

XUPAI 旭派®

6-QTF-50  
(LN1)

甄 选  
Selection



XUPAI 旭派®

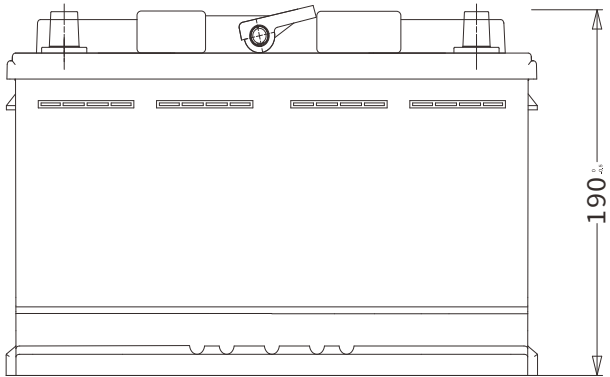
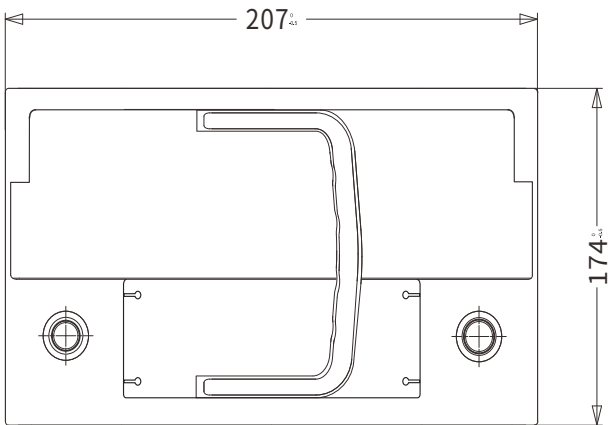
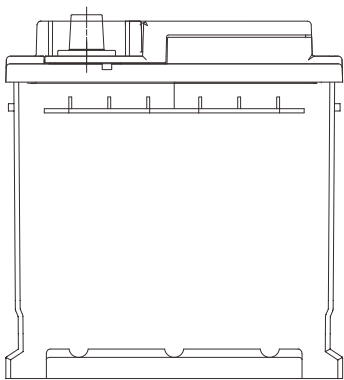
Long  
Life  
Battery



★采用无镉高锡高纯度铅合金制造的蓄电池极板，有着卓越的抗氧化和耐腐蚀能力，避免了一般铅锑、铅钙合金极板因析氢而带来的不良影响，减缓了蓄 电池的失水量，提高了循环次数。

Being made of high pure lead alloy with high tin and no antimony, battery plates have excellent resistance to oxidation and corrosion, avoiding the adverse effects due to hydrogen evolution that are typical of lead-antimony and lead-calcium alloy plates, minimizing water loss and improving cycle times.

壳体尺寸：  
Dimension



■ 电池参数 | PARAMETER

型 号 Model		6-QTF-50		执行标准 Standard		GB/T 5008-2013	
电池电压 Voltage		12V		储备容量 (RC)		100	
起动电流 (CCA)		660A		单格片数 Number of plates		13片/P	
含液重量 weight with electrolyte		14.3kg					
外型尺寸 Dimension						极性 Layout	端子类别 Terminal type
长 Length		宽 width		高 Height		总高 Total height	
207mm		174mm		190mm		190mm	
						R	圆 Standard



★我们采用美国超高分子量聚乙烯材料生产的PE隔板，是目前国际上蓄电池行业中免维护蓄电池优先选用的蓄电池隔板材料。

★它除了生产制造成本高外，具备了低电阻率、小孔径、高孔率、耐氧化、抗穿刺、耐磨损等优点。由于采用了袋式结构，从根本上避免了因活性物质脱落造成的两极短路，极大的延长了蓄电池的使用寿命。

We use PE separators made from American ultra-high molecular weight polyethylene, which is the foremost preferred battery separator material in the international battery industry for the manufacturing of maintenance-free batteries.

