

MOTOMA®

Power into the Future

Sealed Lead-Acid Batteries



 **MOTOMA POWER CO., LTD.**

12/F, Shenmao Bldg, Xinwen Rd, Futian,
Shenzhen, China 518034

TEL: +86-755-8294-9246, 8373-6206

FAX: +86-755-8371-9090

www.motoma.com

Info@motoma.com

motoma96@yahoo.com

To be a quality brand

Brief

MOTOMA power , is one of the leading Maintenance-Free Rechargeable Sealed Lead-Acid Battery (VRLA/SLA) manufacturers and exporters in P.R.China.

We are engaged in the R&D, producing and marketing of Valve Regulated Lead-Acid (VRLA) Batteries, which are mainly used for telecommunication systems, electric powered equipments, power tools, solar powered systems, UPS, emergency lighting etc.

We keep searching the new materials, new construction, new technology of Sealed Lead-Acid batteries. We have much improved the performance & characteristics of VRLA/SLA batteries. The specific energy rose up approx.50% to 55wh/g . Specific power was improved up approx .60% to 230Wh/g . with an output of 400,000 KVAh rating from 0.5 to 3000Ah.

Strong R&D supports us to customize your products. We have develop series of batteries, such as general batteries, high rate batteries, deep cycle discharge batteries, GEL batteries, tubular GEL batteries etc.

For more information, pls contact your local MOTOMA Agents/Distributors.



A view to workshop



Plastic Injection



Pb Power



Plate Casting



Assembling Workshop



Assembling Workshop



Solidify



Drying Room



Outgoing QA-Workshop



Formation Workshop

1 HANDLING INSTRUCTION

Please read MOTOMA "User's Guide" entirely and make its contents fully understood before handling or using MOTOMA rechargeable Valve Regulated Lead-Acid (VRLA) Batteries. For your safety and that of your customers observe, all cautionary informations are provided in the "User's Guide". Save the "User's Guide" for future reference.

For more information, pls contact your local MOTOMA Agents/Distributors.

2 APPLICATIONS

Standby use

- Emergency Light and Guide Light
- UPS
- Computers Peripheral Terminals
- Fire & Security Alarm Systems
- Marine Equipment
- Solar Powered Systems
- Security and Alarm Systems
- Telecommunication Systems
- ATM Machine
- Marine Equipment
- Military Equipment
- Railway System
- Cable Television

Cycle use

- Electric Powered Bicycle
- Medical Equipment
- Portable Measuring Instruments
- Powers Tools
- Television & Video Recorders
- Toys
- Office Equipment
- Garden Lighting
- Vending Machines
- Electric Wheelchair
- Electric Power Station
- Golf Car
- Electric Forklift

3 MAJOR FEATURES:

A. Maintenance-Free

Adopts strong Pb-Ca/Pb-Ca-Sn alloy grid against corrosion and distortion. Super fine glass fiber functions as separator. Internal oxygen recycling realizes through gas re-combination. There is no need to add water or electrolyte into the battery during lifelong operation.

B. Long Service Lifespan

MOTOMA batteries have strong grid made from special Pb-Ca-Sn alloy. Moreover, it has glass fiber separator to press tightly the active material and ensure long float charge service lifespan. The gas generated during float charge can be absorbed and re-combined so that there is no need to add electrolyte. More than 1,000 cycles discharge and charge available under properly use. Up to 18 years design life, this makes it extremely economical and provides an expected life. The battery also has long cyclic lifespan after deep discharge.

C. Low Internal Resistance

Optimized design of electrode, current collecting bar, and electrode terminal and material with very low resistance as separator to minimize battery's internal resistance and ensures high-current discharge.

D. Excellent Discharger Performance

With low internal resistance and high flat voltage characteristics during high current discharge, MOTOMA batteries offer a perfect discharging platform.

E. Wide Operating Temperature Range:

The operating temperature range of MOTOMA batteries could be from -20℃ to 60℃. Max.-40℃ also be available upon request.

F. Reliably Sealed and Leakproof Construction

Quality resin together with excellent ABS container has formed strong sealant construction against corrosion. The quality safety valve, seal gasket, separator and acid filter provides safety, maintenance-free service and no leakage during operation.

G. High Safety and Reliability

Built-in safety valve not only automatically regulates battery's internal pressure to prevent leakage and explosion to ensure safety, but also avoids entry of external gas or flame that may induce self-discharge or explosion. Electrode terminals are sealed by special technologies and ensure no leakage.

H. Total Solution Design

The battery is applicable in configuration demanding of mainframes of exchanges, mobile base stations and telecom power systems and so on. The battery supports both internal and external installations to ensure reliable operation of mainframes.

I. Full Recovery After Deep Discharge (D series)

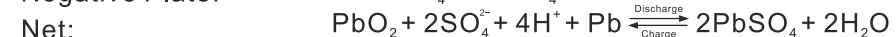
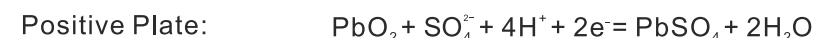
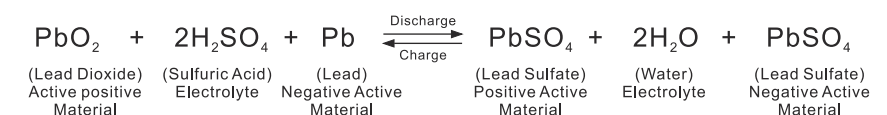
The quality grid alloy, excellent technology and unique electrolyte additive ensure that the battery's capacity can be fully recovered by specified charging after deep discharge.

