FAAM

Heavy Duty Batteries Specialist

STARTER

Energy, power, reliability

the triad that leads the way!

SERI industrial GROUP

Made in Italy

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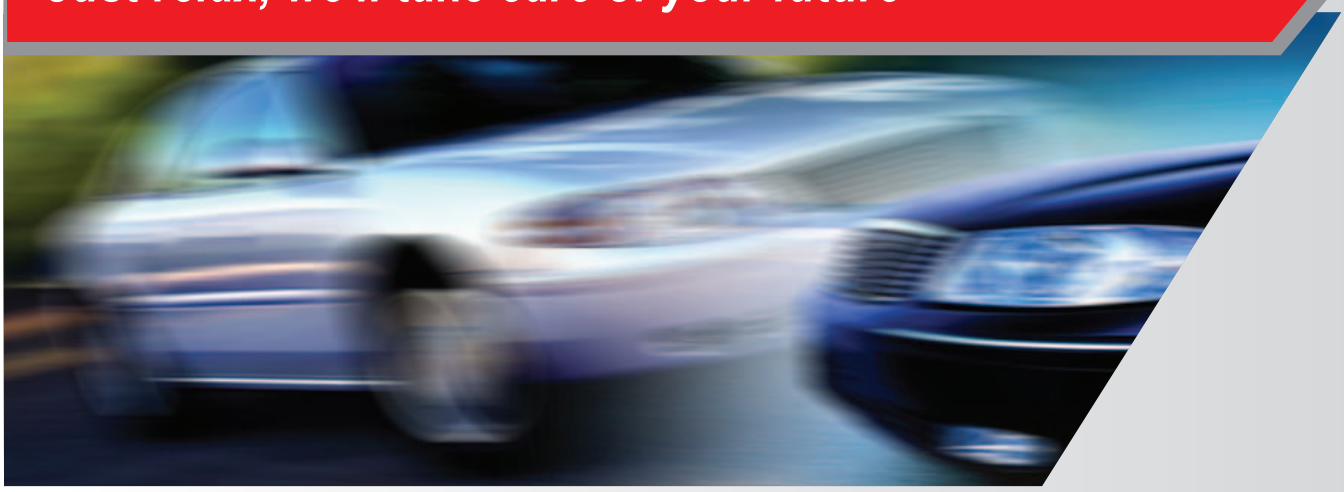
POWER TECHNOLOGY

Energy, power, reliability…the triad that leads the way

The need to reduce the polluting emissions in order to make the use of vehicles more sustainable is leading factories to increasingly limit the consumption of fuels and C02 emissions through Start-Stop systems and regenerative braking. Thus, micro hybrid cars, which currently represent the entire registered car market, were born.
New generation cars are equipped with several electronic devices to manage the active and safe drive, which in some cases replace the driver in the "choice" of the drive in case of specific hazardous conditions.
Accumulators are not all the same and choosing the right battery for the right need is one of the best guarantees for a pleasant and safe driving.
FAAM has developed a new line of Power Technology products, both in "Flooded" and "AGM" version, in order to satisfy the needs of the new vehicles and of those in circulation. The most innovative technological solution is therefore ensured, both for the traditional applications and for extreme cyclical applications, with a strong charge acceptance and resistance to high temperatures.
The mutual strenghts of the new four types of batteries, **CYCLES**, **SAFE**, **START** e **BLACK**, are the reliability and the constant power cycling resistance through high electrical performances in total safety of use.

Just relax, we'll take care of your future



CYCLES

The latest generation cars equipped with Start-Stop system need high-performing batteries in terms of electric features, reliability and high cycling resistance .
CYCLES range satisfies the needs of new cars through a new designing of inner electrodes concerning alloys, grids, thickness, new elaboration of active materials and special systems of inner separation. Both in FLOODED and AGM version, the batteries of the CYCLES range represent the best solution as regards performance, lifetime, reliability and safety due to their strong starting power, to the high cycling resistance and a strong inclination to charge acceptance.

High Cranking Current	High Endurance Cycles	High Charge Acceptance	High Charge Retention	Maintenance Free	Extreme Temperatures	Regenerative Braking	Hard And Intensive Use	Magic Eye
✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	

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SAFE

The SAFE range was created for vehicles of any category. It represents the real answer to the increasing demand of energy and to the need of a highly powerful battery for high starting currents ensuring safety and extreme reliability at the same time.
It was built with lead, calcium and tin alloys with a special recombination cover, centralized degassing and flame-retardant pads. It shows a high cycling resistance and a great charge acceptance and lasting. It is particularly suitable for applications on the latest generation cars.

High Cranking Current	High Endurance Cycles	High Charge Acceptance	High Charge Retention	Maintenance Free	Extreme Temperatures	Regenerative Braking	Hard And Intensive Use	Magic Eye
✔✔✔	✔✔	✔✔✔	✔✔✔	✔✔✔	✔✔✔	✔✔	✔✔	

START

The designing of the START range was born from the need to satisfy the demand of a high starting current, great reliability, lack of servicing and high safety. The use of a recombination watertight cover with a centralized degassing system and a special flame retardant pad represents a remarkable benefit for the safety and reliabilty of this battery.

High Cranking Current	High Endurance Cycles	High Charge Acceptance	High Charge Retention	Maintenance Free	Extreme Temperatures	Magic Eye
✔✔	✔	✔✔	✔✔	✔✔	✔✔	

BLACK

The cars with the traditional wiring system need a considerable power and reliability for a proper functioning. The BLACK range battery, built with hybrid technology, is the best economic and technical solution for this category of after-market need.

High Cranking Current	High Endurance Cycles	High Charge Acceptance	High Charge Retention	Maintenance Free	Extreme Temperatures
✔	✔	✔	✔	✔	✔

ENERGY TECHNOLOGY

Energy, power, reliability…the triad that leads the way

The new types of commercial vehicles introduced on the market need more and more energy, for their functioning and for that of on-board devices and accessories with which they are equipped as well.
The increasingly extreme usage conditions, the installation on highly vibration areas and the higher need of reducing the costs of use of the vehicles led to the designing and development of new ranges of batteries with innovative mechanical, electric and chemical features.

The new application needs have actually determined the improvement of the product in aspects such as:

- **starting power**
- **disposable energy**
- **easy recharging**
- **vibration resistance**
- **maintenance free**
- **suitability for the installation on highly vibrating parts such as the rear of truck chassis**
- **usage in regenerative braking systems**
- **long lasting**
- **reliability**

A power without limits...in any challenge

The choice of a correct and suitable battery in terms of application is a determining factor to satisfy application needs compared to the past.
FAAM has designed the new line ENERGY TECHNOLOGY, with the new product range GENIUSPRO GENIUS, SMARTPRO, and SMART, relying on its innovative technological spirit and its over 50-year-old experience in the field. All the ranges completely and professionally satisfy the different application needs coming from the technological development of heavy industrial vehicles, agricultural vehicles, construction and earth-moving machinery.
In such a way FAAM wants to ensure power, higher reliability and greater efficiency thanks to its products, with a longer lasting battery and a lower maintenance total cost.