Apart from high production costs, it has many advantages, such as low resistivity, small aperture, high porosity, oxidation resistance, anti-puncture, and durability. Using the bag structure to fundamentally avoid the short circuit between two poles caused by the falling of active materials, which extends battery life greatly.

■ **端子**：压铸成型无焊接端子，是本公司发明专利技术，采用高锡铅合金压铸成型，合金密度高、电阻小，提高了端子可承载大电流放电的负荷能力。端子与聚丙烯盖体注塑融合一体，避免了端子因渗酸被氧化腐蚀。结构设计独特、安全可靠、外型美观大方。

Terminals: Die-cast weldless terminals, our company's patented technology, uses high-tin lead alloy which possess high alloy density and low resistance, which improves high current discharge load capacity of the terminal. The terminals are integrated with the polypropylene cover to prevent oxidation corrosion of the terminal from acid infiltration. Uniquely designed, safe, reliable, and attractive.

■ **电量显示器**：独特的荷电状态密度计，有绿色、黑色、白色之别的荷电量显示器，清晰可见。

Charge status indicator: Unique density meter with clearly visible green, black, and white colors that indicate the charge status of the battery.

■ **滤酸隔爆片**：在电池充电过程中可防酸雾溢出、阻止电池外部遇火焰引起的爆炸。

Vent plug and flame arrestor: Avoids overflow of acid mist during the charging process, and prevents nearby flames from causing an explosion.

■ **极板**：采用独特活性物质配方，活性物质利用率得以提高，电池的大电流放电性能和充电接受能力进而提升，可适用于大电流冲击放电的使用要求。过量设计了负极活性物质，保证了正极在充电后期产生的氧气充分扩散到负极，与负极海绵状铅反应再化合成水，防止了电池在充电过程中氢在负极析出，实现了电池内部氧复合循环，赋予了阀控蓄电池优异的高倍率放电性能，延长了其循环使用寿命。

Plates: formulated with a unique active substance improves the utilization of active substances, and further improves the battery's high current discharge performance and charge acceptance capacity. The design of abundant negative active material ensures that the oxygen produced by the positive electrode in the later stage of charging can be fully diffused to the negative electrode, where the oxygen reacts with the spongy lead of the negative electrode and recombines to water. This prevents the release of hydrogen from the negative electrode during the charging process, and achieves the internal oxygen recombination cycle, giving the valve-controlled battery excellent high-rate discharge performance and extending its cycle life.

■ **PE隔板**：低电阻微孔聚乙烯袋式隔板，体质轻，电阻小，吸酸度高，硫酸溶液中离子迁移能力强，最大程度的提高了电池电压和启动电流，使电流容量始终保持着良好的稳定状态。

PE separator: low resistance microporous polyethylene bag partitions, small resistance, and high acid absorption, and more active ion migration in sulfuric acid solution, maximums battery voltage and starting current to the greatest extent to keep a good stable battery capacity throughout.

■ **板栅**：极板板栅采用了特殊合金配方和独特的结构设计及扩网冷成型技术，产品具有良好的耐振动性和耐腐蚀性及高温侵蚀性能。负极采用独特的碳素铅膏配方，正极采用添加4BS晶种，使产品具有启动电流大、回充电性能优越，蓄电池使用寿命长等特点。

Polar plate grid applies special alloy formulation, unique structural design and cold forming technology of expanded network. The product is of good vibration and corrosion resistance, high temperature erosion performance. The negative pole applies unique carbon paste formula while positive pole applies 4BS crystal, making the product features of big starting current, excellent recharging performance, long battery life, etc.

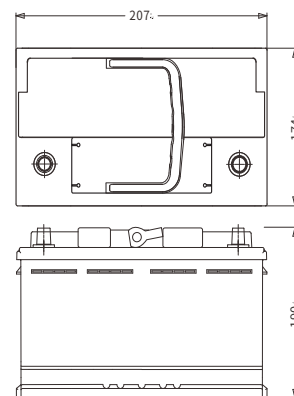
■ **外壳**：款式新颖的壳体，设计合理的提手，采用高强度聚丙烯树脂 PP、三元乙丙橡胶 EPDM、【2-（2-丁氧基乙氧基）乙脂】等混合注塑成型，具有高密度、高韧性、高强度、避免壳体渗液失水、膨胀变形之优点。

Case: Innovative cases, well-designed handles, created through injection molding using a mixture of high-strength polypropylene resin (PP), Ethylene Propylene Diene Monomer (EPDM), [2-(2-butoxyethoxy) ethyl], have the advantages of high density, high toughness, high strength, while avoiding fluid loss and swelling deformation of the case.

