many Euro 5/Euro 6 vehicles have a new chassis layout to integrate the Selective Catalytic Reduction (SCR) system and AdBlue tank, leading truck manufacturers to move batteries into the rear-chassis position.

### New challenges, new solution.

The lifespan of ordinary batteries is greatly reduced by higher vibrations at the rear of the chassis of the vehicle. Exide worked with truck manufacturers to develop the new High Vibration Resistant (HVR®) battery in the market, one of the first to meet the new V4\* vibration test.

HVR guarantees a longer battery lifespan even when installed in the rear chassis of a truck.

\* EN50342-1





### Strong PRO EFB+

- Better rechargeability and charge acceptance than previous generation Strong PRO
- Better control over gassing and stronger anti-stratification effect
- Extremely robust – with HVR® technology, meeting V4 requirements
- Up to 70% savings on TCO within 2 years period when compared with standard batteries
- Maximum starting reliability after overnight stay
- OE experience inside
- First class safety features
- Maintenance free - no topping up



### Endurance PRO EFB

- Extremely robust – now with HVR® technology, meeting V4 requirements
- Perfect for deep cycling applications: 2x more cycle life compared to standard truck battery (advanced SHD technology with glass matt layers pasted on active mass) allowing excellent cycling performance (up to 200 cycles at 50% DoD)
- Improved durability
- OE experience inside
- Urban delivery
- Low maintenance



### Endurance +PRO GEL

- Supports hotel function
- 2x lifetime compared to equivalent AGM and 10x lifetime compared to equivalent standard flooded batteries
- Highly vibration-resistant and valve-regulated technology for maximum safety
- 90% safe depth of discharge: perfect choice for all commercial vehicles
- Safe and reliable engine start at any time
- Reduces operating costs
- Maintenance free - no topping up



### Power PRO

- Superior cranking power (more plates and active material to maximize grid surface)
- Robust and reliable design with hot melt fixation of plate groups
- Superior power
- Designed for extreme climates
- OE experience inside
- Maintenance free - no topping up



### Power PRO Agri & Construction

- Superior cranking power (more plates and active material to maximize grid surface)
- Robust design with hot melt fixation of plate groups
- Wide range including special types
- Superior power
- True OE Agri or Construction fit (original part)
- Maintenance free - no topping up
- Low maintenance



### Start PRO

- Ideal for trucks without special requirements in terms of vibration resistance, cycling, or cranking power
- Robust and reliable design with hot melt fixation of plate groups
- Complete range covering almost 100% of vehicle parc, including special types
- Low maintenance - may need water topping up

## Fulmen commercial vehicle batteries type list

Code	Capacity Ah	CCA A (en)	Assembly drawing	L (mm)	W (mm)	H (mm)	Box type	Hold down
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#### Strong PRO EFB+

FE1403	140	800		513	189	223	D04	B0
FE1853	185	1100		513	223	223	D05	B0
FE2353	235	1200		518	279	240	D06	B0

#### Endurance PRO EFB

FX1803	180	1000		513	223	223	D05	B0
FX2253	225	1150		518	279	240	D06	B0

#### Endurance +PRO GEL

FD851T	85	350		349	235	175	D02	B0
FD2103	210	1030		518	279	240	D06	B0
FD2103T	210	800		518	279	240	D06	B0

#### Power PRO

FF1202	120	870		349	175	235	D02	B1
FF1250	125	850		349	175	285	D03	B0
FF1251	125	850		349	175	285	D03	B0
FF1453	145	900		513	189	223	D04	B0
FF1853	185	1150		513	223	223	D05	B0
FF2353	235	1300		518	279	240	D06	B0

#### Power PRO Agri & Construction

FJ050C	50	800		260	173	206	G34	B7
FJ1000	100	850		353	175	190	L05	B13
FJ1523	152	1130		513	189	223	D04	B0
FJ1723	172	1390		513	223	223	D05	B0

Code	Capacity Ah	CCA A (en)	Assembly drawing	L (mm)	W (mm)	H (mm)	Box type	Hold down
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#### Power PRO Agri & Construction