ENERGY TECHNOLOGY

Energy, power, reliability…the triad that leads the way

FAAM S3 Technology

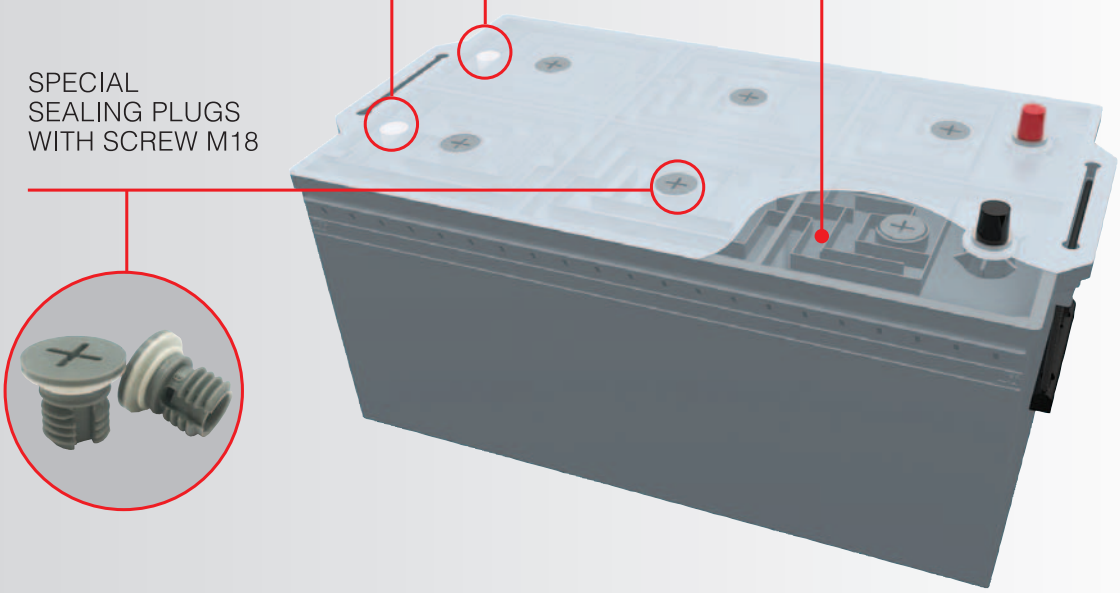
stop S3 shock SYSTEM

FLAME ARRESTOR

CENTRALIZED DEGASSING

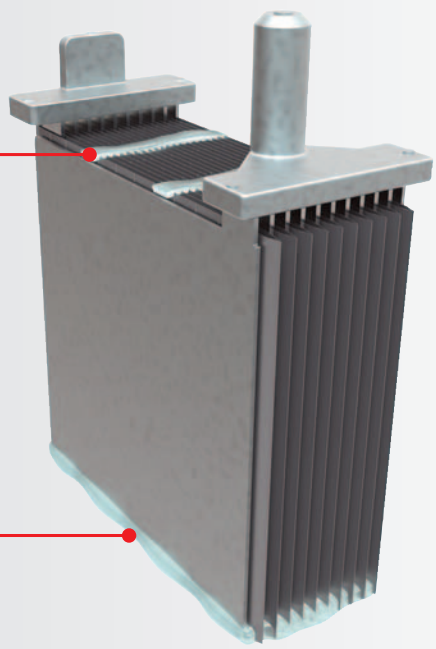
SPECIAL SEALING PLUGS WITH SCREW M18

ELECTROLYTE CONTAINMENT CHAMBER AND GAS CONDENSATION



SPECIAL RESIN FOR THE COMPLETE PLATES BLOCKING

SPECIAL RESIN FOR THE BLOCKING OF THE PLATES TO THE POLYPROPYLENE ENGINE BLOCK



ENERGY TECHNOLOGY

Energy, power, reliability…the triad that leads the way

GENIUS PRO

GENIUSPRO series batteries were designed to be installed on the latest generation industrial vehicles which need high starting power, performing service energy and high cycling resistance, even in extreme conditions. This product, with his Pb/Ca/Sn plates 2,9 mm thick, represents a hybrid solution between starter and motive power batteries, in order to meet all those requirements and provide one of the highest starting power of the market.
They are particularly appropriate to be installed on vehicles subject to high vibration. They have been designed for such aim with the innovative FAAM S3 - Stop Shock System with the blocking of plates in the upper and lower areas by means of special resins in order to be resistant to extreme installation and usage. They exceed the strictest V3 requirements of the EN50342-1 standard which expect 20 h of vibration at 6g and 30 Hz at a temperature of 25°C.
Such batteries are equipped with an innovative double labyrinth flat cover with containment chambers and gas condensation. Each labyrinth inside the cover is heat-sealed and it allows the funnelling of emissions produced by the battery towards the exit, where there are two anti-explosion flame-arrestors (flame-retardant pads).
Moreover, they are equipped with special electrodes/plates with high thickness in Pb/Ca/Sn alloy and special formulations of active matters, which not only do they require lack of maintenance but they also ensure the efficient resistance to heavier uses, with a considerable improvement of the mechanical and electric features compared to conventional batteries. It is equipped with a special fiberglass separator with newly designed grids. Through the use of special productive processes a considerable improvement in the cycling resistance with deep discharging was obtained, ensuring a notable energy with starting powers that are constant in the course of time even under critical conditions regarding vibrations and temperature.

High Cranking Current	High Endurance Cycles	High Charge Acceptance	High Electrolyte Retention	High Charge Retention	Maintenance Free	High Shock Resistance	Extreme Temperatures	Super Heavy Duty	The latest Vehicles Generation
✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓

GENIUS

As GENIUSPRO series, also GENIUS are equipped with the innovative FAAM S3 - Stop Shock System and the innovative double labyrinth flat cover thanks to which they are ideal for the heaviest usages. GENIUS series too is equipped with the special fiberglass separator, which has considerably improved cycling resistance with deep discharging, ensuring a notable energy with starting powers that are constant in the course of time even under critical conditions regarding vibrations and temperature. Moreover, they are equipped with special electrodes/plates with high thickness in Pb/Ca/Sn alloy and special formulations of active matters, which not only do they require lack of maintenance but they also ensure a more efficient resistance to heavier uses, compared to conventional batteries. The GENIUS range is particularly suitable for the intensive use on heavy industrial vehicles and working machinery.

High Cranking Current	High Endurance Cycles	High Charge Acceptance	High Electrolyte Retention	High Charge Retention	Maintenance Free	High Shock Resistance	Extreme Temperatures	Super Heavy Duty	The latest Vehicles Generation
✓✓	✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓	✓✓✓

ENERGY TECHNOLOGY

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SMART PRO

This powerful, safe and low-maintenance type of battery is also equipped with FAAM S3 - Stop Shock System, with which it passes the homologation tests of the main OEM vehicle manufacturers and the tests required by the EN regulations. Similarly to the GENIUS range, the plates are blocked on the upper and lower part due to the FAAM S3 system, allowing the highest resistance to temperatures and extreme vibrations. It is also equipped with a double labyrinth flat cover with containment chambers and gas condensation and, therefore, characterized by the same safety standards and benefits.
The SMARTPRO is the ideal choice for a heavy application where long-lasting, reliability and electric performances ought not to be a compromise.

High Cranking Current	High Endurance Cycles	High Charge Acceptance	High Electrolyte Retention	High Charge Retention	Maintenance Free	High Shock Resistance	Extreme Temperatures	Super Heavy Duty	The latest Vehicles Generation
✔✔	✔✔	✔✔	✔✔	✔✔	✔	✔✔✔	✔✔	✔✔	✔✔✔

SMART

The batteries of SMART series are batteries for Super Heavy Duty use and can be used on conventional vehicles. They are designed with plates (electrodes) with high thickness and strenghtened structure to satisfy the need for high energies and high cyclical resistance with low-maintenance.
They are an excellent compromise among performances, long-lasting and cost, for the use on industrial vehicles.

High Cranking Current	High Endurance Cycles	High Charge Acceptance	High Electrolyte Retention	High Charge Retention	Maintenance Free	High Shock Resistance	Extreme Temperatures	Super Heavy Duty	Safety Plugs
✔✔	✔✔	✔	✔	✔✔	✔	✔	✔	✔✔	

HEAVY PLUS TECHNOLOGY

Energy, power, reliability…the triad that leads the way

The Heavy Plus Technology line was designed for intensive use, when application requires remarkable energy and long-lasting with intensive use reliability. It reacts efficiently and effectively to the energetic needs of innovative vehicles (electrical and motor boats, yatches, caravans) equipped with excellent accessories and with electric drive (golf cart, sweepers, renewable energy storage and so on), where the deep discharging is a standard of use. They are made both with flat and tubular plates with different designing details and components. The ranges satisfy the different needs of professional applications.

MISTRAL

The range is addressed to nautical applications both for starter for boats and small yachts, starter for deep-sea marine and on board services. It is characterized by high reliability, excellent resistance to the charging and discharging cycles, high autonomy and resistance to marine environments.

