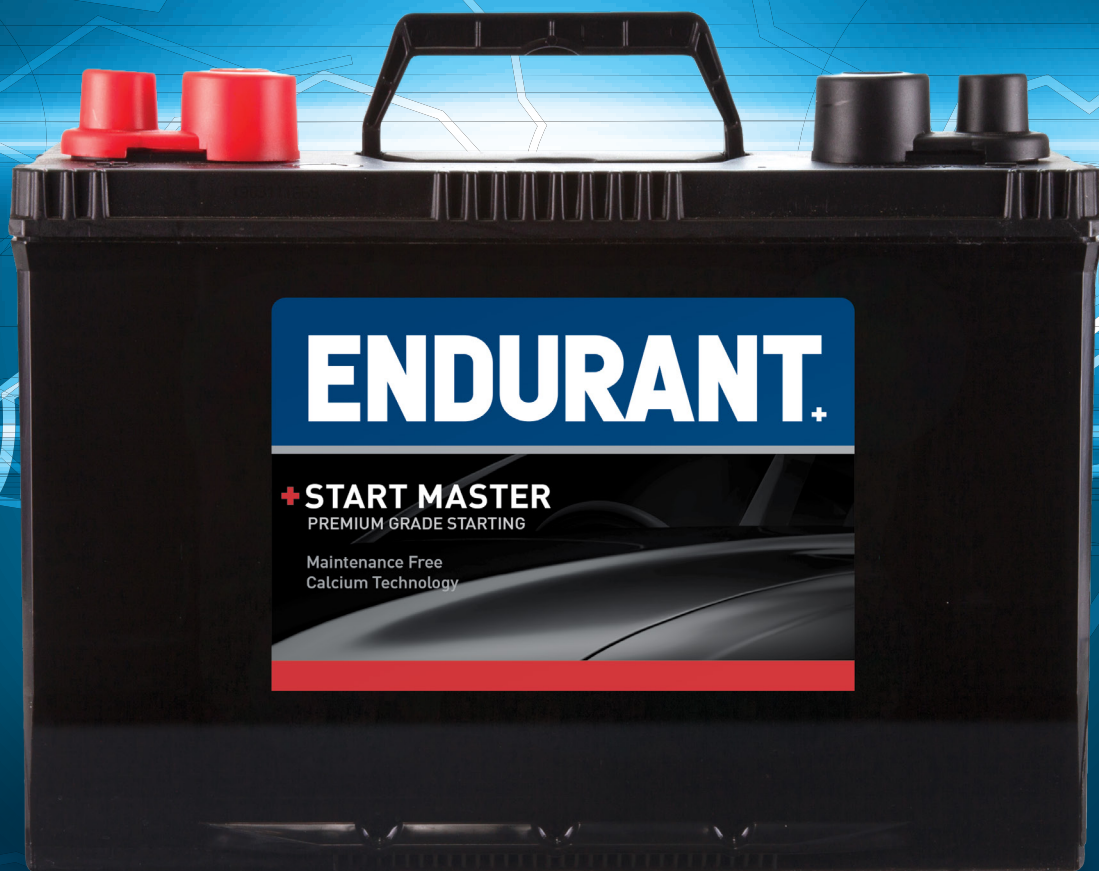


ENDURANT

UNLEASH THE POWER

WITH ENDURANT BATTERIES

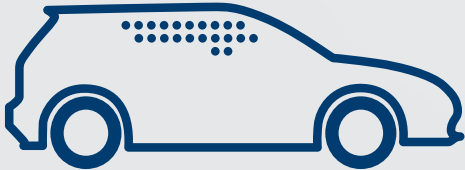


WHY ENDURANT?

- Long life, reliable quality
- Sustained performance
- Backed by leading global manufacturers
- 99% recyclable
- Manufactured using the most advanced technologies
- Suitable for car, 4x4, truck, bus, garden, boat & camping



Pre 2005

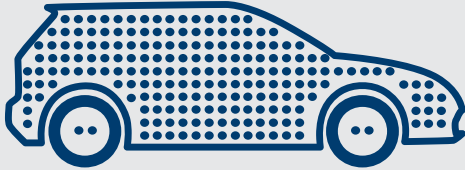


Selecting the right battery is now more critical

The car battery has come a long way. Originally needed to simply help start a vehicle, batteries are now powering Stop/Start technology as well as providing energy even when the car is switched off.

The battery is now the central hub for power. There are greater demands on the battery with sophisticated safety and control systems, like cameras, radar, braking, cruise control, HVAC and connectivity.