FJ1355	135	1000		514	175	210	DB8	B3
FJ2353	235	1450		518	279	240	D06	B0

#### Start PRO

FG110B	110	950		330	173	240	G31	B0
FG1100	110	750		349	175	235	D02	B0
FG1101	110	750		349	175	235	D02	B0
FG1102	110	750		349	175	235	D02	B1
FG1250	125	760		349	175	290	D03	B0
FG145A	145	1000		360	253	240	F21	B0
FG1402	140	900		508	175	205	ATM	B1
FG1206	120	680		510	175	225	D08	B3
FG1406	140	800		510	175	225	D08	B3
FG1806	180	1000		510	218	225	D09	B3
FG1203	120	680		513	189	223	D04	B0
FG1403	140	800		513	189	223	D04	B0
FG1553	155	900		513	223	223	D05	B0
FG1803	180	1000		513	223	223	D05	B0
FG1355	135	1000		514	175	210	DB8	B3
FG1353	135	1000		514	218	210	DB9	B0
FG2253	225	1200		518	279	240	D06	B0
FG2254	225	1200		518	279	240	D06	B0

# Safe on any terrain.

# And always in its element.



# An ocean full of possibilities.

We live in a time when energy and its reliable availability are becoming increasingly relevant. As one of the largest battery manufacturers in the world, Exide is naturally aware of this responsibility. With more than 130 years of experience, we are working today more than ever on innovative solutions that users in various industrial sectors, as well as in everyday life and leisure, can rely on at all times.

Exide's new marine range supplies all the essential functions such as engine start, GPS, lighting, heating, refrigeration, and radio. This reliability in use increases safety and comfort on board the boat. Finding the right battery for upcoming adventures is a simple maneuver. The following pages provide smart step-by-step instruction.

## Equipment supply need

### Equipment Li-Ion

Lithium-ion technology

- Ultra lightweight
- Superior cycling
- Up to 50% faster recharging
- Ready to use
- Absolutely maintenance free
- Suitable for long resting periods
- Battery management systems for safe operation and best performance
- Optimal charging at cold temperatures
- Charging also possible via solar panel
- Bluetooth connectivity and mobile app
- Sleep mode preserves battery charge during idle time



### Equipment GEL

Gel (electrolyte fixed in a gel) with VRLA venting

- Superior cycling
- Internal gas recombination
- No location constraints
- Safe and clean
- High inclination
- High vibration & tilt resistant
- Absolutely maintenance free
- Suitable for long resting periods
- High energy density
- Space savings of up to 30%



### Equipment

Standard flooded with glass mat separators and plug venting

- Superior cycling
- Low maintenance
- Slight inclination
- Medium vibration & tilt resistant



### Equipment AGM

Absorbent Glass Mat

- Superior cycling
- Internal gas recombination
- Absolutely maintenance free
- Medium inclination
- Faster recharging

## Engine start need

### Start AGM

AGM flat or orbital with VRLA venting

- Superior starting power
- Absolutely maintenance free
- Suitable for long resting periods
- Up to 50% faster recharging
- High inclination
- High vibration & tilt resistant
- Internal gas recombination
- No location constraints
- Safe and clean



### Start

Standard flooded with plug venting

- Superior starting power
- Absolutely maintenance free
- Very low gas emission
- Spark arrestor & central degassing for safe gas conduction
- Slight inclination



## Dual supply need



### Dual AGM

AGM flat or orbital with VRLA venting

- Extra start & supply
- Absolutely maintenance free
- Suitable for long resting periods
- Faster recharge
- Up to 50% faster recharging
- High inclination
- High vibration & tilt resistant
- Internal gas recombination
- No location constraints (cabin safe)
- Safe and clean (spark & spill-proof)

### Dual EFB

Enhanced Flooded Battery

- Extra start & supply
- Maintenance free
- Maximum charge acceptance

### Dual

Standard flooded with central degassing

- Start & supply
- Low maintenance
- Low gas emission
- To be installed in special container
- Upright mount
- Medium vibration & tilt resistant
- Top indicator for electrolyte & charge inspection