High Cranking Current	High Endurance Cycles	High Charge Acceptance	High Electrolyte Retention	High Charge Retention	Maintenance Free	Extreme Temperatures	Hard And Intensive Use
✔✔✔	✔✔	✔✔	✔✔	✔✔	✔	✔✔	✔✔

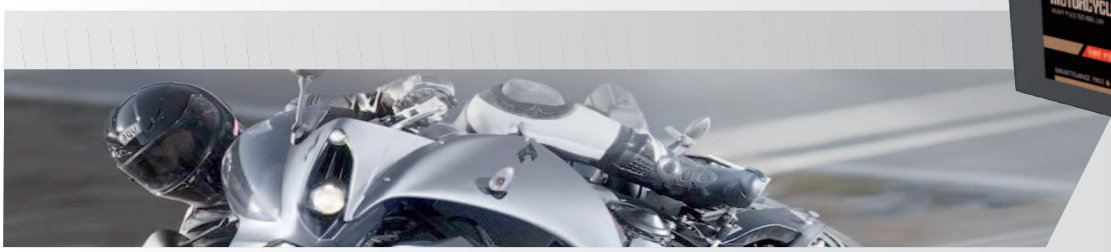
TRALEG

This range, which was designed with traction technology, is suitable for any type of electric-driven vehicle (machines for industrial cleaning, golf cars, lifting platforms and so on), leisure vehicle (services for caravans and nautical field and toys) and the use for the energy storage from renewable sources. The light traction batteries are designed for the cyclical use in which a high number of charge/discharge cycles is required and they are available both in the AGM version (flat and tubular plate) and GEL.

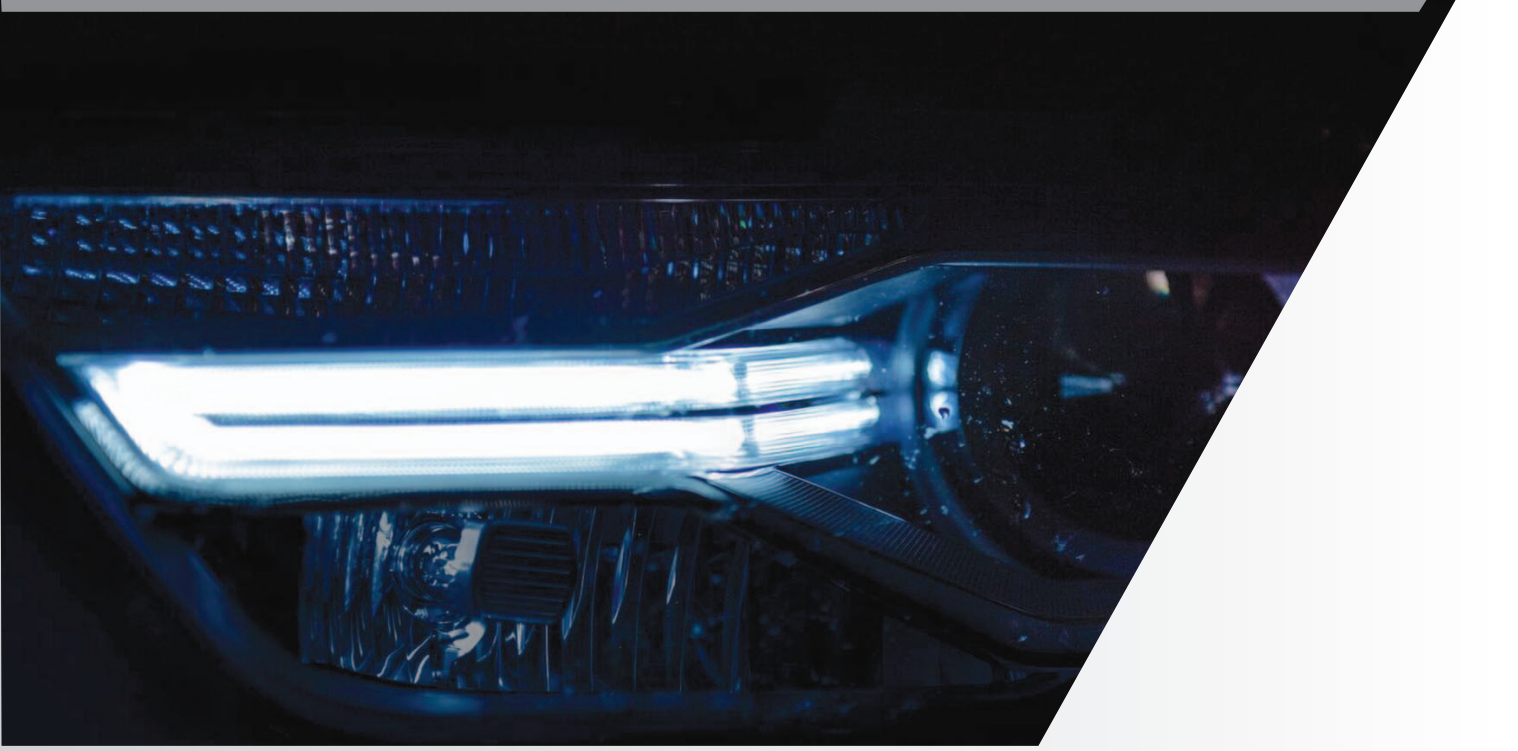
High Cranking Current	High Endurance Cycles	High Charge Acceptance	High Electrolyte Retention	High Charge Retention	Maintenance Free	Extreme Temperatures	Hard And Intensive Use
✔✔✔	✔✔✔	✔✔	✔✔	✔✔	✔	✔✔	✔✔✔

MOTORCYCLES

The range is composed of a variety of products, aiming at satisfying the several application needs including scooters or high-powered motorbikes, lawnmowers, quads, snowcats and water motors. In particular, the watertight models are renowned for their excellent reliability in hot climates and their low self-discharging.



use, diagnostics, features

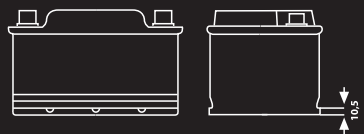


FAAM CODE	V	TECHNOLOGY	MAINTENANCE FREE	ELECTRIC FEATURES		LAYOUT POLARITY	TYPE OF TERMINALS	TYPE OF BOX	DIMENSIONS (mm)			LID	HOLD DOWN	HANDLES	VERSION
				Capacity Ah (20h)	CCA A (EN)				Length L	Width W	Height H				
CYCLES POWER TECHNOLOGY															
EFB FLOODED															
60F22	12	FLOODED	✓	60	570	0	1	L2	242	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
70F32	12	FLOODED	✓	70	650	0	1	L3	276	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
80F42	12	FLOODED	✓	80	740	0	1	L4	314	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
95F52	12	FLOODED	✓	95	870	0	1	L5	352	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
AGM															
60A22	12	VRLA-AGM	✓	60	680	0	1	L2	242	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
70A32	12	VRLA-AGM	✓	70	760	0	1	L3	276	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
80A42	12	VRLA-AGM	✓	80	800	0	1	L4	314	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
90A52	12	VRLA-AGM	✓	90	900	0	1	L5	352	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
SAFE POWER TECHNOLOGY															
43L12	12	FLOODED	✓	43	330	0	1	L1B	207	175	175	SL/IV/FA/ME/MF	B 13	IHL	CA
44L12	12	FLOODED	✓	44	360	0	1	L1	207	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
52L12	12	FLOODED	✓	52	430	0	1	L1	207	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
55X12	12	FLOODED	✓	55	480	0	1	L1	207	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
60L20	12	FLOODED	✓	60	510	0	1	L2B	242	175	175	SL/IV/FA/ME/MF	B 13	IHL	CA
62L22	12	FLOODED	✓	62	540	0	1	L2	242	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
65X22	12	FLOODED	✓	65	570	0	1	L2	242	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
70L30	12	FLOODED	✓	70	600	0	1	L3B	276	175	175	SL/IV/FA/ME/MF	B 13	IHL	CA
74L32	12	FLOODED	✓	74	680	0	1	L3	276	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
80X32	12	FLOODED	✓	80	720	0	1	L3	276	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
00X56	12	FLOODED	✓	100	800	0	1	L5	352	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA

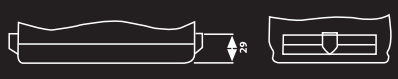
Hold-down

B00 No hold-down

B01
Hold-down of 10,5 mm on long sides

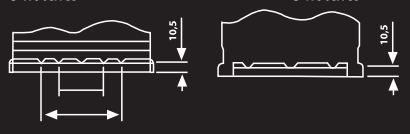


B09
Hold-down of 29 mm with fluting foot



B13
Hold-down of 10,5 mm on all sides

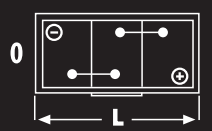
5 notches *3 notches*

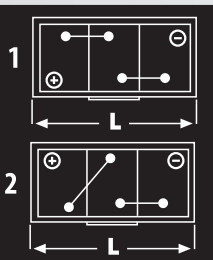


FAAM CODE	V	TECHNOLOGY	MAINTENANCE FREE	ELECTRIC FEATURES		LAYOUT POLARITY	TYPE OF TERMINALS	TYPE OF BOX	DIMENSIONS (mm)			LID	HOLD DOWN	HANDLES	VERSION
				Capacity Ah (20h)	CCA A (EN)				Length L	Width W	Height H				
START POWER TECHNOLOGY															
35NS1	12	FLOODED	✓	35	300	1	3+1	NS40	185	126	220	ASIA	B 00	IHL	CA
35NS2	12	FLOODED	✓	35	300	0	3+1	NS40	185	135	220	ASIA	B 01	IHL	CA
35NS4	12	FLOODED	✓	35	300	0	3+1	NS40	185	126	220	ASIA	B 00	IHL	CA
44L02	12	FLOODED		44	360	0	1	L0	175	175	190	SL/IV	B 13		CA
44R10	12	FLOODED	✓	44	360	0	1	L1B	207	175	175	SL/IV/FA/ME/MF	B 13	IHL	CA
45E21	12	FLOODED		45	330	1	1	E2	217	135	222	FL	B 01		CA/CS
45E22	12	FLOODED		45	330	0	1	E2	217	135	222	FL	B 01		CA/CS
45NS3	12	FLOODED	✓	45	330	1	3+1	NS60	236	127	220	ASIA	B 00	IHL	CA
45NS4	12	FLOODED	✓	45	330	0	3+1	NS60	236	127	220	ASIA	B 00	IHL	CA
52R11	12	FLOODED	✓	52	400	1	1	L1	207	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
52R12	12	FLOODED	✓	52	400	0	1	L1	207	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
60R20	12	FLOODED	✓	60	480	0	1	L2B	242	175	175	SL/IV/FA/ME/MF	B 13	IHL	CA
60D21	12	FLOODED		60	480	1	1	D23	230	170	223	FL	B 00		CS
60D22	12	FLOODED		60	480	0	1	D23	230	170	223	FL	B 00		CS
62R21	12	FLOODED	✓	62	530	1	1	L2	242	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
62R22	12	FLOODED	✓	62	530	0	1	L2	242	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
70R30	12	FLOODED	✓	70	600	0	1	L3B	276	175	175	SL/IV/FA/ME/MF	B 13	IHL	CA
74R31	12	FLOODED	✓	74	650	1	1	L3	276	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
74R32	12	FLOODED	✓	74	650	0	1	L3	276	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
80G43	12	FLOODED	✓	80	620	1	1	Gr 24	260	175	225	ASIA	B 01	IHL	CA
80G44	12	FLOODED	✓	80	620	0	1	Gr 24	260	175	225	ASIA	B 01	IHL	CA
80L40	12	FLOODED		80	700	0	1	L4B	314	175	175	SL/IV	B 13	IHL	CA
80R40	12	FLOODED	✓	80	700	0	1	L4B	314	175	175	SL/IV/FA/ME/MF	B 13	IHL	CA
80L42	12	FLOODED		80	750	0	1	L4	314	175	190	SL/IV	B 13	IHL	CA
80R42	12	FLOODED	✓	80	750	0	1	L4	314	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
92R50	12	FLOODED	✓	92	720	0	1	L5B	352	175	175	SL/IV/FA/ME/MF	B 01	IHL	CA
60003	12	FLOODED	✓	100	760	1	1	GR28	310	175	225	SL/IV/FA/ME/MF	B 13	IHL	CA
60004	12	FLOODED	✓	100	760	0	1	GR28	310	175	225	SL/IV/FA/ME/MF	B 13	IHL	CA
00R42	12	FLOODED	✓	100	800	0	1	L4	314	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
00R51	12	FLOODED	✓	100	800	1	1	L5	352	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
00R52	12	FLOODED	✓	100	800	0	1	L5	352	175	190	SL/IV/FA/ME/MF	B 13	IHL	CA
00L62	12	FLOODED		110	950	0	1	L6	393	175	190	SL/IV	B 13	IHL	CA
BLACK POWER TECHNOLOGY															
54402	12	FLOODED		44	360	0	1	L1	207	175	190	SL/IV	B 13	IHL	CA
55502	12	FLOODED		55	420	0	1	L1	207	175	190	SL/IV	B 13	IHL	CA
56002	12	FLOODED		60	480	0	1	L2	242	175	190	SL/IV	B 13	IHL	CA
57002	12	FLOODED		70	600	0	1	L3	276	175	190	SL/IV	B 13	IHL	CA
58002	12	FLOODED		80	680	0	1	L3	276	175	190	SL/IV	B 13	IHL	CA
59202	12	FLOODED		92	720	0	1	L5	352	175	190	SL/IV	B 13	IHL	CA
60001	12	FLOODED		100	720	1	1	Gb 28	330	175	205	FL	B 13	IHL	CA
60002	12	FLOODED		100	720	0	1	Gb 28	330	175	205	FL	B 13	HL	CA

Polarity

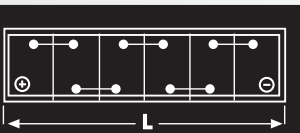
6 Volts



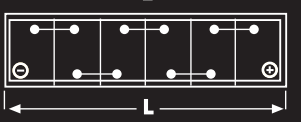


12 Volts

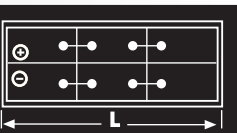
1(L)



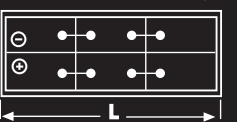
0 (R)



3 (L)



4 (R)

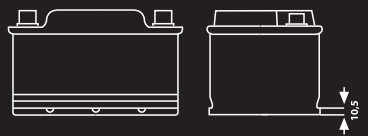


FAAM CODE	V	TECHNOLOGY	MAINTENANCE FREE	ELECTRIC FEATURES		LAYOUT POLARITY	TYPE OF TERMINALS	TYPE OF BOX	DIMENSIONS (mm)			LID	HOLD DOWN	HANDLES	VERSION
				Capacity Ah (20h)	CCA A (EN)				Length L	Width W	Height H				
GENIUS PRO ENERGY TECHNOLOGY															
70092	12	FLOODED-S3	✓	210	1250	3	1	B	513	223	223	FL/IV/FA/ME/MF	B 00	HL	CA
72092	12	FLOODED-S3	✓	240	1400	3	1	C	518	273	242	FL/IV/FA/ME/MF	B 00	HL	CA
GENIUS ENERGY TECHNOLOGY															
64570	12	FLOODED-S3	✓	145	900	3	1	A	513	189	223	FL/IV/FA/ME/MF	B 01	HL	CA
67072	12	FLOODED-S3	✓	170	1000	3	1	B	513	223	223	FL/IV/FA/ME/MF	B 00	HL	CA
68072	12	FLOODED-S3	✓	180	1100	3	1	B	513	223	223	FL/IV/FA/ME/MF	B 00	HL	CA
72072	12	FLOODED-S3	✓	225	1250	3	1	C	518	273	242	FL/IV/FA/ME/MF	B 00	HL	CA
72071	12	FLOODED-S3	✓	225	1250	4	1	C	518	273	242	FL/IV/FA/ME/MF	B 00	HL	CA
SMART PRO ENERGY TECHNOLOGY															
62080	12	FLOODED-S3		120	850	3	1	A	513	189	223	FL/IV/FA/ME/MF	B 01	HL	CA
63580	12	FLOODED-S3		135	900	3	1	A	513	189	223	FL/IV/FA/ME/MF	B 01	HL	CA
66082	12	FLOODED-S3		160	950	3	1	B	513	223	223	FL/IV/FA/ME/MF	B 00	HL	CA
68082	12	FLOODED-S3		180	1050	3	1	B	513	223	223	FL/IV/FA/ME/MF	B 00	HL	CA
70082	12	FLOODED-S3		200	1100	3	1	B	513	223	223	FL/IV/FA/ME/MF	B 00	HL	CA
72082	12	FLOODED-S3		220	1200	3	1	C	518	273	242	FL/IV/FA/ME/MF	B 00	HL	CA
72081	12	FLOODED-S3		220	1200	4	1	C	518	273	242	FL/IV/FA/ME/MF	B 00	HL	CA
SMART ENERGY TECHNOLOGY															
12061	6	FLOODED		120	680	0	1	M4	240	169	225	FL	B 00		CA
16061	6	FLOODED		160	850	0	1	M5	327	175	234	FL	B 01	HL	CA
00G75	12	FLOODED		100	760	1	1	Gb 28	330	175	205	FL	B 13	HL	CA/CS
00G76	12	FLOODED		100	760	0	1	Gb 28	330	175	205	FL	B 13	HL	CA/CS
60561	12	FLOODED		105	710	0	1	Comp. 90	344	172	232	FL	B 00	IHL	CA/CS
60562	12	FLOODED		105	710	1	1	Comp. 90	344	172	232	FL	B 00	IHL	CA/CS
61063	12	FLOODED		110	850	0	1	Comp. 90	344	176	232	FL	B 01	IHL	CA
62060	12	FLOODED		120	850	3	1	A	513	189	223	FL	B 01	IHL	CA
62062	12	FLOODED		120	850	3	1	MAC 120	509	175	228	FL	B 13	HL	CA/CS
62061	12	FLOODED		120	850	4	1	MAC 120	509	175	228	FL	B 13	HL	CA/CS
63061	12	FLOODED		130	720	0	1	Comp. 120	344	172	283	FL	B 00	IHL	CA
63062	12	FLOODED		130	720	1	1	Comp. 120	344	172	283	FL	B 00	IHL	CA
63560	12	FLOODED		135	900	3	1	A	513	189	223	FL	B 01	HL	CA
63561	12	FLOODED		135	900	4	1	A	513	189	223	FL	B 01	HL	CA
63572	12	FLOODED		135	850	0	1	MAT 132	508	175	210	FL	B 01	HL	CA/CS
650M3	12	FLOODED		150	950	3	1	MAC 143/D	514	218	210	BL/IV	B 13	HL	CA
66062	12	FLOODED		160	950	3	1	B	513	223	223	FL	B 00	HL	CA/CS
66061	12	FLOODED		160	950	4	1	B	513	223	223	FL	B 13	HL	CA/CS
68062	12	FLOODED		180	1050	3	1	B	513	223	223	FL	B 00	HL	CA
68061	12	FLOODED		180	1050	4	1	B	513	223	223	FL	B 13	HL	CA
700M1	12	FLOODED		200	1100	4	1	MAC 143/D	514	218	210	BL	B 13	HL	CA
70062	12	FLOODED		200	1100	3	1	B	513	223	223	FL	B 00	HL	CA/CS
70061	12	FLOODED		200	1100	4	1	B	513	223	223	FL	B 13	HL	CA/CS
72062	12	FLOODED		220	1200	3	1	C	518	273	242	FL	B 00	HL	CA/CS
72061	12	FLOODED		220	1200	4	1	C	518	273	242	FL	B 00	HL	CA/CS