Today



● Number of electrical components

Start your adventure with Endurant Batteries

Endurant brings you long-lasting quality power products backed by leading manufacturers, giving you the freedom to get on with life's adventures, every day.

Our Supplier Partners



PRODUCT RANGE OVERVIEW



FEATURES		START MASTER	CRANK MASTER	CRANK MASTER ENHANCED	LOAD MASTER	BOAT MASTER	CYCLE MASTER	GARDEN MASTER
Technology	Flooded	✓	✓		✓	✓	✓	✓
	EFB			✓				
	AGM			✓				
Application	Car	✓	✓	✓				
	SUV	✓	✓	✓				
	4X4/Light Commercial		✓		✓			
	Heavy Commercial				✓			
	Start-Stop			✓				
	Marine & Boat					✓	✓	
	Auxiliary Power					✓	✓	
	Lawn Mower							✓
Power Demands	Starting	✓	✓	✓	✓	✓		✓
	Light Cycle On-board Accessories		✓	✓		✓	✓	
	Semi Cycle Basic Accessories			✓		✓	✓	
	Deep Cycle Extra Accessories						✓	
Vibration Resistance	Moderate	✓						
	High		✓		✓			✓
	Very High			✓		✓	✓	
Maintenance	Maintenance Free	✓	✓	✓	✓	✓	✓	✓
	Accessible							
Warranty	Domestic	36 Months	42 Months	42 Months	12 Months	18-24 Months**	18 Months	12 Months
	Commercial	12 Months	12 Months	12 Months	12 Months	12 Months	12 Months	24 Months
	Start-Stop			24 Months				

*Selected Part Numbers. ^Dual Purpose Part Numbers.
**18 months for deep cycle applications. 24 months for starting applications.

+START MASTER

Durable, reliable and compatible with most vehicles. This range is also maintenance free, environmentally friendly and gives you 3 years warranty.



36 Months warranty

Suitable for vehicles with standard power demands

Excellent starting performance

Maintenance free

Suitable for Australian conditions

Built in charge indicator

Part No	Case Size	Terminal	Layout	CCA	Ah C20	RC	L (MM)	W (MM)	TH (MM)
NS40ZLBMF-E	NS40SL	JIS	(-, +)	330	35	56	185	125	200
NS40ZLSMF-E	NS40SL	SAE	(-, +)	330	35	52	196	128	225
NS40ZLMF-E	NS40L	JIS	(-, +)	330	35	52	196	128	225
NS40ZSMF-E	NS40S	D/F	Centre	332	35	52	196	128	225
NS40ZMF-E	NS40	JIS	(+, -)	330	35	52	196	128	225
NS60LSMF-E	NS60SL	SAE	(-, +)	430	45	80	237	128	225
NS60LMF-E	NS60L	JIS	(-, +)	430	45	80	237	128	225
NS60SMF-E	NS60S	SAE	(+, -)	430	45	80	237	128	225
NS60MF-E	NS60	JIS	(+, -)	430	45	80	237	128	225
55D23LMF-E	55D23L	SAE	(-, +)	550	55	90	229	172	225
55D23RMF-E	55D23R	SAE	(+, -)	550	55	90	229	172	225
50D20LMF-E	50D20L	SAE	(-, +)	450	50	80	206	172	205
58MF-E	N51	SAE	(-, +)	520	60	95	240	172	209
57MF-E	N50	SAE	(+, -)	520	60	95	240	172	209
58MFFD-E	N51	D/F	(-, +)	520	60	95	240	172	209
43MF-E	N40/41	D/F	Centre	330	40	60	238	134	204
DIN44LMF-E	DIN44	SAE	(-, +)	400	43	75	206	174	174
DIN55RMF-E	DIN55R	SAE	(+, -)	500	54	90	242	174	174
DIN55LMF-E	DIN55	SAE	(-, +)	500	54	90	242	174	174
DIN55LHMF-E	DIN55H	SAE	(-, +)	580	62	95	241	174	188
DIN66LMF-E	DIN66	SAE	(-, +)	550	65	110	277	174	174
DIN66LHMF-E	DIN66H	SAE	(-, +)	680	74	135	277	174	188
DIN66RHMF-E	DIN66HR	SAE	(+, -)	600	72	120	277	174	188
DIN77LMF-E	DIN77	SAE	(-, +)	730	80	140	313	174	174
DIN77RHMF-E	DIN77HR	SAE	(+, -)	912	90	160	313	174	188
DIN88LMF-E	DIN88	SAE	(-, +)	750	85	165	352	174	174
DIN88LHMF-E	DIN88H	SAE	(-, +)	800	100	180	352	174	188

+LOAD MASTER

Designed for truck, bus and light and heavy commercial vehicles with proven cranking performance and the durability to handle high electrical loads.