## Exide Marine & Leisure batteries type list

Code	Wh*	Capacity Ah (20h)	CCA A (EN)	Assembly drawing	L (mm)	W (mm)	H (mm)	Box type	Hold down
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### Equipment Li-Ion

EV640 EV640S	640	50	-		308	168	211	D31	B0
EV1250 EV1250S	1250	96	-		355	176	190	L05	B13
EV1300 EV1300S	1300	100	-		308	168	211	D31	B0
EV1300/24 EV1300S/24	1300	50	-		307	170	216	G77	B0
EV2500 EV2500S	2500	200	-		485	170	240	F51	B0
EV3800/36 EV3800S/36	3800	100	-		520	269	221	H52	B0

\*S - with Sleep mode

### Equipment AGM

EQ600	600	70	-		278	175	190	L03	B13
EQ800	800	95	-		353	175	190	L05	B13
EQ1000	1000	120	-		286	269	230	D07	B0

### Equipment GEL

ES290	290	25	-		166	175	125	P24	B0
ES450	450	40	-		210	175	175	LB1	B4
ES650	650	56	-		278	175	190	L03	B13
ES900	900	80	-		353	175	190	L05	B13
ES950	950	85	-		330	171	235	D02	B0

Code	Wh*	Capacity Ah (20h)	CCA A (EN)	Assembly drawing	L (mm)	W (mm)	H (mm)	Box type	Hold down
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### Equipment GEL

ES1000-6	1000	195 (6V)	-		244	190	275	GC2	B0
ES1100-6	1100	200 (6V)	-		244	190	275	GC2	B0
ES1200	1200	110	-		286	269	230	D07	B0
ES1300	1300	120	-		345	171	283	D03	B0
ES1350	1350	120	-		513	189	223	D04	B0
ES1600	1600	140	-		513	223	223	D05	B0
ES2400	2400	210	-		518	274	240	D06	B0

### Equipment

ET550	550	80	-		278	175	190	L03	B13
ET650	650	100	-		353	175	190	L05	B13
ET950	950	135	-		513	189	223	D04	B0
ET1300	1300	180	-		513	223	223	D05	B0
ET1600	1600	230	-		513	274	249	D06	B0

Code	Wh*	Capacity Ah (20h)	CCA A (EN)	Assembly drawing	L (mm)	W (mm)	H (mm)	Box type	Hold down
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### Dual AGM

EP450	450	50	750		260	173	206	G34	B7
EP500	500	60	680		242	175	190	L02	B13
EP600	600	70	760		278	175	190	L03	B13
EP800	800	95	850		353	175	190	L05	B13
EP900	900	100	800		347	174	238	G31	B0
EP1200	1200	140	700		513	189	223	D04	B0
EP1500	1500	180	900		513	223	223	D05	B0
EP2100	2100	240	1200		518	274	240	D06	B0

### Dual EFB

EZ600	600	70	760		278	175	190	L03	B13
EZ650	650	75	750		270	173	222	D26	B13
EZ850	850	100	900		353	175	190	L05	B13

### Dual

ER350	350	80	510		270	173	222	D26	Korean B1+B6
ER450	450	95	650		306	173	222	D31	Korean B1
ER550	550	115	760		349	175	235	D02	B0
ER600	600	120	800		349	175	285	D03	B0
ER850	850	180	1000		513	223	223	D04	B0

Code	MCA* A (BCI)	Capacity Ah (20h)	CCA A (EN)	Assembly drawing	L (mm)	W (mm)	H (mm)	Box type	Hold down
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### Start AGM

EM960	960	100	800		347	174	238	G31	B0
EM1000	1000	50	800		260	173	206	G34	B7

### Start

EN500	500	50	450		207	175	190	L01	B13
EN600	600	62	540		242	175	190	L02	B13
EN750	750	74	680		278	175	190	L03	B13
EN800	800	90	720		353	175	190	L05	B13
EN850	850	110	750		349	175	235	D02	B0
EN900	900	140	800		513	189	223	D04	B0
EN1100	1100	180	1000		513	223	223	D05	B0