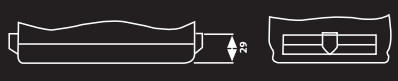
Hold-down

B00 No hold-down

B01
Hold-down of 10,5 mm on long sides

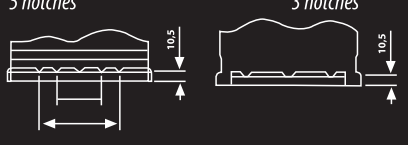


B09
Hold-down of 29 mm with fluting foot



B13
Hold-down of 10,5 mm on all sides

5 notches *3 notches*



FAAM CODE	V	TECHNOLOGY	MAINTENANCE FREE	ELECTRIC FEATURES		LAYOUT POLARITY	TYPE OF TERMINALS	TYPE OF BOX	DIMENSIONS (mm)			LID	HOLD DOWN	HANDLES	VERSION
				Capacity Ah (20h)	CCA A (EN)				Length L	Width W	Height H				

MISTRAL HEAVY PLUS TECHNOLOGY

STARTER FOR BOATS AND SMALL YACHTS

80M32	12	FLOODED		80	680	0	1	L3	276	175	190	SL/IV	B 13	IHL	CA
00M56	12	FLOODED		100	800	0	1	L5	352	175	190	SL/IV	B 13	IHL	CA
60078	12	FLOODED		100	730	0	1	Gb 28	330	175	205	FL	B 00	HL	CS

STARTER FOR DEEP-SEA MARINE

72007	12	FLOODED		220	810	3	35		430	395	280		B 00	HL	CA/CS
74007	12	FLOODED		240	850	3	35		430	395	280		B 00	HL	CA/CS
82017	12	FLOODED		320	950	3	35		550	395	280		B 00	HL	CA/CS

BOARD SERVICE

28540	4	FLOODED		885		sx (4V)	35		410	220	580		B 00	HL	CA
35435	6	FLOODED		430		1	35		330	220	475		B 00	HL	CA
36435	6	FLOODED		520		1	35		410	220	475		B 00	HL	CA
37435	6	FLOODED		610		1	35		490	220	475		B 00	HL	CA
38435	6	FLOODED		680		1	35		515	220	475		B 00	HL	CA
39435	6	FLOODED		780		1	35		600	220	475		B 00	HL	CA

TRALEG HEAVY PLUS TECHNOLOGY

FLAT PLATE

				Ah/20h	Ah/5h										
24061	6	FLOODED		240	190	0	1	GOLF-CART	244	190	282	SL	B 00		CA
80T32	12	FLOODED		80	64	0	1	L3	276	175	190	SL/IV/FA/SP	B 13	IHL	CA
58061	12	FLOODED		80	64	1	1	Gr 24	287	175	230	FL	B 09		CA
00T56	12	FLOODED		100	80	0	1	L5	352	175	190	SL/IV/FA/SP	B 13	IHL	CA
60068	12	FLOODED		100	80	0	1	Gr 28	330	175	220	FL	B 01	HL	CA
63071	12	FLOODED		130	105	0	1	Comp. 120	344	172	283	FL	B 00	IHL	CA
69962	12	FLOODED		200	160	3	1	B	513	223	218	FL	B 00	HL	CA
71962	12	FLOODED		220	165	3	1	C	518	279	238	FL	B 00	HL	CA

TUBULAR PLATE

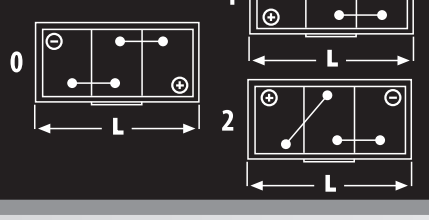
24071	6	FLOODED		240	185	0	1	GOLF-CART	244	190	282	SL	B 00		CA
24081	6	FLOODED		260	205	0	1	GOLF-CART	244	190	282	SL	B 00		CA
59078	12	FLOODED		95	75	0	1	Gr 28	304	175	228	SL/IV	B 01	IHL	CA
58578	12	FLOODED		100	80	0	1	Comp. 90	344	172	232	FL	B 00	IHL	CA
61578	12	FLOODED		135	110	0	1	Comp. 120	344	172	283	FL	B 00	IHL	CA

GEL

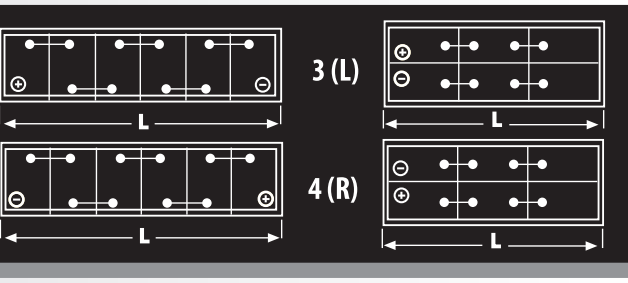
24091	6	VRLA-GEL	✓	225	180	0	1	GOLF-CART	244	190	276	SL	B 00		CA
61588	12	VRLA-GEL	✓	135	110	0	1	Comp. 120	344	172	283	FL	B 00	IHL	CA