12 Month unlimited KM warranty*

Suitable for small to large commercial vehicles with heavy electrical loads

Commercial grade starting performance

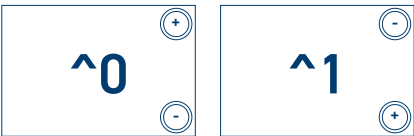
Vibration resistant

Designed for Australian conditions

Maintenance free

Part No	Case Size	Terminal	Layout	CCA	Ah C20	RC	L (MM)	W (MM)	TH (MM)
NS70LMF-E	NS70L	SAE	(-, +)	600	75	135	260	172	225
NS70MF-E	NS70	SAE	(+, -)	600	75	135	260	172	225
N70ZZLMF-E	N70ZZL	SAE	(-, +)	710	90	160	305	172	225
N70ZZMF-E	N70ZZ	SAE	(+, -)	710	90	160	305	172	225
N70ZZLMFHD- E	N70ZZL	SAE	(-, +)	750	70	125	305	171	226
N70ZZMFHD-E	N70ZZ	SAE	(+, -)	750	70	125	305	171	226
31900MF-E	GRP 31	SAE	Centre	900	100	160	330	172	240
31900TMF-E	GRP 31	M8 STUD	Centre	900	100	160	330	172	240
311000MF-E	GRP 31	SAE	Centre	1000	100	160	330	172	240
N100LMF-E	N100L	SAE	(-, +)	750	100	185	406	172	231
N100MF-E	N100	SAE	(+, -)	750	100	185	406	172	231
N120MF-E	N120	SAE	(-, +)^0	800	120	230	503	182	231
N120LMF-E	N120L	SAE	(+, -)^1	800	120	230	503	182	231
N150MF-E	N150	SAE	(-, +)^0	1050	150	300	507	213	231
N150LMF-E	N150L	SAE	(+, -)^1	1050	150	300	507	213	231
N200MF-E	N200	SAE	(-, +)^0	1200	200	440	510	275	238
N200LMF-E	N200L	SAE	(+, -)^1	1200	200	440	510	275	238
N150MFEU-E	N150	SAE	(+, -)	1050	180	320	513	223	223
N150MFHD-E	N150L	SAE	(-, +)^0	1050	160	320	507	213	231
N200MFHD-E	N200	SAE	(-, +)^0	1300	210	440	510	275	238

Layout key:



*Standard warranty terms and conditions apply, refer to page 11 for full details.

+CRANK MASTER

With higher cranking power, this range is suitable for large SUV's, 4x4's and where energy requirements are greater. This battery is longer lasting, with 42 months warranty.



42 Months warranty

Suitable for 4WD's SUV and higher power demands

Excellent starting performance

Maintenance free

Suitable for Australian conditions

Built in charge indicator

Part No	Case Size	Terminal	Layout	CCA	Ah C20	RC	L (MM)	W (MM)	TH (MM)
58MFC-E	N51	SAE	(-, +)	680	60	105	240	172	209
57MFC-E	N50	SAE	(+, -)	680	60	105	240	172	209
55D23LMFC-E	55D23L	SAE	(-, +)	650	75	125	229	172	225
N70ZZLMFC-E	N70ZZL	SAE	(-, +)	810	90	170	305	172	225
N70ZZMFC-E	N70ZZ	SAE	(+, -)	810	90	170	305	172	225
NS70LMFC-E	NS70L	SAE	(-, +)	680	80	140	260	172	225
NS70MFC-E	NS70	SAE	(+, -)	680	80	140	260	172	225
DIN66LMFHD-E	DIN66	SAE	(-, +)	730	75	118	277	174	174

+CRANK MASTER ENHANCED

EFB and AGM batteries provide superior cold start and low state of charge cranking performance as well as enhanced cycle stability. EFB is suitable for entry level Asian manufactured vehicles with start/stop, whilst AGM is predominantly used in modern European vehicles.



