

DZM Series VRLA Battery

DZM系列电动车用阀控式铅酸蓄电池



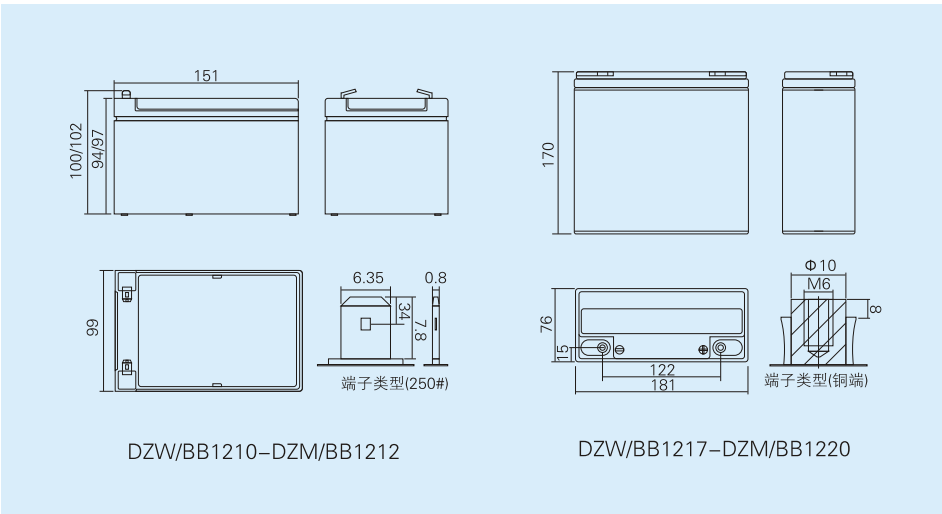
产品特性

- 采用贫液设计和紧装配工艺，蓄电池的体积比能量和重量比能量高：容量≥100%；
- 采用特殊的工艺配方，低温及大电流放电性能能个好，其性能处于国内先进水平，适合北方低温地区使用；
- 采用高纯度的原材料和添加剂。使电池在储存或不使用时的自放电率大大降低，自放电率低于3%/月。
- Use the poor fluid design and the tight assembly technique.
- Use the special craft formula, the low temperature and the big electric current discharging performane is good, its performance is advanced level in the domestic, it suits the low temperature area in North of China.
- Use the high-purity raw material and the chemical additive, causes the self-discharge rate of battery reduces greatly when its storage or does not use, the self-discharge rate is lower than for 3% per month. Use the special electrolyte formula, make battery has the good restoration characteristic after deep discharging.