Polarity

6 Volts



12 Volts



MOTORCYCLES

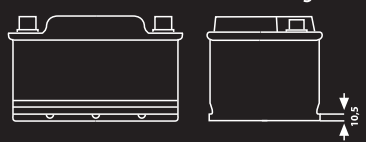
FLOODED

FAAM CODE	V	TECHNOLOGY	MAINTENANCE FREE	ELECTRIC FEATURES		LAYOUT POLARITY	TYPE OF TERMINALS	TYPE OF BOX	DIMENSIONS (mm)			LID	HOLD DOWN	HANDLES	VERSION
				Capacity Ah (20h)	CCA A (EN)				Length L	Width W	Height H				
6N4B-2A	6	FLOODED		4		0	M05		70	47	96	Hole L	B 00		CS
6N4B-2A-4	6	FLOODED		4		0	M05		71	71	96	No degas. hole	B 00		CS
6N6-3B	6	FLOODED		6		2	M06		99	57	111	No degas. hole	B 00		CS
B39-6	6	FLOODED		7		0	M06		126	48	126	No degas. hole	B 00		CS
B49-6	6	FLOODED		8		1	M06		91	83	161	No degas. hole	B 00		CS
6N11A-3A	6	FLOODED		11		2	M05		122	62	131	Hole L	B 00		CS
6N11A-1B	6	FLOODED		11		0	M06		122	62	131	Hole R	B 00		CS
B 38-6A	6	FLOODED		13		0	M06		119	83	161	Hole R	B 00		CS
CB3L-A	12	FLOODED		3	32	0	M06		99	57	111	Hole L	B 00		CS
CB3L-B	12	FLOODED		3	32	0	M06		99	57	111	Hole R	B 00		CS
CB4L-B	12	FLOODED		4	60	0	M05		116	71	93	Hole R	B 00		CS
12N5-3B	12	FLOODED		5	65	0	M06		121	61	131	Hole R	B 00		CS
CB5L-B	12	FLOODED		5	70	0	M06		121	61	131	Hole R	B 00		CS
12N5.5A-3B	12	FLOODED		5,5	70	0	M06		104	91	115	Hole R	B 00		CS
12N5.5-4A	12	FLOODED		5,5	70	1	M02		138	61	131	Hole L	B 00		CS
12N5.5-3B	12	FLOODED		5,5	70	0	M06		138	61	131	Hole R	B 00		CS
12N7-3B	12	FLOODED		7	85	0	M06		137	76	135	Hole R	B 00		CS
12N7-4B	12	FLOODED		7	85	1	M06		137	76	135	Hole R	B 00		CS
CB7-A	12	FLOODED		8	120	1	M06		137	76	135	Hole L	B 00		CS
CB7L-B	12	FLOODED		8	120	0	M06		137	76	135	Hole R	B 00		CS
CB9-B	12	FLOODED		9	130	1	M06		138	77	133	Hole R	B 00		CS
CB9L-A2	12	FLOODED		9	130	0	M02		138	77	141	Hole L	B 00		CS
12N9-4B-1	12	FLOODED		9	130	1	M06		137	76	140	Hole R	B 00		CS
12N9-3B	12	FLOODED		9	90	0	M06		137	76	140	Hole R	B 00		CS
12N10-3B	12	FLOODED		10	160	0	M06		136	91	146	Hole R	B 00		CS
CB10L-A2	12	FLOODED		11	160	0	M04		136	91	146	Hole L	B 00		CS
CB12A-A	12	FLOODED		12	165	1	M06		135	81	161	Hole L	B 00		CS
CB12A-B	12	FLOODED		12	165	1	M06		135	81	161	Hole R	B 00		CS
CB12AL-A2	12	FLOODED		12	165	0	M08		136	81	161	Hole L	B 00		CS
12N14-3A	12	FLOODED		14	135	0	M08		136	91	167	Hole L	B 00		CS
CB14-A2	12	FLOODED		14	190	1	M08		136	91	167	Hole L	B 00		CS
CB14L-A2	12	FLOODED		14	190	0	M08		136	91	167	Hole R	B 00		CS
SCB14L-B2	12	FLOODED		14	190	0	M08		136	91	167	Hole R - with sensor	B 00		CS
CB16-B	12	FLOODED		19	200	1	M06		176	101	156	Hole R	B 00		CS
SCB16L-B	12	FLOODED		16	200	0	M06		176	101	156	Hole L	B 00		CS
CB16B-A	12	FLOODED		16	220	1	M04		162	92	162	Hole L	B 00		CS
CB16AL-A2	12	FLOODED		16	220	0	M02		207	71	164	Hole L	B 00		CS
CB18L-A	12	FLOODED		18	235	0	M07		182	92	164	Hole L	B 00		CS
CB16CL-B	12	FLOODED		19	240	0	M10		175	100	175	Hole R	B 00		CS
52015	12	FLOODED		20	240	0	M07		186	82	173	Hole R	B 00		CS
SC50 N18LAT	12	FLOODED		20	260	0	M07		207	92	164	Hole L - with sensor	B 00		CS
52432	12	FLOODED		24	220	0	M10		187	128	165	Hole RL	B 00	IHL	CS
C60-N24-A	12	FLOODED		28	280	1	M03		185	125	176	Hole L	B 00		CS
53030	12	FLOODED		30	300	0	M11		187	130	170	Hole R	B 00	IHL	CS
53031	12	FLOODED		30	300	1	M11		187	130	170	Hole R	B 00	IHL	CS
53232	12	FLOODED		32	300	0	M10		232	130	167	Hole RL	B 00	IHL	CS
53532	12	FLOODED		35	450	0			233	130	165	Hole L	B 00	IHL	CS

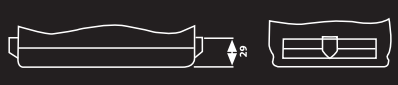
Hold-down

B00 No hold-down

B01
Hold-down of 10,5 mm on long sides

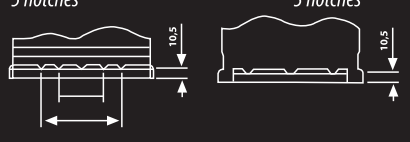


B09
Hold-down of 29 mm with fluting foot



B13
Hold-down of 10,5 mm on all sides

5 notches *3 notches*



FAAM CODE	V	TECHNOLOGY	MAINTENANCE FREE	ELECTRIC FEATURES		LAYOUT POLARITY	TYPE OF TERMINALS	TYPE OF BOX	DIMENSIONS (mm)			LID	HOLD DOWN	HANDLES	VERSION
				Capacity Ah (20h)	CCA A (EN)				Length L	Width W	Height H				

MOTORCYCLES

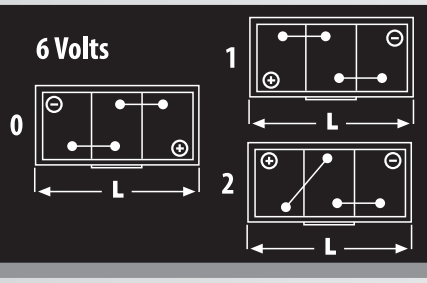
MAINTENANCE FREE

XTR4A-BS	12		✓	2,3	45	4	M12		114	49	86	No degas. hole	B 00		CA
CBTX4L-BS	12		✓	4	50	0	M05		114	71	86	No degas. hole	B 00		CS
CBTX5L-BS	12		✓	5	70	0	M05		114	71	106	No degas. hole	B 00		CS
CBTZ7-BS	12		✓	6	70	0	M05		114	71	106	No degas. hole	B 00		CS
CBT7B-BS	12		✓	6.5	90	1	M05		150	65	93	No degas. hole	B 00		CA
CBTX7A-BS	12		✓	7	90	1	M05		152	88	94	No degas. hole	B 00		CS
CBTX7L-BS	12		✓	7	90	0	M05		114	71	131	No degas. hole	B 00		CS
CBT9B-BS	12		✓	8	110	1	M04		150	70	105	No degas. hole	B 00		CA
CBTX9-BS	12		✓	9	120	1	M04		152	88	106	No degas. hole	B 00		CS
CBTZ10-BS	12		✓	9	120	1	M05		152	88	93	No degas. hole	B 00		CA
CBT12A-BS	12		✓	10	120	1	M05		152	88	106	No degas. hole	B 00		CS
CBT12B-BS	12		✓	10	180	1	M05		152	70	131	No degas. hole	B 00		CA
CBTZ12-BS	12		✓	11	210	1	M05		152	88	110	No degas. hole	B 00		CA
CBTZ12-BD	12		✓	11	210	0	M04		152	88	110	No degas. hole	B 00		CA
CBTX12-BS	12		✓	12	180	1	M05		152	88	131	No degas. hole	B 00		CS
CBTX14-BS	12		✓	14	200	1	M05		152	88	147	No degas. hole	B 00		CS
CBTX20-BS	12		✓	18	270	1	M05		177	88	156	No degas. hole	B 00		CS
CBTX20L-BS	12		✓	18	270	0	M05		177	88	156	No degas. hole	B 00		CA
CBTX24HL-BS	12		✓	21	350	0	M05		205	85	162	No degas. hole	B 00		CS

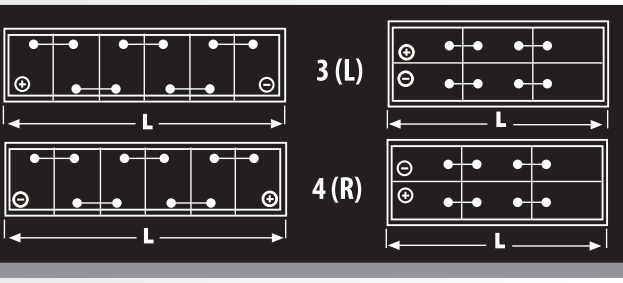
***designed to face** any effort*

Polarity

6 Volts



12 Volts



INSTRUCTIONS FOR USE

1. STORAGE AND TRANSPORTATION
Starter batteries do not require any maintenance if they are dry charged. They must be stored in a cool, dry place (avoid very cold areas).
Temperatures between 20°C-30°C (68°F-86°F).
Wet charged starter batteries shall be recharged when acid density falls below 1.23kg/l (1.18kg/l if the first filling acid density is 1.23kg/l);
however, every 4-6 months of storage.
Wet charged batteries shall be blocked in upright position and transported in this position, otherwise there is a risk of acid leakage or a possible overturning during transport.

