

MOTOMA®

Power into the Future



T TECH BATTERIES



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To be a quality brand

Company Brief



重要特征 Major Features

寿命长

特殊配方的正极低锡合金通过压铸工艺而成板栅, 明显提高电池深循环使用的耐腐蚀性能, 先进的T技术有效避免电池反复充放电时活性物质脱落, 80%放电深度循环次数接近1000次。

优良的低温放电性能

-10℃环境下放电容量为常温的75%以上, -18℃环境下放电容量为常温的65%以上。

高容量

电池实际容量富裕标称容量的5%, 保证了车辆长距离运行的供电需求。

使用方便少维护

电池滤酸片采用特殊材料精制而成, 有效避免了电池在充电后期的水分损失, 减少电池维护的加水次数。采用目前最普遍的外壳设计和链接端子设计, 避免了电池更换造成的不便。

嵌入式端子

嵌入式端子提供增强的耐用性, 可将日常电池维护期间施加到端子的应力减至最低。

Long Service Life

Grid is made from special low antimony alloy by adopting die-casting process, which improves the corrosion resistance obviously when deep cycle using. Advanced T technology can effectively avoid active substances fall off when battery charging and discharging. It's up to 1000 cycles on 80% DOD.

Good Performance of Low-temperature Discharge

Discharge capacity at -10 °C environment is still above 75% when at normal temperature, at -18 °C environment is above 65% .

High Capacity

The actual capacity is 5% higher than the nominal capacity, which ensure the power supply for long distance running vehicle.

Easy Use & Low Maintenance

The filters of acid are made from special materials, which effectively avoids the water loss after charging, reduce maintain times. Adopting universal designed of case and terminal, avoid inconvenience of replacement.

Embedded Terminal

Embedded terminals provide reinforced durability minimizing stress applied to the terminals during routine battery maintenance.

公司简介 Company Brief

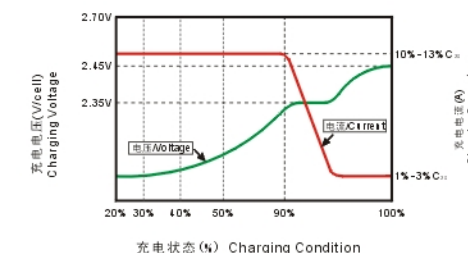
Motoma电池, 作为一个前沿的清洁能源开发公司, 提供一系列的高性能电池满足清洁能源市场的需求, 有深循环富液电池、深循环AGM电池和胶体深循环电池。Motoma 电池持续致力于电池的R&D, 尖端技术开发和检测设备的改进提高。

日益增加的清洁能源设备需要可靠的、高效、高能、长寿命、高能密度的电池。Motoma 先进的T技术系列电池是清洁能源设备的最佳选择, 如高尔夫球车、三轮车、旅游观光车、巡逻车、酒店用车、工具车等。方便、经济、环保。

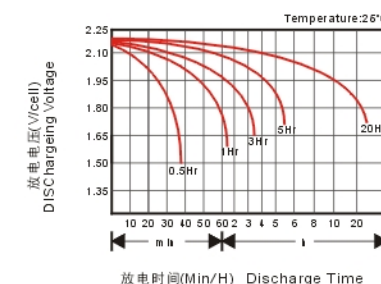
MOTOMA POWER CO., is a leading clean energy company in South China, offer a wide rang of high performance batteries to meet the market needs, include deep cycle flooded batteries, deep cycle AGM and GEL batteries. MOTOMA continuous focus on the R&D, cutting-edge technology development and inspection equipment improvement.

Growing clean energy appliances are looking for batteries with reliable, durable, energy-efficient, powerful, longer service life and higher energy density. MOTOMA T series rechargeable storage traction battery equipped with our innovative T technology, is the best solution to clean energy facilities such as Golf Car, Tricycle Car, Utility Vehicles, Sightseeing Car, Hotel Usage, Utility Transport, Police Patrol Car etc. It is more convenience, economy and environmental protection.