J. Wide Application:

Motoma batteries can be widely-used due to its perfect performance. It could be used for UPS, telecommunication, emergency lighting, fire and security alarm system, solar and wind power system, ATM machine, military equipment, railway system, cable television, golf carts, hammer drills, saws, instruments, measuring equipment, medical electronics, backup power etc.

4 ELECTROCHEMICAL PRINCIPLE

General Forum:

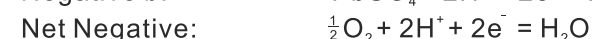
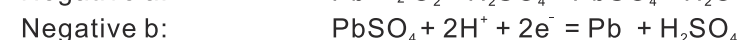
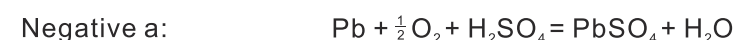


The gassing and water loss reactions are as follows:



It is noted that the gassing reaction only generally occurs to any extent when the battery is almost totally charged.

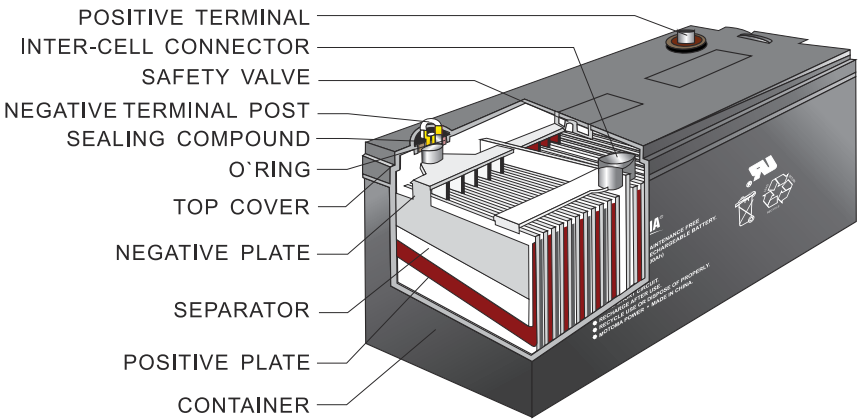
For the valve regulated battery, it is obvious that water loss must be avoided. This is done by limiting the escape of hydrogen and oxygen from the battery. The design therefore accomplishes the recombination of the oxygen formed at the positive plate with the hydrogen formed at the negative plate. The reaction is as follows.



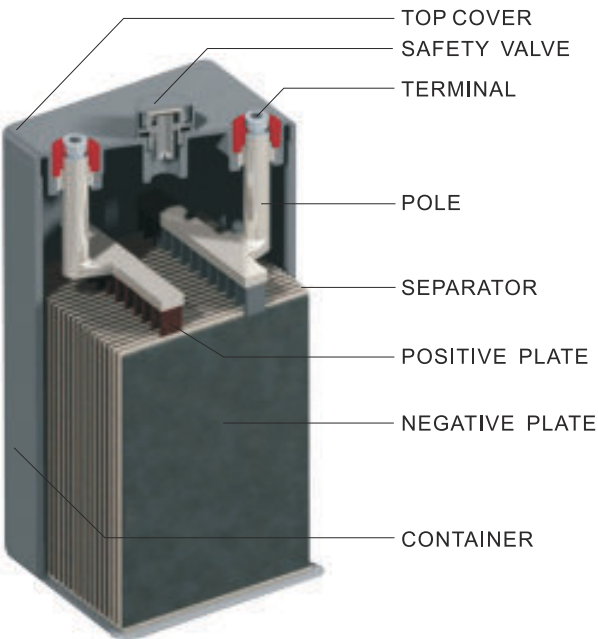
Because the oxygen gas generated in the final stage of charging is absorbed by the negative, as shown by above equations, there is no increase in internal pressure, despite the sealed construction. When, however, the charging current exceeds the specified value, or when charging is conducted at less than the specified temperature, the gas generated by reaction (1) cannot all be absorbed the negative. (2)In the event of an increase in internal pressure develops, in the worst case, the safety valve opens.

