

Conventional Series

GBT12-90(12V90Ah)

General-Purpose Lead-Acid Batteries

GBT series batteries are general-purpose lead-acid batteries. Adopting high quality lead-calcium multi-alloy plate grid, corrosion resistance, good mechanical properties; high-performance casting and welding plates, conductivity is 30% higher than ordinary batteries internal mechanical through-wall welding, internal resistance is reduced by 20%, more adaptable to high-current discharging; AGM technology, so that the battery has a higher energy density, charging acceptance is stronger; imports of ABS raw materials, homemade shell, the use of heat sealing process, so that the battery becomes an integrated whole, sealing is greatly improved; pure copper downward rotating terminals, not only to meet the needs of high-current charging and discharging, and flexible installation and maintenance. Pure copper downward rotating terminals not only meet the needs of high-current charging and discharging, but also flexible installation and more convenient maintenance. This series of batteries are manufactured by international advanced automatic production line, with high stability and consistency of batteries and longer service life. The product meets the standards of TLC, GB/T19638.1-2014, etc., and the design life is up to 12 years (25°C).

Applications

- * Uninterruptible Power Supply (UPS)
- * Data Center (IDC)
- * Government and Enterprise Unit (GEU) server rooms
- * Bank Backup Power
- * Fire Fighting Power Supply (EPS)
- * Telecommunications communication systems
- * Alarm and security systems
- * Solar wind energy systems
- * DC panel power supply
- * Power Systems

Material Composition

- * Safety Exhaust Valve EPDM
- * Positive plate lead dioxide
- * Negative plate sponge lead
- * electrolytes sulfuric acid
- * Partitions fiberglass wool
- * Terminals copper
- * Housing ABS material flame retardant UL94-HB
- UL94-V0

Product Advantage

- * Low self-discharge
- * Highly airtight
- * Consistency
- * maintenance-free without the need to add water
- * with a design life of up to 12 years
- * High safety performance, explosion-proof and flame retardant
- * Low internal resistance and excellent conductivity
- * excellent high rate discharge performance
- * Upgraded protection, standard with leak-proof tray

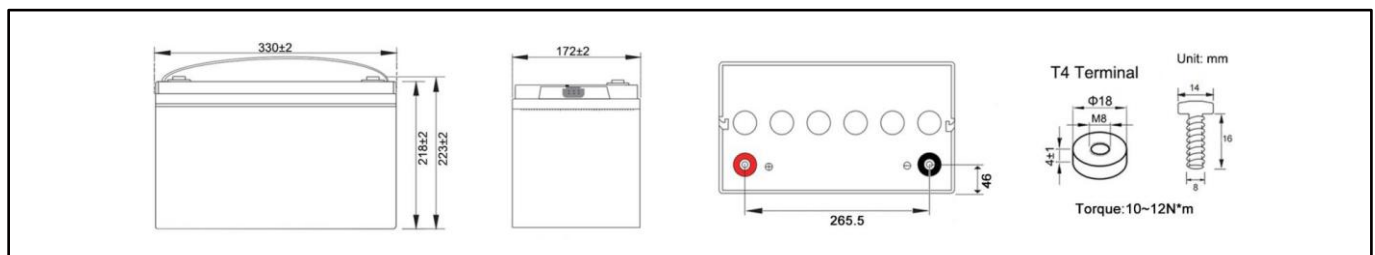
Specification

Breakdown

Battery type	Rated voltage		12V	
	Nominal Capacity (20HR)		90Ah	
	Battery type		GBT12-90	
Battery size	Long	Wide	High	Overall height (including terminals)
	330mm (12.99 inches)	172mm (6.77 inches)	218mm (8.58 inches)	223mm (8.77 inches)
Approximate weight	22.5kg(49.60lbs) ± 3%			
Capacity (Ah) (25°C)	20 hour rate (10.5V)	10 hour rate (10.8V)	5-hour rate (10.5V)	1 hour rate (9.6V)
	90Ah	80Ah	66.7Ah	45Ah
Maximum discharge current	1080A (5 sec.)			
Battery internal resistance	Approx. 7.02mΩ at full power (25°C)			
capacity under the influence of temperature	40°C (104 °F)	25°C (77 °F)	0°C (32 °F)	-15°C (5 °F)
	102%	100%	85%	65%
Self-discharge @25°C (77 ° F)	stored for one month		three months of storage	Storage for twelve months
	98%		94%	74%
Charging Method @25°C (77 ° F)	Recycling		Float-charged use	
	14.40-15.00V (initial charging current less than 27A)		13.50-13.80V	