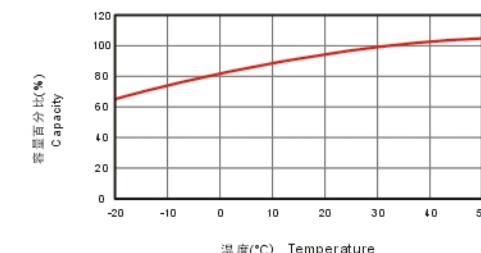
建议充电曲线图
Recommended Charge Curve



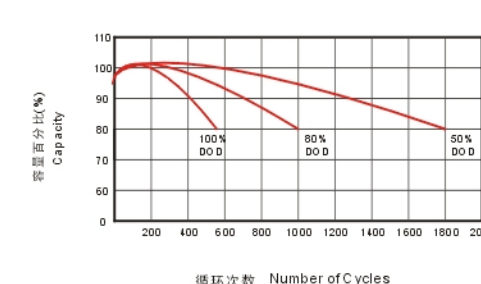
放电特征曲线图
Discharge Characteristics Curve



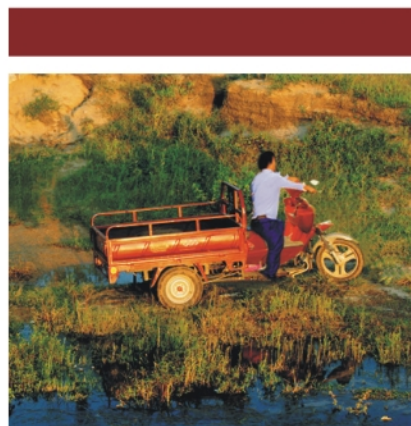
电池温度与容量关系曲线图
Temperature Effects on Capacity



循环寿命与放电深度关系曲线图
Cycle Life in Relation to Depth of Discharge



应用 | Applications



Applications

旅游观光车
高尔夫球车
电动轿车
电动三轮车
电动搬运车
电动清扫车
电动牵引车
电动巡逻车
电动游艇
电动工具车
电动平板车
储能系统 (太阳能&风能)
UPS

Sightseeing car
Golf car
Electric car
Electric tricycle
Electric transportation vehicle
Electric cleaning vehicle
Electric tractor
Electric patrol car
Electric yacht
Utility car
Electric flat car
Energy storage systems (solar & wind)
Uninterruptable Power System