5 CONSTRUCTION

5.1

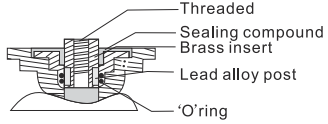


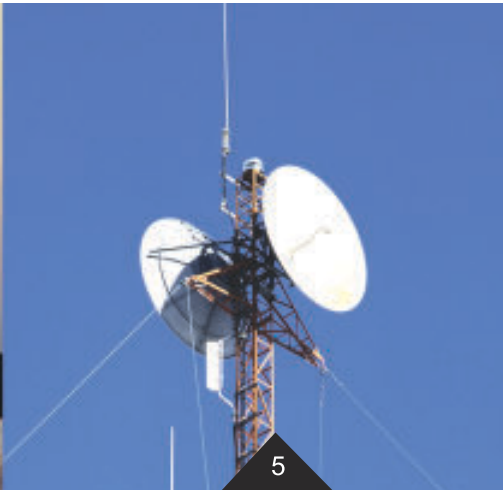
12V



2V

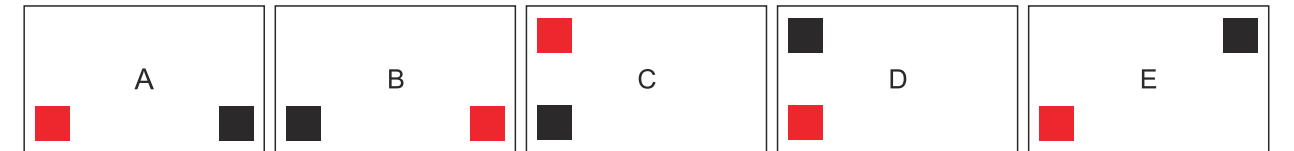
5.2 Construction and Functions

Battery Parts	Material Used	Special Function
Positive and Negative plates	Pasted type plate in which special lead-tin-calcium alloy grids are pasted with active material.	Retain high capacity. Maintain capacity performance throughout service life. Minimize self-discharge.
Separator	Microporous glass fiber (AGM)	Prevent short-circuit between(+) and (-) plates. Prevent active material from shedding. Retain electrolyte.
Safety valve	Synthetic rubber cap with excellent acid resistance In cap shape	Release gas if internal pressure rises too high. Vent release pressure is between 2~6Psi.
Electrolyte	Highly purified dilute sulphuric acid with special additives	It is absorbed by plates & separator. Conduct electro-chemical reaction in (+) and (-) plates.
Sealing epoxy	Acid-resistant epoxy resin	Sealing condition allow the gas recombination, system which transforms the generated gas into. water, thus no topping-up is required throughout. battery life and is maintenance-free. Leakproof from terminal or case. Ensure safety.
Container & cover & top lid	Injection-mould made of ABS synthetic resin	Withstands thermal and mechanical shock. Integral handle incorporated into lid for easy lifting.
Terminal Construction	 <p>Made of copper or lead alloy integrally moulded with terminal post Terminal section employs dual complete seal construction of O-ring and sealing compound Color of sealing compound: red for positive section and black for negative section Optional type has a nut embedded in terminal</p>	Threaded insert terminal provides maximum conductivity and enhance high rate of discharge characteristics.