### Vintage

EU72L	-	72	640		278	175	190	L03	B13
EU77-6	-	77 (6V)	650		215	169	184	H02	B6
EU80-6	-	80 (6V)	600		158	165	213	M02	B0
EU140-6	-	140 (6V)	900		257	175	236	M04	B1
EU165-6	-	165 (6V)	900		330	174	234	M05	B0
EU200-6	-	200 (6V)	1150		398	174	234	M06	B0
EU260-6	-	260 (6V)	1300		345	172	286	M08	B0

### Supply needs calculator

Add up all devices (W) and estimate usage (h) between recharge

<b>W x h</b>	=	<b>Wh</b>
Watts x hours		Watt hours
25 x 4	=	<b>100</b>
300 x 1	=	<b>300</b>
40 x 3	=	<b>120</b>
35 x 2	=	<b>70</b>
80 x 6	=	<b>480</b>
<b>Total devices</b>	=	<b>1070</b>
x 1.2 Safety margin	+	<b>214</b>

**Required Wh = 1284**

Exide supply battery options based on energy need, for example:



Dual	Dual EFB	Dual AGM	Equipment AGM	Equipment GEL	Equipment Li-Ion
450Wh/95Ah	850Wh/100Ah	900Wh/100Ah	800Wh/95Ah	1300Wh/120Ah	1300Wh/100Ah
Number of batteries and total weight					
3 x 23 kg = 69 kg	2 x 26 kg = 52 kg	2 x 32 kg = 64 kg	2 x 26 kg = 52 kg	1 x 39 kg = 39 kg	1 x 11.7 kg = 11.7 kg
	• Maximum charge acceptance	• Fast recharge time • DNV GL certification		• Smaller volume/weight ratio • DNV GL certification	• Ultra-lightweight with fastest recharge
<b>1350Wh</b>	<b>1700Wh</b>	<b>1800Wh</b>	<b>1600Wh</b>	<b>1300Wh</b>	<b>1300Wh</b>

The rated energy in Wh is calculated based on the safe DoD indicated above: 100Ah in AGM is equal to 900Wh because allowed DoD is 75% (otherwise 100Ah at 12V would be 1200Wh)

## Innovative workshop tools

### Testing

**EBT-965P Battery Tester and EBTP Battery Tester program**  
With the innovative Conductance Profiling technologies™.



### Charging

**Battery Charger**  
To charge cars, boats, and motorcycles, and can be used by consumers and professionals alike.



### Replacing

**BRT-12 Battery Replacement Tool**  
For easy battery replacement.



### Selecting

**Battery Finder app and online**  
To support battery selection and fitting for the most comprehensive range of vehicle types, including detailed battery replacement instructions.  
[exidegroup.com/eu/en/battery-finder](http://exidegroup.com/eu/en/battery-finder)



# Pushing the boundaries.

Enjoying the freedom on the roads, the horizon in front of you and knowing that the only goal is to have a good time. Now that's even easier with Exide's high-performance batteries. The most advanced components and materials ensure long reliability and durability. Best of all, they're perfect for motorcycles, scooters, jet skis, and a host of other vehicles.



## Exide Li-Ion

- Ultra lightweight – up to 80% lighter than lead-acid batteries
- Super-fast recharging
- Extreme cycle life > 2,000 cycles
- Ready to use and maintenance free – just install and forget
- Multi-position mounting – even upside down
- Very low self-discharge – long shelf life and perfect for seasonal use
- State-of-charge indicator for regular checks at one glance
- Covers the majority of parc – spacers included for more fitment options
- First-class safety features
- Overcharge protection



## Exide AGM

- Extended cycle life
- Ideal for seasonal use and cold weather
- Great safety features and vibration resistance
- Maintenance free – no water refilling
- 6-bottle acid pack included for initial filling
- Easy stock handling – no recharge required before acid filling
- Wide range covering 90% of the parc around 90% of car parc