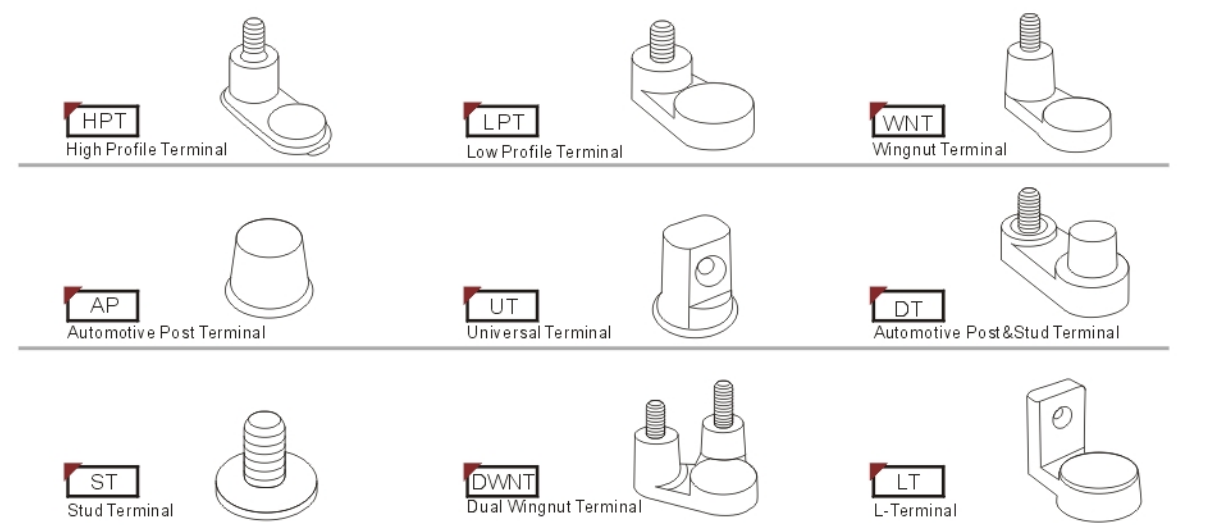
型号 | Models



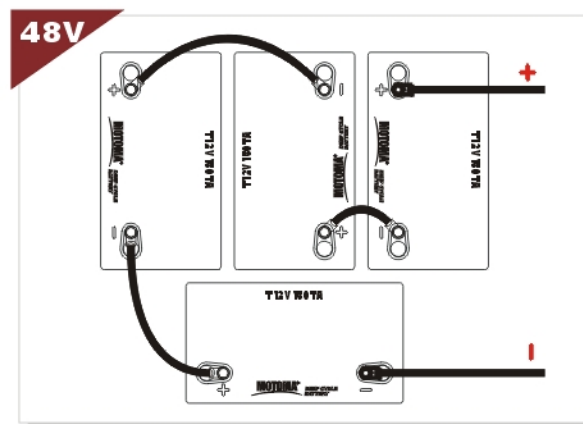
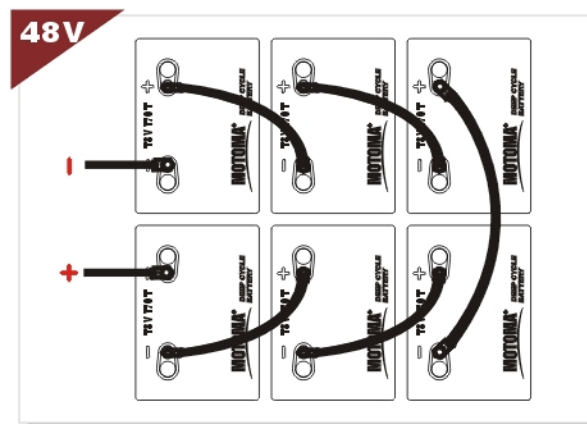
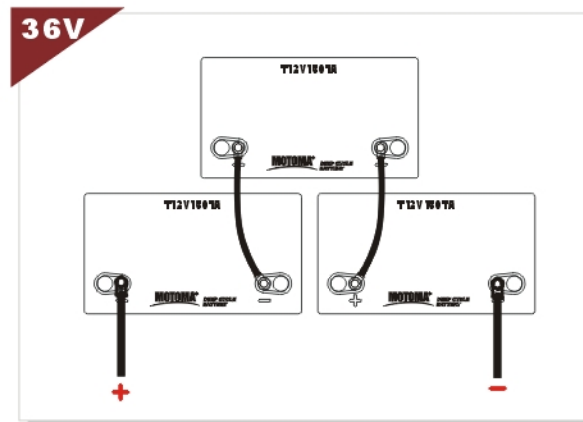
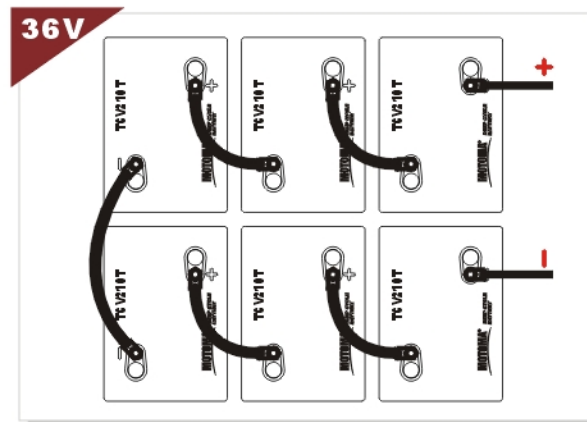
型号 Type	额定电压(V) Rated Voltage	额定容量(Ah) Rated capacity	尺寸(mm) Overall Size				参考重量 (Kg) Weight
			长(L)	宽(W)	高(h)	总高(H)	
T6V200T	6V	200	260	182	249	290	32
T6V210T		210	260	182	266	309	32.5
T6V220T		220	260	182	266	309	33.0
T6V250T		250	260	182	266	309	35.0
T8V135T	8V	135	260	182	249	290	33.0
T8V150T		150	260	182	249	290	34.0
T8V170T		170	260	182	249	290	35.0
T8V180T		180	260	182	303	338	38.0
T12V36T	12V	36	196	128	202	224	13.5
T12V60T		60	256	170	203	225	18.5
T12V100T		100	245	190	252	288	38.0
T12V120T		120	360	172	235	255	32.0
T12V140T		140	360	172	255	275	34.0
T12V140TA		140	327	181	245	280	40.0
T12V150T		150	360	172	255	275	35.0
T12V150TA		150	327	181	245	280	41.0

Specifications are subject to change without prior notice.