2. STARTING OPERATION
Dry charge starter batteries are ready for use without the need for any recharge after filling with acid.
During the filling-up operation, the temperature of the acid and of the battery should be between 15°C (59°C) and 20°C (68°F) Remove the plugs. Fill up all battery cells with sulphuric acid—according to VDE 0510, with a density of 1.28 kg/l (or 1.23kg/l in tropical countries) until you reach the maximum level of acid or a height of 15 mm above the plates.
Leave the battery alone for 15-30 minutes, in order to allow the plate to absorbe the electrolyte well. Then, if needed, fill it with more electrolyte until the aforementioned correct level is reached. Put the plugs in and screw them down accurately. Dry all acid drops and spurts. The batteries are now filled up and ready for use.
NOTE: the battery—because of a too low temperature, unfavourable storage conditions or a storage time over 6 months, needs to be recharged. That, giving a current equal to 1/10 of the nominal capacity (e.g.: 4.5A of charging current in case of a 45Ah battery) for 4h-6h.

3. INSTALLATION IN THE VEHICLE
Before the installation or the disinstallation of the battery, stop the engine and all devices that use electricity.
Beware of short-circuits caused by tools.
Before the disinstalling, remove the negative terminal (-) before the positive one (+).
Clean the vehicle's battery compartment and support before placing the battery. Fasten the battery properly. Clean the battery poles and the terminals, smearing them slightly with anti-acid grease. When installing the battery in the vehicle, assemble the positive pole (+) before the negative one (-).
Make sure all the terminals are properly fastened.

4. OUT-OF-VEHICLE CHARGING
It is recommended to remove the battery from the vehicle prior to charging. If the battery is to be charged on board the vehicle, it is necessary to disconnect the battery cables (follow the vehicle manufacturer's instructions).
Batteries can be charged only with direct current. Connect the positive terminal (+) of the battery to the positive terminal (+) of the battery charger and the negative terminal (-) of the battery to the negative terminal (-) of the battery charger. Switch the charger on only after connecting the battery to it. When charging is over stop the battery charger before disconnecting the battery.
It is recommended to charge the battery with a current of 1/10 of the nominal capacity (e.g.: 4.5 A for 45 Ah batteries).
Acid temperature shall not exceed 55°C (131°F) during charging; if that happens stop immediately the charging. The battery is fully charged when the acid density and the charging voltage do not increase over a two hours period.
Check the electrolyte level after charging and, if necessary, add demineralised or distilled water until the water level reaches the maximum or at least it is 15 mm above the plates. Make sure there is proper ventilation during the charging.

5. MAINTENANCE
The following recommendations should be observed to ensure a long battery duration.
Keep the battery surface clean and dry. Regularly check the electrolyte level and add demineralised or distilled water if needed. Never add acid.
In case of a major water decreasing the voltage of the charge regulator should be checked by a specialist.
Do not use so-called "improvement" products.
The battery's charge status can be assessed by checking the electrolyte's density. Recharge the battery if density is below 1.23kg/l (or 1.18kg/l if initial density of acid was 1.23kg/l).
This value of electrolyte density protects the battery against cold for temperatures up to approximately –15° C/5°F (up to –70°C/-94°F if d=1.28kg/l).

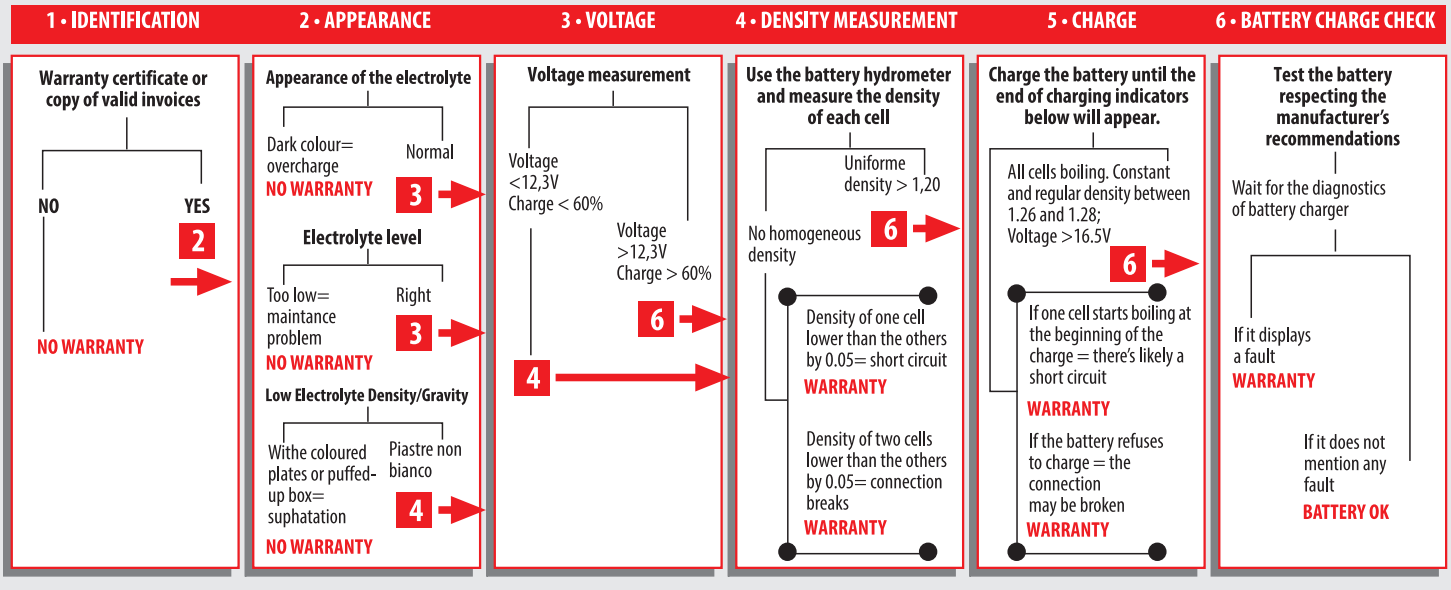
6. MAGIC EYE
The magic eye monitors the status of the battery:
Green: charged
Black: low charge or needs to be checked
The magic eye is in the Top Power Safe range.

7. ASSISTANCE TO ENGINE STARTING BY MEANS OF ANOTHER VEHICLE
Use only standard cables (e.g. DIN 72533). Always follow cable usage instructions.
Connect only batteries with the same nominal voltage.
Connection: stop both the engines, first connect the two positive terminals and then the negative terminals (-) of the charged battery (to a metal, non insulated spot in the non-working vehicle). (Follow all relevant instructions from the vehicle manufacturers).
Start the "helping" vehicle, then start the engine of the non-working vehicle for a maximum time of 15 seconds.
Disconnect the cables in the reverse order.

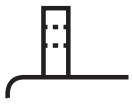
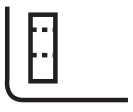
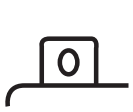
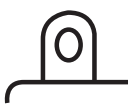
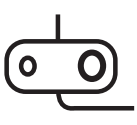
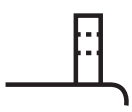
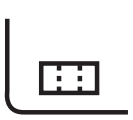
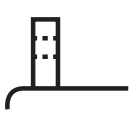
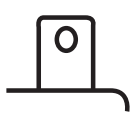
8. TEMPORARY NON-USE OF THE VEHICLE
Remove the battery from the vehicle and store it in a fresh and dry place. On the contrary, if the battery remains on the vehicle, disconnect the negative (-) terminal.
Regularly control the level of charge.