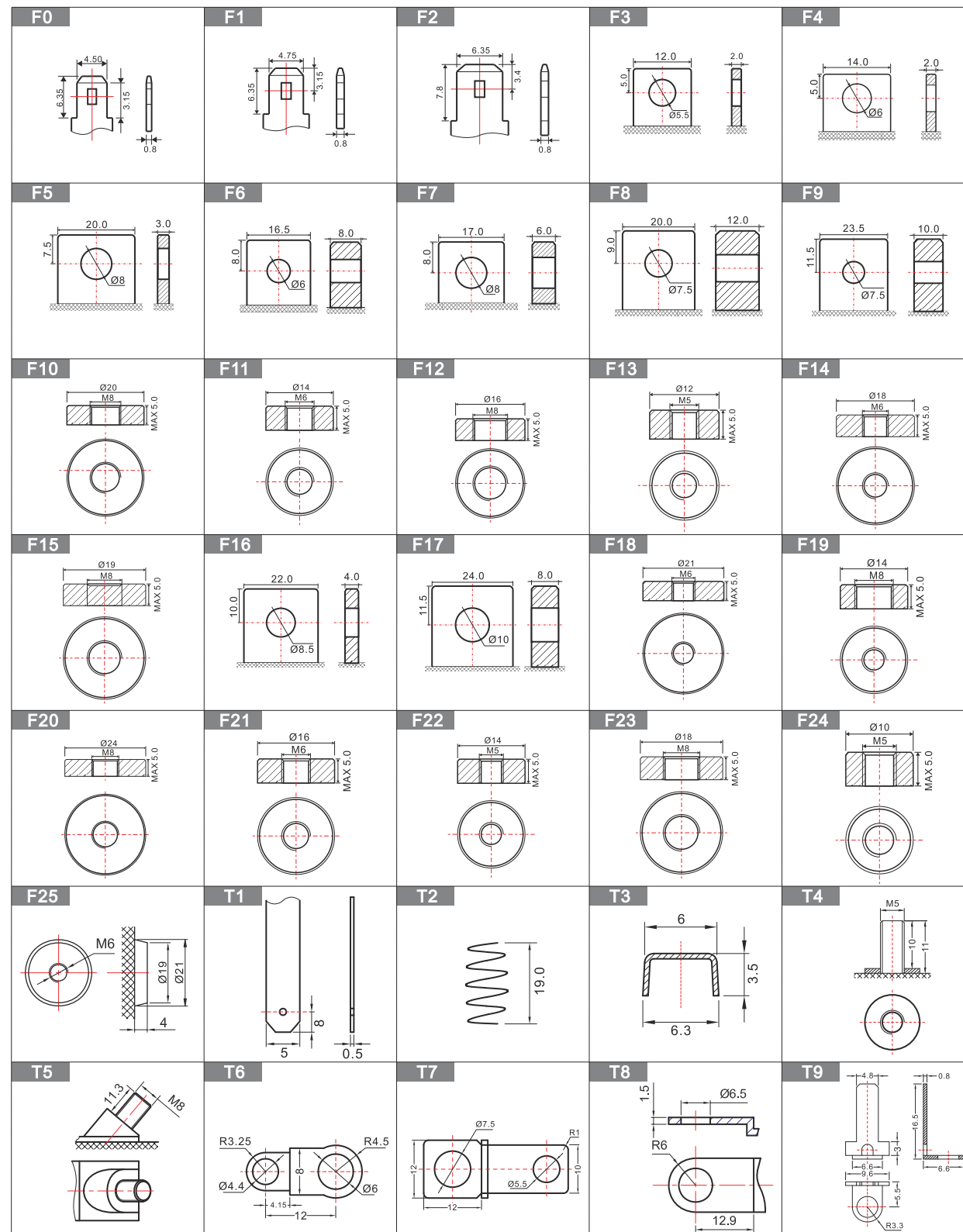
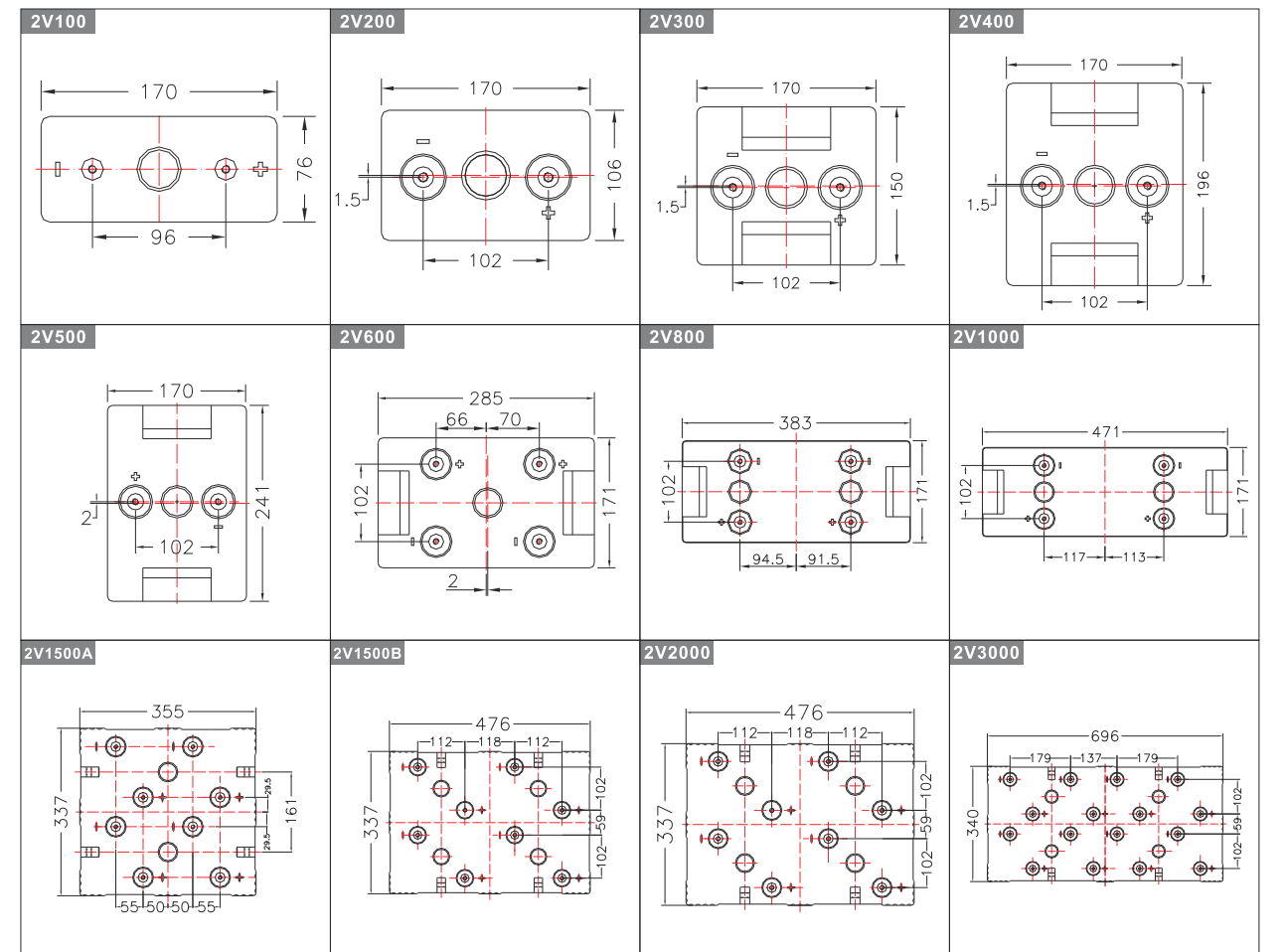