## Exide GEL

- Brilliant performance even when partially discharged, prolonging cycle life
- Maximum safety and highly vibration-resistant – easily handles rough road conditions
- Ready to use, no initial acid filling
- Maintenance free – no water refilling
- Very low self-discharge – perfect for seasonal use
- Deep-discharge protection – up to 24 months store without loss in cycle life
- Latest original equipment technology
- Made in Europe



## Exide Conventional

Exide Conventional batteries are designed for entry-level and older vehicles with basic power needs. They are also ideal for small lawn movers and garden machines.

- Acid pack included for initial filling
- Easy stocking and handling – no recharge required before initial acid filling
- A great variety of battery types, including 6V



## Exide AGM Ready

- Ready to use, no initial acid filling
- Maximum power
- Extended cycle life
- Ideal for cold weather
- Ultra safe and highly vibration-resistant – ideal for rough road conditions
- Maintenance free – no water refilling
- Low self-discharge – suitable for seasonal use
- Original equipment experience inside
- Largest range in the market – covering 80% of the parc



### European legislation prohibiting sale of battery electrolyte to end users.

Since February 2, 2021, a European Regulation (Regulation EU 2019/1148) bans the sale of battery electrolyte to end users since it contains sulphuric acid. Retailers are no longer allowed to supply end users with separate sulphuric acid packs or bottles for the activation of dry, pre-charged batteries. Motorcycle batteries already factory-filled, like Exide GEL and Exide AGM Ready, are not affected by the Regulation. Exide AGM (Dry) and Conventional batteries therefore must be filled and prepared by retailers before being given to the end user.



For detailed filling instructions please scan QR code!

## Exide motorcycle batteries type list

Code	Energy (Wh)	CCA A (EN)	L (mm)	W (mm)	H (mm)	Polarity	Terminal type		
							Front	Side	Top

### Li-Ion

ELTZ5S	24	120	113	70	85				
ELTZ7S	28.8	150	113	70	85				
ELTX9	36	180	150	87	105				
ELT9B	36	190	150	65	92				
ELTX12	42	210	150	87	93				
ELTZ10S	48	230	150	87	93				
ELTX14H	48	240	150	87	93				
ELT12B	60	260	150	65	130				
ELTZ14S	60	290	150	87	93				
ELTX20H	84	380	175	87	130				

Code	Capacity (10h) Ah	CCA A (EN)	L (mm)	W (mm)	H (mm)	Polarity	Terminal type		
							Front	Side	Top

### GEL 12V

GEL12-14	14 (20h)	150	150	87	145				
GEL12-16	16 (20h)	100	180	75	165				
GEL12-19	19 (20h)	170	185	80	170				
GEL12-30	30 (20h)	180	197	132	186				

### AGM Ready 12V

AGM12-4	3	50	113	70	85				
AGM12-5	4	70	113	70	105				
AGM12-6	6	90	150	87	93				
AGM12-7	6	100	113	70	105				
AGM12-7F	7	85	150	65	100			4.8	
AGM12-7.5	8	120	150	87	105				
AGM12-8	8.6	145	150	87	93				
AGM12-9	9	120	135	75	139				
AGM12-10	10	150	150	87	130				
AGM12-11	11.2	205	150	88	110				
AGM12-12	12	200	150	90	145				
AGM12-12F	12	150	150	100	100			4.8	
AGM12-12M	12	200	150	90	145				
AGM12-14	12	210	134	89	164				
AGM12-16	16	170	150	90	160				
AGM12-19	18	270	175	87	155				
AGM12-19.1	18	270	175	87	155				
AGM12-18	18	250	181	77	167				
AGM12-23	21	350	205	86	162				
AGM12-31	30	430	166	126	175				