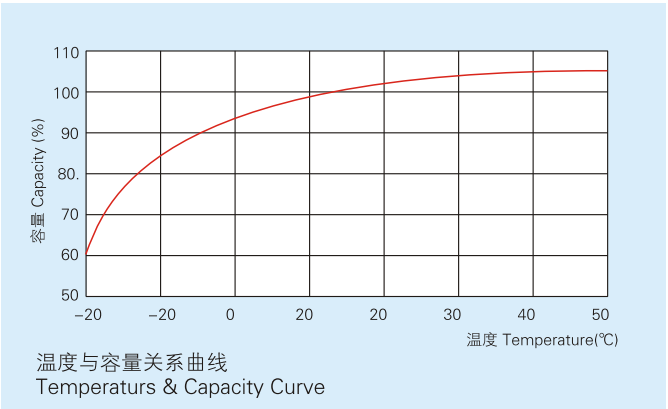
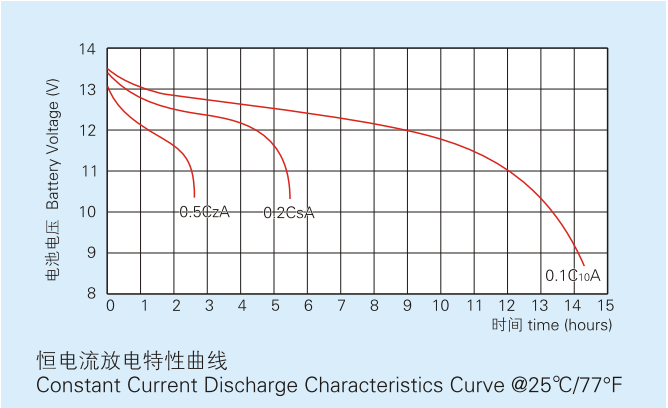
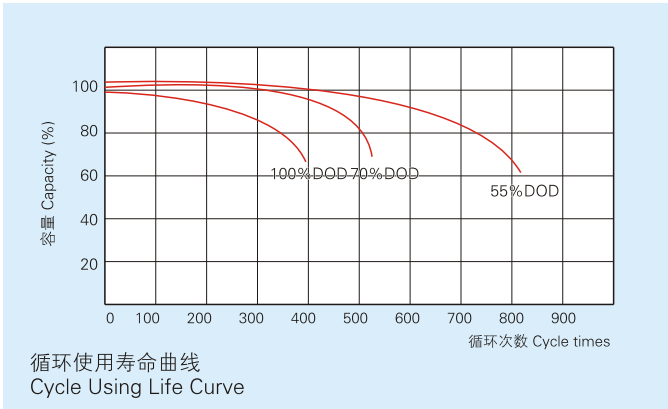
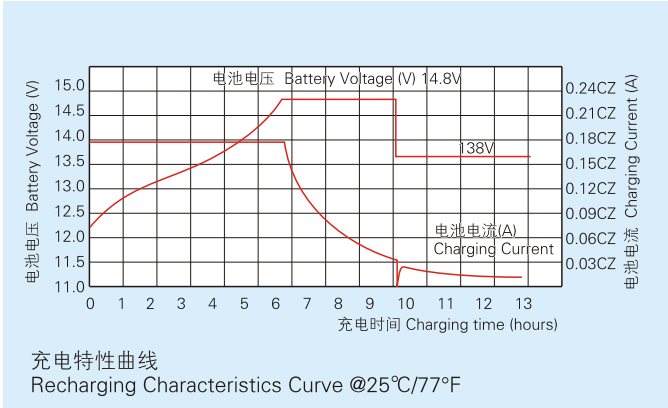
DZM 系列性能参数 DZM Series Performance Parameter

蓄电池型号 Battery Model	额定电压 Norninal Voltage	额定容量 Norninal Capacity	外型尺寸 Dimensions(mm)				电池参考 Weight (appeox)	内阻(mΩ) Internal Resistance
			长L	宽W	槽高H	总高1H		
DZM/BB-1210	12	10	151	99	94	100	4.2	21
DZM/BB-1212	12	12	151	99	97	102	4.4	16
DZM/BB-1217	12	17	181	76	170	170	6.4	13
DZM/BB-1220	12	20	181	104	170	170	7.1	11

电池外形图 Battery Dimensions(mm)



DZM 系列特性曲线 DZM Series Characteristics Curve



DZM 系列充放电方法 DZM Series Charging and Discharging ways

Charging 充电

推荐采用三阶段充电法:

恒流充电: 以0.15C2–0.18C2A恒流充电至14.8V/只

恒压充电: 以恒压14.8V/只继续充电, 当充电电流下降至300mA(10 Ah)或500mA(17Ah)时, 转为涓流充电

涓流充电: 转以恒压13.8V/只继续充电, 当充电电流下降至最小并稳定2小时不变充电结束

Recommended three–stage charging method:

Constant–current charging: charging to 14.8V/pc by (0.15C2–0.18C2)A constant– current.

Constant–voltage charging: continue to charging by constant voltage 14.8V/pc, when the charging current drops to 300mA (10Ah) or 500 mA(17Ah),transfers the trickling charge.

Trickling charging: continue to charging by constant voltage 13.8V/ pc, when the charging current drops to the smallest and is stable, and 2hours invariable, the charging is ended.