Terminal type

6V/12V Terminals



2V Terminals





Standard Series

Battery Type	Voltage (V)	Capacity (AH)	Dimension				Weight (approx) (Kg)	Terminal Type
			Length	Width	Height	Total Height		
MS2V4	2	4	48	25	101	106	0.28	F2
MS2V6		6	51	33	99	104	0.44	F10
MS2V100		100	170	76	213	222	7.00	F21
MS2V200		200	170	106	330	342	13.00	F10
MS2V300		300	170	150	330	342	18.50	F10
MS2V400		400	196	171	330	342	24.50	F10
MS2V500		500	241	171	330	342	30.00	F10
MS2V600		600	285	171	330	342	36.00	F10
MS2V800		800	383	171	330	342	48.50	F10
MS2V1000		1000	471	171	330	342	59.50	F10
MS2V1500		1500	355	337	330	342	89.00	F10
MS2V2000		2000	476	337	330	342	118.00	F10
MS2V3000		3000	696	340	330	342	178.00	F10
MS4V0.3	4	0.3	26	20	41	46	0.041	—
MS4V0.4		0.4	28.5	20	46	51	0.052	—
MS4V0.6		0.6	30	23	66	71	0.065	—
MS4V0.8		0.8	35	22	65	70	0.086	—
MS4V4.5		4.5	48	48	102	108	0.54	F1
MS4V5		5.0	91	50	74	74	0.76	F1/F2
MS4V8		8.0	91	50	101	101	0.97	F2
MS4V9.5		9.5	102	44	94	100	1.00	F1/F2
MS4V10		10	102	50	94	100	1.14	F1/F2
MS4V20		20	149	43	154	160	2.10	F2
MS6V0.5	6	0.5	57	14	50	52	0.1	WIRE

Battery Type	Voltage (V)	Capacity (AH)	Dimension				Weight (approx) (Kg)	Terminal Type
			Length	Width	Height	Total Height		
MS6V1.0	6	1.0	51	42	51	57	0.27	F1
MS6V1.2		1.2	97	24	52	58	0.28	F1
MS6V1.3		1.3	97	24	52	58	0.31	F1
MS6V1.8		1.8	43	37	76	76	0.34	T1
MS6V2.0		2.0	43	37	76	76	0.35	T1
MS6V2.8		2.8	66	33	97	103	0.62	F1
MS6V3.2		3.2	134	34	60	66	0.63	F1
MS6V3.2L		3.2	194	25	50	56	0.65	F1
MS6V3.2H		3.2	67	34	118	124	0.65	F1
MS6V4		4.0	70	47	101	106	0.71	F1
MS6V4P		4.0	70	47	102	114	0.72	F1
MS6V4S		4.0	70	47	105	105	0.70	T3
MS6V4R		4.0	67	67	96	115	0.70	T2
MS6V4.5		4.5	70	47	101	106	0.74	F1
MS6V4.5B		4.5	70	47	101	106	0.78	F1
MS6V4.5C		4.5	70	47	101	106	0.80	F1
MS6V4.5S		4.5	70	47	105	105	0.74	T3
MS6V4BR		4.0	67	67	96	115	0.78	T2
MS6V5		5.0	70	47	101	106	0.85	F1
MS6V5S		5.0	70	47	105	105	0.85	T3
MS6V5R		5.0	67	67	96	115	0.82	T2
MS6V6		6.0	151	34	94	100	1.00	F1/F2
MS6V6.5		6.5	151	34	94	100	1.10	F1/F2
MS6V6.8		6.8	94	47	102	107	1.08	F1
MS6V6.8L		6.8	151	34	94	100	1.05	F1/F2
MS6V7		7.0	151	34	94	100	1.20	F1/F2
MS6V8		8.0	98	56	117	117	1.80	F1
MS6V10		10	151	50	94	100	1.50	F1/F2
MS6V12		12	151	50	94	100	1.70	F1/F2
MS6V12B		12	151	50	94	100	1.85	F1/F2
MS6V14		14	108	71	140	140	2.55	F1/F2
MS6V20		20	157	83	125	125	3.20	F3
MS6V36		36	161	87	163	169	5.50	F2
MS6V42		42	161	87	163	169	5.90	F2
MS6V100		100	195	170	206	211	17.40	F21
MS6V105		105	280	128	203	203	18.50	F21
MS6V120		120	195	170	206	211	19.00	F21
MS6V150		150	260	180	247	252	23.50	F14
MS6V180		180	306	168	220	225	28.00	F14
MS6V200		200	306	168	220	225	29.00	F14
MS6V225		225	320	176	225	230	30.50	F16/F23