Dimensional data (mm)

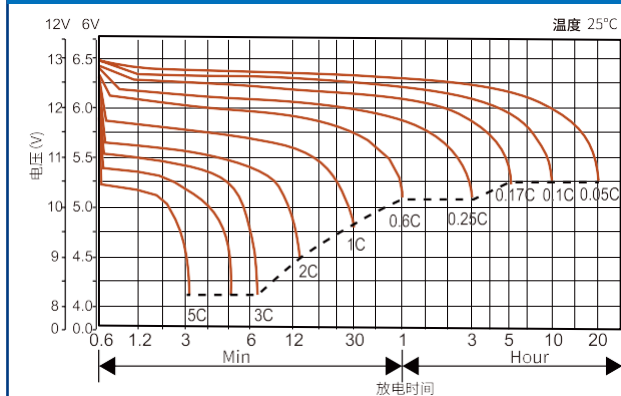
Terminal Type (mm)



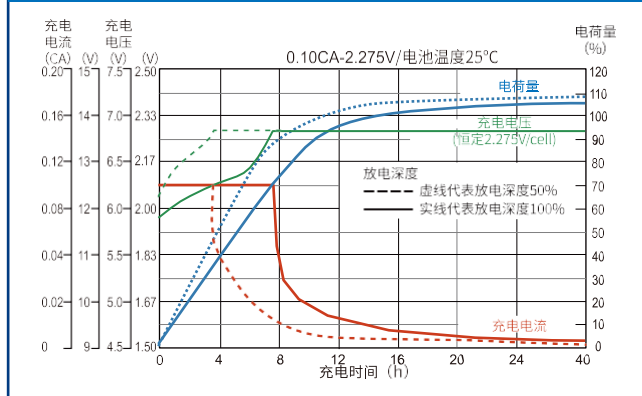
Constant Current and Constant Power Discharge Meter (25°C)

F.V\TIME		15MIN	30MIN	60MIN	90MIN	2 HR	3HR	5HR	8HR	10HR	20HR
1.60V/cell	A	127.500	76.000	45.000	32.935	27.763	19.777	13.496	9.556	8.465	4.845
	W	246.075	151.392	89.775	65.761	55.550	39.570	27.004	19.121	15.571	8.575
1.67V/cell	A	120.877	74.376	44.674	32.609	27.625	19.673	13.422	9.476	8.328	4.778
	W	233.474	148.232	89.130	65.126	55.319	39.433	26.904	18.999	15.361	8.163
1.70V/cell	A	117.896	73.726	44.348	32.576	27.556	19.623	13.419	9.381	8.243	4.652
	W	227.893	146.942	88.587	65.087	55.204	39.344	26.905	18.818	15.175	7.950
1.75V/cell	A	112.929	72.427	43.696	32.152	27.383	19.500	13.348	9.355	8.124	4.500
	W	218.517	144.457	87.500	64.304	54.848	39.117	26.776	18.780	15.056	7.829
1.80V/cell	A	108.292	70.803	43.370	31.924	27.210	19.396	13.311	9.274	8.000	4.395
	W	209.870	141.282	86.957	64.007	54.512	38.928	26.714	18.632	14.824	7.577