端子 Terminals



接线示意图 Connection



处理和预防措施 Handling and Precaution

连接 Connecting

- ▶ 新电池在使用时建议用万用表测量电压进行配对，将电压差 $\leq 0.04V$ 的电池作为一组使用。切忌将新旧电池混合使用，否则会大大缩短电池的寿命。
- ▶ 请检查与端子的电缆连接是否牢固，连接太紧或太松都可能导致极柱损坏、熔化或起火。

充电与放电 Charging and Discharging

- ▶ MOTOMA牌T技术电池没有记忆效应，因此重新充电前不需要完全放电，每次使用后请及时补充电。
- ▶ 电池放电不应超过 80%，这样可避免电池充电过度 and 损坏电池。
- ▶ Motoma 新电池的容量没有达到额定容量，在10-50次循环后达到额定容量。

加水 Watering

- ▶ 定期（建议每半个月）检查液面高度，应保证液面高出隔板顶部16-20mm，如下降，请用蒸馏水或纯净水补充，严禁电池极板露在液面外，严禁使用硫酸调整液面高度。
- ▶ 电解液为蓄电池专用硫酸和蒸馏水（去离子水）配制而成，比重为 $1.285 \pm 0.005g/cm^3$ （25℃），切勿用工业硫酸和自来水代用，否则将会对电池性能和使用寿命有极大的影响。

储存 Storage

- ▶ 新电池应存放在干燥通风无阳光直射的地方，室温应在5~40℃范围内。
- ▶ 使电池远离火星、火焰和金属物件。
- ▶ 电池必须始终竖直放置，不得倒置及卧放（倾斜不得超过45度），不得受任何机械冲击和重压。

维护 Maintenance

- ▶ 始终保持电池清洁、干燥，避免与任何液体和有害物质接触，严防金属或其他杂质落入电池内，以免造成短路，或引起自放电增大。
- ▶ 如果端子未保持清洁和干燥，则可能不断被腐蚀。为防止腐蚀，请涂抹一层凡士林或应用端子保护器。
- ▶ 电池寿命可能因为环境、使用条件、使用频率、维护水平的改变而改变。
- ▶ 严格按照Motoma操作手册安装、维护、储存电池，以使电池达到最大寿命。
- ▶ 有疑问、技术咨询请联系我们技术支持工程师 info@motoma.cn 或者致电您当地代理商。

连接 Connecting

- ▶ Battery in one group should be in same voltage level (voltage difference $\leq 0.04V/cell$). Do not use old and new batteries mixed together, otherwise it may shorten the service life.
- ▶ Check that all cable connections to the terminal are properly tightened, connections that are too tight or too loose could result in post breakage, meltdown or fire.

充电与放电 Charging and Discharging

- ▶ The MOTOMA T batteries do not have a memory effect and therefore do not need to be fully discharged before recharging. Batteries should be fully charged after each use.
- ▶ Do not discharge more than 80% in order to protect the batteries from over-discharge and damage.
- ▶ A new Motoma battery will not deliver its full rated capacity. This is normal and should be expected as it takes 10-50 cycles to provide full capacity.

加水 Watering

- ▶ Regularly check the electrolyte level to make sure it is barely covering the plates. If the electrolyte level is well above the separator (16-20mm) then it is not necessary to add more water, otherwise add distilled or de-ionized water. Never add acid to a battery.
- ▶ The battery's electrolyte in specific gravity $1.285 \pm 0.005g/cm^3$ (25℃) is made from battery special sulphuric acid and distilled (de-ionized water). Do not use industrial sulphuric acid and tap water, otherwise it may shorten the service life.

储存 Storage

- ▶ New batteries should be stored in a dry and well-ventilated place without direct sunlight, and room temperature should be in the range of 5 ~ 40 °C.
- ▶ Keep batteries away from sparks, flames and metal objects.
- ▶ Batteries must be placed upright at all times. Fluid in the battery will spill if the battery is placed on its side or at an angle. And shall not be under any mechanical shock and heavy pressure.

Battery Handling

- ▶ Keep the battery clean and dry, far away from liquid and hazardous substances, metal or other material fall into the cell may causing short circuit or self-discharge increased.
- ▶ Corrosion can build up on terminals if they are not kept clean and dry. To prevent corrosion apply a thin coat of petroleum jelly or terminal protector.
- ▶ The life of a battery is difficult to predict as it will vary with application, frequency of usage and level of maintenance.
- ▶ Follow all the procedures in the Motoma User's Guide for proper installation, maintenance and storage to maximize the performance of Motoma Battery.
- ▶ If you have any questions or concerns about MOTOMA batteries, please contact Motoma Power Company's Technical Support Engineering at info@motoma.cn or phone your local Motoma Agency.