Battery Type	Voltage (V)	Capacity (AH)	Dimension				Weight (approx) (Kg)	Terminal Type
			Length	Width	Height	Total Height		
MS6V225S	6	225	243	188	275	275	32.0	F23
MS8V3.2	8	3.2	134	36	63	69	0.78	F1
MS8V3.2H		3.2	68	48	91	91	0.78	T1
MS12V0.8	12	0.8	92	65	62	62	0.34	T9
MS12V0.8W		0.8	92	65	62	62	0.34	WIRE
MS12V1.2		1.2	97	43	52	58	0.54	F1
MS12V1.9		1.9	178	35	61	67	0.87	F1
MS12V2C		2.0	143	24	65	65	0.60	F1
MS12V2M		2.0	150	20	90	90	0.68	F1
MS12V2.2		2.2	103	46	70	70	0.98	F1
MS12V2.3		2.3	178	35	61	67	0.89	F1
MS12V2.5		2.5	178	35	61	67	0.93	F1
MS12V2.5S		2.5	104	48	70	70	0.93	F1
MS12V2.6		2.6	178	35	61	67	0.99	F1
MS12V2.6H		2.5	70	48	99	105	0.90	F1
MS12V2.8		2.8	134	67	61	67	1.20	F1
MS12V2.8H		2.8	66	66	97	104	1.20	F1
MS12V2.9		2.9	79	56	99	105	1.10	F1
MS12V3		3.0	134	67	61	67	1.32	F1
MS12V3.2		3.2	134	67	61	67	1.34	F1
MS12V4		4.0	90	70	101	107	1.40	F1/F2
MS12V4L		4.0	195	47	70	76	1.62	F1
MS12V4.5		4.5	90	70	101	107	1.50	F1/F2
MS12V5		5.0	90	70	101	107	1.60	F1/F2
MS12V5.5		5.5	90	70	101	107	1.65	F1/F2
MS12V6		6.0	151	52	94	100	1.65	F1/F2
MS12V6B		6.0	151	65	94	100	1.80	F1/F2
MS12V7		7.0	151	65	94	100	1.90	F1/F2
MS12V7B		7.0	151	65	94	100	2.00	F1/F2
MS12V7.2		7.2	151	65	94	100	2.20	F1/F2
MS12V7.5		7.5	151	65	94	100	2.40	F1/F2
MS12V8		8.0	151	65	94	100	2.55	F1/F2
MS12V9		9.0	151	65	94	100	2.80	F1/F2
MS12V10		9.0	151	98	95	101	3.20	F1/F2
MS12V12		12	151	98	95	101	3.60	F1/F2
MS12V14		14	151	98	95	101	4.20	F1/F2
MS12V15		15	181	77	167	167	5.00	F3/F13
MS12V17		17	181	77	167	167	5.20	F3/F13
MS12V18		18	181	77	167	167	5.60	F3/F13
MS12V20		20	181	77	167	167	5.90	F3/F13
MS12V22L		22	181	77	167	167	6.20	F3/F13

Battery Type	Voltage (V)	Capacity (AH)	Dimension				Weight (approx) (Kg)	Terminal Type
			Length	Width	Height	Total Height		
MS12V22	12	22	166	175	125	125	6.20	F3/F13
MS12V24		24	166	175	125	125	8.00	F3/F13
MS12V28		28	166	175	125	125	8.60	F3/F13
MS12V28B		28	165	125	175	182	9.30	F6
MS12V33		33	195	130	155	168	10.2	F11/F22
MS12V38		38	197	165	172	172	12.2	F11/F22
MS12V40		40	197	165	172	172	13.5	F11/F22
MS12V45		45	197	165	172	172	13.8	F11/F22
MS12V50		50	229	138	211	216	17.5	F5/F11
MS12V55		55	229	138	211	216	18.0	F5/F11
MS12V65		65	350	166	174	174	22.0	F11/F21
MS12V70		70	350	166	174	174	23.4	F11/F21
MS12V75		75	259	168	208	213	23.5	F11/F21
MS12V80H		80	259	168	208	213	26.5	F21
MS12V80		80	350	167	180	183	26.5	F5/F11
MS12V90		90	306	169	211	216	29.0	F21
MS12V100		100	329	174	216	222	29.5	F12/F14
MS12V120		120	407	175	210	240	36.0	F23
MS12V150		150	484	170	240	240	43.0	F23
MS12V160		160	484	170	240	240	47.5	F23
MS12V180		180	520	240	219	224	58.0	F23
MS12V200		200	520	240	219	224	60.0	F10/F12
MS12V230		230	520	268	203	208	72.5	F10
MS12V250		250	520	268	220	225	73.0	F10
MS12V260		260	520	268	220	225	74.0	F10
MS24V1.3	24	1.3	194	44	52	58	1.20	F1
MS24V3.5		3.5	185	73	70	70	2.60	WIRE
MS24V4		4.0	300	67	62	68	3.20	F1/F2



MOTOMA FA series of batteries are designed into front terminal construction. The humanized design ensures battery come with high reliability and makes the installation quite easy and safe, when put the batteries into a closed cabinet or on a standard relay rack tray.

Top standard connection, side monoblocs connection are available upon request.

Typical Application:

➤Telecommunication

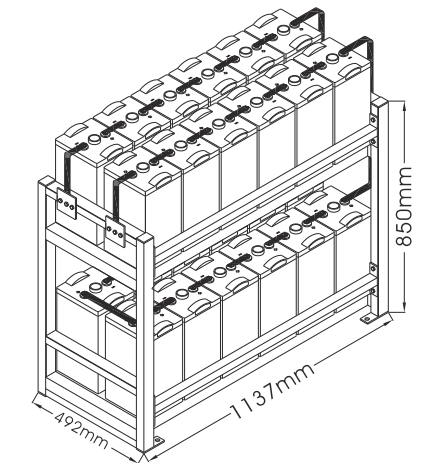
➤Uninterruptible Power Supply (UPS)