Discharging 放电

蓄电池正常使用时, 最大启动电流应限制在1.5C(C为电池容量)A, 正常工作电流应控制在0.2C内, 蓄电池严禁过放电, 为避免过放电, 每只蓄电池(12V), 最低放电保护电压为10.50V。

电池使用后（放电深度65%左右），必须及时进行充电, 在没有充足电以前, 禁止再次放电或亏电存放。

Normal using the battery, the maximum starting current should be limited to 1.5 (C is battery's capacity)amps, the normal operating current should be controlled within 0.2C amps, the batteries have been prohibited over discharging.

In order to avoid over discharge,the minimum discharging protect voltage of each battery (12V) is 10.5V. After Battery using (about 65% depth of discharging), we must recharge battery promptly,forbids to discharge or restorage with less saturated Before sufficiently charged.

安装使用与维护 Installation and maintenance



- 1.正负极不得接反或短路

2.防止火花产生

3.推荐恒压充电

4.禁止化学物质清洗

5.禁止拆卸
- 1.Don't make positive and negative to reverse connection or short–circuit.

2.Prevent Sparks.

3.Recommended constant voltage charging.

4.Prohibited chemical

5.No Demounted

电池的联接 Connection of the Battery

实际容量相同的电池或电池组方可串联使用;

实际电压相同的电池或电池组方可并联使用;

联结部位要紧密, 防止火花产生;

如接触不良, 用苏打水清洗接触面;

正负极不得接反或短路。

Only the batteries or battery groups with the same actual capacity can be connected in serial;

Only the batteries or battery groups with the same actual voltage can be connected in parallel;

Positive and negative pole shouldn't be inverted or shorted in connection;

The connection parts should be tightful to protect against sparks.

电池充电 Charge of the Battery

选用适合的充电方式是获得最长使用寿命的关键之一;

每放出1Ah的电量, 必须补充1.10Ah–1.20Ah的电量以确保阀控式密封蓄电池充足电。阀控式密封铅酸蓄电池的充电方法有“恒压充电”、“恒流充电”或其他综合方法等。由于采用“恒流充电”的方法时须严格控制以避免极有可能发生的过充电现象, 因此阀控式密封铅酸蓄电池推荐的充电方法为“恒压充电”。

The key to obtaining maximum life from a VRLA battery is optimum charging.

For every ampere–hour discharged from a battery, a supplement between 1.10 and 1.20 ampere–hours must be supplied to ensure a complete&adquate recharge. Broadly speaking, a VRLA battery may be recharged using constant voltage(CV) charging, or constant current(CC) charging or a modification of either or both of these. "CC charging" must be exercised with extreme care and has greater potential for overcharge than "CV charging".

保存 Storage

电池适合存放于低温、干燥、通风、洁净的环境中, 充满电存放, 且每3–6个月须补充电一次。

The battery should be stored at low tempertatures, drying, ventilation,cleaing the environment. keep it after full charge, recharge it per 3–6 months.

注意事项 Notice

BB 系列蓄电池属阀门控式全密封免维护铅酸蓄电池, 不得试图拆卸电池, 避免危险; 如因运输或使用不发造成蓄电池壳体破损, 若人体接触硫酸, 请即用大量清水清洗, 必要时请就医;

不能将新旧蓄电池混合用, 不同容量及电压的电池也同样不能混用, 蓄电池应有完整的履历表, 内容包括出厂日期、安装日期、运行情况记录等;

定期（每年一次）检查连接是否松动;

如有松动现象, 应加以坚固; 定期用柔软的布擦拭蓄电池表面（每三个月一次）, 保持其清洁; 不要用化学物质清洗蓄电池表面。

BB series batteries have acid in the cases and fully charged before leaving factory. Do not trydisassembling the battery and avoidburt. If the case breaks during the transports and incorrect using and someone is hurt, wash the wourddirectly with large volume fresh water and go to see doctor if necessary.

Do not use old and new batteries together. Do not use different capacity and voltage batteries together.Each battery should have detailed records including the factory–leaving date, install date and using record.

Check the connection of wire in a fixed interval(once a year). If thereis any looseness, closely connect the wire directly. Wipe the surface of the battery with soft cloth in a fixed interval (once three months) and always keep the battery clean. Never clean the surface of the battery with organic chemical wash liquid.