EFB Start-Stop Technology

24 Months warranty

Start-Stop suitable

Commercial grade starting performance

Higher charge acceptance

2 x Cycling for longer life

Maintenance free

Part No	Case Size	Terminal	Layout	CCA	Ah C20	RC	L (MM)	W (MM)	TH (MM)
Q85MF-E	55D23L	SAE	(-, +)	660	70	125	229	172	225
Q85RMF-E	55D23R	SAE	(+, -)	660	70	125	229	172	225
S95MF-E	NS70L	SAE	(-, +)	720	70	130	257	172	220
DIN55LHEFB-E	DIN55H	SAE	(-, +)	560	60	100	241	174	188
DIN66LHEFB-E	DIN66H	SAE	(-, +)	720	70	120	277	174	188
T110MF-E	N70ZZL	SAE	(-, +)	800	80	145	302	172	220

AGM Start-Stop Technology

24 Months warranty

Start-Stop suitable

Commercial grade starting performance

Higher charge acceptance

3 x Cycling for longer life

Spill and leak proof

Part No	Case Size	Terminal	Layout	CCA	Ah C20	RC	L (MM)	W (MM)	TH (MM)
DIN55LHAGM-E	DIN55H	SAE	(-, +)	680	60	100	241	174	188
DIN66LHAGM-E	DIN66H	SAE	(-, +)	760	70	120	277	174	188
DIN77LHAGM-E	DIN77H	SAE	(-, +)	800	80	140	314	174	188
DIN88LHAGM-E	DIN88H	SAE	(-, +)	850	90	160	352	174	188



+BOAT MASTER

A complete range of marine and leisure starting, trolling and dual purpose batteries. Delivering excellent performance and reliability, high strength casing and maintenance free construction to reduce corrosion around the terminals.



18-24 Months warranty*



Semi to moderate cycling capability



Excellent starting performance



Maintenance free



Extreme vibration resistance



Built in charge indicator

Marine Starting

Part No	Case Size	Terminal	Layout	CCA	Ah C20	RC	L (MM)	W (MM)	TH (MM)
MS24MF-E	GRP 24	D/T	(+, -)	680	80	160	260	172	225
MS27MF-E	GRP 27	D/T	(+, -)	780	100	185	305	172	225
MS31MF-E	GRP 31	D/T	Centre	1000	100	180	330	172	230

Marine Dual Purpose

Part No	Case Size	Terminal	Layout	CCA	Ah C20	RC	L (MM)	W (MM)	TH (MM)
MD24MF-E	GRP 24	D/T	(+, -)	520	82	135	260	172	225
MD27MF-E	GRP 27	D/T	(+, -)	680	97	162	305	172	225
MD31MF-E	GRP 31	D/T	Centre	720	110	190	330	172	230

+GARDEN MASTER

Reliable batteries for ride on mowers and garden tractors, providing proven performance in all weather conditions.



12 Month unlimited KM warranty*



Reliable starting power performance



Maintenance free



Extreme vibration resistance



Built in charge indicator

Part No	Case Size	Terminal	Layout	CCA	Ah C20	RC	L (MM)	W (MM)	TH (MM)
U1RMF-E	U1R	LUG	(-, +)	280	26	33	196	128	184
U1LMF-E	U1	LUG	(+, -)	280	26	33	196	128	184

+CYCLE MASTER

Auxiliary Deep Cycle



18 Months warranty*



Heavy cycling capability



Maintenance free



Extreme vibration resistance



Built in charge indicator



Semi to moderate cycling capability

Part No	Case Size	Terminal	Layout	CCA	Ah C20	RC	L (MM)	W (MM)	TH (MM)
DC24MF-E	GRP 24	D/T	(+, -)	580	82	140	260	172	225
DC27MF-E	GRP 27	D/T	(+, -)	680	97	162	305	172	225
DC31MF-E	GRP 31	D/T	Centre	730	110	190	330	172	230



Technical Information

Terminal Types



M8 STUD



Standard/SAE



Small/JIS



D/T
(Dual Terminals)



LUG



Multi Fit/DF

Battery Tech Terminology

Flooded (Batteries)

Also known as conventional batteries, are the oldest form of automotive batteries. These batteries contain electrolyte that is free to move around. These batteries must be mounted upright.

CCA (Cold Cranking Amps)

This is a measurement test representing the number of amps that a fully charged battery can produce. This is a measurement of a batteries maximum ability to start an engine however does not represent battery quality or longevity.

EFB (Enhanced Flooded Battery)

These are flooded batteries with enhanced cycling abilities and improved charge acceptance. Designed as an entry level battery for cars with start/stop technology with the ability to handle heavy duty electrical requirements.