产品(图)  
Products

## 外形尺寸Dimension (mm)

外形尺寸Dimension;  
长Length: 207±2mm  
宽width: 174±2mm  
高Height: 190±2mm  
总高Total height: 190±2mm



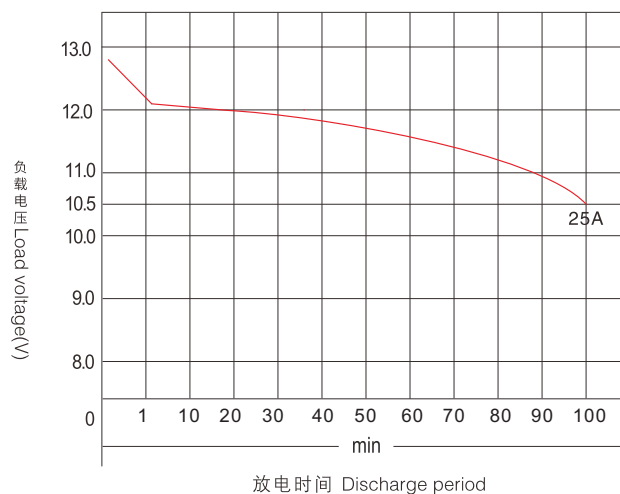
## 规格表 Specification

额定电压 Voltage	12 V
内化选择程序 Internalization selection program	号/No
湿量 With electrolyte weight	14.3 kg
硫酸比重 Gravity of sulphuric acid	1.28 ± 0.015/cm <sup>3</sup> (25°C)
标准端子 Terminal type	T2
极性 Layout	( 0 )
固定方式 Fix mode	下固定 Hold down
外壳 Shell	聚丙烯 P.P
顶盖 Cover	聚丙烯 P.P
把手 Handle	聚丙烯 P.P
提手结构 Handle structure	中间单提手Intermediate single hand
充电方式 Charge method	采用恒压限流浮充电 Floating charge under constant voltage and limited current
充电电压 Charge voltage	限电压最高值为14.85V Maximum charge voltage:14.85V
充电电流 Charge current	限电流最高值为15 Maximum charge current:15A
充电时间 Charge period	连续充电24小时 Charge 24 hours continuously

## 电池特性

储备容量(RC)	100
起动电流CCA(-18°C)	570A

## 放电特性Discharge Characteristics(25°C, 70° F)

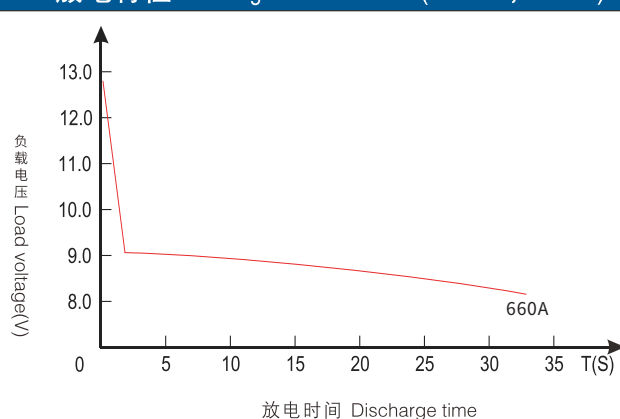


## 标准端子Standard terminal(mm)

## 极 性 Layout

端子类型 Terminal type	D		
	正极 R	负极 L	
T2	19.5° <sub>-0.3</sub>	17.9° <sub>-0.3</sub>	

