

GENERAL FEATURES

- Longer cycle life: Pure Gel battery, special paste formula, over dimensioned negative plate, optimized manufacturing process, additives for deep discharge.
- Special separators boost up the battery internal performance.
- Using oxygen recombination technology, maintenance-free and little water losing.
- ABS material: enhanced strength of the battery container. (Flame-retardant ABS is optional).
- Designed to have a lifespan of 12 years for float charging at 25°C

APPLICATIONS

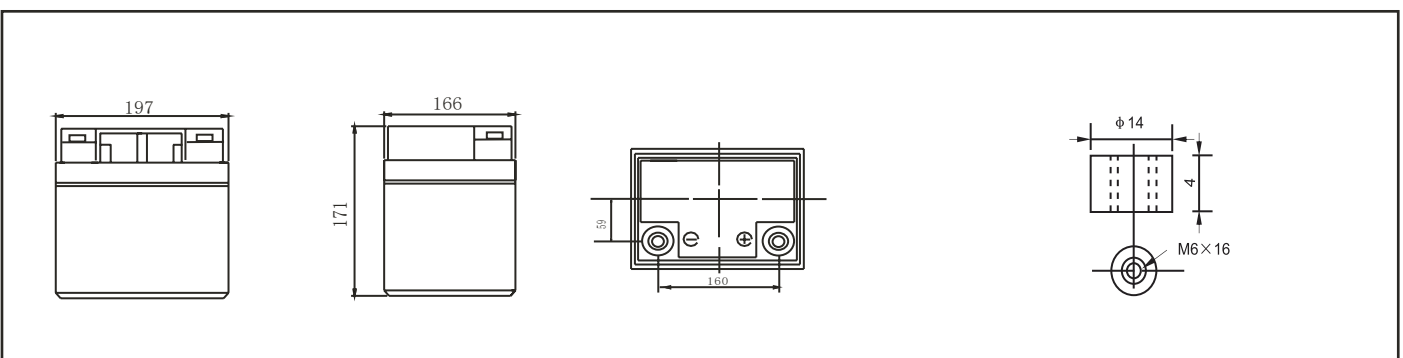
- Electric tools
- Vehicle in place of walking
- Lawn mowers
- Golf trolleys and golf cart
- Power system of special network or local area network
- Electric toys
- Railway and marine systems
- Fire alarms
- Solar and wind power system
- Electric wheelchairs
- Medical equipment



SPECIFICATIONS

Model	Nominal Voltage	12V		
	Rated Capacity (10Hr rate)	45Ah		
Dimensions	Length	Width	Height	Total Height
	197mm (7.73")	166mm (6.54")	171mm (6.73")	171mm (6.73")
Weight	Approx. 12.3kg ± 3%			
Capacity @25°C (77°F)	10 Hour (4.5A,10.8V)	5Hour (6.8A,10.5V)	3 Hour (10 A,10.2V)	1 Hour (22.0A,9.6V)
	45.0Ah	34Ah	30.0Ah	22.0Ah
Internal Resistance	Fully charged at 25°C, approx. 13.0mΩ			
Max. Discharge current	400A (5 Sec.)			
Capacity Affected by Temp. (20Hr)	40°C (104°F)	25°C (77°F)	0°C (32°F)	-15°C (5°F)
	102%	100%	85%	65%
Self Discharge Rate @25°C (77°F)	After 3 months Storage	After 6 months Storage	After 12 months Storage	
	91%	82%	64%	
Charge Method	Cycle Use		Float Charging	
	14.1-14.4V (Initial current less than 11.7A) @25°C (77°F)		13.5-13.8V@25°C (77°F)	

DIMENSIONS & TERMINALS

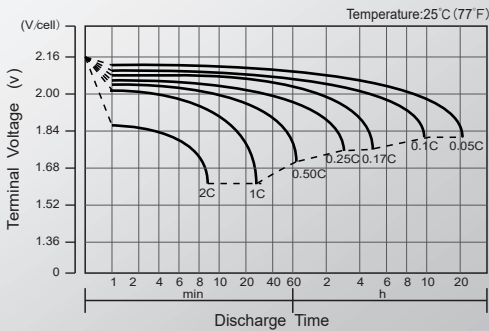


PERFORMANCE CHARACTERISTICS

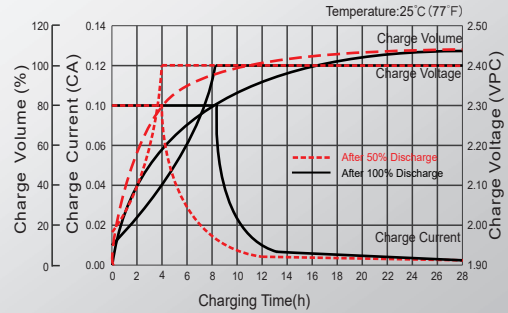
Constant Current (Amp.) and Constant Power (Watt) Discharge Table @25°C (77°F)