9. SMART - ENERGY TECHNOLOGY
They were designed and built for traditional vehicles, before 2000, and for vehicles that do not belong to the latest generations. Some care is needed against the electrolyte leakage.

FAULT DIAGNOSTICS



Motorbike Battery Terminals

Type	Front view	Side view	Top view
M 01			
M 02			
M 03			
M 04			
M 05			
M 06			
M 07			
M 08			
M 09			
M 10			
M 11			
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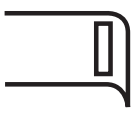
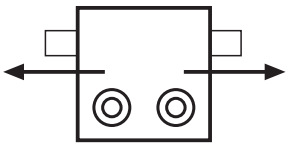
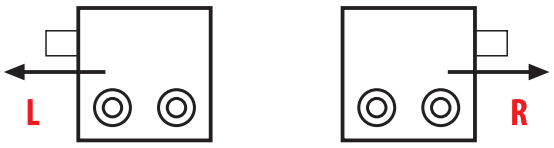
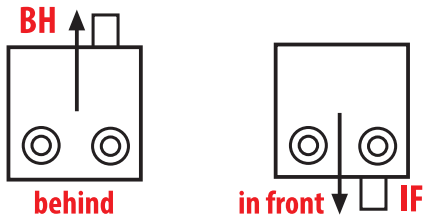
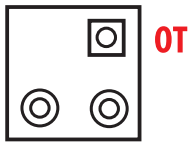
M 13			

Gas expulsion position

Code	Degassing position
RL	
R or L	
BH or IF	
OT	

Explanation about battery details

Version

CA = Battery type, which is Available as Wet Charged

CS = Battery type, which is Available as Dry Charged

Features of the cover

BL (block lid)= (Kamina type) the terminals height is the same as the lid height. The plugs embedded under the lid surface. There is no perimetrical space around the lid for possible fixings.

FL (flat lid)= The lid surface is completely flat; the terminals and the plugs stick out from it.

SL (semi lid)= (Kamina type) the terminals height is the same as the lid height. The plugs embedded under the lid surface. There is a 15mm perimetrical space for the possible fixing of upper clamps.

IV (internal valve)= special lid with central degassing.

FA = Flame Arrester.

SP = Spill Proof.

VR = Valve Regulator

IHL = Handle integrated in the lid.

HL = Rope handles fixed on the short sides of the battery. All the batteries are built in polypropylene, excepted those ones in which is differently specified.

ME = Magic Eye

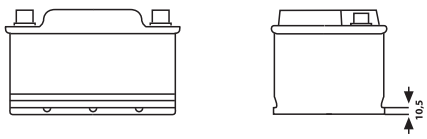
MF = Maintenance Free

FEATURES

HOLD - DOWNS

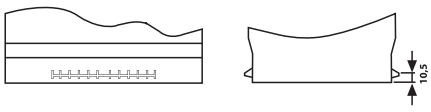
B00 No hold-downs

B01 Hold-down 10,5 mm on long sides

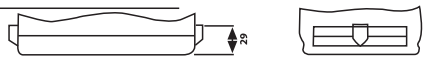


B04 Hold-down of 19 mm on long sides

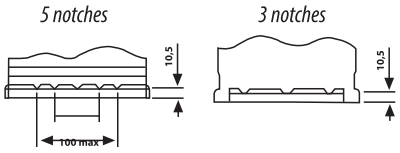
B07 Hold-down of 10,5 mm



B09 Hold-down of 29 mm with fluting foot

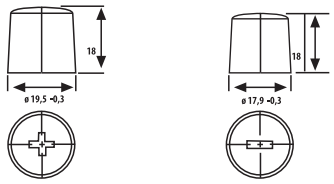


B13 Hold-down of 10,5 mm on all sides

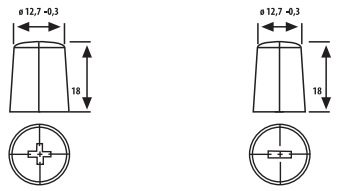


TERMINALS

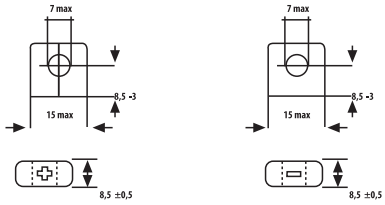
1 Normal terminals



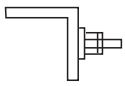
3 Small terminals (Japanese cars)



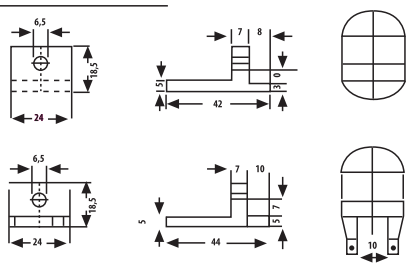
4 Bracket fastening



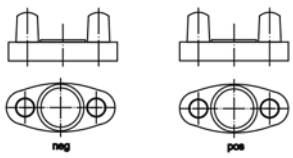
12 Bracket fastening



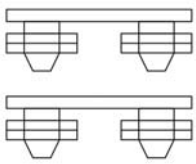
19 Ford poles



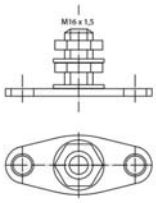
20 Double tapered pole



21 Double screw pole



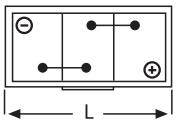
35 Screw pole for marine batteries



POLARITY

6 Volts

0



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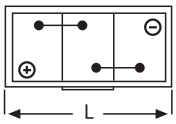

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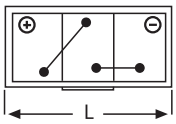

12 Volts

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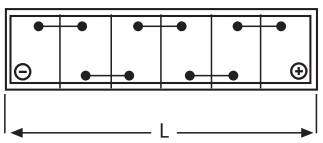

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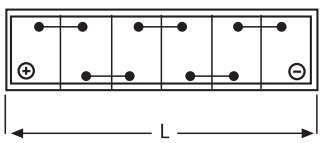

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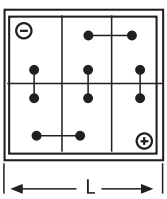

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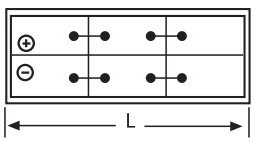

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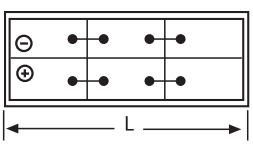

SYNOPTIC TABLE OF THE ADVANTAGES

	POWER TECHNOLOGY				ENERGY TECHNOLOGY			
	CYCLES	SAFE	START	BLACK	GENIUS PRO	GENIUS	SMART PRO	SMART
General Judgment	●●●●●	●●●●●	●●●●○	●●●●○	●●●●●	●●●●●	●●●●○	●●●●○
Cold Crancking Current	●●●●●	●●●●●	●●●●○	●●●○○	●●●●●	●●●●○	●●●●○	●●●●○
Capacity	●●●●●	●●●●●	●●●●●	●●●●○	●●●●●	●●●●●	●●●●●	●●●●○
Average life span	●●●●●	●●●●●	●●●●○	●●●○○	●●●●●	●●●●●	●●●●●	●●●●○
Cycle proof	●●●●●	●●●●○	●●●●○	●●●○○	●●●●●	●●●●○	●●●●○	●●●○○
Slower Self-discharge	●●●●●	●●●●●	●●●●○	●●●○○	●●●●●	●●●●●	●●●●○	●●●○○
Reduced water consumption	●●●●●	●●●●●	●●●●○	●●●●○	●●●●●	●●●●●	●●●●○	●●●●○
Vibration resistance	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●○○

GOOD ●●●○○ VERY GOOD ●●●●○ EXCELLENT ●●●●●

ANNOTATIONS

C45AVGB Grafica e Stampa Manita Creative - agenzia di comunicazione - 0823 543296

STARTER

This catalogue cancels and replaces the previous one. FIB srl reserves the right to modify at any time and without prior notice the information contained in this catalogue.

FAAM
Heavy Duty Batteries Specialist

Made in Italy

SERI industrial GROUP

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ENVIRONMENTAL SYSTEM CERTIFICATION DNV·GL ISO 14001
QUALITY SYSTEM CERTIFICATION DNV·GL ISO 9001