FA Series

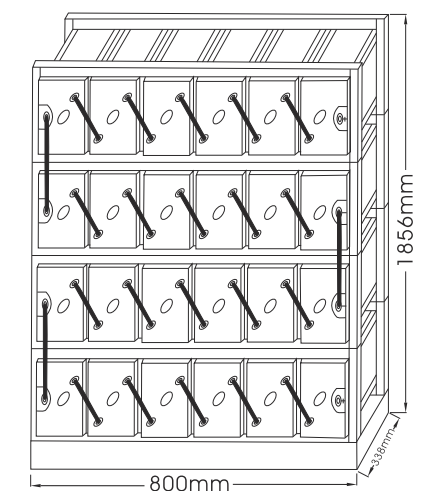
Battery Type	Voltage (V)	Capacity (AH)	Dimension				Weight (approx) (Kg)	Terminal Type
			Length	Width	Height	Total Height		
FA12V50	12	50	277	106	222	222	17.5	F11
FA12V55		55	277	106	222	222	18.0	F11
FA12V80		80	562	114	188	188	26.8	F12
FA12V100		100	494	110	235	235	35.0	F11
FA12V100X		100	508	110	223	238	35.0	F15
FA12V100F		125	420	110	295	295	39.0	F15
FA12V100FB		100	395	110	286	286	35.0	F12
FA12V100FC		100	395	110	286	286	33.0	F12
FA12V105		105	395	110	286	293	35.0	F15
FA12V125F		125	420	110	295	295	38.0	F15
FA12V125X		125	436	108	317	317	41.0	F15
FA12V140X		140	552	110	288	295	49.0	F15
FA12V150		150	548	105	316	316	49.0	F15
FA12V150A		150	551	110	288	288	45.0	F11
FA12V150B		150	551	110	288	288	49.0	F11
FA12V150FL		150	546	125	315	315	56.0	F15
FA12V155D		155	546	125	315	315	57.0	F15
FA12V160		160	551	110	316	316	56.5	F10
FA12V180		180	520	125	317	323	60.0	F15
FA12V200X		200	520	240	219	224	68.8	F10

48V Group

HORIZONTAL



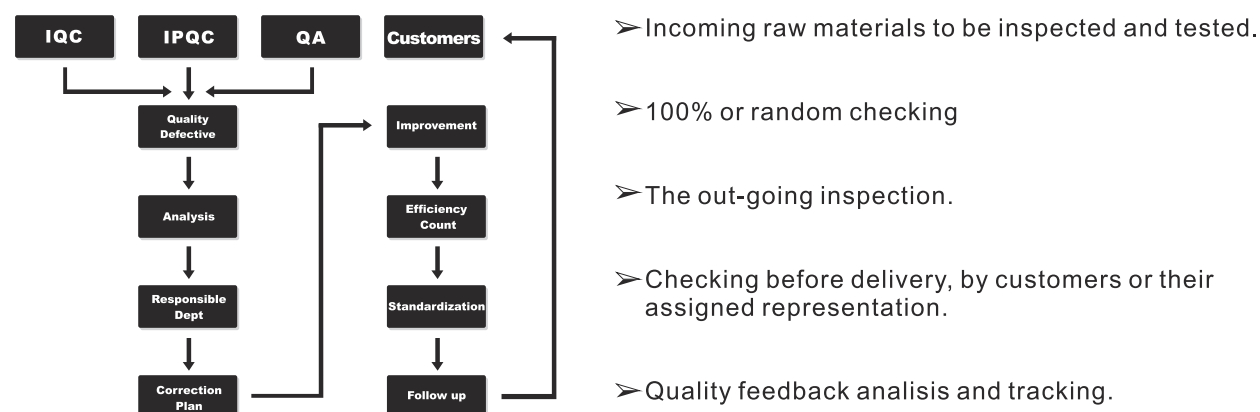
VERTICAL



48V System

Battery Type	Voltage (V)	Capacity (AH)	HORIZONTAL	VERTICAL
			LengthxWidthxHeight(mm)	LengthxWidthxHeight(mm)
MS48V100	48V	100	547x430x730	—————
MS48V200		200	727x430x850	338x796x968
MS48V300		300	1131x400x850	338x796x1250
MS48V400		400	1137x492x850	338x800x1586
MS48V500		500	1137x582x850	338x800x1856
MS48V600		600	1195x680x850	338x800x2120
MS48V800		800	1195x876x850	—————
MS48V1000		1000	1195x1052x850	—————
MS48V1500		1500	2390x820x850	—————
MS48V2000		2000	2390x1062x850	—————
MS48V3000		3000	4816x776x850	—————

QUALITY ASSURANCE SYSTEM: ■■■■



Precautions for handling Motoma Valve-Regulated Lead-Acid Batteries.

Please read the “Handling Book” entirely and make its contents fully understood before handling or using Motoma rechargeable Valve Regulated Lead-Acid (VRLA) Batteries.

If there are any questions, please contact your local Motoma power agents/ distributors. Due to the potential energy stored in the batteries, improper handling or use of the batteries by not observing the precautions listed in the document may result in bodily injury caused by electrolyte leakage, heat generation or explosion.