RC (Reserve Capacity)

This refers to an approximate time that the battery will run a vehicle with a night time electrical load should the vehicle charging system fail. This rating is the time in minutes that a new fully charged battery can supply a current of 25 Amps before it goes flat.

AGM (Absorbed Glass Mat)

This is when the electrolyte is absorbed into the glass mats like a sponge and is not free flowing. For this reason they are a safer option, can be side mounted and have enhanced starting and cycling abilities vs conventional flooded batteries required for cars with advanced start-stop technology.

Ah C20 (Ampere Hours)

This is an indication of how much energy is stored in the battery. Ah C20 rating is a unit of capacity, which tells you how much energy a battery can deliver over 20 hours at 25°C without falling below 10.5V for a 12V battery.

Warranty Terms & Conditions

Statement, Coverage and Exclusions

Federal Batteries Pty Ltd warrants that the goods supplied to an original purchaser will be free from defects for the applicable Warranty Period and Applications set out on page two subject to the terms and conditions stated herein. All benefits under this warranty are additional to other rights and remedies under the applicable law. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law.

You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. This warranty does not cover goods imported into Australia other than by Federal Batteries Pty Ltd.

If a failure with the goods or a service does not amount to a major failure, you are entitled to have the failure rectified in a reasonable time. If this is not done, you are entitled to a refund for the goods and to claim a refund from the installer of any services associated with the installation of the goods.

If Federal Batteries Pty Ltd (itself or through a reseller) finds on examination that the battery is defective due to faulty manufacturing and is within the specified warranty period, the battery will be replaced with an equivalent battery free of charge. The warranty period is not renewed or extended as a result of this replacement subject to your rights under the Australian Consumer Law.

This warranty covers batteries that become unusable or unserviceable due to defects in material and/or workmanship. Warranty period commences from date of original purchase.

This warranty covers the product ranges listed on page three, provided that they are sized properly and used in the application for which it was intended and charged with an approved charging profile.

This warranty only applies to the original purchaser of the goods. Proof of purchase and return of good(s) in question must accompany any requests for warranty. No exceptions will be accepted.

This warranty does not apply to batteries that break or fail due to abuse or neglect such as:

- Charge system problem/incorrect charging creating an over-charge or under-charge situation
- Incorrect or under specified battery type fitted to vehicle/application
- Prolonged storage of the car or very minimal use
- Deep discharge applications (heavy accessory loads etc.

- Electrical faults, Shorts, Excessive loads and loose wiring
- Damage to the battery caused by the consumer or other in-car and/or application fault
- Any battery modifications such as acid additives, lead terminal changes, or any other contaminants
- Any batteries received at 9V or lower (for 12V batteries) will be deemed as discharged and neglected.

To verify a warranty claim, the battery must be fully charged prior to adjudication. A flat (discharged) or sulphated battery is not considered to be a manufacturing defect and is not covered under this warranty.

If the battery fails during the warranty period, you can return the battery to the place of purchase with your original proof of purchase receipt. The battery will then be tested as per Federal Batteries Pty Ltd Test Procedure. You must bear any expense you may incur in making the claim (other than our costs of remedying the defect subject of this warranty). The warranty is provided by Federal Batteries Pty Ltd 4 Arctic Court, Keysborough, VIC 3173. Contact No. 1300 133 980 or go to www.federalbatteries.com.au for full terms and conditions.

Start/Stop vehicles:

It is becoming increasing common that fitting new batteries to certain modern vehicles requires the OBD (Electronic Codes) error codes to be reset and new battery registered on the vehicle so full functionality can be regained on the vehicle. Installation must be done by suitably trained and qualified persons.

Additionally, a conventional flooded battery may not be suitable for some vehicles and they may require technology such as Absorbed Glass Mat (AGM) or an Enhanced Flooded (EFB). This warranty does not extend to any goods that have been installed to an incompatible vehicle or incorrect vehicle programming which will void the warranty and potentially damage the vehicle.

Please refer to our website www.federalbatteries.com.au for this Warranty Statement.

Disclaimer

Federal Batteries Pty Ltd attempts to ensure the correctness of the product description and data contained herein. We reserve the right to change designs, specifications and pricing at any time without notice or obligation. It is the responsibility of the reader of this information to verify any and all information presented herein.

ENDURANT BATTERIES



END006

1300 133 980
federalbatteries.com.au
facebook.com/EndurantBatteriesAUS

Distributed by
FEDERAL
BATTERIES