## 放电特性 Discharge Characteristics(-18°C, 0° F)





# 蓄电池安全使用须知：

## Safety instructions for the use of battery:

### 电池用途 Usage



免维护铅酸蓄电池能为车辆的启动提供所需的大电流放电，亦可在车辆怠速、熄火后保持车载电子系统及车内附属用电设备的供电，也可用于太阳能电源、牵引动力电源、通讯电源、电子仪器、照明、应急装置电源或其他直流电源等多个领域。

1、Usage: Maintenance free lead acid battery could supply huge current discharging during the starting of the vehicle and the frequent start-stop in driving, also could supply power for the vehicle electronic system and other auxiliary equipments. This battery could also be used widely in Solar system、traction utility power 、 telecom power system、electric instrument、lighting system、emergency lighting system and other alternating current field.

### 电池安装 Installation



1、电池安装使用前，先将车辆挡位置于P挡(停车挡位)后熄火、关闭电源。2、先用钢丝刷清理接线卡及电池两极接线端子，刷至光泽。3、先将正极线与电池正极端子连接，然后再将负极线与电池负极端子连接，接线后的正负端子应涂以凡士林，以免氧化腐蚀。4、安装前注意清洁电池架存在的异物，根据电池架与电池上固定或下固定的方式，将蓄电池置于托架卡压固定。5、蓄电池内电解液为稀硫酸有强烈的腐蚀性，在蓄电池使用、充电或放置时可产生易爆氢氧混合气体，须避免火花、火焰的接近，以免引以爆炸，因此在蓄电池充电或在蓄电池附近工作时，要戴上护目镜、面罩等防护物。

1.Before install the battery, first puts vehicles at P gear(parking gear), then flameout, turn off the power. 2.Clean the clips of cable and terminals with steel brush to brunish.3.Connect the positive wire with positive terminal first, then negative terminal with negative wire, then should b coat with Vaseline to avoid oxidation corrosion.4.Before installation Should clean the battery holder, According to the fixed way of battery hold and hold-up and hold-down, fasten it.5.the electrolyte of battery is Dilute sulphuric acid, is Strong corrosive,can produce hydrogen and explosive mixed gas when using, charging or storage,should keep away flames,sparks to avoid flash explosion, so when charging or working near the battery, be protected with shield such as goggles and masks

### 电池维护 Maintenance



免维护铅酸蓄电池具备优越的深度放电、充电接受能力，在正常的使用过程中其循环耐久能力是普通电池的3~4倍，为保证电池的良好使用，注意如下几点是相当重要的：1、时常检查蓄电池接线端卡，接触是否良好，出现松动或氧化腐蚀及时紧固清理。电池在充电过程中会产生可燃气体通过电池上侧气孔排出，为避免气孔堵塞防止电池形成内压引以爆炸，且应注意始终保持气孔通畅。电池在清理维护过程中，尽量避免电池倾斜或倒置，以防电池电解液泄漏。2、车辆发动机因电池故障难以启动时，须经专业技术人员进行检测排除故障或更换电池。更换电池时，注意区分正、负极端子位置，先拆卸负极端子连接线，再拆卸正极端子连接线，避免正负线端因短路引以火花放电。3、车辆停止使用时，注意关闭电源开关，关闭车内附属用电设备及室内灯光开关，以充分保持电池的储备电量。车辆关闭电源开关时，车载电子系统仍处于工作状态，会持续微量消耗电池容量，停车时长超过15天应将电池取下或断开负极端线;停用的蓄电池采用浮充电方式每隔三个月补充充电一次。

Maintenance: maintenance-free lead acid battery has superior performance of deeply discharging and charging acceptance, with its cycle durability three to four times common battery during normal use. the normal use of its cycle durability is 3 to 4 times the normal battery. Please pay attention to the following important points in order to ensure the good use of the battery:

(1). Frequently check the connection of battery terminal. If there is loose or oxidized corrosion, timely fasten and clean are needed. During the charging process, the battery will generate combustible gas through the stomata on the upper side of the battery. To prevent the stomata from being blocked, the battery should be prevented from forming internal pressure to cause explosion, and your care should be taken to keep the stomata open. During cleaning and maintenance process, you should try to avoid the tilt or inversion of battery, to prevent leakage of battery electrolyte.