DANGER ■■■■

- 1.1 Do not load valve-regulated lead-acid batteries (hereinafter described as “the battery”) in airtight equipment. Use of the battery in airtight equipment may cause explosion of the equipment or injury.
- 1.2 Insulate metallic tools such as torque-wrenches and wrenches with a vinyl tape, etc. Using uninsulated tools may cause a short circuit, and the heat or sparks generated by the short circuit could result in burns, damage to the battery, or ignite an explosion.
- 1.3 Do not place the battery in a closed room or near fire. Placing the battery in such a location could result in an explosion or fire due to hydrogen gas emitted by the battery.
- 1.4 Be sure to provide enough insulation around the lead wires and/or plates used between the batteries and the application. Insufficient insulation may cause an electric shock, heat generating from a short circuit (or excess current) may result in an injury, burn, smoke or ignition.
- 1.5 The batteries must be charged by the specified charger or under the charging conditions indicated by Motoma Power. If the batteries are charged under conditions other than those specified by Motoma Power, they may leak, ignite or explode.
- 1.6 Do not connect the (+) and (-) terminals of the battery to each other with a metallic material such as wire; do not allow tools such as pipe wrenches and wrenches to touch points of different voltages on the battery; and do not bring metallic necklaces or hair pins into contact with the battery or store them together with the battery. Failure to observe these precautions may cause the battery to overheat, emit hydrogen gas, leak, ignite, or burst.

WARNING ■■■■

1. Charge the battery with a specified charger following the charging condition specified by MOTOMA. Charging the battery under any other condition may cause overheating, emission of hydrogen gas, leakage, fire or burst.
2. When using battery in medical equipments, provide a back-up system other than the main battery. Otherwise it may cause injury.
3. Avoid direct contact of the battery with metallic containers. Acid-resistant and heat-resistant insulators should be employed. Leakage of the battery in the absence of such insulators may cause fumes and fire.
4. Do not place the battery near a device that may cause sparks(such as a switch or a fuse). The battery may generate flammable gas when being charged. Keep the battery away from fire or an open flame to prevent any spark from igniting or causing explosions.
5. Avoid placing the battery near a heat source(such as a transformer). Otherwise it may cause overheating, emission of hydrogen gas, leakage, fire or burst.
6. In applications which use more than one battery, first make sure all batteries are connected correctly, then connect the battery with the charger or the load. Make sure battery terminals are firmly connected with the charger or load. If the terminals of batteries, the charger or the load are connected improperly, explosion, ignition or damage to the batteries and/or equipments may occur, which may cause injury.
7. Be extremely careful not to drop the battery onto feet to avoid personal injury.
8. Do not contact any plastic or resin containing a migrating plasticizer with the batteries. Avoid using organic solvents such as thinner, gasoline, lamp oil, benzene and liquid detergent to clean the batteries. Use of any of the above materials may cause crack, leakage or fire to the battery container or cover(ABS resin).
9. Take safety measures such as wearing rubber gloves for insulation when handling battery of voltage higher than 45V. Operation without safety measures may result in electric shocks to the operator.
10. Avoid placing battery in an environment which is susceptible to floods.
11. Do not throw the battery in fire or heat the battery, otherwise it may burst or generate a toxic gas.
12. Do not disassemble, remodel or destroy the battery, it may cause leakage, fire or burst, and could create sulfuric acid spilling from the battery resulting in burns to personnel and damage to the immediate environment.

Precautions

Note

13. Battery posts, terminals and related accessories contain lead and lead compounds. Handling the battery may expose you to sulfuric acid mist, chemicals unknown which may cause cancer and reproductive harm. Wash hands after handling.
14. Clean the battery with a slightly damp cloth, ensure there is no excess water on the cloth by squeezing it well. Do not use a dry cloth or a duster, as it may generate static electricity, which may cause fire or burst.
15. Replace the battery with a new one within the time period specified in the " Handling Book " .
16. The battery should be replaced when its capacity has decreased to 50% of the initial capacity (at an ambient temperature of 77°F(25°C) or below). In the trickle or float application of the battery (application as stand-by power) at an ambient temperature higher than 77°F(25°C), the period for which the battery can be used before replacement is shortened by a half for every 10°C rise of temperature. When the discharge current becomes higher than 0.25CA, the run time and battery life is also shortened.
17. The usable period for the battery is remarkably shortened near the end of its service life (when discharge time has decreased to 50% of the initial). During this period, problems such as internal short, dry-up of electrolyte (increase in internal resistance) and corrosion of the cathode grids will occur. Replace the battery before these problems occur. If the battery continues to be used under these conditions, maximum discharge current will continue flowing, which may lead to thermal runaway or leakage.
18. The battery contains diluted sulfuric acid, a very toxic substance. If the battery leaks and the liquid inside spills on the skin or clothing, immediately wash it off with plenty of clean water. If the liquid splashes into eyes, immediately flush the eyes with plenty of clean water and consult a doctor. Sulfuric acid in the eyes may cause loss of eyesight and acid on the skin will cause burns.
19. The batteries should be used in non life critical medical equipment. When any medical equipment incorporating a MOTOMA VRLA batteries is planned, please notify MOTOMA Power.

For more details, please read "User's Guide " which comes with the batteries.
All descriptions are subject to modification without prior notice.



FLAMMABLE



SHIELD EYES



**KEEP OUT OF THE
REACH OF CHILDREN**



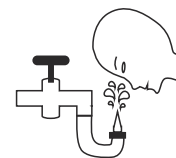
CAUTIONS OF SULFURIC ACID



**READ INSTRUCTION
MANUAL CAREFULLY**



EXPLOSIVE



**FLUSH EYES
IMMEDIATELY
WITH WATER.
GET MEDICAL
HELP FAST.**