### AGM 12V

ET4B-BS	2.3	35	113	38	85				
ETR4A-BS	2.3	35	113	48	85				
ETX4L-BS	3	50	113	70	85				
ETX5L-BS	4	70	113	70	105				
ETX7A-BS	6	90	150	87	93				
ETX7L-BS	6	100	113	70	130				
ETZ7-BS	6	100	113	70	105				
ET7B-BS	6.5	85	150	65	93				
ET9B-BS	8	110	150	70	105				
ETX9-BS	8	120	150	87	105				
ETZ10-BS	8.6	145	150	87	93				
ETX9C-BS	9	120	135	75	139				
ET12A-BS	9.5	130	150	87	105				
ET12B-BS	10	160	150	70	130				
ETX12-BS	10	150	150	87	130				
ETZ14-BS	11.2	205	150	87	110				

Code	Capacity (10h) Ah	CCA A (EN)	L (mm)	W (mm)	H (mm)	Polarity	Terminal type		
							Front	Side	Top

### AGM 12V

ET14B-BS	12	190	150	70	145				
ETX14-BS	12	200	150	87	145				
ETX14L-BS	12	200	150	87	145				
ETX14AH-BS	12	210	134	89	164				
ETX14AHL-BS	12	210	134	89	164				
ETX16-BS	14	215	150	87	161				
ETX20H-BS	18	270	175	87	155				
ETX20HL-BS	18	270	175	87	155				
ETX20CH-BS	18	230	150	87	161				
ETX24HL-BS	21	350	205	87	162				

### Conventional 6V

6N6-3B-1	6	40	98	56	110				
6N11A-1B	11	95	121	59	131				

### Conventional 12V

EB4L-B	4	50	120	70	92				
12N5-3B	5	40	120	60	130				
EB5L-B	5	65	120	60	130				
12N5,5-3B	5.5	45	135	60	130				
12N7-3B	7	75	135	75	133				
EB7C-A	8	90	130	90	114				
EB7-A	8	85	135	75	133				
EB7L-B	8	85	135	75	133				
12N9-3B	9	85	135	75	139				
12N9-4B-1	9	85	135	75	139				
EB9-B	9	100	135	75	139				
EB10L-A2	11	130	135	90	145				
EB10L-B	11	130	135	90	145				
EB10L-B2	11	130	135	90	145				
12N12A-4A-1	12	115	134	80	160				
EB12A-A	12	165	134	80	160				
EB12AL-A	12	165	134	80	160				
EB12AL-A2	12	165	134	80	160				
12N14-3A	14	130	134	89	166				
EB14-A2	14	145	134	89	166				
EB14-B2	14	145	134	89	166				
EB14L-A2	14	145	134	89	166				
EB14L-B2	14	145	134	89	166				
EB16AL-A2	16	175	205	70	162				
EB18L-A	18	190	180	90	162				
EB16-B	19	190	175	100	155				
EB16CL-B	19	190	175	100	175				
EB16L-B	19	190	175	100	155				
12Y16A-3A	20	210	185	81	170				
E50-N18L-A	20	260	205	90	162				
E50-N18L-A3	20	260	205	90	162				
12N24-3A	24	220	184	124	175				
12N24-4A	24	220	184	124	175				
U1-9	24	240	196	130	180				
E60-N24-A	28	280	184	124	169				
E60-N24AL-B	28	280	184	124	169				
E60-N24L-A	28	280	184	124	169				
E60-N30-A	30	300	185	128	168				
E60-N30L-A	30	300	185	128	168				
E60-N30L-B	30	300	185	128	168				
EB30L-B	30	300	165	130	176				
U1R-11	30	300	196	130	180				

# Energy that goes beyond.



- Automotive plant
- Industrial plant
- R&D facility
- Recycling
- Global HQ
- Principle sales offices  
+ sales offices and distribution centers across the world



<p>All manufacturing plants <b>ISO 9001</b> certified</p>	<p>All automotive plants <b>IATF 16949</b> certified</p>	<p>All manufacturing plants <b>ISO 14001</b> certified</p>	<p>All manufacturing plants <b>ISO 50001</b> certified</p>	<p>Most manufacturing plants <b>ISO 45001</b> certified</p>
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