(2). When the vehicle engine is difficult to start due to battery failure, you should ask professional and technical personnel to detect, troubleshoot or replace the battery. When replacing the battery, you should pay attention to distinguish the positive and negative terminal positions. You should remove the negative terminal connection cable firstly and then remove the positive terminal connection cable to avoid spark discharge caused by short circuit at the positive and negative terminals.

(3). When you stop using the vehicle, you should turn off the power switch, turn off the attached electrical equipments inside car and indoor light switches, to fully maintain the battery reserve power. After turning off the power switch, the car electronic system is still in working condition and will continue to consume battery capacity. After parking longer than 15 days, you should remove or disconnect the negative terminal cable. Unused battery need being charged by float-charge mode once after every three months.

### 电池充电 Battery capacity



1、采用恰当的浮充充电电流、电压值是影响电池循环寿命的关键因素，浮充充电是恒电压、限电流的充电方式，以14.1V~14.8V的恒电压设定值、最大电流不超过电池容量的25%进行补充充电。2、车辆停用每隔三个月或电池电压降至12.5V时，须采用浮充充电的方式进行补充，随电池充电时间的渐进，充电电流逐步减小，当电流降至0.5A，且3小时稳定不变时为充电饱和终止状态。3、免维护铅酸蓄电池在实际使用过程中，一定要根据环境温度选择合适的浮充电压，浮充电压过高，除引起水损失加速外，更加速了正极板栅的腐蚀，因电池设计寿命赖于正极板栅合金的腐蚀速率，正极板栅被腐蚀的越多，电池的剩余容量就越少，电池寿命就越短。4、当电池停用超6个月未能及时补充充电或电池电压降至10.5V时，属电池深度放电，将导致电池极板不可逆硫酸盐化，电池内阻增大，容量难以恢复原正常容量值，甚至成为蓄电池寿命终止的原因。

(1). The use of fitable floating charge current and proper voltage is the key factor of affecting the battery cycle life. Floating charge is a charging mode using constant voltage and limited current, boost charging under constant voltage setting(14.1V ~ 14.8V) and the maximum current-less than 25% of the battery capacity.(2). Floating charge needed to be used for supplement every three months of un-used vehicles or when the battery voltage drops to 12.5V. The charge current gradually reduces with the processing battery charging. When the current drops to 0.5A and stays for 3 hours, it enters saturation termination state.(3). During the actual operation process of maintenance-free lead acid battery, it is necessary to choose the appropriate floating voltage according to the ambient temperature. If floating charge voltage is too high, in addition to the acceleration of water loss, the corrosion of the positive grid will also be accelerated. Due to battery's designed life depends on the corrosion rate of the positive grid alloy, the more corrosion of the positive grid, the less remaining capacity of the battery, then the shorter of the battery life.(4). When the battery fails to be recharged after not being used for over 6 months or battery voltage drops to 10.5V, the battery undergoes a deep discharge, which will lead to irreversible battery plate sulfate, increasing of the battery internal resistances, unable recover of the normal capacity, and even the reasons for the battery life ends.

### 电池存放 Storage



车辆停止使用时，注意关闭电源开关，关闭车内附属用电设备及室内灯光开关，以充分保持电池的储备电量。车辆关闭电源开关时，车载电子系统仍处于工作状态，会持续微量消耗电池容量，停车时长超过15天应将电池取下或断开负极端线;停用的蓄电池应放置在清洁、干燥、避光、通风的地方，环境温度应保持在5~30℃之间，在此条件下，每隔三个月采用浮充电方式补充充电一次。

When the vehicle is stopped, please turn off the power and all the accessory equipments and the lights to maintain the battery storage power fully. vehicle electric systems are working when the power is off that will consume slight battery capacity. when stopping time is more than 15 days, pls take out the battery or break the negative terminal. store the battery in a clean, ventilated dry place with temperature between 5-30℃, in addition, pls charge the battery with float charge every three months.