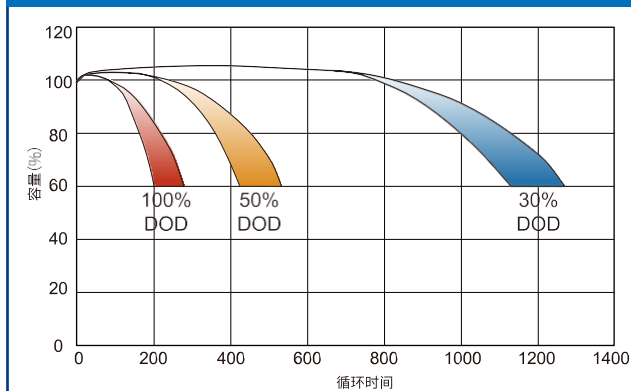
放电特性曲线图 (25°C/77°F)



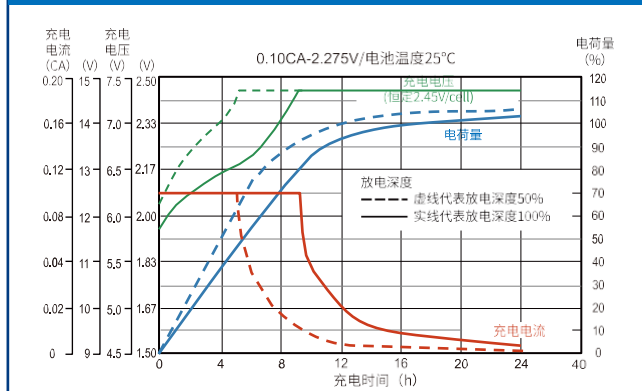
浮充充电特性曲线图 (25°C/77°F)



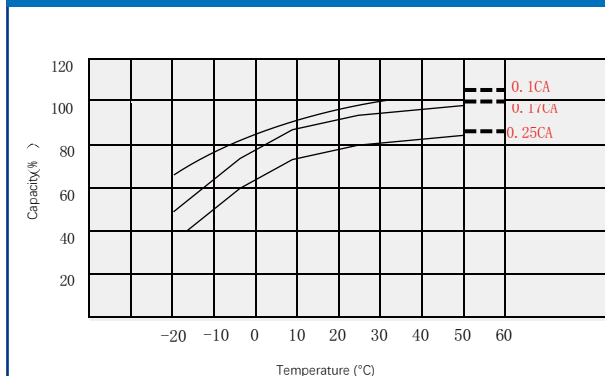
循环寿命与放电深度



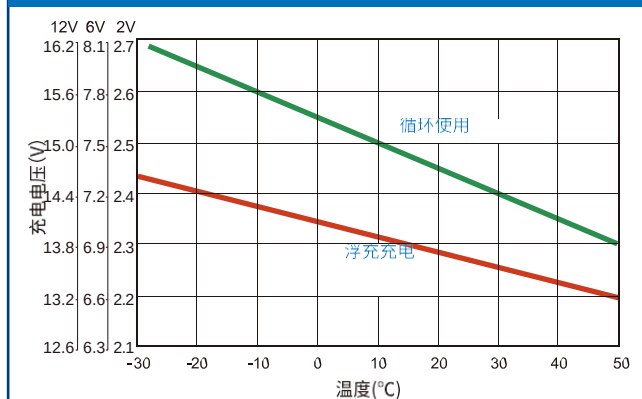
循环充电特性曲线图 (25°C/77°F)



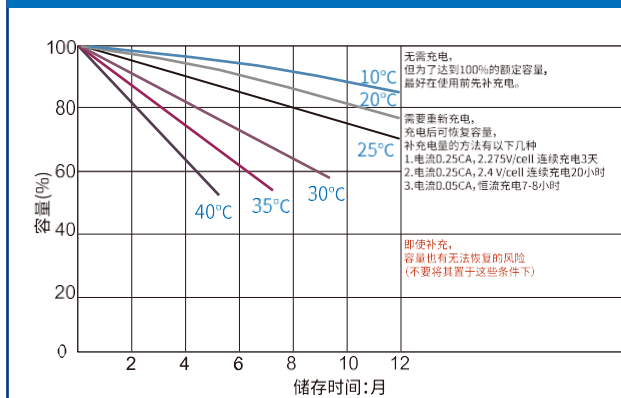
温度与容量之间的关系



充电电压与温度的关系



自放电特性



温度与浮充寿命