Cell Voltage	Time	5min	10min	15min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
9.60V	A	117.90	77.60	62.60	42.00	22.10	12.90	9.50	7.40	6.07	4.31	3.86	2.09
	W	1216.40	829.30	671.20	451.00	238.50	141.40	105.80	82.80	69.04	49.34	44.63	24.26
10.20V	A	114.20	70.10	59.00	40.10	20.80	12.30	9.20	7.20	5.96	4.20	3.79	2.02
	W	1219.20	782.40	659.70	450.30	234.70	140.80	105.40	82.60	68.78	49.08	44.53	23.78
10.50V	A	110.40	62.70	51.60	37.50	20.10	12.00	9.00	7.10	5.89	4.16	3.72	2.01
	W	1206.00	712.90	588.40	432.00	232.70	139.10	103.50	82.30	66.68	48.90	43.98	23.71
10.80V	A	106.40	59.10	47.90	34.60	19.40	11.70	8.80	7.00	5.74	4.05	3.68	1.99
	W	1194.10	681.10	552.00	400.80	226.20	137.10	103.30	82.10	67.86	47.97	43.74	23.67
11.10V	A	102.90	55.30	44.20	30.90	18.80	11.40	8.50	6.80	5.59	3.94	3.50	1.88
	W	1166.40	640.90	514.90	361.70	220.70	134.80	100.60	80.60	66.75	47.16	42.20	22.75

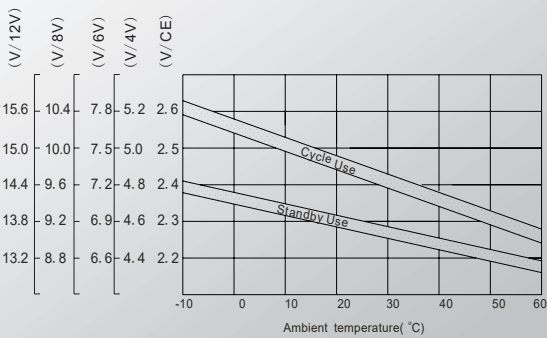
DISCHARGE CHARACTERISTICS



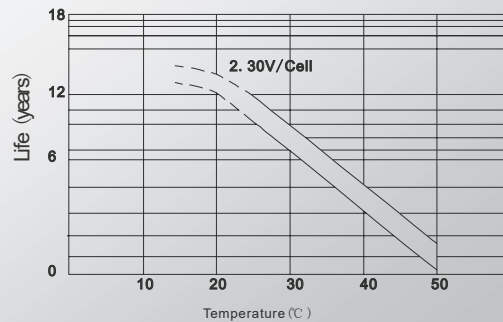
CHARGING CHARACTERISTICS (STANDBY)



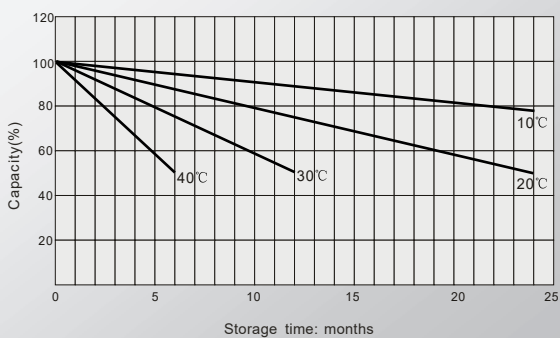
CHARGING VOLTAGE V.S. TEMP.



EFFECT OF TEMP. ON LONG TERM FLOAT DESIGNED LIFE



SELF DISCHARGE CHARACTERISTICS



CYCLE LIFE IN RELATION TO THE DEPTH OF DISCHARGE

